DEENDAYAL PORT AUTHORITY
(Erstwhile: DEENDAYAL PORT TRUST)

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DEENDAYAL PORT AUTHORITY

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No: - EG/WK/4684(EC)/Part VII/ 158 Date: 10/08/2022

To,
The Regional Officer
Ministry of Environment, Forest & Climate Change
Integrated Regional Office,
Gandhinagar, A wing-407 & 409
Aranya Bhavan Near CH-3 Circle
Sector 10A, Gandhinagar - 382010
Email ,eccomplaince-guj@gov.in

Sub: Development of Plots for Construction of Liquid Storage Tank Farm at Kandla, Gujarat by Deendayal Port Authority (Erstwhile: Deendayal Port Trust) –**Compliance Report of conditions stipulated in Environmental & CRZ Clearance & Monitoring Report in Data Sheet(Period up to May, 2022) reg.**

Ref.: 1) MoEF&CC, GoI vide letter No. F. No.10-36/2008-IA-III dated 02.02.2010.
2) DPT letter No. EG/WK/4684 (EC)/Part V/124 dated 15/10/2014.
3) DPT letter No. EG/WK/4684 (EC)/Part V/222 dated 05/05/2015.
4) DPT letter No. EG/WK/4684 (EC)/Part V/13 dated 03/03/2016.
5) DPT letter No. EG/WK/4684 (EC)/Part V/267 dated 04/02/2017.
6) DPT letter No. EG/WK/4684 (EC)/Part VII/124 dated 05/04/2019.
7) DPT letter No. EG/WK/4684 (EC)/Part VII/67 dated 18/08/2021

Sir,

It is requested to kindly refer above cited references for the said subject.

In this connection, it is to state that, MoEF&CC, GoI has accorded Environmental & CRZ Clearance for the subject proposal vide above referred letter dated 02.02.2010. Further, MoEF&CC, New Delhi vide letter No. F. No.10-36/2008-IA-III dated 18.08.2015 had extended validity for EC & CRZ clearance up to 01.02.2020.

Now, please find enclosed herewith point wise compliance report of the stipulated conditions mentioned in the EC & CRZ Clearance letter dated 02.02.2010 **(Annexure 1)** & Monitoring Report in Data Sheet **(Annexure 2)** **(Period up to May, 2022)** for kind information and record please.

Further, as per the MoEF&CC, GoI Notification S.O.5845 (E) dated 26/11/2018, stated that "In the said notification, in paragraph 10, in sub-paragraph (ii), for the words "hard and soft

copies" the words "soft copy" shall be substituted". Accordingly, we are submitting herewith soft copy of the same via email ID eccomplaince-guj@gov.in.

This has the approval of the Chief Engineer, Deendayal Port Authority.

Thanking You.

Yours faithfully,

Manager (Environment)
Deendayal Port Authority

Copy along with point wise compliance of stipulated conditions.

Copy to:

Shri Amardeep Raju,
Scientist E,
Ministry of Environment
Forests & Climate change, GoI,
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Shri Prasoon Gargav,
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Smt. Urvashi Upadhyay,
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Gujarat Pollution Control Board,
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The Regional Officer,
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Email Id. ro-gpcb-kute@gujarat.gov.in

Annexure - 1

Compliance Report Up to May, 2022

SUBJECT: Point wise compliance status report for Environmental & CRZ Clearance for the development of plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat –reg.

- **02/02/2010 – The MoEF&CC, GoI granted Environmental & CRZ Clearance.**

- **18/08/2015 – The MoEF&CC, GoI extended the validity period of Environmental & CRZ Clearance for a further period of 5 year i.e. up to 01/02/2020.**

- **The necessary provisions/conditions had already been incorporated in the Lease Deed (para 10(d) of lease deed document) for the compliance of the stipulated conditions of Environment & CRZ Clearance, CRZ Recommendation and NOC (CTE). Further, all the conditions of Environment & CRZ Clearance are part of lease deed and all the plot allottee has to comply all the conditions of Environment & CRZ Clearance.**

- **Out of total 17 plots, DPT allotted 13 plots (3,4,5,6,7,10,12,13,14,15,17,18&19) to various plot allottees. Further, Commercial operation started for 13plots (3,4,5,6,7,10,12,13,14,15,17,18 &19) and also obtained CTO from GPCB. The Plot no. 8, 9, 11 & 16 will be auctioned again in due course.**

- **Present Status:**

Plot. No.	Name of Plot Allottee	Allotment letter Issued on	Present Status
3	M/s. Aegis Logistics	17.04.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
4	M/s. Aegis Logistics	26.10.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016)
5	M/s. Aegis Logistics	26.10.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
6	M/s. Aegis Logistics	06.04.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
7	M/s. Shreeji Liquid Storage Pvt. Ltd.	09.11.2015	Commercial operation started (GPCB has granted CTO on 08/01/2019)
8	Not allotted	-	-
9	Not allotted	-	-
10	M/s. Friends Bulk Handlers Ltd.	16.04.2015	Commercial operation started (GPCB has granted CTO on 09/03/2016)
11	M/s. Friends Oil & Chemicals Terminals Pvt. Ltd., Gandhidham	06.06.2016	DPT has allotted plot on 06/06/2016. However, Allottee has surrendered the plot to DPT on 18/08/2017 & will be auctioned again in due course.
12	M/s. Viking Lighatrage and cargo handlers Pvt. Ltd.	06.06.2016	Commercial operation started (GPCB has granted CTO on 12/04/2018).
13	M/s. Gokul	03.05.2016	Commercial operation started (GPCB has

	AgroResources Limited		granted CTO on 02/08/2018).
14	M/s. Kutch Oil and Soap Industry	30.08.2016	Commercial operation started (GPCB has granted CTO on 16/06/2019).
15	M/s. Seabridge Terminal Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 11/12/2017)
16	M/s. B.L Agro Oils Limited.	03.05.2016	DPT has allotted plot on 03/05/2016. However, Allottee has surrendered the plot to DPT on 26/10/2017 & will be auctioned again in due course.
17	M/s. Emperors Infralogistic Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 27/02/2018)
18	M/s. Sunshine Liquid Storage Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 14/04/2018).
19	M/s. Ambaji Import Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 13/03/2018).

- The copy of Collective point wise Compliance report of stipulated conditions mentioned in EC & CRZ Clearance submitted by the plot allottee of 13 plots (Plot Nos.3,4,5,6,7,10,12,13,14,15,17,18 &19) are placed as **Annexure-A.**

Sr. No	EC Conditions	Compliance Status
SPECIFIC CONDITION		
Construction Phase		
I	All the conditions stipulated by Govt. of Gujarat vide letter no. ENV -110-2008-366-E dated 09.03.2009 and Gujarat Pollution Control Board vide letter No.PC/NOC/CCA-Kutch-78 (2)/GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009 is enclosed as **Annexure B.** Further, Compliance report of NOC/CTE granted by GPCB (Valid up to 5/8/2020) is enclosed as **Annexure C.**
II	The entire water supply shall be managed by the Port. Waste water will be treated and utilized.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12,13,14,15,17,18 & 19) and started commercial operation. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they had purchased water for their requirement from local water Supplier and also submitted that wastewater is being treated and utilized for green belt development at their own premises.
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading /unloading of trucks within the Port complex.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. 13 plot Allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they had provided sufficient area for Parking of heavy vehicles and sufficient space for loading/unloading of trucks within their own premises.
IV	The proponent shall put in place the detailed on site and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also.	The plot Allottee (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they had already prepared detailed on site and Off Site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also.
V	The proponent shall put in place the Oil Spill Contingency Plan.	DPA is already having Oil Spill Contingency Plan (**Copies placed at Annexure D)**.
VI	The proponent shall strictly comply the measures proposed as per their letter No EG/WK/4684/EC/388, dated 01.12.2009.	The plot Allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted assurance for compliance of measures proposed by DPA vide letter dated 1/12/2009 and accordingly, the Plot allottees had started commercial operation in respective plot, after obtaining statutory permission wherever

		applicable i.e. CTO from GPCB, PESO Permission etc.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991.	The plot Allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that they had carried out construction activities as per the Plans approved by the DPA considering all relevant aspects i.e. local bye laws, EC & CRZ Clearance etc.
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent Authority prior to construction /operation of the project.	The plot allottees had submitted that they had purchased water for their requirement from local tanker water Supplier and no ground water withdrawal is being done by any of the plot allottee.
IX	Sewage Treatment facilities should be provided in accordance with the CRZ notification.	The allottees had submitted that, Septic tank/Soak pits had been provided for sewage treatment.
X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and Handling) Rules, 2000.	The plot allottees had submitted that, collection, segregation and disposal of solid waste is being done as per the provisions of Solid Waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016.
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the project.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12,13,14,15,17,18 & 19) and started commercial operation. The allottees have submitted that, temporary housing has been constructed within its premises with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc.
Xii	A first Aid Room will be provided in the project both during construction and operation of the project.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation.
xiii	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation.
Xiv	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation.
Xv	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	The environmental monitoring reports carried out by the allottees are attached with individual compliances placed at **Annexure A**.
xvi	Construction spoils, including bituminous material and other	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No.

	hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	3,4,5,6,7,10,12,13,14,15,17,18 & 19) and started commercial operation.
xvii	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation.
xviii	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	The plot allottees have submitted that they have operated the DG sets as per their requirement and as per the guidelines of CPCB.
Xix	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to Environmental (Protection) Rules prescribed for air and noise emission standards.	The plot allottees have submitted that they have operated the DG sets as per their requirement and as per the guidelines of CPCB.
Xx	The diesel required for operation DG sets shall be stored in underground tanks and if required clearance from Chief Controller of Explosives shall be taken.	The plot allottees have submitted that diesel required for DG sets are being stored as required and as per rules.
Xxi	Vehicles hired for bringing construction materials to the site should be in good condition and should have a pollution check certificate and should confirm to applicable air and noise emission standards and should be operated only during non-peak hours.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12,13,14,15,17,18 & 19) and started commercial operation.
xxii	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to confirm to the stipulated standards by CPCB/GPCB.	The monitoring report submitted by the Plot allotteesare attached with individual compliances placed at **Annexure A.**
xxiii	Storm water control and its re-use as per CGWB and BIS standards for various applications.	DPA has considered the provision of Rain water Harvesting while approving the drawing. Allottees of Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19 have submitted that, they have constructed RWH pits as per drawing approved by DPA.
xxiv	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12,13,14,15,17,18 & 19) and started commercial operation.

xxv	The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire-fighting equipments, etc. as per National Building Code including protection measures from lighting etc.	Successful plot Allottees have already obtained the necessary clearances from concerned authorityand maintained the same as per the norms at their own premises.
xxvi	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Noted. DPA is having dedicated Environmental Monitoring Cell (EMC) for regular supervision for environmental parameters. However, the plot allottees are also having their dedicated team for compliance of Environmental conditions including monitoring.
xxvii	Under the provisions of Environmental (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found the construction of the project has been started without obtaining environmental clearance.	All necessary clearance from statutory authorities' i.e. EC&CRZ Clearance from MoEF&CC, New Delhi, and CRZ Recommendation from Forest & Environment Department, GoG and NOC / CTE from GPCB, GoG had been obtained for the project.
II. Operation Phase		
I	The installation of the Sewage Treatment Plant (STP), if any, should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled /reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall confirm to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	According to the condition &keeping in mind the magnitude of sewage generation, for treatment of domestic waste water & its disposal, necessary arrangements for providing soak pit/septic tank has been provided by the Plot allottee of respective Plot, whose operation has already been started. While approving the layout drawings of the Plot allottees by DPA, due care was taken for incorporation of the provisions related to the wastewater treatment i.e. septic tank/soak pit by the plot allottees including the green belt, adequate parking area, storm water drainage, rainwater harvesting etc. as mentioned in the stipulated conditions of EC & CRZ Clearance. CRZ Recommendation & NOC(CTE). Further, DPA is already having STP of capacity 1.5 MLD for treatment of domestic waste water for entire DPT area.
ii	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and confirm to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with Gujarat Pollution	The Plot allottees have submitted that, they are operating DG sets and adequate stack height for the DG sets has been kept, as per obtained CCA/CTO from GPCB.

	Control Board.	
Iii	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	The monitoring report submitted by the Plot allotteesare attached with individual compliances placed at **Annexure A.**
Iv	The greenbelt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	The Plot allottees have submitted that, they have provided necessary greenbelt as per condition.
V	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area during the monsoon period.	The Plot allottees have submitted that they had provided the weep holes in the compound walls to ensure natural drainage of rainwater in the catchment area during the monsoon period.
Vi	Rain water harvesting for roof run –off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground table.	The plot allottees have submitted that, they have already constructed rain water harvesting facility for roof run-off at their premises.
Vii	The ground water level and the quality should be monitored regularly in consultation with Central Ground Water Authority.	The plot allottees have submitted that, they are meeting the water requirement through authorized water supplier.
viii	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	The plot allottees have submitted that, they have prepared and placed Traffic Management Plan for their premises to avoid traffic congestion. Copy already forwarded vide EC Compliance dated 05.04.2019.
Ix	Effort may be made to use solar energy to the maximum extent possible.	The plot allottees have prepared & submitted Solar Energy utilization Plan. Copy already forwarded vide EC Compliance dated 05.04.2019.
X	Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.	The treatment of domestic waste water & its disposal, necessary arrangement, soak pit/septic tank have already been provided by the plot allottees.
	General Conditions	
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously confirming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat.	The plot allottees have submitted that they have constructed the structures as per the approved Drawing by DPA and considering the provisions of Coastal Regulation Zone Notification dated 19.02.1991.
II	In the event of any change in the project	Point Noted for Compliance.

	profile a fresh reference shall be made to the Ministry of Environment and Forests.	
III	This Ministry reserves the right to revoke the clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Point Noted for Compliance.
IV	This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Point Noted for Compliance.
V	Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protection activities.	The plot allottees have submitted assurance that they will provide full support to the officials of Ministry's Regional Office at Gandhinagar and the offices of the Central and State Pollution Control Board by the project proponents during their inspection at Project site.
VI	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and control of Pollution) Act 1981, the environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000, including the amendments and rules made thereafter.	The monitoring report submitted by the Plot allottees are attached with individual compliances placed at **Annexure A.**
VII	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12,13,14,15,17,18 & 19) and started commercial operation, after obtaining statutory applicable clearance.
VIII	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. the advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same	Deendayal Port Authority (DPA) had already given advertisement in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. Deendayal Port Authority had made advertisement in two newspapers i.e. Divya Bhasker and Kutch Mitra on 17/02/2010. Further, Deendayal Port Authority vide

	should be forwarded to the Regional Office of this Ministry at Bhopal.	letter dated 17/02/2010 had already submitted the same to the Regional Office of this Ministry at Bhopal.
IX	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	Point Noted.
X	Any appeal against this clearance shall lie with the National Environmental Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environmental Appellate Act,1997.	Point Noted.
XI	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	N/A
XII	The Proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Deendayal Port Authority has regularly submitting the compliances of stipulated conditions made in EC & CRZ Clearance, CRZ Recommendation and NOC/ CTE to the statutory authorities and same have been uploaded regularly on DPA website. i.e., **www.deendayalport.gov.in.** The plot allottees have submitted that, they have monitored the pollutants like SPM, RSPM, SO2, NOx and displayed at a convenient location near the main gate of the company in the public domain. **(The monitoring report submitted by the Plot allottees are attached with individual compliances placed at Annexure A).**
XIII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well as by email) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	After getting compliance reports from the respective plot allottees, DPA regularly submitting the compliance reports.
XIV	The environmental statement for each financial year ending 31st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the	Point noted for compliance

	website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of MoEF by e – Mail.	

Annexure –A

[Compliance reports submitted by allottees is placed at Annexure I of CRZ compliance (Annexure B)]

Annexure –B

[Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009]

DEENDAYAL PORT AUTHORITY
(Erstwhile: DEENDAYAL PORT TRUST)

दीनदयाल पत्तन प्राधिकरण
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www.deendayalport.gov.in

EG/WK/4684/Part (EC)/Part VII/ 157 Dated :10/08/2022

To,
The Addl. Secretary & Director (Environment),
Govt. of Gujarat,
Forest & Environment Department,
Block No.14, 8th floor, Sachivalaya,
Gandhinagar – 382 010.
Email: gczma.crz@gmail.com,
direnv@gujarat.gov.in.

Sub: Development of Plots for Construction of Liquid Storage Tank Farm at Kandla, Gujarat by Deendayal Port Authority (Erstwhile: Deendayal Port Trust) – **Point wise Compliance to the stipulations in CRZ Recommendation (Period up to May, 2022) reg.**

Ref.: 1) F&E Department letter No. ENV-10-2008-336-E dated 09.03.2009.
2) DPT letter No.EG/WK/4684 (EC)/Part I/223 dated 05.05.2015.
3) DPT letter No.EG/WK/4684 (EC)/Part I/14 dated 03.03.2016.
4) DPT letter No.EG/WK/4684 (EC)/Part V/ dated 04.02.2017.
5) DPT letter No.EG/WK/4684 (EC)/Part VII/126 dated 05.04.2019.
6) DPT letter No.EG/WK/4684 (EC)/Part VII/68 dated 18.08.2021

Sir,

It is requested to kindly refer above cited references for the said subject.

In this connection, it is to state that, that Director (Environment), Forest & Environment Department, GoG vide above referred letter dated 09.03.2009 had granted CRZ Recommendations for the subject proposal.

In this regard, MoEF&CC, GoI vide letter No. F.No.10-36/2008-IA-III dated 18.08.2015 had extended the validity for EC & CRZ clearance up to 01.02.2020.

Now, please find enclosed herewith compliance report (for the period up to May, 2022) of the stipulated conditions mentioned in CRZ Recommendation letter dated 09.03.2019 along with necessary annexure, for kind information and record please (**Annexure 1**).

Further, as per the MoEF&CC, GoI Notification S.O.5845 (E) dated 26/11/2018, stated that **"In the said notification, in paragraph 10, in sub-paragraph (ii), for the words "hard and soft copies" the words "soft copy" shall be substituted".** Accordingly, we are submitting herewith soft copy of the same via email ID gczma.crz@gmail.com & direnv@gujarat.gov.in.

This has the approval of Chief Engineer, Deendayal Port Authority.

Yours faithfully,

Manager (Environment)
Deendayal Port Authority

Copy to:

Shri Amardeep Raju,
Scientist E,
Ministry of Environment, Forest and Climate Change,
& Member Secretary (EAC-Infra.1),
Indira Paryavaran Bhawan,
3rd Floor, Vayu Wing, Jor Bagh Road, Aliganj,
New Delhi- 110 003;
E-mail: ad.raju@nic.in

Annexure - 1

Compliance Report Up to May, 2022

Subject: Point wise compliance report of stipulated conditions mention in the CRZ Recommendation for the development of plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat.

- **CRZ Recommendations: Letter No. ENV-10-2008-366-E March 9, 2009 of Director (Environment), Forest & Environment Department, GoG. Further MoEF&CC, New Delhi vide File No. 10-36/2008-III dated 18/08/2015 had extended the validity period of Environmental and CRZ Clearance up to 1/02/2020.**

- **The necessary provisions/conditions had already been incorporated in the Lease Deed (para 10(d) of lease deed document) for the compliance of the stipulated conditions of Environment & CRZ Clearance, CRZ Recommendation and NOC(CTE). Further, all the conditions of Environment & CRZ Clearance are part of lease deed and all the plot allottee has to comply all the conditions of Environment & CRZ Clearance.**

- **Out of total 17 plots, DPT allotted 13 plots (3,4,5,6,7,10,12,13,14,15,17,18&19) to various plot allottees. Further, Commercial operation started for 13 plots (3,4,5,6,7,10,12,13,14,15,17,18 & 19) and also obtained CTO from GPCB. The Plots no. 8, 9, 11 & 16 will be auctioned again in due course.**

- **Present Status:**

Plot. No.	Name of Plot Allottee	Allotment letter Issued on	Present Status
3	M/s. Aegis Logistics	17.04.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
4	M/s. Aegis Logistics	26.10.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016)
5	M/s. Aegis Logistics	26.10.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
6	M/s. Aegis Logistics	06.04.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
7	M/s. Shreeji Liquid Storage Pvt. Ltd.	09.11.2015	Commercial operation started (GPCB has granted CTO on 08/01/2019)
8	Not allotted	-	-
9	Not allotted	-	-
10	M/s. Friends Bulk Handlers Ltd.	16.04.2015	Commercial operation started (GPCB has granted CTO on 09/03/2016)
11	M/s. Friends Oil & Chemicals Terminals Pvt. Ltd., Gandhidham	06.06.2016	DPT has allotted plot on 06/06/2016. However, Allottee has surrendered the plot to DPT on 18/08/2017 & will be auctioned again in due course.
12	M/s. Viking Lighatrage and cargo handlers Pvt. Ltd.	06.06.2016	Commercial operation started (GPCB has granted CTO on 12/04/2018).

13	M/s. Gokul Agro Resources Limited	03.05.2016	Commercial operation started (GPCB has granted CTO on 02/08/2018).
14	M/s. Kutch Oil and Soap Industry	30.08.2016	Commercial operation started (GPCB has granted CTO on 16/06/2019).
15	M/s. Seabridge Terminal Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 11/12/2017)
16	M/s. B.L Agro Oils Limited.	03.05.2016	DPT has allotted plot on 03/05/2016. However, Allottee has surrendered the plot to DPT on 26/10/2017 & will be auctioned again in due course.
17	M/s. Emperius Infralogistic Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 27/02/2018)
18	M/s. Sunshine Liquid Storage Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 14/04/2018).
19	M/s. Ambaji Import Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 13/03/2018).

- The copy of Collective point wise Compliance reports of stipulated conditions mentioned in CRZ Recommendation submitted by the plot allottees of 13 plots (Plot Nos.3,4,5,6,7,10,12,13,14,15,17,18 & 19) are placed as **Annexure-I.**

Sr. No	CRZ Recommendations	Compliance Status
Specific Conditions		
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	Deendayal Port Authority (DPA) and successful plot allottees are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments/agencies shall be obtained by the KPT before commencing the expansion.	Deendayal Port Authority (DPA) had obtained EC/CRZ Clearance from the MoEF, GoI on 02/02/2010 and MoEF&CC, New Delhi vide File no. 10-36/2008-IA. III dated 18/08/2015 had extended the validity period of EC/CR Clearance up to 01/02/2020 (Copy placed at **Annexure – II).** Further, Deendayal Port Authority had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-kutch-1285/GPCB ID 46364/ dated 28/08/2015 had extended the validity period of NOC up to 05/08/2020. (Copy placed at **Annexure – III**).
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site tin question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued from time to time.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they have stored only permissible cargo as per EC & CRZ Clearance/CRZ Notification.
4	No ground water shall be tapped to meet the water requirements during the construction and/or operation phases.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they have purchased water for their requirement from local water Supplier and no ground water withdrawal envisaged by any of the plot allottee.
5	The Kandla Port Trust shall undertake roof top water harvesting in areas wherever it is feasible.	DPA has considered the provision of Rain water Harvesting while approving the drawing. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had constructed RWH as per drawing approved by DPA.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation.

	management issues.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they hadprovided assurance for contribution towards the cost of any common study that may be carried out for DPA region for environmental protection and management issues.
7	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they have already prepared detailed Disaster Management Plan.
8	The project proponents shall implement all the suggestion/recommendations given by the NIOT in their Rapid EIA report.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they had assurance for comply and implementation recommendations given by the NIOT in their EIA report.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in the Consent to Establish (NOC) and the CCA	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they hadstarted commercial operation and assured for comply the condition of CCA.
10	The project proponents shall bear the cost of the external agency that may be appointed by the Department for supervision/monitoring of proposed activities and the environmental impacts of the proposed activities.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they had dedicated Environmental Consultant for compliance of Environmental conditions including monitoring.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department.	Deendayal Port Authority had completed mangroves plantation in an area of 1500 ha. Further, DPA is carrying out additional mangrove plantation of 100 Ha. With consultation of Gujarat Ecology Commission vide Work Order No. DD/WK/3050/Pt-I/GIM/PC-44 dated 02/06/2022. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) started commercial

		operation. All plot allottees had provided necessary greenbelt as per the condition stipulated.
12	Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they have started commercial operation after obtaining statutory clearances as applicable.
General Conditions		
1	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. And the stipulated conditions will be taken care of by the individual plot allottee.
2	The KPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the forest and Environment Department and the District Collector/District Development Officer	DPA is already engaged in numbers of CSR activities in the area. Also, the plot allottees carried out CSR at their own level in addition to the CSR by DPA.
3	A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that they hadseparate budget earmarked for environmental management and socioeconomic activities. Further, all the plot allottee had also expenditure on monitoring of environmental parameters by Environmental Consultant.
4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that they have appointed Environmental Consultant for compliance of Environmental conditions including monitoring.
5	An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that they have appointed Environmental Consultant and regular monitoring of ambient air, stack, water and noise being done.
6	A six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that they are being complied on compliance of the condition mentioned by authorities.
7	Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that they have started commercial operation after obtaining statutory clearances as applicable.

Annexure -I

DEENDAYAL PORT AUTHORITY
Chief Engineer Department
(Land Section)

Sub: Six Monthly Compliance Report of Environmental / CRZ clearance for the period December 2021 to May 2022

*****

With reference to above, it is inform that, this office is in receipt of Six monthly Compliance Report of Environmental / CRZ Clearance for the **Period of December – 2021 to May - 2022' with relevant enclosures,** submitted by following **03 (Three) Parties viz.**

1. M/s. Gokula Agro Resources Ltd.,
   (Pertains to Plot No. 13 at Kandla)
2. M/s. Emperius Ltd.
   (Pertains to Plot No: 17 at Kandla)
3. M/s. Gokula Agro Resources Ltd.,
   (Pertains to Plot No: 26 at Kandla)

The originals of the above are enclosed herewith for ready reference.

This is for kind information and necessary action please.

Encl: As above (03 Bunches).

S.E. (Kandla Land)
Deendayal Port Authority

To,
S.E. (Marine) & EMC (I/c)
No. LAND/PL/3301-VI/695

Dated: 17.06.2022

519
20/06/2022

Manager (Land) / Shri Padalia EMC

EMPERIUS

Ref. No. CMP/EIPL/2022/06

Date: 01/06/2022

To, SE(L)
DEENDAYAL PORT TRUST
Administrative Office,
PB No. 50, Gandhidham (Kutch)
Gujarat – 370201,

Sub. : Submission of Six Monthly Compliance Report of Environmental/CRZ Clearance, (Compliance Report for the Period of December-2021 to May-2022).

Ref.: EC/CRZ issued vide letter No. : F. No. 10-36/2008-IA-III dated 02/02/2010 and 18/08/2015.

Dear Sir,

We are setting up Edible Oil Storage Terminal at Plot No. 17.

Accordingly, please find enclosed here with point wise compliance report of the stipulated condition in EC/CRZ Clearance.(Encl. as **Annexure - A**)

Also find enclosed here with Detail Compliance Report of CRZ Recommendation. (Encl. as **Annexure - B**) Detail Compliance Report of Consent to Establish (NOC). (Encl. as **Annexure - C**) Enclosed here with Data Sheet (Encl. as **Annexure-D**) Environment Monitoring Reports for the period of December-2021 to May-2022 (Encl. as **Annexure – E**).

We hope the above is in line with your requirements.

Thanking you

Yours sincerely,
M/s. Emperius Infralogistics Pvt. Ltd.,

Authorized Signatory

EMPERIUS INFRALOGISTICS PRIVATE LIMITED
Registered office Address : Plot No. 17, Near Jawaharlal Road, Kandla, Kachchh, Gujarat-370210
T: +91 8980012144 | E : terminalmanager@emperiusindia.com | W: emperiusindia.com
CIN : U74120GJ2015PTC110480 | PAN : AAECE0846R | GST : 24AAECE0846R1ZB

COMPLIANCE STATUS REPORT OF EC

EC issued vide letter No. F. No. 10-36/2008 – IA-III dated 2nd February 2010

Extension of validity of EC issued Vide Letter No. F. No. 10-36/2008- IA-III dated 18th August, 2015

NO.	BRIEF DESCRIPTION	COMPLIANCE REPORT
6	**Specific conditions :**	
A	**Construction Phase :**	
I	All the conditions stipulated by the Govt. of Gujarat vide letter No. ENV -10-2008-366-E, dated 09.03.2009 and Gujarat Pollution Control Board vide letter No. PC/NOC/CCA-Kutch-78(2) GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009 is enclosed as **Annexure B.** Further, GPCB vide letter dated 28/08/2015 had extended the validity period of NOC/CTE up to 5/08/2020. Accordingly, Compliance report of NOC/CTE granted by GPCB on 28/08/2015 enclosed as **Annexure C.**
II	The entire water supply shall be managed by the port; waste water will be treated and utilized.	We do meet this condition.
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading/unloading of trucks within the port complex.	We provided parking for large vehicles during the construction phase, as well as sufficient space for loading and unloading trucks within the port complex.
IV	The proponent shall put in the place the detailed on site and off site emergency Management Plan as per the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, as amended to date which may cover the natural disasters also.	We created a complete on-site and off-site emergency management plan in accordance with the Hazardous Chemicals Manufacturing, Storage, and Importation Rules 1989, as revised to date, which may encompass natural disasters as well as the construction period.
V	The proponent shall put in the place the Oil Spill Contingency Plan.	We have prepared the Oil Spill Contingency Plan and follow this plan.
VI	The proponent shall strictly comply the measures proposed as per their letter No. EG/WK/4684/EC/388, dated 01.12.2009	Not Applicable as we are only edible oil storage Terminal.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991	The FSI on the plots are done as per CRZ notification 1991.
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent authority prior to construction/operation of the project.	No any ground water drawn will be done by us; We have arranged the water supply from the authorized water supplier.
IX	Sewage Treatment facility should be provided in accordance with the CRZ notification.	Domestic Waste water disposed through septic tank /Soak pit system accordance with the CRZ notification.

X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and handling) Rules, 2000.	According to the provisions of the Solid Garbage (Management and Handling) Rules, 2000 and the Solid Waste Management Rules, 2016, solid waste was appropriately collected, sorted, and disposed.
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	There is no any labor camp required as local public/ labor mainly engaged for construction activities.
XII	A first aid room will be provided in the project both during the construction and operation of the project.	We have already provided first aid room.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	During construction, we kept all of the topsoil and used it for landscaping and greenbelt development on the site.
XIV	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Construction wastes have been disposed off as per the construction and demolition Rule, 2016. There is no any neighboring communities are located at project site.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	It shall be ensured that there are no hazards to ground water quality due to leaching of heavy metals and other harmful substances by taking adequate measures for evaluating soil and ground water samples.
XVI	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Properly adequate measure were taken for secure construction practices so that no construction spoils were contaminate watercourse and were not leach into ground water.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	We are disposed off our hazardous waste as per Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016. Used oil is disposed by sending to registered recyclers and Pig waste is disposed by sending to Common Hazardous Waste Incineration Facility. Membership certificate is enclosed here in **Annexure-H**.
XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We have installation and operation of the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.
XIX	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	We are using low Sulphur diesel in DG set during the construction phase and also follow the Environment (Protection) Rules prescribed for air and noise emission standard.

XX	The diesel required for operating DG Sets shall be stored in underground tanks and if required, clearance from chief controller of explosives shall be taken.	Diesel required for the operation of DG has been stored as per rules.
XXI	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	We have only hired those vehicles having valid pollution under control license granted by statutory authorities. Project area is connected with national highway, so transporting activities have been carried out only at day time.
XXII	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/GPCB	We have taken adequate measure to reduce ambient air and noise level during construction phase. The ambient noise level was also checked by third party. (Refer **Annexure-E**)
XXIII	Storm water control and its re-use as per CGWB and BIS standards for various applications.	The area for storage of storm water and same will be reuse for green belt development at the premises of the plots as we already mention.
XXIV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	We minimized the water demand during the construction phase by using pre-mixed concrete, curing agents, preventing losses due to leaks and spills, and other best practices for construction and related operations.
XXV	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipment's, etc. as per National Building Code including protection measures from lightening etc.	We have obtained the approval of competent authority for structural safety of the Building due to earthquake, adequacy of firefighting equipment etc.
XXVI	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	We have appointed a site inspection team for regular supervision of construction activity carried out by us.
XXVII	Under the provisions of the Environment protection Act 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	We had started construction activities only after obtained the necessary clearance from statutory authorities i.e. EC/CRZ Clearance from MoEF&CC. New Delhi, CRZ Recommendation from Forest & Environment Department, GoG and NOC/CTE from GPCB, GoG.
B. OPERATION PHASE		
I	The installation of the Sewage Treatment Plant (STP) if any should be certified by an independent expert and a report inthis regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Gujarat Pollution Control	We have provided the septic tank and soak pit for the sewage treatment and disposal and if any STP will be installed, it will be informed to Ministry along with necessary details.

	Board. Necessary measures should be made to mitigate the odour problem from STP.	
II	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be enclosed type and conform to the rules under the Environment (Protection) Act,1986. The height of stack of DG sets, Use of low Sulphur diesel. The location of the DG Sets may be decided with in consultation with Gujarat Pollution Control Board.	We have placed the DG sets with considering the location, fuel type and the height of the DG sets after getting the approval by consulting with GPCB.
III	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	We are ensuring that Noise level will be in prescribed standard, We have adopted measure for noise control and they were under the prescribed standards. (Refer **Annexure-E**)
IV	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We have already earmarked the area for development of Greenbelt at periphery area of plots. Enclosed herewith drawing in **Annexure-F.**
V	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	We have already provided the area for weep holes in the compound walls to ensure natural drainage of rainwater in the catchment area during the monsoon period.
VI	Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented, before recharging the surface run-off, pretreatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground water table.	Rain water harvesting for roof run -off is implemented by us.
VII	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	We have been regularly monitoring the ground water level and its quality in consultation with Central Ground Water Authority.
VII	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	To reduce traffic congestion around the entry and exit points, we have prepared and placed a Traffic Management Plan for the premises, as well as adequate parking spaces.
IX	Efforts may be made to use solar energy to the maximum extent possible.	We have provided the open areas to use solar energy to the maximum extent possible.
X	Adequate measures should be taken to prevent odor problem from solid waste processing plant and STP.	Adequate measures are taken by us to prevent odor problem. We are control the odor problem within plant by cleaning and scrubbing.
7.	**General Conditions:**	
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/ local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of the Coastal	We have constructed the structures as per the approved plan by Deendayal Port Authority. Further, We have constructed the

	regulation zone notification dated 19.02.1991 and the approved coastal zone management plan of Gujarat.	structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department, GOG on 9/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and forests.	We will comply with this condition.
III	This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Agree with the ministry.
IV	The ministry or other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Agree with the competent authorities.
V	Full support should be extended to the officers of this Ministry's regional office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protective activities.	Full support had been provided to officers of GPCB/CPCB/MoEF&CC.
8.	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public liability (Insurance) Act, 1991 and municipal solid wastes (Management) & Handling Rules, 2000 including the amendments and rules made thereafter.	Mentioned Stipulations have been strictly followed by under the water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, the Hazardous Chemicals (Manufactures, storage and Import) Rules, 1989,the Coastal Regulation Zone Notification, 1991 and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made there under from time to time.
9.	All other statutory clearance such as the approvals for storage of diesel from chief controller of Explosives, Fore Department and Civil Aviation Department from height point of view, Forest conservation Act, 1980 and wildlife (Protection) Act, 1972 etc. shall be obtained as applicable by project proponents from the respective competent authorities.	When we require, we will obtain the statutory clearance for storage of Diesel from chief controller of explosive, fire department, civil aviation department from height point of view and other respective competent authorities.
10.	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorder CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the clearance letter and its copy of the same should be	Kandla Port Trust had already advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of

	forwarded to the Regional office oh this ministry at Bhopal.	Environment and Forests at http://www.envfor.nic.in.
11	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (civil) No. 460 of 2004 as may be applicable to this project.	We have carried out the construction /operation activities as per the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004.(wherever applicable)
12	Any appeal against this clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.	Noted
13	A copy of the clearance letter shall be sent by the proponent to the concerned zillaParishad/Municipal corporation, urban local body and the local NGO, if any from whom suggestions if any were received while processing the proposal. The clearance letter shall also be put on website of the company by the proponent.	N/A
14	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF, the respective zonal office of CPCBand SPCB. The criteria pollutant levels namely SPM, RSPM,SO_2,NO_Xor critical sector parameters indicated for the project shall be monitored and displayed at s convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance. CRZ Recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on Deendayal Port Authority website. i.e. www.kandlaport.gov.in.We have monitored pollutant like SPM, RSPM, SO_2,NO_X and display at a convenient location near the main gate of the company in the public domain.
15	The project proponent shall also submit six monthly reports on the status of the stipulated EC conditions including results of monitored data (both in hard copies as well as by email) to the respective regional office of MoEF, the respective zonal office of CPCB and the SPCB.	We are submitting the six monthly compliance to DPA.
16	The environmental statement for each financial year ending 31st March in form –V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	The Environmental Statement for each financial year ending 31st march in Form -V is submitted to the Honorable State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986. Form-V is attached here in **Annexure-I**.

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kachchh,

CRZ Recommendations: Letter No.ENV-10-2008-366-E March 9th, 2009 of Director (Environment), Forest & Environment Department, GoG.

STATUS OF COMPLIENCE OF THE CONDITIONS STIPULATED BY GUJARAT STATE COASTAL ZONE MANAGEMENT AUTHORITY, GANDHINAGAR IN CRZ RECOMMENDATIONS LETTER

Sr. No.	Conditions in CRZ Recommendation Letter	Compliances
	Specific Conditions	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued by MoEF, GoI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments/agencies shall be obtained by the KPT before commencing the expansion activities.	We have obtained the EC/CRZ Clearance from the MoEF, GOI on 2/02/2010 and MOEF &CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020. Further, Deendayal Port Authority had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 /dated 28/8/2016 had extended the validity period of NOC up to 5/08/2020. We have also obtained the Valid CTE or CCA separately for the Plot No. 17.
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued from time to time.	We are handling only permissible cargo as per the CRZ Notification, 1991 and its amendments issued from time to time.
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	No any ground water has been tapped to meet the water requirements during the construction phase as we have appointed local authority water supplier.
5	The Kandla Port Trust shall undertake roof – top water harvesting in areas wherever it is feasible.	We have made necessary arrangement for the roof top water harvesting our premises.

6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We have contributed towards the cost of any common study that may be carried out for DPA region for environmental protection and management issues.
7	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department.	DPA has already having updated Disaster Management Plan prepared by M/s Telos Consultancy, Mumbai and same as been submitted to Forest and Environment Department.
8	The project proponents shall implement all the suggestion/ recommendations given by the NIOT in their Rapid EIA report.	Suggestion / recommendation given by the NIOT in their Rapid EIA reports are being will be strictly followed by us.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complying the conditions stipulated by GPCB in Consent to Establish (NOC) as well as in Consolidated, Consent and Authorization (CC&A).
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We will bear the cost of the external agency that may be appointed by this Department for supervision /monitoring of proposed activities and the environmental impacts of the proposed activities.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department.	We have already been earmarked the area for development of greenbelt along the periphery area.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We will comply all the stipulated by Forest and Environmental Department. GOG from time to time for environmental protection /management purpose.
	General Conditions	
1	The construction camps shall be located outside the CRZ area and the construction labor shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labors.	No any construction camps had required at Project site because only local peoples /labors involved for the construction activities. We have been provided the necessary amenities, sanitation, water and fuel to their labor during the construction phase. No any environmental conditions have been deteriorated by construction labors during the construction activities carried out by us.
2	The KPT shall have to contribute financially for talking up the socio-economic upliftment	Socio –economic up liftment activity in the

<table>
<tr><td></td><td>activities in this region in construction with the Forest and Environment Department and the District Collector / District Development Officer.</td><td>region has been done by us.</td></tr>
<tr><td>3</td><td>A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.</td><td>We will earmark separate budget for environmental protection& Socio economic activity after commissioning of our Operation.
<table><tr><th>Budget for</th><th>Planned cost for F.Y. 2021-2022</th><th>Actual Cost for F.Y. 2021-2022</th></tr><tr><td>EMP</td><td>2.2 Lakh</td><td>2.2 Lakh</td></tr><tr><td>CSR</td><td>NA</td><td>NA</td></tr><tr><td>CER</td><td>NA</td><td>NA</td></tr></table></td></tr>
<tr><td>4</td><td>A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.</td><td>We have appointed GPCB approved Environmental Consultant to carry out the Environmental Monitoring during construction and operational phase at our premises.</td></tr>
<tr><td>5</td><td>An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.</td><td>We will submit reports every year if any change with respect to the baseline environmental quality in the coastal and marine environment reports will be submitted to the respective authority.</td></tr>
<tr><td>6</td><td>Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.</td><td>Six Monthly reports on Compliance report condition mentioned in EC/CRZ Clearance will be furnished by us on regular basis to this department / MoEF, GOI through DPA.</td></tr>
<tr><td>7</td><td>Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.</td><td>Noted</td></tr>
</table>

Annexure–C

COMPLIANCE REPORT OF CONSENT TO ESTABLISH (NOC)

(CTE NO: 72308 ON DATED 28/08/2015 is valid up to 05/08/2020)

NO	CONSENT CONDITION POINTS	COMPLIANCE
1	Consent Order No. **CTE-72308&** issue on Dated **28/08/2015.**	Complied.
2	The consents shall be valid up to **05/08/2020** for setting up of industrial plant at ADMINISTRATIVE BUILDING POST BOX NO - 50, TAL- GANDHIDHAM, DIST.-KUTCH for development of plot for construction of liquid storage tank farm for handling edible & non-edible oil & petroleum products for 4,38,92 sq. meter (108.46 acres) area for storage of liquid hazardous chemicals (A,B,C,D) for liquid storage (21.26 lakh kilo liters) in phase wise up to 2025 as per EC order dated 2.2.2010.	We do meet the condition.
	SUBJECT TO THE FOLLOWING CONDITIONS:	
2.1	Unit shall not start any construction activities till extending the validity of EC& CRZ from Competent Authority.	Construction activity have been started only after extending the validity of EC & CRZ clearance from MoEF & CC.
2.2	No ground water shall be used for the project coming under Dark zone without permission of competent authority.	We are not use ground water. We will use water supplied by approved water supplier.
2.3	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 KL, Chemical and PO land Acid of 472 tanks with 12,08,369 KL. The tentative tanker capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We will strictly adhere the environment and CRZ clearance condition no. 2. Necessary permission will be obtained by us in case of storage of additional quantity.
2.4	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10~ 36/2008-IA-III dated 02/02/2010 for old Kandla.	We have started the commercial operation and strictly complied with the condition of EC & CRZ issued by MoEF.
2.5	You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities.	We have obtained the valid CTE and CCA from bard and strictly complied with this.
2.6	Applicant is required to comply with provision of	We are strictly complying

<table>
<tr><th>NO</th><th>CONSENT CONDITION POINTS</th><th>COMPLIANCE</th></tr>
<tr><td>2.6</td><td>Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.</td><td>We are strictly complying with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules -1989 framed under Environment Protection Act -1986.</td></tr>
<tr><td>3</td><td colspan="2">CONDITIONS UNDER THE WATER ACT 1974:</td></tr>
<tr><td>3.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.</td><td>The quantity of industrial effluent from the factory is nil</td></tr>
<tr><td>3.2</td><td>The quantity of domestic waste water (Sewage) shall not exceed 4.00 KL/Day</td><td>Domestic waste water generation will not exceed the limit.</td></tr>
<tr><td>3.3</td><td>Sewage shall be disposed of through septic tank/soak pit system.</td><td>We do meet the condition</td></tr>
<tr><td>3.4</td><td>The unit shall install flow meters for measuring category wise (Category as given in Water-Cess 1977 Schedule II) consumption of water.</td><td>We have install meter for measuring of water consumption.</td></tr>
<tr><td>3.5</td><td>Domestic effluent shall be disposed off through septic tank / soak pit system confirm to the following standards.
<table>
<tr><th>Parameter</th><th>Permissible Limit</th></tr>
<tr><td>BOD (5 days at 20° C)</td><td>30 mg/Liter</td></tr>
<tr><td>Suspended Solid</td><td>20 mg/Liter</td></tr>
<tr><td>Residual Chlorine</td><td>Minimum 0.5 mg/Liter</td></tr>
</table></td><td>We have disposed the sewage through septic tank / soak pit system.</td></tr>
<tr><td>4</td><td colspan="2">CONDITIONS UNDER THE AIR ACT 1981:</td></tr>
<tr><td>4.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.</td><td>We do meet the condition.</td></tr>
<tr><td>4.2</td><td>There shall be no process emission from the manufacturing and other ancillary activities</td><td>There is no process gas emission from our unit</td></tr>
<tr><td>4.3</td><td>The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009..
<table>
<tr><th>Pollutant</th><th>Time weighted average</th><th>Concentration in ambient air in µg/M3</th></tr>
</table></td><td>Ambient Air quality within plant premises will be confirmed to the prescribed norms.
Refer Annexure-E.</td></tr>
</table>

NO	CONSENT CONDITION POINTS			COMPLIANCE
	SO_2	Annual 24 hours	50 80	
	NO_2	Annual 24 hours	40 80	
	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 hours	60 100	
	Particulate Matter (Size less than 2.5 mm) OR $PM_{2.5}$	Annual 24 hours	40 60	
4.4	The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A).			We do meet the condition. Refer **Annexure-E.**
5	**CONDITIONS UNDER HAZARDOUS WASTE:**			
5.1	The applicant shall provide temporary storage facilities and maintain the record for each type of Hazardous Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.			We have provided the storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling &Transboundary Movement) Rules, 2008 as amended from time to time.
5.2	The applicant shall obtain membership of common TSDF site for disposal of hazardous waste as categorized in Hazardous waste (Movement, Handling and Transboundary Movement) rules 2016 as amended from time to time.			We complied with.
6	**GENERAL CONDITIONS :**			
6.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.			We will intimate to GPCB, GOG if there are any change in personnel, equipment or working condition as mentioned in the consents form / order.
6.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipment's, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.			In case of failure of Pollution control equipment, we will stop the storage activities connected with the pollution control equipment.

NO	CONSENT CONDITION POINTS	COMPLIANCE
6.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.	We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our own premises. Further, Monitoring report will be submitted to GPCB regularly during the operation phase.
6.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We have set up Environmental Cell.
6.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.	We will submit environmental statement within stipulated time limit.
6.6	The board reserves the right to review and/or revoke the consent and/ or make variations in the conditions, which the board deems, fit in accordance with section 27 of the act.	We strictly agree with this.
6.7	In case of change of ownership/management the name and address of the new owners /partners /directors /proprietor should immediately be intimated to the board.	We will intimate to GPCB, GoG immediately in case of change of ownership/management the name and address of new owners/partners/directors/proprietor.
6.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.	We have obtained the TSDF membership certificate for collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal of waste generated at our own premises whenever applicable.
6.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31st January of every year	We are maintaining the records foe waste generation and its management. We have submitted the Annual returns

NO	CONSENT CONDITION POINTS	COMPLIANCE
		to GPCB in prescribed form within stipulated time period.
6.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We will keep all the necessary insurance policy including the "Public Liability Insurance Act - 91".
6.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.	We have adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GOG in prescribed form.
6.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We will strictly comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act- 1986
6.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.657 of 199s-dated 14th October-2003.	We are displaying the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.657 of 199s-dated 14th October-2003.
6.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We had display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within their own premise.
6.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We are only edible oil storage tank terminal.

Annexure-D

Monitoring the implementation of environmental Safeguards
Ministry of Environment, Forest and Climate Change
Western Region, Regional Office, Bhopal.
MONITORING REPORT
Part – 1
DATA SHEET

1. Project type : River valley/ Mining/Industry/ thermal/nuclear/Other (specify)	Liquid Storage Terminal
2. Name of the project	**M/s. Emperius Infralogistics Pvt. Ltd.**
3. Clearance Letter (s). OM no and date	MoEF , New Delhi vide File No.10-36/2008-IA-III dated 2/02/2010 had granted Environmental /CRZ Clearance to Deendayal port Authority for the subject project. Further, MoEF & CC, New Delhi vide File No.10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	Dist. : Kutch State : Gujarat Location : Deendayal port Authority, 23° 1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address of Concerned Project Chief Engineer (with pin code &telephone/telex/fax numbers) b) Address of Executive project Engineer/ manager/(with pin code fax numbers)	Plot No. 17, Liquid Storage Tank Farm, Deendayal port Authority, Gandhidham-Kutch Gujarat Pin-370201 Plot No. 17, Liquid Storage Tank Farm, Deendayal port Authority, Gandhidham-Kutch GujaratPin-370201
6. Salient features of the project b) Salient features of the Environmental management plan	1. Plot no. 17 have been developed for the Liquid storage Tank farm. 2. The Tentative capacity works out for the proposed tank farm is 68385.39Kiloliters. 3. This Plot is mainly used for storage of liquid cargo as permitted in CRZ Notification 2011 and amended from time to time. 1. Provision of parking of heavy vehicles and sufficient space for loading /unloading of trucks within individual plot limit have been made by us. 2. We had already placed the detailed on site and Off site Emergency management Plan as per the Manufacture, Storage and Import of Hazardous Chemicals Rules,1989, as amended to date. 3. The solid waste have been properly

	collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room had already been provided by successful plot allotted during the construction activities. 5. Secure construction practices have been adopted by successful plot allotted in which no any construction spoils take placed. 6. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities. 7. We have already earmarked the area for storage of storm water and same will be reuse for green belt development at the premises of the each plots.
7. Break up of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land & landless labourers/artisen a) SC. ST/Adivasis b) Others (please indicate whether these figures are based on any scientific and systematic survey carried out of only provisional figures, if a survey is carried out give details and years of survey).	 Nil Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference b) Allocation made for environmental management plans with item wise and year wise break-up c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) includes the cost of environmental management plans so far. d) Actual expenditure incurred on the project e) Actual expenditure incurred on the Environmental management plans so far.	Total project Cost: 40 Crore Approx. Planned EMP Cost: **2.2 Lakh** Financial Year**2021-2022:- Lakh** FIRR EIRR Actual Project Cost: 40 Crore Approx. Actual provided fund for EMP: 2.2 Lakh
10. Forest land requirement a) The status of approval for diversion of forest land for non-forestry use	Nil Nil-Not related

forest land for non-forestry use b) The status of clear felling c) The status of compensatory a forestation, if any d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	Nil-Not related Nil Nil Nil
11. The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	Nil
12. Status of construction a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	a) 23/10/2015 b) 07/02/2020
13. Reasons for the delay if the Project is yet to start	--
Date of site visited a) The dates on which the project was monitored by the regional office on pervious occasion, if any b) The date site visit for this monitoring report	--- ---

Annexure –E

(EMR)

Report No. : EE/LAB/AMB/2021/03/12/005

Date: 29/12/2021

ANALYSIS REPORT
(For the Month of December-2021)

Name and Address Of Client	M/s. Emperiustrategistics Pvt. Ltd. Plot No.: 17, Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182, Part – 5: 2014
Analysis Start on	15/12/2021
Analysis end on	18/12/2021

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	14/12/2021
				Date of Sample Receipt	14/12/2021
				Code	EE/1221/EIPL/AA1
1	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	62.05
2	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	16.26
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	11.20
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	14.03

Analyzed By

Authorized Signatory

- Report is subject to the conditions which the Sample is received at our Laboratory.
- Report not to be used in any evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained 7 days maximum from the date of sampling.

Report No: EE/UNB/IHW/2021/[illegible]/[illegible]

Date: 20/12/2021

ANALYSIS REPORT
(For the Month of December-2021)

Name and Address Of Client	M/s. Emperanintralogistics Pvt. Ltd. Plot No. 17,Kandla Port Zone Tal. Gandhidham Dist. Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Date of Sampling	14/12/2021
Sample Receipt in lab	14/12/2021
Sample ID	EE/2021/1101/ST1
Method Used for Sampling	Guidelines on methodologies for source emission monitoring LAQS/80/2013-14
Sampling equipment	Yash stack monitoring kit
Date of Analysis	15/12/2021 to 18/12/2021

Details required for Isokinetic Sampling

Stack Attached To	D.G set (250 KVA)
Fuel Used	HSD
APCM provided	-
Stack Height (m)	11
Stack Diameter(mm)	169
Stack Temperature (K)	448
Ambient temperature (K)	304
Velocity (m/s)	10.38
Flow rate (LPM)	13.37

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1	Particulate Matter (PM)	mg/Nm^3	71.85	150	IS 11255 (Part 1
2	Sulphur dioxide (SO_2)	ppm	20.43	100	IS 11255 (Part 2)
3	Oxides of Nitrogen (NO_x)	ppm	10.55	50	IS 11255 (Part 7

Analyzed By:

Authorised Signatory:

- Analysis subject to the condition in which the sample is received at our laboratory.
- Reports cannot be used as evidence anywhere including any purpose without our prior permission.
- Samples will be retained for one month from the date of sampling.

Report No: - EE/LAB/EMR/2021/Q3/12/007

Date: 20/12/2021

ANALYSIS REPORT

(For the Month of December-2021)

Name and Address Of Client	M/s. EmperiusInfralogisticsPvt. Ltd. Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	14/12/2021
Sampling end on	15/12/2021
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/1221/EIPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1.	Near Main gate	dB (A)	66.8	75.0	60.5	70.0
2.	Near Refiner Area	dB (A)	72.2	75.0	66.7	70.0
3.	Near ETP plant	dB (A)	68.6	75.0	61.3	70.0

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No : FE/LAB/LMR/2021/03/12/001

Date: 20/12/2021

ANALYSIS REPORT

(For the Month of December-2021)

Name and Address Of Client	M/s. EmperiusInfralogisticsPvt. Ltd. Plot No - 17,Kandla Port Zone Tal - Gandhidham Dist - Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	14/12/2021
Sampling end on	15/12/2021
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/1221/EIPL/N1-N3

NOISE MONITORING RESULTS

Sr. No	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1	Near Main gate	dB (A)	66.8	75.0	60.5	70.0
2	Near Refiner Area	dB (A)	72.1	75.0	65.7	70.0
3	Near ETP plant	dB (A)	68.6	75.0	61.3	70.0

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: EE/SAMPLING/2021/Q3/12/001

Date: 30/12/2021

ANALYSIS REPORT

(For the Month of December-2021)

Name and Address Of Client	M/s. Emperia Infralogistics Pvt. Ltd. Plot No. 17, Kandla Port Zone Tal.: Gandhidham Dist.: Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	14/12/2021
Date of Sample receipt	14/12/2021
Date of Analysis	14/12/2021 - 20/12/2021
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result
	Sampling Location	--	--	ETP outlet
	Sample Code	--	--	EE/1221/EIPL/WWL
1	pH at 25°C	--	IS 3025 (P-11)	7.46
2	Temperature	°C	APHA 2550 B	25.6
3	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1420
4	Total Suspended Solids	mg/l	IS 3025 (P-17)	20
5	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	68
6	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	22.14
7	Oil & Grease	mg/l	IS 3025 (P-39)	0.44
8	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	8.93
9	Chloride	mg/l	IS 3025 (P-32)	236.59
10	Percent Sodium	%	IS 3025 (P-45)	5.6

Analyzed By:

GUJARAT Authorised Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Date: 20/12/2021

Report No: - EE/ENV/2021/12/059

ANALYSIS REPORT

(For the Month of December-2021)

Client Details		Sample Details	
Name	M/s. Emperus Infralogistics Pvt. Ltd.	Sample Code	EIPL/SA1
Address	Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	14/12/2021
Analysis Starts on	15/12/2021	Sampling Method	IS 2720 Part 1
Analysis Completion On	20/12/2021	Sample Received Date	14/12/2021

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1	Texture	--	Sandy Loam	Methods manual of Soil testing in India (January 2011)
1.a	Sand	%	74.48	Methods manual of Soil testing in India (January 2011)
1.b	Silt	%	10	Methods manual of Soil testing in India (January 2011)
1.c	Clay	%	15.52	Methods manual of Soil testing in India (January 2011)
2.	pH	--	7.86	IS 2720 (P-26)
3.	Moisture Content	%	2.23	IS 2720 (P-2)
4.	Organic Matter	%	0.73	Methods manual of Soil testing in India (January 2011)
5	Conductivity	µs/cm	2785	IS 14767:2021
6	AvoiableFhosphorus as P	Mg/KG	16.3	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7.	Potassium as K	Mg/KG	41	Methods manual of Soil testing in India (January 2011)
8	Calcium + magnesium	Me/100 gm	15.51	Methods manual of Soil testing in India (January 2011)
9	Calcium as Ca	Me/100 gm	13.02	Methods manual of Soil testing in India (January 2011)

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained for one month from the date of sampling.

EARTH envirotech
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No. : EE/LAB/EMR/2022/04/01/005 Date: 11/01/2022

ANALYSIS REPORT
(For the Month of January - 2022)

Name and Address Of Client	M/s. EmperisInfralogistics Pvt. Ltd. Plot No.: 17, Kandla Port Zone Tal : Gandhidham Dist : Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182: Part – 5: 2014
Analysis Start on	08/01/2022
Analysis end on	11/01/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	07/01/2022
				Date of Sample Receipt	07/01/2022
				Code	EE/0122/EPU/AAL
1	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	59.85
2	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	33.51
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	04.39
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	11.99

Analyzed By:

Authorized Signature

- Analysis subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be retained for one month from the date of sampling.

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ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No. : EE/LAB/EMR/2022/Q4/01/006 Date: 11/01/2022

ANALYSIS REPORT

For the Month of January - 2022

Name and Address Of Client	M/s. Emperor Hydrogenics Pvt. Ltd. Plot No : 17, Kandla Port Zone Tal : Gandhidham Dist : Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Date of Sampling	07/01/2022
Sample Receipt in lab	07/01/2022
Sample ID	EE/0122/EHPL/ST1
Method Used for Sampling	Guidelines on methodologies for source emission monitoring LAPS/80/2013-14
Sampling equipment	Yash stack monitoring kit
Date of Analysis	08/01/2022 to 11/01/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G set (250 KVA)
Fuel Used	HSD
APCM provided	--
Stack Height (m)	13
Stack Diameter(mm)	101
Stack Temperature (K)	403
Ambient temperature (K)	301
Velocity (m/s)	10.35
Flow rate (LPM)	13.85

Result of Analysis

Sr. No	Parameter	Unit	Result	Limit as per GPCB	Method used
1.	Particulate Matter (PM)	mg/Nm^3	67.88	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	17.70	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NOx)	ppm	33.03	50	IS 11255 : Part 7

Analyzed By:

Technical Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our
- Sample will be retained for one month from the date of sampling.

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Report No. - EE/LAB/EMR/2022/Q4/01/007

Date: 13/01/2022

ANALYSIS REPORT

(For the Month of January - 2022)

Name and Address Of Client	M/s. EmperiusInfralogisticsPvt. Ltd. Plot No : 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	07/01/2022
Sampling end on	07/01/2022
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/0122/EIPL/N1-N3

NOISE MONITORING RESULTS

Sr. No	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1.	Near Main gate	dB (A)	69.4	75.0	59.4	70.0
2.	Near Refiner Area	dB (A)	71.9	75.0	62.7	70.0
3.	Near ETP plant	dB (A)	70.1	75.0	58.7	70.0

Analyzed By:

GUJARAT
Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

7 & 15, Ground Floor, Madhav Palace, Plot No. 55, Sector-8, Opp. D-Mart Mall, Gandhidham-Kutch. 370201, Gujarat, India.

Report No. : EE/LAB/EMR/2022/Q4/01/008

Date: 13/01/2022

ANALYSIS REPORT

(For the Month of January - 2022)

Name and Address Of Client	M/s. EmperiusInfralogisticsPvt. Ltd. Plot No. 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	07/01/2022
Date of Sample receipt	07/01/2022
Date of Analysis	08/01/2022 to 13/01/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result
	Sampling Location	--	--	ETP outlet
	Sample Code	--	--	EE/0122/EIPL/WW1
1	pH at 25°C	--	IS 3025 (P-11)	7.51
2	Temperature	°C	APHA 2550 B	25.3
3	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1574
4	Total Suspended Solids	mg/l	IS 3025 (P-17)	29.2
5	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	71.71
6	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	21.83
7	Oil & Grease	mg/l	IS 3025 (P-39)	0.5
8	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	5.32
9	Chloride	mg/l	IS 3025 (P-32)	251.78
10	Percent Sodium	%	IS 3025 (P-45)	6.6

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be returned in one month from the date of sampling.

Report No. : EE ENV/ 2022/ 01/ 016

Date: 13/01/2022

ANALYSIS REPORT

(For the Month of January - 2022)

Client Details		Sample Details	
Name	M/s. Emperia Metallurgies Pvt. Ltd.	Sample Code	EPL/SA1
Address	Plot No. 17, Kandla Port Zone Tal.: Gandhidham Dist.: Kutch – 370 201	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	07/01/2022
Analysis Starts on	08/01/2022	Sampling Method	IS 2720 Part 1
Analysis Completion On	13/01/2022	Sample Received Date	07/01/2022

SOIL ANALYSIS RESULT

Sr. No	Parameters	Unit	Result	Test Method Used
1	Texture	–	Sandy Loam	Methods manual of Soil testing in India (January 2011)
2	Sand	%	74.66	Methods manual of Soil testing in India (January 2011)
3	Silt	%	10.29	Methods manual of Soil testing in India (January 2011)
4	Clay	%	15.05	Methods manual of Soil testing in India (January 2011)
5	pH	–	7.42	IS 2720 (P-26)
6	Moisture Content	%	2.18	IS 2720 (P-2)
7	Organic Matter	%	0.65	Methods manual of Soil testing in India (January 2011)
8	Conductivity	µs/cm	2956	IS 14767:2021
9	AvailablePhosphorus as P	Mg/KG	17.25	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
10	Potassium as K	Mg/KG	33.5	Methods manual of Soil testing in India (January 2011)
11	Calcium + magnesium	Meq/100 gm	20.20	Methods manual of Soil testing in India (January 2011)
12	Calcium as Ca	Meq/100 gm	15.05	Methods manual of Soil testing in India (January 2011)

Analysed By

Authorized Signatory

- All work subject to the sample submitted to the Sample selected at our laboratory.
- Report can not be used as an evidence in any court of law.
- Sample will be retained for one month from the date of sampling.

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: - EE/LAB/EMR/2022/Q4/02/001

Date: 16/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Name and Address Of Client	M/s. Emperios Infralogistics Pvt. Ltd. Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182: Part – 5: 2020
Analysis Start on	11/02/2022
Analysis end on	15/02/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	10/02/2022
				Date of Sample Receipt	10/02/2022
				Code	EE/0222/EPL/AA1
1.	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	55.38
2.	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume-I	15.06
3.	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	12.55
4.	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	14.17

Analyzed By:

GUJARAT
Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purposes without our prior permission.
- Sample will be retained till one month from the date of sampling.

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: - EE/LAB/EMR/2022/Q4/02/002

Date: 16/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Name and Address Of Client	M/s. Emperius Infralogistics Pvt. Ltd. Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Date of Sampling	10/02/2022
Sample Receipt in lab	10/02/2022
Sample ID	EE/0222/EIPL/ST1
Method Used for Sampling	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Sampling equipment	Yash stack monitoring kit
Date of Analysis	11/02/2022 to 15/02/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G set (250 KVA)
Fuel Used	HSD
APCM provided	--
Stack Height (m)	11
Stack Diameter(mm)	165
Stack Temperature (K)	462
Ambient temperature (K)	299
Velocity (m/s)	10.54
Flow rate (LPM)	12.96

Result of Analysis

Sr No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1.	Particulate Matter (PM)	mg/Nm^3	70.29	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	20.81	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NOx)	ppm	17.86	50	IS 11255 : Part 7

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

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Report No: - EE/LAB/EMR/2022/Q4/02/003

Date: 16/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Name and Address Of Client	M/s. Emperius Infralogistics Pvt. Ltd. Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Mater (HTC/SL-1350)
Sampling Start on	10/02/2022
Sampling end on	10/02/2022
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/0222/EIPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1.	Near Main gate	dB (A)	66.4	75.0	58.1	70.0
2.	Near Refiner Area	dB (A)	71.5	75.0	65.8	70.0
3.	Near ETP plant	dB (A)	72.6	75.0	66.4	70.0

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

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Report No: - EE/LAB/EMR/2022/Q4/02/004

Date: 16/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Name and Address Of Client	M/s. Emperius InfralogisticsPvt. Ltd. Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	10/02/2022
Date of Sample receipt	10/02/2022
Date of Analysis	11/02/2022 to 15/02/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result
	Sampling Location	--	--	ETP outlet
	Sample Code	--	--	EE/0222/EIPL/WW1
1.	pH at 25°C	--	IS 3025 (P-11)	7.42
2.	Temperature	°C	APHA 2550 B	25.1
3.	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1414
4.	Total Suspended Solids	mg/l	IS 3025 (P-17)	22.2
5.	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	67.86
6.	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	24.32
7.	Oil & Grease	mg/l	IS 3025 (P-39)	0.40
8.	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	5.03
9.	Chloride	mg/l	IS 3025 (P-32)	236.59
10	Percent Sodium	%	IS 3025 (P-45)	6.1

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: - EE/ENV/2022/02/052

Date: 16/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Client Details		Sample Details	
Name	M/s. Emperius Infralogistics Pvt. Ltd.	Sample Code	EIPL/SA1
Address	Plot No : 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	10/02/2022
Analysis Starts on	11/02/2022	Sampling Method	IS 2720 Part 1
Analysis Completion On	16/02/2022	Sample Received Date	10/02/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1.	Texture	--	Sandy Loam	Methods manual of Soil testing in India (February 2011)
1.a	Sand	%	79.08	Methods manual of Soil testing in India (February 2011)
1.b	Silt	%	7.60	Methods manual of Soil testing in India (February 2011)
1.c	Clay	%	13.32	Methods manual of Soil testing in India (February 2011)
2.	pH	--	8.13	IS 2720 (P-26)
3.	Moisture Content	%	2.54	IS 2720 (P-2)
4.	Organic Matter	%	0.61	Methods manual of Soil testing in India (February 2011)
5.	Conductivity	µs/cm	2846	IS 14767:2021
6.	Available Phosphorus as P	mg/kg	15.86	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7.	Potassium as K	mg/kg	35.9	Methods manual of Soil testing in India (February 2011)
8.	Calcium + magnesium	Meq/100 gm	20.40	Methods manual of Soil testing in India (February 2011)
9.	Calcium as Ca	Meq/100 gm	16.59	Methods manual of Soil testing in India (February 2011)

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling

Report No: - EE/LAB/EMR/2022/Q4/03/003

Date: 10/03/2022

ANALYSIS REPORT
(For the Month of March - 2022)

Name and Address Of Client	M/s. EmperiusInfralogisticsPvt. Ltd. Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	04/03/2022
Sampling end on	04/03/2022
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/0322/EIPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1	Near Main gate	dB (A)	68.5	75.0	60.4	70.0
2	Near Refiner Area	dB (A)	72.1	75.0	65.8	70.0
3	Near ETP plant	dB (A)	71.3	75.0	63.9	70.0

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

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GPCB Approved Environmental Auditor

Report No: - EE/LAB/EMR/2022/Q4/03/004

Date: 10/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Name and Address Of Client	M/s. EmperiusInfralogisticsPvt. Ltd. Plot No.: 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	04/03/2022
Date of Sample receipt	04/03/2022
Date of Analysis	05/03/2022 to 10/03/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result
	Sampling Location	--	--	ETP outlet
	Sample Code	--	--	EE/0322/EPL/WW1
1	pH at 25°C	--	IS 3025 (P-11)	7.65
2	Temperature	°C	APHA 2550 B	26.8
3	Total Dissolved Solids	mg/l	IS 3025 (P-15)	1360
4	Total Suspended Solids	mg/l	IS 3025 (P-17)	32
5	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	80
6	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	27.26
7	Oil & Grease	mg/l	IS 3025 (P-39)	0.8
8	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	6.24
9	Chloride	mg/l	IS 3025 (P-32)	219.93
10	Percent Sodium	mg/l	IS 3025 (P-45)	[illegible]

Analyzed By:

GUJARAT
Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: - EE/LAB/EMR/2022/Q4/03/004

Date: 10/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Name and Address Of Client	M/s. EmperiusInfralogisticsPvt. Ltd. Plot No : 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	04/03/2022
Date of Sample receipt	04/03/2022
Date of Analysi:	05/03/2022 to 10/03/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr No	Parameters	Unit	Reference Method	Result
	Sampling Location	--	--	ETP outlet
	Sample Code	--	--	EE/0322/EIPL/WWL
1	pH at 25°C	--	IS 3025 (P-11)	7.65
2	Temperature	°C	APHA 2550 B	26.8
3	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1360
4	Total Suspended Solids	mg/l	IS 3025 (P-17)	32
5	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	80
6	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	27.26
7	Oil & Grease	mg/l	IS 3025 (P-39)	0.8
8	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	6.24
9	Chloride	mg/l	IS 3025 (P-32)	219.93
10	Percent Sodium	mg/l	IS 3025 (P-45)	

Analyzed By:

GUJARAT
Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: - EE/ENV/2022/03/014

Date: 10/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Emperius Infralogistics Pvt. Ltd.	Sample Code	EIPL/SA1
Address	Plot No : 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/03/2022
Analysis Starts on	05/03/2022	Sampling Method	Methods manual of Soil testing in India (March 2011)
Analysis Completion On	10/03/2022	Sample Received Date	04/03/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1	Texture	--	Sandy Loam	Methods manual of Soil testing in India (March 2011)
1.a	Sand	%	80.68	Methods manual of Soil testing in India (March 2011)
1.b	Silt	%	5.60	Methods manual of Soil testing in India (March 2011)
1.c	Clay	%	13.72	Methods manual of Soil testing in India (March 2011)
2	pH	--	8.26	IS 2720 (P-26)
3	Moisture Content	%	3.29	IS 2720 (P-2)
4	Organic Matter	%	0.65	Methods manual of Soil testing in India (March 2011)
5	Conductivity	µs/cm	2912	IS 14767:2021
6	Available Phosphorus as P	mg/kg	18.39	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7	Potassium as K	mg/kg	32.95	Methods manual of Soil testing in India (March 2011)
8	Calcium + magnesium	Meq/100 gm	18.40	Methods manual of Soil testing in India (March 2011)
9	Calcium as Ca	Meq/100 gm	16.80	Methods manual of Soil testing in India (March 2011)

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere in Court of Judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No:- EE/ENV/2022/03/014

Date: 10/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Empenus Infralogistics Pvt. Ltd.	Sample Code	EIPL/SA1
Address	Plot No : 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/03/2022
Analysis Starts on	05/03/2022	Sampling Method	Methods manual of Soil testing in India (March 2011)
Analysis Completion On	10/03/2022	Sample Received Date	04/03/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1	Texture	--	Sandy Loam	Methods manual of Soil testing in India (March 2011)
1.a	Sand	%	80.68	Methods manual of Soil testing in India (March 2011)
1.b	Silt	%	5.60	Methods manual of Soil testing in India (March 2011)
1.c	Clay	%	13.72	Methods manual of Soil testing in India (March 2011)
2.	pH	--	8.26	IS 2720 (P-26)
3.	Moisture Content	%	3.29	IS 2720 (P-2)
4.	Organic Matter	%	0.65	Methods manual of Soil testing in India (March 2011)
5.	Conductivity	µs/cm	2912	IS 14767:2021
6.	Available Phosphorus as P	mg/kg	18.39	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7.	Potassium as K	mg/kg	32.95	Methods manual of Soil testing in India (March 2011)
8.	Calcium + magnesium	Meq/100 gm	18.40	Methods manual of Soil testing in India (March 2011)
9.	Calcium as Ca	Meq/100 gm	16.80	Methods manual of Soil testing in India (March 2011)

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

EARTH envirotech
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No EE/LAB/EMR/2022/Q4/04/007

Date: 12/04/2022

ANALYSIS REPORT

(For the Month of April-2022)

Name and Address Of Client	M/s. Emperiusinfralegistics Pvt. Ltd. Plot No 17, Kandla Port Zone Tal Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020- Gaseous pollutants IS 5182 Part 23:2017- PM_{10} CPCB manual volume I-$PM_{2.5}$
Analysis Start on	07/04/2022
Analysis end on	11/04/2022

AMBIENT AIR MONITORING RESULTS

Sr No	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	06/04/2022
				Date of Sample Receipt	08/04/2022
				Code	EE/0422/EIPL/AA1
1	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	51.21
2	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	21.27
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	16.41
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	19.14

---------- END OF TEST REPORT ----------

Chemist
Analyzed By: Gaurav Dimpal K. Chemist
Name & Designation Dimpal

Authorized Signatory:
Name & Designation Environmental Engineer

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained up to one month from the date of sampling.

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ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

(GPCB Approved Environmental Auditor)

Report No : [redacted]

Date: 12/04/2022

ANALYSIS REPORT

(For the Month of April 2022)

Name and Address Of Client	M/s. Emperorsinfralogistics Pvt. Ltd. Plot No. 17,Kandla Port Zone Tal. Gandhidham Dist. Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Date of Sampling	06/04/2022
Sample Receipt in lab	06/04/2022
Sample ID	EE/0422/E0L/ST1
Method Used for Sampling	IS:11255 (Part-2)-2019-Sulphur dioxide IS:11255 (Part-7)-2017- Nitrogen Oxide IS:11255(Part-1)-2019-Particulate matter
Sampling equipment	Kesh stack monitoring kit
Date of Analysis	07/04/2022 to 11/04/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G set (250 KVA)
Fuel Used	HSD
APCM provided	--
Stack Height (m)	11
Stack Diameter(mm)	165
Stack Temperature (K)	465
Ambient temperature (K)	305
Velocity (m/s)	9.93
Flow rate (LPM)	12.38

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1	Particulate Matter (PM)	mg/Nm³	69.17	150	IS 11255 : Part 1
2	Sulphur dioxide (SO_2)	ppm	16.64	100	IS 11255 : Part 2
3	Oxides of Nitrogen (NOx)	ppm	14.68	50	IS 11255 : Part 7

END OF TEST REPORT

Chemist

Analyzed By:
Name & Designation

Authorized Signatory
Name & Designation

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Report cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained for one month from the date of sampling.

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Date: 12/04/2022

Report No : EE/LAB/EMR/2022/Q4/04/009

ANALYSIS REPORT
(For the Month of April-2022)

Name and Address Of Client	M/s. EmpyreslnfralogisticsPvt. Ltd Plot No.. 17,Kandla Port Zone Tal.: Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	06/04/2022
Sampling end on	06/04/2022
Method used for Sampling	IS 9989 : 2020
Sampling code	EE/0422/EIPL/NL-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1.	Near Main gate	dB (A)	69.5	75.0	62.2	70.0
2.	Near Refiner Area	dB (A)	73.1	75.0	66.8	70.0
3.	Near ETP plant	dB (A)	72.4	75.0	64.3	70.0

END OF TEST REPORT

Analysed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis subject to the condition in which the Sample is received at our Laboratory.
- Report shall not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained for one month from the date of sampling.

EARTH

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

ANALYSIS REPORT

[For the Month of April 2022]

Name and Address of Client : M/s. [illegible]

Sampling Done By : [illegible]
Method of Sampling : IS 3025
Date of Sampling : [illegible]
Date of Sample receipt : [illegible]
Date of Analysis : [illegible]
Type of Sample : [illegible]

WASTE WATER ANALYSIS RESULTS

Sr No	Parameters	Unit	Reference Method	Result
	Sampling Location	—	—	ETP outlet
	Sample Code	—	—	EE/0422/EPL/WW1
1	pH at 25°C	—	IS 3025 (P-11)	7.42
2	Temperature	°C	APHA 2550 B	26.6
3	Total Suspended Solids	mg/l	IS 3025 (P-17)	26.4
4	Oil & Grease	mg/l	IS 3025 (P-39)	1.20
5	Phenolic Compounds	mg/l	IS 3025 (P-43)	0.15
6	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	9.55
7	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	23.33
8	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	72
9	Chloride	mg/l	IS 3025 (P-32)	210.36
10	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1895
11	Sodium	mg/l	IS 3025 (P-45)	116
12	Sulphide	mg/l	APHA 23rd Ed. 4500S 2 F: 2017	0.2
13	Total Chromium	mg/l	IS 3025 (P-52)	BDL

BDL: below detectable limit

END OF REPORT

Analyzed By:
Name & Designation

Authorised Signatory:
Name & Designation

- Analysis is subject to the conditions on which the Sample is received at our Laboratory.
- Report is not to be used as an evidence in any court of law and/or for publicity purpose without our prior permission.
- Opinion and interpretation, if any, are beyond the scope of NABL accreditation.

Report No :- EE/LAB/EMR/2022/Q4/04/0011

Date: 12/04/2022

ANALYSIS REPORT

(For the Month of April-2022)

Client Details		Sample Details	
Name	M/s. Emperia Intralogistics Pvt. Ltd.	Sample Code	EE/0422/EIPL/WW1
Address	Plot No. 17, Kandla Port Zone Ta:- Gandhidham Dist:- Kutch - 370 201	Sample Type	5 L
		Quantity	--
Sampling Done By	Earth Envirotech Team	Date of Sampling	06/04/2022
Analysis Starts on	06/04/2022	Sampling Method	APHA-1060B
Analysis Completion On	12/04/2022	Sample Received Date	06/04/2022

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Result	Test Method Used
1	Colour	Unites	03	IS 3025 (Part 4)
2	Sulphate	mg/l	166.6	IS 3025 (Part 24)

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No : EE/AB/EMR/2022/Q4/04/0012

Date: 12/04/2022

ANALYSIS REPORT

(For the Month of April-2022)

Client Details		Sample Details	
Name	M/s. Emperus Infralogistics Pvt. Ltd.	Sample Code	EIPL/SA1
Address	Plot No. 17 Kandla Port Zone Tal. Gandhidham Dist. Kutch - 370 201	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	06/04/2022
Analysis Starts on	07/04/2022	Sampling Method	Methods manual of Soil testing in India (March 2011)
Analysis Completion On	12/04/2022	Sample Received Date	06/04/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1	Texture	--	Sandy Loam	Methods manual of Soil testing in India (March 2011)
1.a	Sand	%	79.88	Methods manual of Soil testing in India (March 2011)
1.b	Silt	%	6.40	Methods manual of Soil testing in India (March 2011)
1.c	Clay	%	13.72	Methods manual of Soil testing in India (March 2011)
2	pH	--	8.15	IS 2720 (P-26)
3	Moisture Content	%	2.35	IS 2720 (P-2)
4	Organic Matter	%	0.76	Methods manual of Soil testing in India (March 2011)
5	Conductivity	µs/cm	2846	IS 14767:2021
6	Available Phosphorus as P	mg/kg	14.10	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7	Potassium as K	mg/kg	36.15	Methods manual of Soil testing in India (March 2011)
8	Calcium + magnesium	Meq/100 gm	16.20	Methods manual of Soil testing in India (March 2011)
9	Calcium as Ca	Meq/100 gm	12.26	Methods manual of Soil testing in India (March 2011)

Analyzed By:

Authorised Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: EE/LAB/EMR/2022/01/05/007 Date: 16/05/2022

ANALYSIS REPORT
(For the Month of May-2022)

Name and Address Of Client	M/s. Emperius Infralogistics Pvt. Ltd. Plot No. 17,Kandla Port Zone Tal : Gandhidham Dist. : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020- Gaseous pollutants IS 5182 (Part 23):2017- PM_{10} CPCB manual volume I-$PM_{2.5}$
Analysis Start on	10/05/2022
Analysis end on	14/05/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	09/05/2022
				Date of Sample Receipt	09/05/2022
				Code	EE/0522/EIPL/AA1
1	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	64.50
2	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	23.76
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	18.54
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	21.61

END OF TEST REPORT

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained for one month from the date of sampling.

EC-5975

EARTH envirotech
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No : EE/LAB/ENVI/2022/01/05/008

Date: 16/05/2022

ANALYSIS REPORT

(For the Month of May-2022)

Name and Address Of Client	M/s. Emperius Infralogistics Pvt. Ltd. Plot No. 17,Kandla Port Zone Tal : Gandhidham Dist. : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Date of Sampling	09/05/2022
Sample Receipt in lab	09/05/2022
Sample ID	EE/0522/EIP/371
Method Used for Sampling	IS 11255 (Part-2)-2019-Sulphur dioxide IS:11255 (Part-7)-2017- Nitrogen Oxide IS:11255(Part-1)-2019-Particulate matter
Sampling equipment	Yash stack monitoring kit
Date of Analysis	10/05/2022 to 14/05/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G set (250 KVA)
Fuel Used	HSD
APCM provided	--
Stack Height (m)	11
Stack Diameter(mm)	165
Stack Temperature (K)	458
Ambient temperature (K)	306
Velocity (m/s)	10.67
Flow rate (LPM)	13.54

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1	Particulate Matter (PM)	mg/Nm^3	72.03	150	IS 11255 : Part 1
2	Sulphur dioxide (SO_2)	ppm	19.07	100	IS 11255 : Part 2
3	Oxides of Nitrogen (NOx)	ppm	16.20	50	IS 11255 : Part 7

END OF TEST REPORT

Analyzed By: Chemist

Name & Designation

Authorized Signatory:

Name & Designation

Chemist / Manager

Parimal Jamin

- All right is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be disposed 1 time month from the date of sampling.

EARTH envirotech
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: EE/LAB/ENR/2022/05/809

Date: 16/05/2022

ANALYSIS REPORT
(For the Month of May-2022)

Name and Address Of Client	M/s. Emporius Infralogistics Pvt. Ltd Plot No. 17, Kandla Port Zone Tal. Gandhidham Dist. Kutch - 370 201
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (MTC/SL 1350)
Sampling Start on	09/05/2022
Sampling end on	09/05/2022
Method used for Sampling	IS 9989 : 2020
Sampling code	EE/0522/EPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1	Near Main gate	dB (A)	67.3	75.0	61.5	70.0
2	Near Rester Area	dB (A)	72.6	75.0	67.1	70.0
3	Near ETP plant	dB (A)	71.2	75.0	65.8	70.0

---END OF REPORT---

Analyzed By
Name & Designation

Authorized Signatory:
Name & Designation

- This report is the property of Earth Envirotech and shall not be reproduced without our prior permission
- This report is valid for 30 days from the date of sampling

097247 34757 02836-237150 info@earthenvirotech.com www.earthenvirotech.com
7 & 15, Ground Floor, Madhav Palace, Plot No. 55, Sector-8, Opp. D-Mart Mall, Gandhidham-Kutch, 370201, Gujarat, India.

EARTH envirotech | ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No : EE/LAB/EMR/2022/04/05/010

Date: 16/05/2022

ANALYSIS REPORT

(For the Month of May-2022)

Name and Address Of Client	M/s. Empenus Infralogistics Pvt. Ltd. Plot No. 17,Kandla Port Zone Tal. Gandhidham Dist. Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	09/05/2022
Date of Sample receipt	09/05/2022
Date of Analysis	10/05/2022 to 16/05/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result
	Sampling Location	--	--	ETP outlet
	Sample Code	--	--	EE/0522/EIPL/WW1
1	pH at 25°C	---	IS 3025 (P-11)	7.35
2	Temperature	°C	APHA 2550 B	26.9
3	Total Suspended Solids	mg/l	IS 3025 (P-17)	29
4	Oil & Grease	mg/l	IS 3025 (P-39)	1.6
	Phenolic compounds	mg/l	IS 3025 (P-43)	0.20
	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	8.69
	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	28
8	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	79.37
9	Chloride	mg/l	IS 3025 (P-32)	238.26
10	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1358
11	Sodium	mg/l	IS 3025 (P-45)	140.5
12	Sulphide	mg/l	APHA 23rd Ed. 4516S-3 F 2017	0.4
13	Total chromium	mg/l	IS 3025 (P-52)	BDL

END OF TEST REPORT

BDL: below detectable limit

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis is valid for the condition in which the sample is received at our laboratory
- Report cannot be used in any evidence in anywhere and any judiciary purpose without our prior permission
- Sample will be kept up to 15 days from the date of sampling

097247 34757 02836-237150 info@earthenvirotech.com www.earthenvirotech.com
7 & 15, Ground Floor, Madhav Palace, Plot No. 55, Sector-8, Opp. D-Mart Mall, Gandhidham-Kutch, 370201, Gujarat, India.

Report No : EE LAB/ENR/2022/Q1/05/011

Date: 16/05/2022

ANALYSIS REPORT

[For the Month of May-2022]

Name and Address Of Client	M/s. Emperus Infralogistics Pvt. Ltd. Plot No. 17, Kandla Port Zone Tal. Gandhidham Dist. Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	09/05/2022
Date of Sample receipt	09/05/2022
Date of Analysis	10/05/2022 to 16/05/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No	Parameters	Unit	Reference Method	Result
	Sampling Location	--	--	ETP outlet
	Sample Code	--	--	EE/0522/EIPL/WW1
	Colour	HU	IS 3025 (Part 4)	colorless
	Sulphate	mg/l	IS 3025 (Part 24)	175

-----END OF TEST REPORT-----

Analyzed By.

Authorized Signatory

- Analysis is done on the condition in which the sample is received at our Laboratory.
- Report should not be used as an evidence anywhere including publicity purpose without our prior permission.
- Sample will be retained for one month from the date of sampling.

EARTH envirotech
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: EE/LAB/ENR/2022/Q1/05/012

Date: 16/05/2022

ANALYSIS REPORT

(For the Month of May-2022)

Name and Address Of Client	M/s. Emperor Infralogistics Pvt. Ltd. Plot No 17,Kandla Port Zone Tal : Gandhidham Dist : Kutch – 370 201
Sampling Done By	Earth Envirotech Team
Method of Sampling	Methods manual of Soil testing in India (January 2011)
Date of Sampling	09/05/2022
Date of Sample receipt	09/05/2022
Date of Analysis	10/05/2022 to 16/05/2022
Type of Sample	Composite Soil Sample

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Reference Method	Result
	Sample Code	--	--	EE/0522/EIPL/SA1
-	Texture	-	Methods manual of Soil testing in India (March 2011)	Sandy loam
1.b	Sand	%	Methods manual of Soil testing in India (March 2011)	79.08
1.c	Silt	%	Methods manual of Soil testing in India (March 2011)	7.20
1.d	Clay	%	Methods manual of Soil testing in India (March 2011)	13.72
2	pH	--	IS 2720 (P-26)	8.28
3	Moisture Content	%	IS 2720 (P-2)	2.43
4	Organic Matter	%	Methods manual of Soil testing in India (March 2011)	0.61
5	Conductivity	µs/cm	IS 14767:2021	2801
6	Available Phosphorus as P	mg/kg	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)	16.08
7	Potassium as K	mg/kg	Methods manual of Soil testing in India (March 2011)	41.60
8	Calcium +magnesium	Meq/100gm	Methods manual of Soil testing in India (March 2011)	17.30
9	Calcium as Ca	Meq/100gm	Methods manual of Soil testing in India (March 2011)	13.90

END OF TEST REPORT

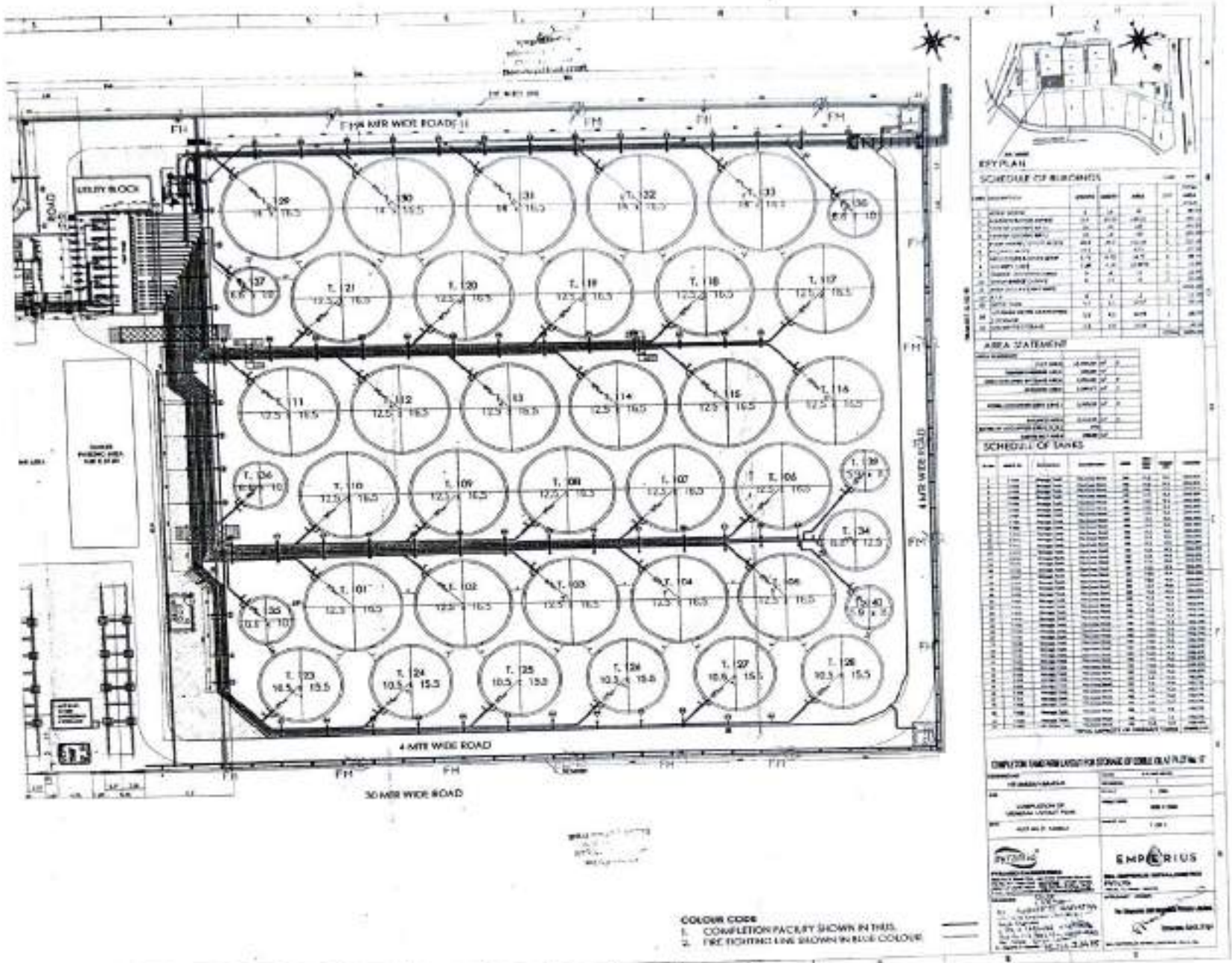
Chemist, Chemist
Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Annexure -F

Approved Compelition Drawing along with Greenbelt area measurement and Drawing


4 MTR WIDE ROAD
4 MTR WIDE ROAD
50 MTR WIDE ROAD
UTILITY BLOCK
KEY PLAN
SCHEDULE OF BUILDINGS
AREA STATEMENT
SCHEDULE OF TANKS
COLOUR CODE
1. COMPLETION FACILITY SHOWN IN THIS
2. FIRE FIGHTING LINE SHOWN IN BLUE COLOUR
EMPERIUS

ANNEXURE – G

(Copy of CTE/CCA Order obtained from board)

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016, framed under the Environmental (Protection) Act-1986.

And whereas Board has received application inward-No **131164** dated **08/01/2018** for the **Consolidated Consent and Authorization** (CC&A) of the Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To,
Emperius Infralogistics Pvt Ltd,
Plot. No: 17,
Kandla Port Zone,
Tal: Gandhidham,
Dist: Kutch. 370 201

1. **Consent Order No. AWH-91152 Date of Issue: 12/02/2018**
2. The consent shall be valid up to 07/01/2023 for storage terminal with following capacity:

Sr. No.	Product	Quantity
1.	Edible Oil, Non Edible Oil and Non – hazardous liquid Cargo	37682.39 KL (Total No. of Tanks-19) for phase-I

3. **SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:**

3.1 You shall not carry out any activities which may attract the applicability of EIA notification-2006.

3.2 No ground water shall be withdrawal without obtaining prior permission from competent authority.

4. **CONDITIONS UNDER WATER ACT 1974:**

4.1 The industrial waste water generation shall not exceed **0.3 KL/day**.

4.2 The quantity of Sewage effluent shall not exceed **0.1 KL/Day**.

4.3 The quality of generated industrial waste water shall conform to the following standards:

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C
Colour (Pt. Co. scale units)	100 units
Suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Phenolic Compound	01 mg/L
Amonical Nitrogen	50 mg/L
BOD (3 Days at 27°C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/L
Total Dissolved Solids	2100 mg/L
Percent Sodium	60 %
Sulphides	02 mg/L

All efforts shall be made to remove colour & unpleasant odour as far as practicable.

4.4 The treated effluent confirming to the above standards shall be used for gardening & plantation purpose in premises.

4.5 Sewage shall be disposed off through septic tank.

5. CONDITIONS UNDER AIR ACT 1981:

5.1 The following shall be used as fuel in the D.G Sets as following rates.

Sr. no.	Name of Fuel	Quantity
1.	Diesel	30 Ltr/hr

5.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below.

Sr. no.	Stack attached to	Stack height in Meters	Parameter	Permissible limit
1	D.G. Sets (250 KVA) (stand by)	11	NO_x+HC CO PM Smoke limit (Light absorbtion co-efficient)	≤ 7.5 g/kW-hr ≤ 3.5 g/kW-hr ≤ 0.3 g/kW-hr ≤ 0.7 m^{-1}

5.3 There shall be no process gas emission from manufacturing process and other ancillary operations.

5.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MOEF&CC dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/m^3
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

CONSENT NO. 1-1(68)-27/02/12

5.5 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. to 10 P.M.: 75 dB (A)
Between 10 P.M. to 6 A.M.: 70 dB (A)

6. **Authorization under Hazardous and Other Waste [Management & Transboundary Movement] Rules, 2016 & amended.**

6.1 **Authorization Number: AWH-91152 and shall valid up to 07/01/2023.**

6.2 Emperius Infralogistics Pvt Ltd, is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot. No: 17, Kandla Port Zone, Tal: Gandhidham, Dist: Kutch. 370 201

Sr. No.	Waste	Quantity Per Year	SCH.	Category	Facility
1.	Used Oil	0.0045 MT	I	5.1	Collection, storage, and disposal by sending to registered recycler.
2.	Piging Waste	5.5 MT	II	CL	Collection, Storage, Transportation, Disposal to CHWIF

6.3 The authorization is granted to operate a facility for collection, storage, within factory premises, transportation, and ultimate disposal of Hazardous wastes by selling out to registered recyclers, TSDF and Incineration facility.

6.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6.5 **GENERAL CONDITIONS OF AUTHORIZATION:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

Outward No: 15/7/2020

9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

7. GENERAL CONDITIONS

7.1 Unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within premises, the unit shall tie up with local agencies like gram panchayat, school, social forestry office etc. for the plantation at suitable open land in nearby locality and submit an action plan of plantation for next three years to GPCB.

7.2 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width shall be developed.

7.3 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

7.4 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.

7.5 The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to the Board for this purpose in the prescribed forms under the provisions of the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986.

7.6 The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act, 1986 & Noise Pollution (Regulation and Control) Rules, 2000.

7.7 Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

7.8 If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property in that case they are obliged to pay the compensation as determined by the competent authority.

Outward No. 4562 27/10/2023

7.9 Applicant shall have to comply with all the guidelines / directive issued / being issued by MoEF&CC / CPCB / DoEF from time to time.

7.10 Environmental cell shall be setup and shall be responsible for the total Environmental management.

7.11 Monitoring in respect to Air, Water, Noise level shall be carried out and results shall be submitted to GPCB on quarterly basis.

For and on behalf of
Gujarat Pollution Control Board

(P.J.Vachhani)
Senior Environmental Engineer

NO: PC/ CCA- KUTCH- 1396/GPCB ID: 51919/ **Date:**

ISSUED TO:
Emperius Infralogistics Pvt Ltd.
Plot No. 17,
Kandla Port Zone,
Tal: Gandhidham,
Dist: Kutch. 370 201

Outward No: 445812, 27/02/2018

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

CCA-Amendment
(No. WH-98804)

GPCB/CCA-KUTCH-1396/ ID-51919/ **Date :**

To,
Emperius Infralogistics Pvt Ltd,
Plot No.:17,
Kandla Port Zone,
Ta.:Gandhidham,
Dist.:Kutch.

SUB: Amendment in the consolidated consent & Authorization of the Board.
REF: 1) CCA order No: - AWH-91152, Dated-12/02/2018 under various Environmental Acts/Rules.
2) Your CCA Amendment Application Inward ID No. **147789 dated 17/12/2018.**

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous And Other Waste (Management and Transboundary) Rules, 2016 & framed under the Environment (Protection) Act-1986, The Board has granted CCA vide order No. AWH-91152 issued vide this office letter no. PC/CC&A-KUTCH-1396/GPCB ID: 51919/445812 Dated 27/02/2018, valid up to 07/01/2023.

The Board has right to review and amend the conditions of the said CCA order.
The said CCA order is further amended as below.

1. This order shall be read as CCA-Amendment Order No. **WH-98804**, date of issue **18/01/2019**, valid up to **07/01/2023.**
2. The condition No-2 of the said CCA order is amended as below
   2. The consents shall be valid up to **07/01/2023** for use of outlet for the discharge of trade effluent & emission due to operation of Interim Liquid storage terminal for following Items / products:

Sr. No.	Product	Quantity per Month		
		As per CCA dated:27/02/2018 storage capacity	As per CTE-amendment dated:	Total storage capacity after CCA Amendment
1.	Edible Oil, Non Edible Oil and Non-hazardous liquid Cargo	37682.39 KL (19 tanks) +1 fire water tank	30187 KL 21(tanks)	68385.39 KL (40 tanks) + 1 fire water

SUBJECT TO SPECIFIC CONDITION:

1. **Industry shall not carry out any activities which attract provisional of EIA notification & CRZ notification and amendment made therein without prior approval of competent authority.**
2. **Industry shall obtain NOC from CGWA as per order of Hon. National Green Tribunal for the withdrawal of ground water.**

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

3. **Industry shall manage Solid Wastes generated from industrial activities as per Solid Waste Management Rules-2016 (solid waste as defined in Rule-3(46)).**
4. **As per Provisions of Rule 18 of Solid Waste Management Rules-2016 you are directed to make an arrangement in Utilities to replace at least five percent (5%) of your solid fuel requirement by 'refused derived fuel', if applicable.**

3. **Condition No 4 of the said CCA Order is amended as under:**

CONDITIONS UNDER WATER ACT 1974:

4.1 Source of Water: - Tankers

4.2 There shall be no change in existing quantity of industrial consumption (100 Ltr/Day) Industrial effluent generation (0.3 KL/D), after CCA-Amendment.

4.3 There shall be no change in existing quantity of domestic water consumption (0.3 KL/D) & domestic waste water (0.3 KL/D), after CCA-Amendment.

4.4 The quality of generated industrial waste water shall conform to the following standards:

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C
Colour (Pt. Co. scale units)	100 units
Suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Phenolic Compound	01 mg/L
Amonical Nitrogen	50 mg/L
BOD (3 Days at 27°C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/L
Total Dissolved Solids	2100 mg/L
Percent Sodium	60%
Sulphides	02 mg/L
Total Chromium	02 mg/ L

All efforts shall be made to remove colour & unpleasant odour as far as practicable.

4.5 The treated effluent conforming to the above standards shall be discharge on land for gardening & plantation purpose within premises.

4.6 Industry shall provide fixed pipelines network with flow meter for proper distribution of industrial effluent & maintain records in this record.

4.7 Sewage shall be disposed off through septic tank / soak pit system.

4. **Condition No. 6 of the said CCA order is amended as below.**

6. **AUTHORIZATION as per HAZARDOUS AND OTHER WASTE (MANAGEMENT AND TRANSBOUNDARY) RULES, 2016 Form-2 [See rule 6 (2)]**

Form for grant of authorization for occupier or operator handling Hazardous waste

6.1 Authorization Number: WH - 98804 and Date of Issue: 18/01/2019.

6.2 Authorization shall be valid up to 07/01/2023.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

6.3 **M/s. Emperius Infralogistics Pvt Ltd,** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at, **Plot No.:17,Kandla Port Zone, Ta.:Gandhidham, Dist.:Kutch.**

Sr. No.	Waste	Waste Category & Schedule	Quantity as per Existing CC&A	Quantity as per CCA-Amendment	Total Quantity After Amendment	Disposal Facility
1.	Used Oil	5.1/I	0.8 MT/Y	NIL	0.8 MT/ Y	Collection, storage, Transportation, Disposal by selling to authorized recycler
2.	Pigging Waste	C-II	6 MT/ Y	4 MT/ Y	10 MT/ Y	Collection, storage, Transportation, Disposal at CHWIF Site.

6.4 The authorization shall be valid up to **10/10/2022.**

6.5 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6.6 The authorization is granted to operate a facility for collection, storage within factory premises transportation and ultimate disposal of Hazardous wastes as per condition no.6.3 to the industry having valid CCA of this Board.

A. TERMS AND CONDITIONS OF AUTHORISATION

1. The applicant shall comply with the provisions of the Environment (Protection) Act 1986 and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.
3. The persons authorized shall not rent, lend, sell, and transfer or otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a beach of this authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Wastes and Penalty"
7. It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
8. An application for the renewal of an authorization shall be made as laid down in rules 6(2) under Hazardous and Other Waste Rules, 2016.

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

9. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
10. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
11. The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
12. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time and The waste generator shall be totally responsible for (i.e. collection, storage, transportation and ultimate disposal) the wastes generated.
14. Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form-4 by 30th day of June of every year for the preceding period April to March.
15. In case of any accident, details of the same shall be submitted on Form-11 to Gujarat Pollution Control Board.
16. As per "Public Liability Insurance Act-91" company shall get Insurance Policy, if applicable.
17. Empty drums and containers of toxic and hazard material shall be treated as per guideline published for "Management & Handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.
18. In case of transport of hazardous wastes to a facility for (i.e. treatment, storage and disposal) existing in a State other than the State where hazardous wastes are generated, the occupier shall obtain 'No Objection Certificate' from the State Pollution Control Board or Committee of the concerned State of Union Territory Administration where the facility exists.
19. Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and also along with Form-4.
20. Industry shall have to display the relevant information with regards to hazardous waste as indicated in the Hon. Supreme Court's Order in W.P. No.657 of 1995 dated 14th October, 2003.
21. Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within the factory premises.

5. **The rest of the conditions of the above referred CCA order shall remain unchanged. You are directed to comply with these conditions judiciously.**

For and on behalf of
Gujarat Pollution Control Board

30/4/2019

(Smt U.K. Upadhyay)
Environmental Engineer

Annexure – H

Membership Certificate

DETOX GROUP

Saurashtra Enviro Projects Pvt. Ltd.

Integrated Common Hazardous Waste Management Facility

Certificate

Certificate No : 1200002784

To Whomsoever it may concern

This is to certify that

EMPERIUS INFRALOGISTICS PVT. LTD.

PLOT NO.17,
KANDLA PORT ZONE,
TAL: GANDHIDHAM,

KUTCH

is a valid member of

SAURASHTRA ENVIRO PROJECTS PVT. LTD.

for Integrated Common Hazardous Waste Management Facility.

This membership is valid for a period of

5 Years

Date of issue : *08.11.2017*

Date of expiration : *07.11.2022*

Place of issue : *Surat*

For, Saurashtra Enviro Projects Pvt. Ltd.

Director

SUBJECT TO SURAT JURISDICTION

Corporate Office : Detox House, Opp. Gujarat Samachar Press, Udhna Darwaja, Ring Road, Surat - 395 002. (Guj.)
p. +91 261 2351248, 2346181 f. +91 261 2354068
e. info@seplindia.com w. www.detoxgroup.in
CIN :- U51100GJ2006PTC047689

Annexure – I

Environmental Statement Form-V

EMPERIUS

Ref.: GPCB/EIPL/ENV/2022/04

Date: 17/05/2022

PCB ID: 51919

To

Gujarat Pollution Control Board,

Paryavaran Bhavan,

Sector: 10 - A,

Gandhinagar - 382 010

K. A.. The Member Secretary

Sub. : Submission of Environmental Statement Form-V for the year ending on 31st March, 2022

Respected Sir,

We are pleased to enclose herewith Environmental Statement Form-V duly filled in, for the financial year ending on 31st March, 2022.

We hope you find the above in order.

Thanking you and Regards.

Yours sincerely,

For

M/s. EMPERIUS INFRALOGISTICS PVT LTD.

Authorized Signatory

Encl.: Environmental Statement – Form V

EMPERIUS INFRALOGISTICS PRIVATE LIMITED

Registered office Address : Plot No. 17, Near Jawahar Lal Road, Kandla, Kachchh, Gujarat-370210

T: +91 8980012144 | E: gpcbsiknanger@emperiusindia.com | W: emperiusindia.com

CIN: U74120GJ2015PTC110480 | PAN: AACCE8468R | GST: 24AACCE8468R1ZR

FORM V

For the Year APRIL 2021 - MARCH 2022

ENVIRONMENTAL STATEMENT REPORT FOR YEAR 2021-2022

M/s. EMPERIUS INFRALOGISTICS PVT. LTD.

PART - A

i.	Name & address of the owner / occupier of the industry operation or process	: M/s. EMPERIUS INFRALOGISTICS PVT. LTD. Plot No. 17, Kandla Port Zone, Tal. Gandhidham, Dist. Kutch - 370201.
ii.	Industry category Primary - (STC Code) Secondary - (STC Code)	: RED CATEGORY, MEDIUM SCALE UNIT,
iii.	Production Capacity	: As per Annexure –A
iv.	Year of Establishment	: 23/10/2015
v.	Last Environmental Statement Submitted	: 12/05/2021

PART - B

WATER AND RAW MATERIAL CONSUMPTION

(i) Water Consumption, m^3/day

Domestic : 1.0 KL/DAY
Industrial : 0.3 KL/DAY (IN WASHING)

Name of Products	Water (PROCESS) consumption per unit of product output	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
	(1)	(2)
Edible Oil, Non Edible Oil and Non-Hazardous liquid Cargo - 68385.39 Kl (40 tanks) + 1 Fire water	NA	NA

(ii) Raw material consumption

Name of raw material consumed	Name of Products	During the previous financial year (2020-2021)	During the current financial year (2021-2022)

No Raw Material used as we have only Providing storage facilities for Edible Oil.

PART – C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/day)	Percentage of variation from prescribed standards with reasons.
(a) Water	INDUSTRIAL – 0.3 KLD	As per GPCB Norms	NO PERCENTAGE VARIATION
	DOMESTIC – 0.3 KLD	BOD < 10 mg/L Suspended Solid < 20 mg/L Residual Chloride Minimum 0.5 mg/L.	NO PERCENTAGE VARIATION
(b) Air			
D. G. SET (250 KVA) (AS STAND BY)	---	$NO_x + HC \leq 7.5$ g/kW-hr $CO \leq 3.5$ g/kW-hr $PM \leq 0.3$ g/kW-hr Smoke limit (light absorbance Co-efficient) $\leq 0.7\ M^{-1}$	NO PERCENTAGE VARIATION

PART – D

HAZARDOUS WASTES

Hazardous Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process		
(b) From pollution control facility		
Pigging Waste	0.785 MT	2.16 MT
USED / Spent Oil	NIL	NIL

PART – E

SOLID WASTES

Solid Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process	NIL	NIL
(b) From pollution control facility	NIL	NIL
(c) (1) Quantity recycled or re-utilized within the unit	NIL	NIL

(2) Solid	NIL	NIL
(3) Disposed	NIL	NIL

PART - F

Please specify the characteristics (in terms of concentration & quantum) of hazardous as well as solid wastes & indicate disposal practice adopted for both these categories of waste.

5.1- USED OIL – 0.8 MT/YEAR
C-3- PIGGING WASTE 10 MT/YEAR

USED OIL IS DISPOSED BY SELL OUT TO AUTHORIZE RECYCLER.
PIGGING WASTE IS DISPOSED BY INCINERATION AT CHWIF SITE.

PART – G

Impact of the pollution control measures taken on conservation of natural resources & consequently on the cost of production

AIR	STACK IS ATTACHED TO D. G. SET, DIESEL IS USED AS A FUEL, ADEQUATE STACK HEIGHT IS PROVIDED. NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.
WATER	INDUSTRIAL – THE TREATED INDUSTRIAL EFFLUENT AFTER CONFIRMING THE GPCB STANDARDS TOTALLY REUSED IN GARDENING & PLANTATION PURPOSE WITHIN PLANT PREMISES.
	DOMESTIC- DOMESTIC EFFLUENT IS DISCHARGED IN TO SEPTIC TANK/ SOAKS PIT SYSTEM. NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.
SOLID WASTE	USED OIL IS DISPOSED BY SELL OUT TO AUTHORIZE RECYCLER. PIGGING WASTE IS DISPOSED BY INCINERATION AT CHWIF SITE. NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.

PART – H

Additional measures /investment proposal for environmental protection including abatement of pollution, prevention of pollution

UNIT IS DEVELOPING GREEN BELT WITHIN PREMISES.

PART - I

Any other particulars for improving the quality of the environment

ADEQUATE PLANTATION IS CARRIED OUT ALONG THE PERIPHERY OF THE INDUSTRIAL PREMISES.

Prepared By

For

M/S. EMPERIUS INFRALOGISTICS PVT. LTD.,

(AUTHORIZED SIGNATORY)

Date: 22/04/2022

ANNEXURE – A

LIST OF PRODUCTS

Sr. No.	Product	Quantity
01	Edible Oil Non Edible Oil and Non-hazardous Liquid Cargo	68385.39 KL (Total No of Tanks-40) + 01 Fire water

AMBAJI
IMPORT PVT LTD

Plot # 19 Sy. No. 1 B/P, Phase II
Kandla Gujarat

Akshat House, 220/1 A
Gandhidham, Kachchh
370201 INDIA

t. +91 2836 226 699
f. +91 2836 231 799
e. ambajiimport@gmail.com

Ref. No. CMP/AIPL/2022/07

Date: 16/07/2022

To, SE (Land)
Environment Management Cell,
DEENDAYAL PORT AUTHORITY,
Administrative Office,
PB No. 50, Gandhidham (Kutch)
Gujarat - 370201.

Sub. : Submission of Six Monthly Compliance Report of Environmental/CRZ Clearance, CRZ Recommendation and NOC/ CTE granted by GPCB. (Compliance Report for the Period of **Decemer-2021 to May-2022**).

Ref.: EC/CRZ issued vide letter No.: **F. No. 10-36/2008-IA-III** dated **02/02/2010.**

Dear Sir,

We are setting up Edible Oil Storage Terminal at Plot No. 19.

Accordingly, please find enclosed here with point wise compliance report of the stipulated condition in EC/CRZ Clearance. (Encl. as **Annexure - A)**

Also here we have enclosed the detail Compliance Report of CRZ Recommendation as **Annexure-B**, detailed Compliance Report of Consent to Establish (NOC) as **Annexure-C**, Monitoring Data Sheet as **Annexure-D**, and Approved Competition Drawing with greenbelt area as **Annexure-F**, with Environment Monitoring Reports for the period of **December-2021 to May-2022** (Encl. as **Annexure – G).**

We hope the above is in line with your requirements.

Thanking you

Yours sincerely,

M/s. AMBAJI IMPORT PVT. LTD.,

Authorized Signatory,

Manager (Env.) / Shri Pradhan
EMC

Annexure - A

COMPLIANCE STATUS REPORT OF EC

EC issued vide letter No. F. No. 10-36/2008 – IA-III dated 2nd February 2010

Extension of validity of EC issued Vide Letter No. F. No. 10-36/2008– IA-III dated 18th August, 2015

SR. NO.	BRIEF DESCRIPTION	COMPLIENCE
6.	**SPECIFIC CONDITION**	
A.	**Construction Phase**	
I	All the conditions stipulated by the Govt. of Gujarat vide letter No. ENV -10-2008-366-E, dated 09.03.2009 and Gujarat Pollution Control Board vide letter No. PC/NOC/CCA-Kutch-78(2) GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009 is enclosed as **Annexure B.** Further, Compliance report of NOC/CTE granted by GPCB (Valid up to 05/08/2020) is enclosed as **Annexure C.**
II	The entire water supply shall be managed by the Port. Waste water will be treated and utilized.	We have begun commercial operations and are obtaining water from local providers. The wastewater generated in the unit is totally utilised within the plant for gardening and planting purposes. There is no wastewater generated during the construction process.
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading /unloading of trucks within the Port complex.	We have set aside enough space for large vehicles to park and trucks to load and unload.
IV	The proponent shall put in place the detailed on site and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also.	In line with the Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989, as revised to date, we have prepared a detailed on-site and off-site emergency management strategy, which we will implemeat as required by law.
V	The proponent shall put in place the Oil Spill Contingency Plan.	We have prepared the Oil Spill Contingency Plan and follow the same.
VI	The proponent shall strictly comply the measures proposed as per their letter No EG/WK/4684/EC/388, dated 01.12.2009.	N/A, because we are only edible oil storage firm.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991.	We are done the FSI at plot No. 19 as per the CRZ Notification 1991 and as amended from time to time.
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent Authority prior to construction /operation of the project.	We will not be drawing ground water; we have arranged for a water supply from a local water company.
IX	Sewage Treatment facilities should be provided	Domestic Waste water disposed through...

	in accordance with the CRZ notification.	septic tank /Soak pit system accordance with the CRZ notification.
X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and Handling) Rules, 2000.	The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016. Disposed by sending to Municipality.
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP, safe drinking water medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the project.	There is no any labour camp required as local public/ labour mainly engaged for construction activities.
XII	A first Aid Room will be provided in the project both during construction and operation of the project.	We have already provided first aid room during construction phase as well as during operation phase.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	All of the topsoil that was excavated during the construction process was stored and used for landscape / greenbelt development inside the plot.
XIV	Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval sites with the approval of competent authority.	There are no nearby communities around the project site, and no detrimental effects are created during construction, and construction debris is disposed of in accordance with the Construction and Demolition Rules, 2016.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Adequate measure has been taken by us for testing of soil and ground water sample and it will be assured that there are no threats to ground water quality by leaching of heavy metals and other toxic contaminants.
XVI	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	During the construction phase, we used secure construction procedures to ensure that no construction wastes occurred.
XVII	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	Hazardous wastes generated during construction phase were disposed off as per the norms. And we have obtained the membership of **M/s SaurashtraEnviro Projects Pvt. Ltd.** for the Integrated Common Hazardous Waste Management. (Refer **Annexure-E**)
XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We have installing and operating the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.

	in accordance with the CRZ notification	septic tank /Soak pit system accordance with the CRZ notification.
X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and Handling) Rules, 2000.	The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016. Disposed by sending to Municipality.
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP, safe drinking water medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the project.	There is no any labour camp required as local public/ labour mainly engaged for construction activities.
XII	A first Aid Room will be provided in the project both during construction and operation of the project.	We have already provided first aid room during construction phase as well as during operation phase.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	All of the topsoil that was excavated during the construction process was stored and used for landscape / greenbelt development inside the plot.
XIV	Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval sites with the approval of competent authority.	There are no nearby communities around the project site, and no detrimental effects are created during construction, and construction debris is disposed of in accordance with the Construction and Demolition Rules, 2016.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Adequate measure has been taken by us for testing of soil and ground water sample and it will be assured that there are no threats to ground water quality by leaching of heavy metals and other toxic contaminants.
XVI	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	During the construction phase, we used secure construction procedures to ensure that no construction wastes occurred.
XVII	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	Hazardous wastes generated during construction phase were disposed off as per the norms. And we have obtained the membership of **M/s SaurashtraEnviro Projects Pvt. Ltd.** for the Integrated Common Hazardous Waste Management. (Refer **Annexure-E**)
XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We have installing and operating the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.

XIX	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to Environmental (Protection) Rules prescribed for air and noise emission standards.	We are operating the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.
XX	The diesel required for operation DG sets shall be stored in underground tanks and if required clearance from Chief Controller of Explosives shall be taken.	At our unit diesel required for DG set has been stored as per applicable rules.
XXI	Vehicles hired for bringing construction materials to the site should be in good condition and should have a pollution check certificate and should confirm to applicable air and noise emission standards and should be operated only during non-peak hours.	We only hired vehicles with a valid pollution control licence issued by statutory authorities, and we only scheduled transportation during non-peak hours.
XXII	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to confirm to the stipulated standards by CPCB/GPCB.	The ambient and noise level is confirming the residential standards and the report areattached as **Annexure-G**. We have taken the adequate measures to reduce ambient air and noise level during construction phase.
XXIII	Storm water control and its re-use as per CGWB and BIS standards for various applications.	We have already provided a storm water storage facility, which will be used for green belt development on the plots' premises.
XXIV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	We had reducedthe water demand during construction by use of pre –mixed concrete, curing agent, prevention of losses due to leak & spill and other best practices for construction & allied works.
XXV	The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipment's , etc. as per National Building Code including protection measures from lighting etc.	We have already obtained the necessary clearance from DPA and maintained the same as per the norms at our own premises.
XXVI	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Noted. DPA is having dedicated EMC for regular supervision for environmental parameters. However, we are also having our dedicated team for compliance of Environmental conditions including monitoring.
XXVII	Under the provisions of Environmental (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found the construction of the project has been started without obtaining environmental clearance.	We had started construction activities after obtained the necessary clearance from statutory authorities i.e. EC/CRZ Clearance from MoEF&CC. New Delhi, CRZ Recommendation from Forest & Environment Department, GOG and NOC/CTE from GPCB, GOG.
II. Operation Phase		

i	The installation of the Sewage Treatment Plant (STP), if any, should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled /reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall confirm to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP	We have provided the septic tank and soak pit for the sewage treatment and disposal and if in future STP install by us, it will be informed to Ministry along with necessary details.
ii	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and confirm to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with Gujarat Pollution Control Board.	We have embraced best practices for the use of diesel power generating sets and rules made under the Environment (Protection) Act, 1986, and the DG sets have been put following approval of consulting with the GPCB, taking into account the location, fuel type, and height of the DG sets.
iii	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	The noise level confirming the standards and we have appointed Environmental consultant for carrying out Environmental Monitoring at our own premises as per the norms. We have attached the noise level monitoring Report as **Annexure-G**.
iv	The greenbelt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We have already provided the adequate area for development of Greenbelt at periphery area of plots. We have provided approx. 769 square meter area for greenbelt. Enclosed herewith drawing in **Annexure-F**.
v	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area during the monsoon period.	During the monsoon season, we have installed weep holes in the compound walls to ensure natural rainwater drainage in the catchment region.
vi	Rain water harvesting for roof run -off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore-well for rainwater recharging should be kept at least 5 Mts. above the highest ground table.	We have implemented the Rain water harvesting for roof run-off at our premises.
vii	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	We do meet the condition.
viii	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be	To reduce traffic congestion around the entry and exit points, we prepared and placed a Traffic Management Plan for the

	utilized.	premises, as well as adequate parking spaces.
ix	Effort may be made to use solar energy to the maximum extent possible.	We have prepared and also submitted the Solar Energy Utilization Plan.
x	Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.	Adequate measures are taken by us to prevent odor problem by providing the proper ventilation, by regular cleaning and scrubbing in plant.
General Conditions:		
1.	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously confirming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat.	We have constructed the structures as per the approved plan by Deendayal Port Authority (statutory authority of Deendayal Port Authority, Ministry of Shipping are approved the construction plan). Further, We have constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department, GOG on 09/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.
2.	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests.	We are agreed with this and complied.
3.	This Ministry reserves the right to revoke the clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	We are agreeing with this condition and assure that we have complied with this.
4.	This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	We are agreeing with ministry and assure that we are complying with the all necessary condition.
5.	Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.	We are providing full support to the officials of Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection at Project site.
6.	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and control of Pollution) Act 1981, the environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000, including the	We are strictly followed by under the water (Prevention and Control of Pollution) Act,1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, the Hazardous Chemicals (Manufactures. storage and Import) Rules, 1989, the Coastal Regulation Zone Notification, 1991

	amendments and rules made thereafter	and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made there under from time to time. We are fully complied with this. Monitoring report is attached here as **Annexure-G.**
7.	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	We have obtained all necessary clearances and permissions from all relevant responsible authorities, as well as all necessary norms and standards.
8.	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in.the advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhopal.	Deendayal Port Authority had already advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. Deendayal Port Authority had made advertised in two newspapers i.e. Divya Bhasker and Kutch Mitra on 17/02/2010. Further, Deendayal Port Authority vide letter dated 17/02/2010 had already been submitted to Regional Office of this Ministry at Bhopal.
9.	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	Point Noted.
10.	Any appeal against this clearance shall lie with the National Environmental Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997.	Point Noted.
11.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	N/A

12.	The Proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NO, (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance CRZ Recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on Deendayal Port Authority website i.e. www.deendayalport.gov.in. We are monitored the pollutants like SPM, RSPM, SO2, NOx and monitoring report is attached here in **Annexure-G**.
13.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well as by email) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	We will submit the compliance report as wherever applicable. Further we are regularly submitting the six monthly EC/CRZ compliance Report to DPA.
14.	The environmental statement for each financial year ending 31st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of MoEF by e – Mail.	The Environmental Statement for each financial year ending 31st march in Form – V is submitted to the Honorable State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986. **Please refer Annexure-I.**

Annexure –B

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kachchh.

CRZ Recommendations: Letter No ENV-10-2008-366-E,9thMarch, 2009 of Director (Environment), Forest & Environment Department, GOG.

STATUS OF COMPLIENCE OF THE CONDITIONS STIPULATED BY GUJARAT STATE COASTAL ZONE MANAGEMENT AUTHORITY, GANDHINAGAR IN CRZ RECOMMENDATIONS LETTER.

Sr. No	Conditions in CRZ Recommendation Letter	Compliances
	SPECIFIC CONDITIONS	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued by MoEF, GOI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments/agencies shall be obtained by the KPT before commencing the expansion activities.	We had obtained the EC/CRZ Clearance from the MoEF, GOI on 02/02/2010 and MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020. Further, Deendayal Port Authority had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 /dated 28/8/2016 had extended the validity period of NOC up to 05/08/2020, and we have also obtained the Valid NOC or CCA separately for the Plot No. 19. (Copy placed at **Annexure-H**)
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued from time to time.	We are handle only permissible cargo as per the CRZ Notification, 1991 and its amendments issued from time to time.
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	No any ground water has been trapped to meet the water requirements during the construction phase as we have appointed local authority water supplier.
5	The Kandla Port Trust shall undertake roof -top water harvesting in areas wherever it is feasible.	We have made necessary arrangement for the roof top water harvesting our premises.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We have purchased water from local water Supplier and no ground water withdrawal envisaged by us.

7	The Kandla Port Trust shall duly incorporate the above mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department	We have made necessary arrangement for the roof top water harvesting our premises
8	The project proponents shall implement all the suggestions/ recommendations given by the NIOT in their Rapid EIA report	Suggestion / recommendation given by the NIOT in their Rapid EIA reports are being strictly followed by us.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA	We are strictly following the GPCB's conditions in the Consent to Establish (NOC) as well as the CCA
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We have dedicated Environmental Consultant for compliance of Environmental Conditions Including Monitoring.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department	We have already been earmarked the area for development of greenbelt along the periphery area.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We have started the commercial operations after receiving the all necessary statutory clearances.

GENERAL CONDITIONS

1	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.	No any construction camps had required at Project site because only local peoples /labours involved for the construction activities. Now, we have started the commercial operation.
2	The KPT shall have to contribute financially for taking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the District Collector / District Development Officer.	DPA is already engaged in numbers of CSR activities in the area. Also, we are carried out CSR at our own level in addition to the CSR by DPA.
3	A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	We have earmark separate budget for environmental protection& Socio economic activity. Please refer below table:

Budget for	Planned cost for F.Y. 2021-2022	Actual Cost for F.Y. 2021-2022
EMP	3.9	3.3
CSR	----	----
CER	----	----

4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project	We have appointed GPCB approved Environmental Consultant to carry out the Environmental Monitoring during construction and operational phase at our premises
5	An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI	If there is any change in the baseline environmental quality in the coastal and marine environment, we shall submit reports to the appropriate authority every year
6	Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.	Six Monthly reports on Compliance report condition mentioned in EC/CRZ Clearance will be furnished by us on regular basis to this department / MoEF, GOI through DPA. Last six monthly EC/CRZ compliance report submitted vide **Ref. No. CMP/AIPL/2022/02, date: 04/02/2022.**
7	Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.	Noted.

Annexure –C

COMPLIANCE REPORT OF CONSENT TO ESTABLISH (NOC)

(CTE NO: 72308 ON DATED 28/08/2015 is valid up to 05/08/2020)

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
SPECIFIC CONDITIONS:		
1.1	Unit shall not start any construction activities till extending the validity of EC& CRZ from Competent Authority.	We are complied with this. We had started the construction activity after extending the validity of EC and CRZ Clearance from MoEF& CC, New Delhi.(MoEF&CC, New Delhi vide letter no. F. No. 10-36/ 008- IA-III dated 18/08/2015, extended the validity period for Environmental and CRZ Clearance up to 01.02.2020. (Enclosed as **Annexure B**)
1.2	No ground water shall be used for the project coming under Dark zone without permission of competent authority.	We are purchase water from local water Supplier and no ground water withdrawal envisaged by us.
1.3	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and PO land Acid of 472 tanks with 12,08,369 Kl. The tentative tankage capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We do meet the condition. We have stored only permissible cargo as per EC & CRZ Clearance accorded by the MoEF, GoI.
1.4	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10– 36/2008-IA-III dated 02/02/2010 for old Kandla.	We have started the commercial operation and strictly complied with the condition of EC & CRZ issued by MoEF.
1.5	You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities.	We have obtained the valid CTE and CCA from bard and strictly complied with this.
1.6	Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	Wherever appropriate, we scrupulously followed the provisions of the Manufacturing, Storage, and Import of Hazardous Chemicals Rules-1989, which were enacted under

<table>
<tr><th>SR. NO.</th><th>CONSENT CONDITION POINTS</th><th>COMPLIANCE</th></tr>
<tr><td></td><td></td><td>the Environment (Protection) Act- 1986.</td></tr>
<tr><td>2</td><td colspan="2"><u>CONDITIONS UNDER THE WATER ACT 1974:</u></td></tr>
<tr><td>2.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.</td><td>We are only Edible oil Storage terminal and we are not doing any manufacturing activity.</td></tr>
<tr><td>2.2</td><td>The quantity of domestic waste water (Sewage) shall not exceed 2.00 KL/Day</td><td>We do meet the condition. Our Domestic Wastewater generation will never exceed the limit.</td></tr>
<tr><td>2.3</td><td>Sewage shall be disposed of through septic tank/soak pit system.</td><td>We do meet the condition. We have provided the septic tank/soak pit for disposal of sewage.</td></tr>
<tr><td>2.4</td><td>The unit shall install flow meters for measuring category wise (Category as given in Water Cess 1977 Schedule II) consumption of water.</td><td>We have purchased water from local water Supplier.</td></tr>
<tr><td>2.5</td><td>Domestic effluent shall be disposed off through septic tank / soak pit system confirm to the following standards.
<table><tr><th>Parameter</th><th>Permissible Limit</th></tr><tr><td>BOD (5 days at 20° C)</td><td>30 mg/Liter</td></tr><tr><td>Suspended Solid</td><td>20 mg/Liter</td></tr><tr><td>Residual Chlorine</td><td>Minimum 0.5 mg/Liter</td></tr></table></td><td>We have provided the septic tank/soak pit for disposal of sewage.</td></tr>
<tr><td>3.</td><td colspan="2"><u>CONDITIONS UNDER THE AIR ACT 1981:</u></td></tr>
<tr><td>3.1</td><td>There shall be no use of fuel hence there shall be no flue gas emission from the manufacturing process and other ancillary industrial operation.</td><td rowspan="2">As we will not be carrying out any manufacturing activity/process, there will be no flue gas and process gas emissions from manufacturing and other ancillary activities.</td></tr>
<tr><td>3.2</td><td>There shall be no process emission from the manufacturing and other ancillary activities</td></tr>
<tr><td>3.3</td><td>The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009.
<table><tr><th>Pollutant</th><th>Time weighted average</th><th>Concentration in ambient air in µg/M3</th></tr><tr><td>SO2</td><td>Annual
24 hours</td><td>50
80</td></tr><tr><td>NO2</td><td>Annual
24 hours</td><td>40
80</td></tr><tr><td>Particulate Matter (Size less than 10 µm) OR PM10</td><td>Annual
24 hours</td><td>60
100</td></tr></table></td><td>Ambient Air quality within plant premises will be confirmed to the prescribed norms. Refer Annexure-G.</td></tr>
</table>

SR. NO.	CONSENT CONDITION POINTS			COMPLIANCE
	Particulate Matter (Size less than 2.5 mm) OR PM 2.5	Annual 24 hours	40 60	
3.4	The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels: Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A).			We do meet the condition Refer **Annexure-G.**
4.	**CONDITIONS UNDER HAZARDOUS WASTE:**			
4.1	The applicant shall provide temporary storage facilities and maintain the record for each type of Hazardous Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.			We have provided the storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time wherever applicable.
5.	**GENERAL CONDITIONS :**			
5.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.			We will intimate to GPCB, GoG, if there are any change in personnel, equipment or working condition as mentioned in the consents form / order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipment's, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.			We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in excess of standards at their premises and we will take necessary actions / measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analysed by one of the laboratories recognized by the state Board.			We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our own premises.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall			We complied with this. We have dedicated team/ Environmental Consultant for compliance of Environmental

SR NO	CONSENT CONDITION POINTS	COMPLIANCE
	directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	conditions including monitoring
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.	Environmental Statement is regularly submitted by us within stipulated time period.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Agreed with the condition.
5.7	In case of change of ownership/management the name and address of the new owners /partners /directors /proprietor should immediately be intimated to the board.	Agree with the condition.
5.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.	We have obtained the TSDF membership certificate for collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal of waste generated at our own premises.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31st January of every year.	We are maintaining the records for waste generation and its management. We are submitting the Annual returns to GPCB in prescribed form on regular basis.
5.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We have all the necessary insurance policy including the "Public Liability Insurance Act – 91.
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.	We had adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form-4.
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complied with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
		1986 wherever applicable.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.657 of 199s-dated 14th October-2003.	We are complied with this condition.
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We are monitored the pollutants like SPM, RSPM, SO2, NOx and displayed at a convenient location near the main gate of the company in the public domain.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We have already prepared a complete On-Site and Off-Site Emergency Management Plan in accordance with the Hazardous Chemicals Manufacture, Storage, and Import Rules, 1989, as revised to date, which may also cover natural disasters where relevant.

Annexure -D

Monitoring the implementation of environmental Safeguards
Ministry of Environment, Forest and Climate Change
Western Region, Regional Office, Bhopal.
MONITORING REPORT
Part - 1
DATA SHEET

1. Project type : River valley/ Mining/Industry/ thermal/nuclear/Other (specify)	Edible Oil Storage Terminal
2. Name of the project	**AMBAJI IMPORT PVT.LTD.**
3. Clearance Letter (s). OM no and date	MoEF , New Delhi vide File No.10-36/2008-IA-III dated 2/02/2010 had granted Environmental /CRZ Clearance to Deendayal Port Authority for the subject project. Further, MoEF& CC, New Delhi vide File No.10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	Dist.: Kutch State : Gujarat Location : Deendayal Port Authority. 23° 1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address of Concerned Project ChiefEngineer(with pin code &telephone/telex/ fax numbers) b) Address of Executive projectEngineer/manager/(with pin codefax numbers)	"Akshat House", Plot No.220, Sector -1-A, Gandhidham (Kutch) Tele fax | +91 2836 226699 | 231790. Plot No. 19, Liquid Storage Tank Farm, Nr. Jawaharlal Road, Kandla, Gandhidham-Kutch, Gujarat, Pin-370210
6. Salient features of the project b) Salient features of the Environmental management plan	1. Plot no. 19 have been developed for the Liquid storage Tank farm. 2. The Tentative capacity works out for the proposed tank farm is 48,523 Kiloliters (31 Tanks). 3. This Plot mainly used for storage of liquid cargo as permitted in CRZ Notification from time to time. 1. Provision of parking of heavy vehicles and sufficient space for loading /unloading of trucks within individual plot limit have been made by us. 2. We have already placed the detailed on site and Off site Emergency management Plan as per the Manufacture, Storage and

	import of Hazardous Chemicals Rules,1989, as amended to date. 3. The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room had already been provided by successful plot allottee during the construction activities. 5. Secure construction practices have been adopted by successful plot allotters in which no any construction spoils take placed. 6. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities 7. We have already earmarked the area for storage of storm water and same will be reuse for green belt development at the premises of the each plots.
7. Break up of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land & landless labourers/artisen a) SC. ST/Adivasis b) Others (please indicate whether these figures are based on any scientific and systematic survey carried out of only provisional figures, if a survey is carried out give details and years of survey).	 Nil Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference b) Allocation made for environmental management plans with item wise and year wise break-up c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) includes the cost of environmental management plans so far d) Actual expenditure incurred on the project	Planned Project Cost: 36.7 Crore Planned EMP Cost : 3.9 lakh FIRR EIRR Actual Project Cost: 23.12 Crore

e) Actual expenditure incurred on the Environmental management plans so far.	Actual provided fund for EMP: 3.3 Lakh
10 Forest land requirement a) The status of approval for diversion of forest land for non-forestry use b) The status of clear felling c) The status of compensatory a forestation, if any d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	 Nil Nil-Not related Nil Nil
11 The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information	Nil
12 Status of construction a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	**We have completed Construction and obtain Consent To operate from GPCB on dated 10/01/2018.**
13 Reasons for the delay if the Project is yet to start	N/A
Date of site visited a) The dates on which the project was monitored by the regional office on pervious occasion, if any b) The date site visit for this monitoring report	 -- --

ANNEXURE – E

TSDF Membership Certificate

DETOX GROUP

Saurashtra Enviro Projects Pvt. Ltd.

Integrated Common Hazardous Waste Management Facility

Certificate

Certificate No : 1200002986

To Whomsoever it may concern

This is to certify that

AMBAJI IMPORT PVT. LTD.

PLOT NO.19
LIQUID TERMINAL,
NEAR JAWAHARLAL ROAD KANDLA,
TAL: GANDHIDHAM,
KUTCH

is a valid member of

SAURASHTRA ENVIRO PROJECTS PVT. LTD.

for Integrated Common Hazardous Waste Management Facility.

This membership is valid for a period of

5 Years

For, Saurashtra Enviro Projects Pvt. Ltd.

Date of issue : *24.11.2017*

Date of expiration : *23.11.2022*

Place of issue : *Surat*

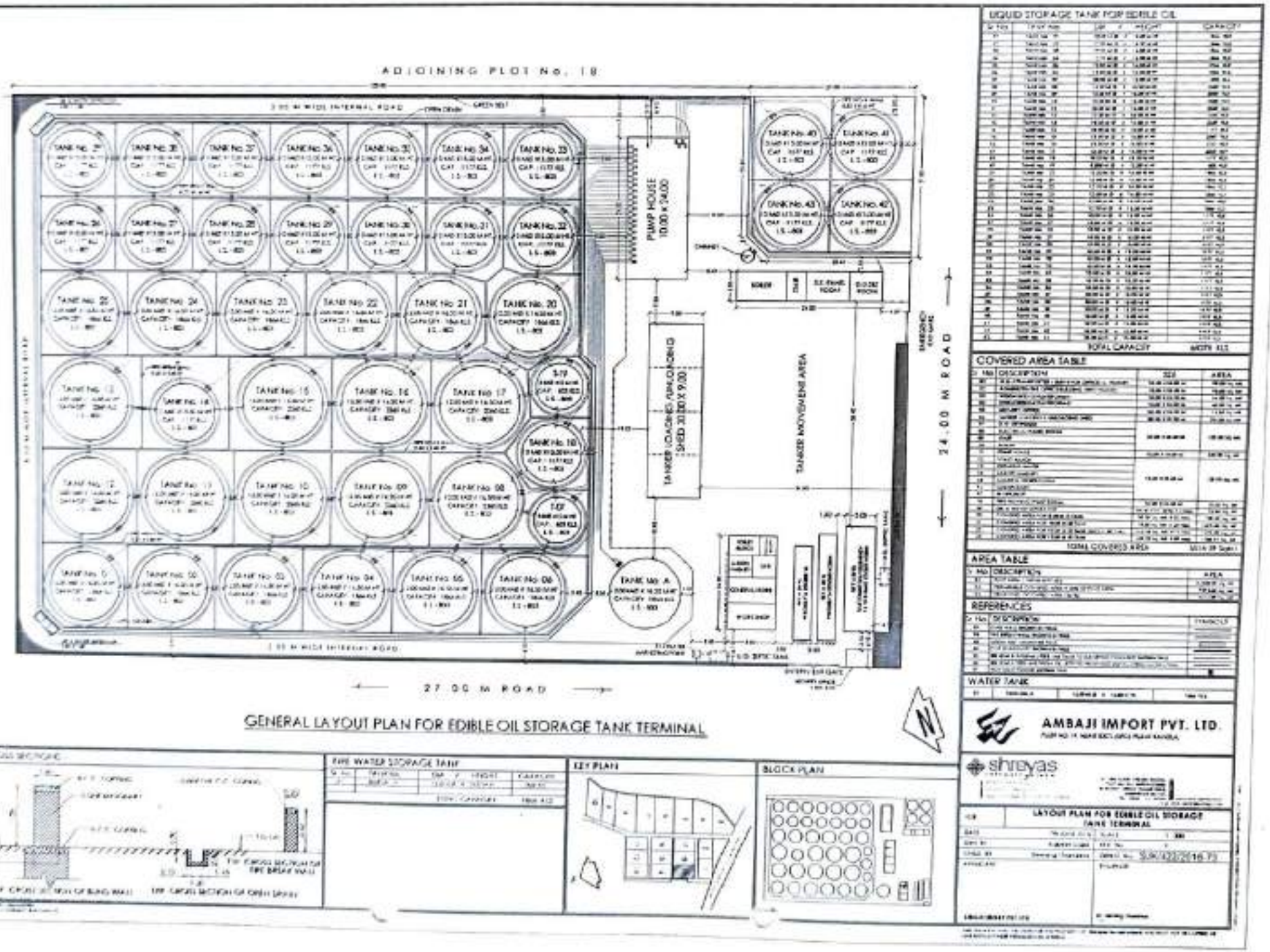
Director

SUBJECT TO SURAT JURISDICTION

Corporate Office : Detox House, Opp. Gujarat Samachar Press, Udhna Darwaja, Ring Road, Surat - 395 002. (Guj.)
p. +91 261 2351248, 2346181 f. +91 261 2354068
e. info@seppindia.com w. www.detoxgroup.in
CIN :- U51100GJ2006PTC047689

ANNEXURE – F

Approved Competition Drawing with Greenbelt


ADJOINING PLOT No. 18
PUMP HOUSE 10.00 x 24.00
TANKER LOADING/UNLOADING SHED 30.00 X 9.00
TANKER MOVEMENT AREA
24.00 M ROAD
27.00 M ROAD
GENERAL LAYOUT PLAN FOR EDIBLE OIL STORAGE TANK TERMINAL
LIQUID STORAGE TANK FOR EDIBLE OIL
COVERED AREA TABLE
AREA TABLE
REFERENCES
WATER TANK
AMBAJI IMPORT PVT. LTD.
shreyas
LAYOUT PLAN FOR EDIBLE OIL STORAGE TANK TERMINAL
FIRE WATER STORAGE TANK
KEY PLAN
BLOCK PLAN

ANNEXURE – G

Environmental Monitoring Report

Report No : EE/ENV/2022/03/122

Date: 31/03/2022

ANALYSIS REPORT
(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Ambaji Import Pvt. Ltd.	Sample Code	AIPL/AA1
Address	Plot No.: 19, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210	Location	Near Main Gate
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	24/03/2022
Analysis Starts on	25/03/2022	Sampling Method	IS 5182: Part – 5: 2014
Analysis Completion On	31/03/2022	Sample Received Date	25/03/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	$\mu g/m^3$	62.3	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	21.5	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	$\mu g/m^3$	15.3	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	23.2	80	IS 5182 Part 6 : 2017

Checked By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2022/03/123

Date: 31/03/2022

ANALYSIS REPORT
(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Ambaji Import Pvt. Ltd.	Sample Code	AIPL/AA2
Address	Plot No.: 19, Liquid Storage Tank Farm,Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210	Location	Near Tank Farm Area
		Nature of Sample	Ambient Air
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	24/03/2022
Analysis Starts on	25/03/2022	Sampling Method	IS 5182: Part – 5: 2014
Analysis Completion On	31/03/2022	Sample Received Date	25/03/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	µg/m³	75.3	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	µg/m³	23.7	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	µg/m³	21.6	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	µg/m³	24.2	80	IS 5182 Part 6 : 2017

Checked By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2022/03/124 Date: 31/03/2022

ANALYSIS REPORT
(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Ambaji Import Pvt. Ltd.	Sample Code	AIPL/N1-N5
Address	Plot No.: 19, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210	Location	As per table
		Quantity	NA
		Date of Measurement	24/03/2022
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Sound Level Meter (HTC/SL-1350)
Measurement Completion Date	24/03/2022	Sampling Method	IS 9876 : 1981 & 9989 : 1981

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time	
			Observed Value	Standard Limit
1.	Near Main Gate	dB (A)	65.9	75.0
2.	Near Office	dB (A)	61.8	75.0
3.	Near Tank Farm Area	dB (A)	69.3	75.0
4.	Near Tanker Loading/ Unloading Shed	dB (A)	71.1	75.0
5.	Near Weigh Bridge Platform	dB (A)	65.9	75.0

Checked By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: - EE/ENV/2022/03/125

Date: 31/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Ambaji Import Pvt. Ltd.	Sample Code	AIPL/SA1
Address	Plot No.: 19, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210	Location	Composite Sample
		Nature of Sample	Soil Sample
		Quantity	1 Kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	24/03/2022
Analysis Starts on	25/03/2022	Sampling Method	—
Analysis Completion On	31/03/2022	Sample Received Date	25/03/2022

Soil Analysis Report

Sr.No.	Parameter	Unit	Result	Test Method
1.	Texture	—	Sandy Loam	Method manual Soil testing in India (January 2011)
1.a	Sand	%	76.08	Method manual Soil testing in India (January 2011)
1.b	Silt	%	7.0	Method manual Soil testing in India (January 2011)
1.c	Clay	%	16.92	Method manual Soil testing in India (January 2011)
2.	pH	—	8.36	IS 2720 (P-26)
3.	Moisture Content	%	1.96	IS 2720 (P-2)
4.	Organic Matter	%	0.64	Method manual Soil testing in India (January 2011)
5.	Conductivity	µs/cm	4562	IS 14767:2021
6.	Available Nitrogen as N	%	6.1	Method manual Soil testing in India (February 2011)
7.	Available Phosphorus as P	mg/kg	15.6	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
8.	Potassium as K	mg/kg	33.6	Method manual Soil testing in India (January 2011)
9.	Cation Exchange Capacity	Meq/100 gm	15.3	IS:2720 (P- XXIV)-2020
10.	Magnesium as Mg	me/100 gm	3.62	Method manual Soil testing in India (January 2011)
11	Calcium as Ca	me/100 gm	12.3	Method manual Soil testing in India (January 2011)
12.	Bulk Density	gm/cc	1.41	IS 2720 (P-7)

Checked By:

Authorized Signatory:

GUJARAT

- Analysis is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

ANNEXURE – H

(Copy of CTE/CCA Order obtained from board)

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone (079) 23222425
(079) 23232152
Fax . (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D

CONSENT TO ESTABLISH
CTE- 90396

No. PC/CCA-KUTCH-1393/GPCB ID 52380/ **Date:**

To,
Ambaji Import Pvt Ltd,
Plot No: 19,
Liquid Terminal, Near Jawaharlal Road, Kandla,
Tal: Gandhidham,
Dist: Kutch. 370210.

Subject : **Consent to Establish (NOC)** under Section 25 of Water (Prevention and Control of Pollution) Act 1974 and Section 21 of Air (Prevention and Control of Pollution) Act 1981.

Reference : Your CTE Application **Inward ID No 129977 dated 11/12/2017.**

Sir,

Without prejudice to the powers of the Board under the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that the Board grants **Consent to Establish (NOC)** of industrial activity at Plot No: 19, Liquid Terminal, Near Jawaharlal Road, Kandla, Tal. Gandhidham, Dist: Kutch. 370210.

1. The validity period of the order shall be up to 10/12/2022.
2. The list of the products to be manufacture is as below:

Sr. No.	Product	Quantity
1.	Receiving, Storage of Edible Oil (Edible Oils storage Tank Terminal) (Total 31 Nos of tanks)	48523 KL

SUBJECT TO FOLLOWING SPECIFIC CONDITIONS:

1. Applicant shall not carry out any activity which may attract the provision of EIA notification-2006 & its amendments.
2. No ground water shall be withdrawn without prior approval from competent authority.
3. **CONDITIONS UNDER WATER ACT 1974:**

3.1 The industrial waste water shall not exceed of 0.1KL/day & given treatment.

3.2 The quantity of domestic waste water (Sewage) shall not exceed 2 KL/Day.

3.3 The quality of the industrial effluent shall conform to the following standards

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40 °C
Colour	100 units
Suspended Solids	100 mg / l
Oil & Grease	10 mg / l
Phenolic Compounds	01 mg / l
Ammonical Nitrogen	50 mg / l
BOD (3Days at 27oC)	30 mg / l
COD	100 mg / l
Chlorides	600 mg / l
Sulphates	1000 mg / l
Total Dissolved Solids	2100 mg / l
Sulphides	02 mg / l

All efforts shall be made to remove colour & unpleasant odour as far as practicable.

3.4 The quality of the sewage shall dispose through septic tank / soak pit.

4. CONDITIONS UNDER AIR ACT 1981;

4.1 The following shall be used as fuel in D.G. set respectively.

Sr. No.	Fuel	Quantity
1.	Diesel	15 Ltr/hr

4.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below;

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1.	D. G. sets	5	NO_x+HC CO PM Smoke limit (Light absorption co-efficient)	≤ 7.5 g/kW-hr ≤ 3.5 g/kW-hr ≤ 0.3 g/kW-hr ≤ 0.7 m^{-1}

4.3 There shall be no process gas emission from manufacturing activities and other ancillary operations.

4.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MoEF&CC dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in ug/m^3
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

4.5 The level of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 am to 10 pm : 75 dB(A)
Between 10 pm to 6 am : 70 dB(A)

5. GENERAL CONDITIONS

5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

5.2 The waste generator shall be totally responsible for (i.e. Collection, storage, transportation and ultimate disposal) of the wastes generated.

5.3 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

5.4 In case of any accident, details of the same shall be submitted in Form – 5 to Gujarat Pollution Control Board.

5.5 Applicant shall comply relevant provision of "Public Liability Insurance Act-91".

5.6 Unit shall take all concrete measures to show tangible results in waste generation reduction, voidance, reuse and recycle. Action taken in this regards shall be submitted within 03 months and also along with Form 4.

5.7 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

5.8 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width shall be developed.

5.9 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

For and on behalf of
Gujarat Pollution Control Board

(P. J. Vachhani)
Senior Environment Engineer

Outward No:442375; 23/01/2018

Outward No:442375,23/01/2018

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974 under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016, framed under the Environmental (Protection) Act-1986

And whereas Board has received application inward No 129977 dated 11/12/2017 for the Consolidated Consent and Authorization (CC&A) of the Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under

CONSENTS AND AUTHORISATION:
(under the provisions /rules of the aforesaid environmental acts)

To,
Ambej Import Pvt. Ltd.
Plot No.19,
Liquid terminal,
Nr Jawaharlal road Kandla,
Ta. Gandhidham,
Dist. Kutch
Pin - 370 210

1. **Consent Order No. AWH-90396 Date of Issue: 10/01/2018.**
2. The consent shall be valid up to **10/12/2022** for storage facility located at Plot No 19 Liquid terminal, Nr.Jawaharlal road Kandla. Ta.Gandhidham, Dist.Kutch Pin-370 210

Sr. No.	Product	Quantity
	Receiving, Storage & Distribution facility for Edible Oil	48523 KL (31 tanks)

3. **SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:**

3.1 You shall not carry out any activities which may attract the applicability of EIA notification-2006

3.2 No ground water shall be withdrawn without obtaining prior permission from competent authority

3.3 The loading and unloading activity of the edible oil should be such that there shall not be any spillages

3.4 The CTE - 90396 vide letter no PC/CCA-KUTCH-1393/GPCB ID 52380/442375, dated 23/01/2018 shall be superseded

4. **CONDITIONS UNDER WATER ACT 1974:**

4.1 The industrial water consumption shall not exceed 0.1 KL/day and domestic water consumption shall not exceed 3.0 KL/day

4.2 The quantity of industrial effluent shall not exceed 0.1 KL/day from storage, handling and other ancillary operations

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

4.3 The quantity of Sewage effluent shall not exceed 2.0 KL/Day

4.4 The quality of generated industrial waste water shall conform to the following standards

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40 C
Colour (Pt. Co. scale units)	100 units
Suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Phenolic Compound	01 mg/L
Amonical Nitrogen	50 mg/L
BOD (3 Days at 27° C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/l
Total Dissolved Solids	2100 mg/L
Sodium Absorption Ratio	26
Percent Sodium	60 %

All efforts shall be made to remove colour & unpleasant odour as far as practicable

4.5 The treated effluent confirming to above standards shall be used for gardening and plantation within premises

4.6 Sewage shall be disposed off through septic tank / soak pit system.

5. CONDITIONS UNDER AIR ACT 1981:

5.1 The following shall be used as fuel in D. G. set respectively

Sr. No.	Fuel	Quantity
	Diesel	16 Liter/Hour

5.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1	D. G. Set	11	NO_x+HC	< 4.0 g/kW-hr
			CO	< 3.5 g/kW-hr
			PM	≤ 0.2 g/kW-hr
			Smoke limit (Light absorbtion coefficient)	≤ 0.7 m^{-1}

5.3 There shall be no process gas emission from manufacturing process and other ancillary operations.

5.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MoEF&CC dated 16th November 2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/m^3
1	Sulphur Dioxide (SO_2)	Annual	50
		24 Hours	80
2	Nitrogen Dioxide (NO_2)	Annual	40
		24 Hours	80
3	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual	60
		24 Hours	100
4	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual	40
		24 Hours	60

Cancelled No. [illegible] 23/2/2022

5.5 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels

Between 6 am to 10 pm 75 dB (A)
Between 10 pm to 6 am 70 dB (A)

6. Authorization under Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016 & amended.

6.1 **Authorization Number: AWH- 90396 and shall valid up to 10/12/2022.**

6.2 **Ambaji Import Pvt** Ltd is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot No 19, Liquid terminal, Nr Jawaharlal road Kandla, Ta. Gandhidham, Dist. Kutch Pin 370 210.

Sr. No.	Waste	Quantity Per Year	Sch.	Category	Facility
1	Used Oil	0.025 MT	I	5.1	Collection, storage, transportation, disposal by selling out to authorized recycler
2	Empty Barrels/ containers/ liners	0.01 MT	I	33.1	Collection, storage transportation, disposal by selling out to authorized recycler.
3	Pigging Waste	0.5 MT	II	C3	Collection, Storage, Transportation, Disposal to CHWIF site
4	Chemical sludge from waste water treatment	0.5 MT	I	36.3	Collection, Storage, Transportation, Disposal to TSDF

6.3 The authorization is granted to operate a facility for collection, storage, transportation and ultimate disposal of Hazardous wastes by selling out to authorized recyclers, TSDF and Incineration facility

6.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act 1986

6.5 **GENERAL CONDITIONS OF AUTHORIZATION:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.

CONSENT NO.

6 The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty

7 It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility

8 The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation

9 The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

10 The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization

11 The importer or exporter shall bear the cost of import or export and mitigation of damages if any

12 An application for the renewal of an authorization shall be made as laid down under these Rules

13 Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time

14 Annual return shall be filed by June 30th for the period ensuring 31st March of the year

7 **GENERAL CONDITIONS**

7.1 Unit shall develop green belt within premises as per the CPCB guidelines. However if the adequate land is not available within premises, the unit shall tie up with local agencies like gram panchayat, school, social forestry office etc. for the plantation at suitable open land in nearby locality and submit an action plan of plantation for next three years to GPCB.

7.2 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width shall be developed.

7.3 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

7.4 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.

7.5 The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to the Board for this purpose in the prescribed forms under the provisions of the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986.

7.6 The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act 1986 & Noise Pollution (Regulation and Control) Rules, 2000.

7.7 Applicant is required to comply with the manufacturing, Storage and import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

Outward No. 6717/2019

7.8 If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property in that case they are obliged to pay the compensation as determined by the competent authority

7.9 Applicant shall have to comply with all the guidelines / directive issued / being issued by MoEF&CC / CPCB / DoEF from time to time

7.10 Environmental cell shall be setup and shall be responsible for the total Environmental management

7.11 Monitoring in respect to Air, Water, Noise level shall be carried out and results shall be submitted to GPCB on quarterly basis

For and on behalf of
Gujarat Pollution Control Board

(P. J. Vachhani)
Senior Environmental Engineer

NO: PC/ CCA- KUTCH- 1393/GPCB ID: 52380/ Date:

ISSUED TO:
Ambaji Import Pvt. Ltd.
Plot No.19,
Liquid terminal,
Nr Jawaharlal road Kandla,
Ta. Gandhidham,
Dist. Kutch
Pin – 370 210

Outward No:447486,13/03/2018

ANNEXURE - I

(Environment statement Form-V)

AMBAJI

Ref.: GPCB/AIPL/ENV/2022/07

Date: 20/07/2022

PCB ID:52380

To
Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector: 10 - A,
Gandhinagar – 382010,

K. A.: Smt. U. K. Upadhyay (Senior Environment Engineer)

Sub. : Submission of Environmental Statement Form-V for the year ending on 31st March, 2022.

Respected Mam,

We are pleased enclose herewith Environmental Statement Form-V duly filled in, for the financial year ending on 31st March, 2022.

We hope you find the above in order.

Thanking you and Regards.

Yours sincerely,

For,
M/s. Ambaji Import Pvt. Ltd

AMBAJI IMPORT PVT LTD

Authorized Signatory

Encl.: Environmental Statement – Form V

FORM- V

For the Year APRIL 2021- MARCH 2022

ENVIRONMENTAL STATEMENT REPORT For Year 2021-2022

M/s. Ambaji Import Pvt. Ltd

PART - A

i.	Name & address of the owner/ Occupier of the industry operation or process	:	M/s. AMBAJI IMPORT PVT. LTD. Plot No.19, Liquid Terminal, Nr. Jawahrlal Road Kandla, Ta.Gandhidham,Dist.Kutch-370210
ii.	Industry category Primary – (STC Code) Secondary – (SIC Code)	:	Medium scale/Red
iii.	Production Capacity	:	Annexure -A
iv.	Year of Establishment	:	01/04/2017
v.	Last Environmental Statement Submitted	:	14/07/2021

PART - B

WATER AND RAW MATERIAL CONSUMPTION

(i) Water Consumption, m^3/day

Domestic : 03 KL/DAY
Washing : 0.1 KL/DAY

Name of Products	Water (PROCESS) consumption per unit of product output	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
	(1)	(2)
Receiving, Storage & Distribution facility For Edible oil	NA	NA

(ii) Raw material consumption

Name of raw material consume	Name of Products	Raw material consumption
No Raw Material used as we are only Providing storage facilities.		

PART - C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/day)	Percentage of variation from prescribed standards with reasons
(a) Water	**INDUSTRIAL- NIL**	**As per GPCB Norms.**	**As per GPCB Norms.**
	DOMESTIC – 02 KLD	**As per GPCB Norms.**	**NO PERCENTAGE VARIATION**
(b) Air			
D. G. SET	**---**	**NO_x+HC≤ 4.0 g/KW-hr CO ≤ 3.5 g/KW-hr PM ≤ 0.2 g/KW-hr Smoke limits 0.7 m^{-1} (Light absorption coefficient)**	**NO PERCENTAGE VARIATION**

PART – D

HAZARDOUS WASTES

Hazardous Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process		
(b) From pollution control facility		
PIGGING WASTE	**0.320 MT**	**0.320 MT**
USED OIL	**NIL**	**NIL**
EMPTY BARRELS/CONTAINER/LINERS	**NIL**	**NIL**
CHEMICAL SLUDGE FROM WASTEWATER TREATMENT	**NIL**	**NIL**

PART - E

SOLID WASTES

Solid Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process	**NIL**	**NIL**
(b) From pollution control facility	**NIL**	**NIL**
(c) (1) Quantity recycled or re-utilized within the unit	**NIL**	**NIL**
(2) Sold	**NIL**	**NIL**

(3) Disposed	NIL	NIL

PART - F

Please specify the characteristics (in terms of concentration & quantum) of hazardous as well as solid wastes & indicate disposal practice adopted for both these categories of wastes.

I-5.1 - USED OIL - 0.025 MT/YEAR
II-C3 - PIGGING WASTE - 0.5 MT/YEAR
I-33.11 – EMPTY BARRELS/CONTAINER/LINERS - 0.01 MT/YEAR
I-35.3 - CHEMICAL SLUDGE FROM WASTEWATER TREATMENT - 0.5 MT/YEAR

USED OIL AND EMPTY BARRELS/CONTAINER/LINERS ARE SENT TO AUTHORIZED RECYCLER.
PIGGING WASTE IS DISPOSED AT CHWIF SITE.
CHEMICAL SLUDGE FROM WASTEWATER TREATMENT IS DISPOSED AT TSDF SITE.

PART - G

Impact of the pollution control measures taken on conservation of natural resources & consequently on the cost of production

AIR	SEPARATE STACK ATTACHED TO D. G. SET. AS DIESEL IS USED AS A FUEL, ADEQUATE STACK HEIGHT IS PROVIDED. NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.
WATER	INDUSTRIAL – TREATED INDUSTRIAL EFFELUNT IS REUSED FOR GARDENING PURPOSE AND PLANTATION PURPOSE. DOMESTIC- DOMESTIC EFFLUENT IS DISCHARGED IN TO SEPTIC TANK/ SOAK PIT SYSTEM. NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.
SOLID WASTE	USED OIL AND EMPTY BARRELS/CONTAINER/LINERS ARE SENT TO AUTHORIZED RECYCLER. PIGGING WASTE IS DISPOSED AT CHWIF SITE. CHEMICAL SLUDGE FROM WASTEWATER TREATMENT IS DISPOSED AT TSDF SITE. NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.

PART – H

Additional measures /investment proposal for environmental protection including abatement of pollution, prevention of pollution

UNIT IS DEVELOPING GREEN BELT WITHIN PREMISES.

PART – I

Any other particulars for improving the quality of the environment

---

ADEQUATE PLANTATION IS CARRIED OUT ALONG THE PERIPHERY OF THE INDUSTRIAL PREMISES.

Prepared By

For
M/s AMBAJI IMPORTS PVT. LTD.

Date: 20/07/2022

(AUTHORIZED SIGNATORY)

ANNEXURE – A

LIST OF PRODUCTS

Sr. No.	Product	Quantity
01	Receiving, Storage & Distribution facility For Edible oil	48523 (Total tank-31)

Deendayal Port Authority

Chief Engineer Department
(Land Section)

Subject: Six Monthly Compliance Report of Environmental / CRZ clearance for the period December 2021 to May 2022.

***

With reference to above it is inform that this office in receipt of Six Monthly Compliance Report of Environmental/ CR Clearance, for the Period of December 2021 to May 2022 with relevant enclosures, Submitted by following 03 (Three) Parties viz.

1. M/s. Shreeji Liquid Storage Terminals (Pvt). (Ltd).

   (Pertains to Plot No. 7 at Kandla.

2. M/s. Frihds Bulk Handlers Limited.

   Pertains to Plot no.10 at Kandla.

3. M/s. Viking Lighterage & Cargo Handlers (Pvt) (Ltd.)

   Pertains to Plot no. 12 at Kandla.

The originals of the above are enclosed herewith for ready reference.

This is for kind information and necessary action please.

Encl.: As above (03 Bunches)

SE (Kandla Land)
Deendayal Port Authority

S.E.(PL) & EMC (I/c)

LW/PL/3301-VII/ 753

Date 26/07/2022

Manager (Env) / Shri Pradip Dave

310
26/07/2022

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address : Plot No. 7, J. N. Marg, Near Railway Crossing, Kandla - 370210

Our Ref. No. SLST/ENV/2020-21/[illegible]

To,

Date: 18-07-2022

The Superintendent Engineer (Kandla Land)
Land & Development Office
Administrative Office
P.B. No. 50, Gandhidham, Kutch
Gujarat - 370 201

Sub: Submission of compliance reports (December 2021 - May 2022)

Dear Sir,

With reference to the above subject we are submitting Environmental [illegible] for the period.

Herewith we have attached Compliance report of Environment & CRZ Clearance, CRZ recommendations for the same is attached as per given below.

1. Compliance report from Dec'21 to May'2022
2. Photo wise compliance of conditions stipulated in CRZ recommendations
3. CRZ Map
4. Ambient Monitoring Report
5. Water, Soil Monitoring Report

1226
21/7/22

Thanking you,

Yours sincerely,

For, SHREEJI LIQUID STORAGE TERMINALS PVT LTD

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

AUTHORISED SIGNATORY

Encl: As above

Regd. Office : Plot No.247, Ward 12-B, Gandhidham (Kutch) 370201. Ph. : (02836) 225210/11/12, 225311
Fax : (02836) 225411 E-mail: shreeji.lstpl@shreeji-group.com • opjangir@shreeji-group.com
CIN No.: U74900GJ2015PTC082198

Subject: Collective submission of Point wise compliance report of stipulated conditions mentioned in the EC & CRZ Clearance for the development of plots for construction of Liquid Storage tank Farm at Kandla, Gujarat.

02/02/2010 – The MoEF&CC, GOI granted Environmental & CRZ Clearance.

18/08/2015 – The MoEF&CC, GOI extended the validity period of Environmental & CRZ clearance for a further period of 5 years i.e. up to 01/02/2020.

Plot No	Name of Plot Allotee	Allotment Letter Issued on	Present Status
7	M/s Shreeji Liquid Storage Terminals Pvt. Ltd.	09.11.2015	Commercial Operation started (GPCB has granted CTO 01/11/2017)

Sr No	EC Conditions	Compliance Status
SPECIFIC CONDITION		
Construction Phase		
i	All the conditions stipulated by Govt. of Gujarat vide letter no. ENV- 110-2008-366-E dated 09.03.2009 and	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 9/03/2009 is enclosed as **Annexure- I**.
	Gujarat Pollution Control Board vide letter No. PC/WDC/CCA-Kutch-78 (2)/ GPCB ID 17662/1760s, dated 13.07.2009.	Further, Compliance Report of NOC/WCTE granted by GPCB (Valid up to 17/02/2025) is enclosed as **Annexure – II**.
ii	The water supply shall be managed by M. Port	-We have sourced the water for our entire water requirement during Construction phase from local water supplier. -We have water supply source from Gujarat water supply sewage board Bhuj
	Waste water will be treated and utilized	-Waste water is being treated in septic tank and utilized for green belt development.
iii	Provision shall be made for parking of heavy vehicles and sufficient space for loading / unloading of trucks within the Port complex	Provision of Parking of heavy vehicles and sufficient space for loading/ unloading of trucks within our premises have already been made.
iv	The proponent shall put in place the detailed on site Emergency Management plan as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended to date which may cover the likely accidents also	The detailed on site & off site emergency management plan as per the manufacture, storage and import of Hazardous chemical rules 1989 as amended to date prepared and put into place as per requirement
v	The proponent shall put in place the Oil Spill Contingency Plan	We have already prepared Oil Spill Contingency Plan & implementing the same. (Copy enclosed as Annexure – III)

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

VI	The proponent shall strictly comply the measures proposed as per their letter No EG/Wk/4684/EC/388, dated 01.12.2009	We hereby assure that we will start commercial production only after obtaining statutory permission from CTO from GPCB, PESO for chemical phase
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991	The FSI of the plots are done as per CRZ notification 1991 as amended from time to time and as per DPT approval.
VIII	There shall be no drawl of ground water. If required necessary permission shall be obtained from the competent Authority prior to construction/operation of the project	No ground water is being drawn by us as we are arranging water supply from authorized water supplier for our requirement. -We have water supply source from Gujarat water supply sewage board Bhuj
IX	Sewage treatment Facilities should be provided in accordance with the CRZ notification.	We have provided soak pit/septic tank for sewage accordance with the CRZ notification
X	The solid water shall be properly collected, segregated and disposed as per the provision of solid water (Management and Handling) rules,2000	The solid water shall be properly collected, Segregated and disposed off as per the provision of solid waste (Management and Handling) rules,2000 and Solid Waste Management Rules, 2016
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking mobile toilets, mobile STP, safe drinking water medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the project	Labour camp is not required as local public/labour will be hired for construction activities. However as per requirement necessary infrastructure and facilities such as toilets, safe drinking water, Medical health care etc. will be provided to construction labours.
XII	A first Aid room will be provided in the project both during construction and operation of the project	A first Aid room have been provided by us during the construction activities as well as during operation phase of our project by us.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site	No excavation is required during construction activities. If any excavation is done it will stored for use in horticulture/landscape development within the project site.
XIV	Disposal of muck during construction phase should not create any advance effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval sites with the approval of	No muck is being generated during construction phase.

	competent authority	
xiv	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants	Adequate measures will be taken for testing of soil and ground water samples and it will be assured that there are no threats to ground water quality by leaching of heavy metals and other toxic contaminants. Copies of test reports are enclosed herewith – **Annexure - IV**
xv	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such materials must be secured so that they should not leach into the groundwater	We have already started commercial operation
xvi	Any hazardous waste generated during construction phase, should be disposed of as per applicable rules and norms with necessary approvals of Gujarat Pollution Control Board	We have already started commercial operation
xviii	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We have operated the DG sets as per the requirement and as per the guideline of GPCB/CPCB.
xix	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should confirm to Environment (Protection) Rules prescribed for air and noise emission standards.	We have used low Sulphur diesel type DG set conforming Environmental Rule prescribed for air and noise emission standard.
xx	The Diesel required for operation of DG sets shall be stored in underground tanks and if required clearance from Chief controller of Explosives shall be taken	The diesel required for operation of DG will be stored as per applicable rules.
xxi	Vehicles hired for bringing construction materials to the site should be in good condition and should have a pollution check certificate and should confirm to applicable air and noise emission standards and should be operated only during non-peak hours.	We have started commercial operation. PUC is enclosed as **Annexure V**
xxii	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase	We have complied with these norms and attached environment monitoring report as **Annexure - VI**

	Adequate measures should be made to rescue ambient air and noise level during construction phase, so as to confirms to the stipulated standards by CPCB/GPCB	
Xxiii	Storm water control and its reuse as per CGWB and BIS standards for various applications	We have already earmarked the area for storage of Storm Water and treating of water with ETP as per GPCB Norms.
Xxiv	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred	We have started commercial operation
Xxv	The approval of the competent authority shall be obtained for structural safety of the building due to earth quake, adequacy of fire fighting equipment's, etc. as per National Building Code including protection measures from lighting etc.	We have already obtained the necessary clearance from DPT and maintained the same as per the norms.
Xxvi	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase to avoid disturbance to the surroundings	We have dedicated team/environmental consultant for compliance of environmental conditions including monitoring
Xxvii	Under the provision of Environmental[Protection] Act 1986, legal action shall be initiated against the project proponent if it was found construction of the project has been started without obtaining environmental clearance	All necessary clearance from statutory authorities i.e., EC/CRZ clearance from MOEF &CC, New Delhi, and CRZ recommendation from Forest and Environment Department, GOG and NOC/CTE from GPCB and GOG has been obtained for the project
II Operation Phase		
	The installation of the sewage treatment plan[STP], if any should be certified by an independent expert and a report in this regard should be submitted to the ministry before the project is commissioned for operation treated effluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall confirm to the norms and standards of the Gujarat pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	According to the condition & looking to the magnitude of sewage generation, for treatment of domestic waste water & its disposal, necessary arrangement for providing soak pit/septic tank has been already provided
	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during	Diesel generator set commissioned and back power available for common area during operation time. Height of stack provided as

	operation phase should be of enclosed type and confirm to rules made under the environmental (Protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur DG sets may be decided with in consultation with Gujarat Pollution Control Board	per the consultation of GPCB norms
iii	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels, to comply with the prevalent regulations	Measured noise levels found within the permissible level and complied with the prevalent regulations. Monitoring report is enclosed as **Annexure - VI**
iv	The greenbelt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We have provided necessary greenbelt as per condition stipulated We have developed greenbelt area area around 1100.000 sq. mtrs. Approximately shown in completion drawing.
V	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment during the monsoon period.	Weep holes provided in the compound wall side for water draining purpose from inside premises.
Vi	Rainwater harvesting for roof run off, as plan submitted should be implemented, before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 meter above the highest ground level.	We have already constructed rain water harvesting facility for roof run-off at our terminal
Vii	The ground water level and its quality should be monitored regularly in construction with Central Ground Water Authority.	No ground water withdrawal envisaged by us → for leaching purpose
Viii	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	We have prepared and placed Traffic Management Plan – copy attached as per **Annexure - VII**
Ix	Effort may be made to use solar energy to the maximum extent possible.	We have prepared and submitted Solar energy management plan – attached as **Annexure - VIII**
X	Adequate measures should take to prevent [illegible] from solid waste processing plant and	We have already made necessary arrangement for domestic waste water & its disposal, soak pit/septic tank

SHAKTI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

	General Conditions	
I	The construction of the structures should be under taken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and central rules and regulations including the provisions of Coastal Regulation Zone notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat	We have construcetd the structure as per the approved drawing by GPT and considering the provisions of Coastal Regulation Zone notification dated 19.02.1991
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests	Agreed with condition
III	The ministry reserves the right to revoke the clearance if any of the conditions stipulated are not complied with to the satisfaction of this ministry	Agreed with condition
IV	The ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary for environmental protection which shall be complied with.	Agreed with condition
V	Full support should be extended to the officers of this ministry's regional office at Bhopal and the offices of the central and state pollution control board by the project proponents during their inspection for monitoring purpose by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental activities	We have provided full support to the official of ministry's regional office at Bhopal and the offices of the central and state pollution control board.
VI	These stipulations would be enforced among others under the provisions of water (prevention and control of pollution) act 1974, the air (prevention and control of pollution) act 1981, the environment (protection) act 1986, the public liability (insurance) act 1991 and municipal solid wastes (management and handling) rules 2000 including amendments and rules made thereafter	Environmental monitoring report enclosed as per Annexure - VI
VII	The other statutory clearance such as the approval for storage of diesel from chief controller of explosives, fire department, civil aviation department (with height point of	We have started commercial operation after obtaining statutory clearance as applicable

	view, forest conservation act, 1980 and wildlife (protection) act, 1972 etc shall be obtained as applicable by project proponents from the respective competent authorities	
X	The project proponents shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the ministry of Environment and Forest at http://www.envfor.nic.in The advertisement should be within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the regional office of this ministry Bhopal	DPT had already advertised in two local newspapers widely circulated in the region one of which shall be in the vernacular language informing that the project has been accorded environmental and CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in
XI	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in writ Petition (Civil) No.460 of 2004 as be applicable to this project	Point Noted
XII	Any appeal against this clearance shall lie with the national environmental appellate authority, if preferred within a period of 30 days as prescribed under section 11 of the national environmental appellate act, 1997	Point Noted
XIII	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any from whom suggestions/representations, if any were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent	N/A as DPT has already given advertisement
XIV	The proponent shall upload status of compliance of the stipulated clearance conditions including results of monitored data on their website and shall update the periodically. It shall simultaneously be sent to the regional office of MoEF, the respective zonal office of CPCB and the	DPT has regularly submitting the compliances of stipulated conditions made in EC & CRZ recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on DPT website i.e. www.deendayalport.gov.in We have monitored the pollutants like SPM,

KANDLA

	SPCB. The criteria pollutant levels namely, SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectorial parameters indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	RSPM, SO2, NOx and displayed at a convenient location near the main gate of the company in the public domain (Copy of monitoring report placed at **Annexure – VI**)
XV	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well as by email) to the respective regional office of MoEF, the respective Zonal office of CPCB and the SPCB	We are regularly submitting compliance report to DPT
XVI	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the environment (protection) rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective regional office of MoEF by email	We will provide necessary forms to DPT

Plot No	Name of Plot Allottee	Stamp & Signature
7	**M/s Shreeji Liquid Storage Terminals Private Limited**	

ct: Collective submission of point wise compliance report of stipulated conditions mentioned in the CRZ mmendation for the development of plots for construction of Liquid storage tank farm at Kandla, Gujarat

CRZ Recommendations: Letter No. ENV – 10-2008-366-E March 9, 2009 of Director (Environment), Forest & Environment Department, GoG. Further, MOEF & CC, New Delhi vide File No. 10-36/2008-1A.III dated 18/08/2015 had extended the validity period of Environmental and CRZ Clearance up to 01/02/2020.

Plot No	Name of Plot Allotee	Allotment Letter Issued on	Present Status
7	M/s Shreeji Liquid Storage Terminals Pvt. Ltd.	09.11.2015	Commercial Operation started (GPCB has granted CTO 01/11/2022)

Sr.No	CRZ Recommendations	Compliance Status
	Specific Conditions	
1	The project proponents strictly adhere to provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI from time to time	We are strictly following the provisions of CRZ notification of 1991 and subsequent amendments issued by MOEF, GOI from time to time
2	The project proponent shall obtain all necessary permissions from different government departments/ Agencies shall be obtained by DPT before commissioning the expansion activities	Deendayal Port Trust (DPT) had obtained the EC/CRZ Clearance from the MOEF, GOI on 02/02/2010 and MOEF & CC, New Delhi vide File No. 10-36/2008-1a. 111 dated 18/08/2015 had extended the validity period of EC/CRZ clearance up to 01/02/2020. [Copy placed at **Annexure – A)** Further, DPT had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 dated 28/8/2016 had extended the validity period of NOC up to 17/02/2025. (Copy placed at **Annexure – B)**
3	The project proponent shall not handle any Hazardous Cargo or any Classified chemicals at the site in question and the permission is valid only for the petroleum products and edible oils having no hazardous characteristics and its permissible in the CRZ notification, 1991 and its amendment issued from time to time	We have stored only permissible cargo as per EC & CRZ clearance accorded by MOEF, GoI
4	No ground water shall be tapped to meet the water requirements during the construction and for operation phase	No ground water has been tapped to meet the water requirements during the construction phase as we have appointed local authority water supplier

5	The Kandla Port Trust shall be undertaken roof top water harvesting area where it is feasible.	We have constructed roof top water harvesting within our premises as per drawing approved by DPT.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the DPT region for environmental protection and management issues.	We will contribute towards the cost of any common study that may be carried out for DPT region for environmental protection and management issues.
7	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department.	DPT already having updated Disaster Management Plan.
8	The project proponents shall implement all the suggestion recommendations given by the NIOT in their Rapid EIA report.	Suggestion / recommendations given by the NIOT in their Rapid EIA report are being followed.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complying the conditions stipulated by GPCB in Consent to Establish (CTE)(NOC)/ CCA and condition mentioned in NOC/CTE. (Copy placed at **Annexure – C**)
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We will bear the cost of the external agency that may be appointed by this Department for supervision/ monitoring of proposed activities and the environmental impacts of the proposed activities.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/ Forest Department.	Deendayal Port Trust had completed mangroves plantation in an area of 1300 ha. We have already earmarked the area for development of green belt along the periphery area.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection/ management purpose.	We have started commercial operation after obtaining statutory clearance as applicable
	General Conditions :	

	The construction camp shall be located outside the CRZ area And the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel And it shall be ensured that the environmental conditions are not deteriorated by the construction labours	We have started commercial operation after obtaining statutory clearance as applicable
2	The DPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the District Collector/ District Development Officer.	We have provided CSR work activities in DPT area.
3	A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MOEF, GOI. The details with respect to the expenditure from this budget had shall also be furnished.	We will earmark separate budget for environmental management & socioeconomic activities.
4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	We have appointed an EHS officer and also appointed GPCB approved Environmental Consultant to carry out the Environmental Monitoring during our construction and operational phase.
5	An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the DPT to this Department as well as to the MOEF, GOI.	We will submit reports every year if any changes with respect to the baseline environmental quality in the coastal and marine environment to the respective authority.
6	Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the DPT on regular basis to this department/ MOEF, GOI.	Six Monthly reports on Compliance report conditions mentioned in EC/CRZ Clearance will be furnished by us on regular basis to this department/ MOEF, GOI through DPT.
7	Any other condition that may be stipulated by this department from time to time for environmental protection/ management purpose shall also have to be complied with by the DPT.	We have started commercial operation after obtaining statutory clearance as applicable

Plot No	Name of Plot Allottee	Stamp & Signature
7	M/s Shreeji Liquid Storage Terminals Private Limited	

bject: Collective submission of point wise compliance report of stipulated conditions mention in the NOC/CTE for the development of plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat.

Gujarat Pollution Control Board vide Letter No. PC/NOC/CCA-Kutch-78(2)/GPCB ID 17832/14401 dated 13/07/2009 had granted NOC/CTE to DPT for the subject project. Further, GPCB vide letter No.GPCB/CCA/Kutch-12BS/GPCB 10 46364 dated 28/08/2015 had extended the validity period of NOC/CTE up to 05/08/2020

Plot No	Name of Plot Allotee	Allotment Letter Issued on	Present Status
7	M/s Shreeji Liquid Storage Terminals Pvt. Ltd.	09.11.2015	Commercial Operation started (GPCB has granted CTO 01/11/2022)

Sr. No.	Specific Conditions	Compliance Status
1	Special Conditions	
1	Unit shall not start any construction activities till extending the validity of EC& CRZ from competent Authority	Construction activities have been started only after extending the validity of EC and CRZ clearance for MoEF&CC, New Delhi vide letter no. F.No.10-36/2008-IA.III dated 18/08/2015 had already extended the validity period for Environment and CRZ Clearance up to 17.02.2025 (Copy attached at **Annexure – I**)
2	No Ground water shall be used for the project coming under dark zone without permission of competent authority.	We have procured water supplied by local water supplier and no ground water withdrawal envisaged. -We have water supply source from Gujarat water supply sewage board Bhuj.

3	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 lakh Kilo litters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and POL and Acid of 472 tanks with 12,08,369 Kl. The tentative tankage capacity works out for the Proposed tank farm is @ 9 lakhs Kilo litre.	We have stored only permissible cargo as per EC & CRZ clearance accorded by the MoEF, GoI
4	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10-36/2008-IA-11Idated 02/02/2010 for Old Kandla.	We have started commercial operation after obtaining necessary permissions and comply with condition of EC & CRZ issued by MoEF, GoI
5	You shall have to obtain consent to Operate from Gujarat Pollution Control Board before commissioning any activities	We obtained the CCA from Gujarat Pollution Control Board for the operation phase. (Copy placed at **Annexure – II)**
6	Applicant is required to comply with provision of Manufacturing, Storage and Import of Handling Chemical rules-1989 framed under the Environment(protection) Act-1986	We will strictly comply with provision of Manufacturing, Storage and Import of Hazardous chemicals Rules-1989 framed under the Environment (protection)Act-1986
2	**Condition Under Water Act 1974**	
2.1	There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations	Not applicable as we operate only for storage of liquid cargo and we will not do any manufacturing activity
2.2	The quantity of domestic waste water(storage) shall not exceed as 4.5 Kl/Day	We ensure that our domestic water generation will not exceed the limit
2.3	Sewage shall be disposed of through septic tank/soak pit system	We are disposing the sewage through septic tank/soak pit system.
2.4	The unit shall install flow meters at utilities for measuring category wise(category as given in water cessact-1977(schedule II)consumption of water	We have installed the flow meter wherever applicable
2.5	Domestic effluent shall be disposed off through septic tank/ soak pit system confirm to the following standards Parameters — Permissible Limits BOD(5 Days at20 C) — 30 mg/lit Suspended Solid — 20 mg/lit Residual chlorine — Minimum 0.5 mg/lit	We appointed approved Environmental consultant for testing of mentioned parameters as per the GPCB and we will comply with this Condition as per the norms.
3	**Conditions under air act 1981**	

3.1	There shall be no use of fuel hence there is no flue gas emission from manufacturing activities another ancillary operations	We will not do any manufacturing as our project is for storage of liquid cargo only. Hence there will be no Flue gas emission manufacturing activities and other ancillary operations
3.2	There shall be no process gas emission from manufacturing and other ancillary activities	We will not do any manufacturing as our project is for storage of liquid cargo only. Hence there will be process gas emission manufacturing activities and other ancillary operations
3.3	The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified here under as per National Ambient Air Quality Emission standards issued by Ministry of Environment forest and climate change dated 16th November-2009	We have submitted environmental monitoring report (**Annexure III**)

Change dated 16th November-2009

Parameters	Time Weighted Average	Concentration in Ambient air in µg/M³
Sulphur Dioxide (SO2)	Annual	50
	24 Hours	80
Nitrogen Dioxide (NO2)	Annual	40
	24 Hours	80
Particulate Matter (Size less than 2.5µmjOR PM1.5	Annual	60
	24 Hours	100

3.4	The Concentration of Noise in ambient air with in the premises of industrial unit shall not exceed the following levels Between 6 A.M and 10 P.M: 75 dB(A) Between 10 P.M and 6 A.M: 70 dB(A)	We have submitted environmental monitoring report
4	**Conditions under Hazardous Waste**	
4.1	The applicant shall provide temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Managing, Handling &Trans oundary Movement) rules, 2008 as attended from time to time	We will provide the storage facilities for each type of hazardous waste as per hazardous waste (Management, Handling &Trans boundary Movement) Rules 2008 as amended from time to time.
5	**General Condition:**	
5.1	Any change in personal, Equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board	We will intimate to GPCB, GoG if there are any change in personnel, equipment or working condition as mentioned in the consent form/order

5.2	Whenever due to accident or other unforeseen act or ever such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board concerned Police station Office of directorate of health service, Department of Explosives, Inspectorate of factories and local body. In case of failure of Pollution Control equipment the production process connected to it shall be stopped. Remedial action/measures shall be implemented immediately to bring entire situation normal.	We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in excess of standards at their premises. In case of failure of pollution control equipment, we will stop the storage activities connected with the pollution control equipment. We will take necessary action/measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analysed by one of the laboratories recognized by the state Board	We have appointed approved environmental consultant to carry out environmental monitoring at our own premises. Further, monitoring report will be submitted to GPCB regularly during the operation phase.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other condition stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We have appointed GPCB approved environmental consultant to carry out the Environmental Monitoring during construction and operational phase at our own premises. GPCB approved Environmental Consultant will directly report to the head of our organization for internalizing environmental issues. GPCB approved environmental Consultant will also coordinate the exercise of environmental audit and preparation of environmental statements.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this state Board latest by 30th September every year	Environment statement for the previous year will be submitted by us to GPCB within stipulated time period.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the board deems, fit in accordance with Section 27 of the Act.	Agree with the Gujarat Pollution Control board, GOG for review and/ or revoke the consent and/or make variation in the conditions, which the Board deems fit in accordance with the section 27 of the Act
5.7	In case of change of ownership/management the name and address of new	We will intimate to GPCB, GOG immediately in case of change of ownership/management the name and

	owners/partners/directors/proprietor should immediately be intimated to the Board	address of new owners/partners/directors/proprietor
5.8	The waste generator shall be totally responsible for(i.e. Collection, storageAs per statutory requirement Encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes genetated	We have obtained ISDF membership for collection, storage as per statutory requirement
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year	We will maintain the records for waste generation and its management. We will submit the annual returns to GPCB in prescribed form within stipulated time period
5.10	As per Public Liability Insurance Act -91 Company shall get insurance Policy, if applicable	We will keep all the necessary insurance policy including the "Public Liability Insurance Act -91"
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form 4	We will adopt best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form-4.
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We will strictly comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1989.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No 657 of 1995 dated 14th October 2003.	We have displayed the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No. 657 of 1995 dated 14th October-2003.
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We will display on-line data outside the main gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within our premises.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We have already prepared detailed On site and Off Site Emergency plan as per the manufacture, storage and import of hazardous chemical rules 1989 as amended to date which may cover the natural disasters also wherever applicable

Plot No	Name of Plot Allottee	Stamp & Signature
7	M/s Shreeji Liquid Storage Terminals Private Limited	SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

Monitoring the implemental Safe guards Ministry of Environment & Forests

Regional office (W), Bhopal.

Monitoring Report (Up To Nov, 2020)

Part-1

DATA SHEET

1. Project type: River valley/ Mining/ Industry/ thermal / nuclear/ Other(specify)	Infrastructure and Miscellaneous Projects CRZ
2. Name of the project	Development of plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat by M/S Deendayal (Kandla) Port Trust.
3. Clearance Letter (s), OM no and date	MOEF, New Delhi vides File No. 10-36/ 2008 – IA-III dated 2/02/2010 had granted Environmental/ CRZ Clearance to Kandla Port Trust for subject project Further, MOEF &CC, New Delhi vide FileNo. 10-36/2008-IA. III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.
4. Location a) District (s) b) State(s) c) Location/latitude/longitude	 Dist.: Kutch State: Gujarat Location: Kandla Port Trust, 23° 1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address ofConcerned Project Chief Engineer (with pin Code & telephone/ telex/ fax numbers	Chief Engineer, Deendayal Port Trust, A.O Building Post Box No.-50, Gandhidham- Kutch. Gujarat Pin – 370201 Tel : 02836-233192,

b) Address of Executive project Engineer/ manager/ (with pin code fax numbers)	Fax 02836 220050 Chief Engineer, Deendayal Port Trust, A.O. Building Post Box No. 50, Gandhidham- Kutch Gujarat Pin – 370201
6. Salient features of the project	1. Total 17 no of plots are being developed for the for Liquid storage Tank farm. Two plots to be developed for parking facilities. Total area requirement = 108.46 acres 2. The tentative capacity works out for the proposed tank farm is 9.0 Lakhs Kiloliters. 3. Proposed developments of plots have been occupied approximate 108.46 acres of low lying areas. 4. This liquid storage mainly used for storage of liquid cargo as permitted in CRZ Notification, 2011 and amendment from time to time.
c) Salient features of the Environmental Management plan	1. Provision of Parking of heavy vehicles and sufficient space for loading unloading of tankers within individual plot limit havebeen made by all successful plot allottees. 2. Successful plot allottees had already placed the detailed on site and Off site Emergency Management Plan as per the Manufacture,Storage and import of Hazardous Chemicals Rules, 1989, as amended to date. 3. The solid waste have been properly collected, segregated and disposed offas per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by successful plot allottees. 4. A first Aid Room had already been provided by successful plot allottees during the construction activities. 5. Secure construction practices have been adopted by successful plot allottees in which no any construction spoils take placed. 6. Successful plot allottees have only hired those Vehicles having valid pollution under control license granted

	by Statutory authorities. 7. Successful plot allottees have already earmarked the area for storage of storm water and same will be re-use for green belt development at the premises of the each plots. 8. DPT has already formed EMC for environmental activities including direct/indirect environmental monitoring each plot by using ETP.
7. Breakup of the project area a) Submergence area forest & non forest b) Others	 Nil Nil
8. Break up of the project affected population with enumeration of those lounghouses/dwelling units only agricultural land & landless labourers/artisena)SC,ST/Adivasi's a) SC ST/Adivasis b) Others (Please indicate whether the figures are based on any scientific and systematic survey carried out of only provisional figures if a survey is carried out give details and years of survey	 Nil Nil
9.Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference. b) Allocation made for environmental management plans with item wise and year wise break-up. c) Benefit cost ratio/internal rate of Return and the year of assessment whether (c) includes the cost of environmental management plans so far. d) Actual expenditure incurred on the project. e) Actual expenditure incurred on the environmental managements plans so far.	 Plot No. 7: Rs. 79.98 Corer Approx. (submitted by M/s. Shreeji liquid Storage Terminals Pvt. Ltd.) Further, Commercial operation started for plots 7 and also obtained CTO from GPCB — Plot no. 7 started commercial operation (GPCB granted on CCA). —
11. The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if anywith quantitative information.	NA, No felling is required
12. Status of construction a) Date of commencement (Actual and / or planned)	Commercial operation started for plots 7

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

b) Date of completion (Actual and / or planned)	and also obtained CTO from GPCB
13. Reasons for the delay if the Project is yet to start	NA
14 Date of the site visited a) The dates on which the project was monitored by the Regional Office on previous occasion if any b) The date site visit for this monitoring report	

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector 10-A Gandhinagar 382 010
Phone (079) 23226295
Fax (079) 23232156
Website www.gpcb.gov.in

CCA-Amendment
(AWH- 110324)

No PC/CCA-KUTCH- 1390(3)/ GPCB ID-52244 / Date:

To
M/s Shreeji Liquid Storage Terminal Pvt. Ltd.,
Survey No 7,
JN Marg, Kandla,
Tal Gandhidham,
Dist Kutch - 370201.

SUB Amendment in the consolidated consent & Authorization of the Board

REF
1. CCA issued by this office vide order no- **AWH- 89769** dated 11/12/2017 valid up to 01/11/2022
2. CCA-Amendment issued by this office vide order no- **AWH- 98609** dated 15/01/2019 valid up to 01/11/2022
3. CCA-Amendment issued by this office vide order no- **H- 103714** dated 27/09/2019 valid up to 01/11/2022
4. CTE Amendment issued by this office vide order no- **CTE-106789** dated 09/03/2020 valid upto 17/02/2025
5. Your CCA Amendment Application Inward ID No. **178943** dated **22/09/2020.**

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974 under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous And Other Waste (Management and Transboundary) Rules, 2016 & framed under the Environment (Protection) Act-1986, The Board has granted CCA vide order No. **AWH- 89769** issued vide this office order no. **PC/CCA-KUTCH-1390/ GPCB ID- 52244/ 430174** dated 11/12/2017, valid up to 01/11/2022.

The Board has right to review and amend the conditions of the said CCA orders. Now, considering your application for CCA amendment inward ID No. **178943** dated **22/09/2020, The amendment to CCA order no. AWH-89769 dated 11/12/2017 is hereby granted for** (1) reduction of existing total storage capacity of Class A,B,C chemicals and Petroleum Oil and Lubricant (POL) Products from 42147 KL (Total Tank-13) to 35648 KL (Total Tank-13) qty. Class A,B,C chemicals and Petroleum Oil and Lubricant (POL) Products & Molasses. (2) Increase in total storage capacity non Petroleum products (Incl. Edibles, Fertilizers and raw materials) from 72988 KL (Total Tank- 20) to 79054 KL (Total Tank- 28 Non Petroleum products, non hazardous products, edibles oils, non edible oils, lube oils, Molasses, Agro base products including fertilizer and raw material etc. (3) Addition of new fire water tanks- 4054 KL (Total Tank- 02) (4) Installation of DG Set (25 KVA, standby facility), 5. To increase hazardous waste quantity of 04 categories with following conditions

1. **The order shall be read as CCA amendment Order No.: AWH- 110324 Date of Issue: 12/11/2020, valid up to 01/11/2022.**

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KANDLA

2 **The condition no. 2 of the said CCA is amended as below:**

2 The consent order shall be valid up to **01/11/2022** for the use of outlet for the discharge of treated effluent and emission due to operation of industrial plant for following items/products

Sr. No.	Existing Quantity as per CCA dated 15/01/2019		Quantity after CCA-Amendment	
	Products	**Capacity**	**Products**	**Capacity**
1	Class A,B,C Chemical and Petroleum Oil and Lubricant (POL) Products	42147 (Total tank-13)	Class A,B,C Chemical and Petroleum Oil and Lubricant (POL) Products	35648 (Total tank-13) (Reduced)
2	Non Petroleum Products (Incl edible oils, fertilizers and raw materials)	72988 (Total Tank-20)	Non Petroleum Products, Non Hazardous Products Edible oils Non edible oil Lube oil Molasses, Agro base products including fertilizer and raw material etc.	79654 (Total Tank-28)
3	NIL	NIL	Fire Water Tanks	4054 (Total tank- 2)

3. **The condition no. 3 of the said CCA is amended as below:**

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

1 Industry shall not carry out any activities which attract provision of EIA Notification – 2006 and its amendments made therein

2 Industry shall comply with conditions as specified in allotment letter issued by KPT dated 25/10/2019 for storage as mentioned in letter.

3 Unit shall renew lease time to time & submit a copy of the same to the Board

4 Unit shall strictly comply all conditions of Environment Clearance and CRZ granted to Kandla Port Trust vide order dated 02/02/2010

5 Industry shall obtain NOC from CGWA as per order of Ho ble NGT for withdrawal of ground water, if applicable

6 Unit shall strictly renew PESO permission from time to time & submit a copy of the same to this office

7 Industry shall renew Public Liability Insurance Policy prior to 14/07/2021 & submit a copy of the same to this office

8 Industry shall submit site notification order of competent authority as mentioned in schedule-5 of MSIHC Rule-1989

9. Industry shall not carry out any activities in CRZ area without prior CRZ Clearance

LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone (079) 23226295
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Website : www.gpcb.gov.in

10 Unit shall strictly comply all conditions of lease deed agreement made between unit & KPT dated 23/06/2016 where lease & lessee, both are responsible for any non-compliance of environment Acts/Rules, arise if any

4 **Conditions no.4 of the said CCA order is amended as below:**

CONDITIONS UNDER WATER ACT 1974:

4.1 Water Source - Narmada Line/ Municipal Water

4.2 The quantity of the fresh water consumption for industrial purpose, after change in storage capacity shall be increased from 1.7 KL/Day to 2.2 KL/Day, due to CCA Amendment

4.3 The quantity of the fresh water consumption for domestic purpose, after change in storage capacity shall be increased from 0.5 KL/Day to 1 KL/Day, due to CCA-Amendment

4.4 The quantity of industrial effluent to be generated from washing activities and other ancillary operation shall be increase from 1 KL/Day to 1.1 KL/Day, due to CCA-Amendment

4.5 The quantity of the domestic waste water (Sewage) generation shall be increased from 0.5 KL/Day to 1 KL/Day, due to CCA-Amendment.

4.6 Domestic effluent shall be disposed off through septic tank/ soak pit system

4.7 Industry shall operate Effluent Treatment Plant (ETP) adequately so that treated industrial effluent shall comply with following norms:

PARAMETERS	PRESCRIBED LIMITS
pH	6.5 to 8.5
Temperature	40°C
Colour (Pt.Co. scale) in units	100 units
Total Suspended Solids	100 mg/L
Oil and Grease	10 mg/L
Ammonical Nitrogen	50 mg/L
BOD (3 days at 27° C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/L
Total dissolved solids	2100 mg/L
Percent Sodium	60 %
Sulphides	5.0 mg/L
Sodium Absorption Ratio	26

4.8 Treated Effluent confirming to above standards shall be discharged on land for gardening and plantation purpose within premises only

4.9 Industry shall provide fixed pipeline network with flow meter for even distribution of treated effluent & domestic effluent and maintain its record.

4.10 Unit shall provide flow meter at inlet & outlet of ETP & maintain its records

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4.11 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the Industrial effluent.

5. Conditions no. 5 of the said CCA order is amended as below:

CONDITIONS UNDER AIR ACT 1981:

5.1 The following shall be used as a fuel in Boilers & D.G. Sets respectively:

Sr. No.	Utility	Fuel	Quantity		
			Existing	New	total
1)	D.G. Sets	Diesel	140 Lit/Hr	140 Lit/Hr	280 Lit/Hr
2)	Boiler	FO	150 Lit/Hr	--	150 Lit/Hr

5.2 The flue gas emission through stack attached to Boiler & D.G. Sets shall conform to the following standards:

Sr. No	Stack attached to	Stack height in Meter	APCM	Parameter	Permissible Limit
1	Steam Boiler (Cap. 2 MT/Hour) (Stand by)	30.5	--	PM	150 mg/Nm^3
2	D.G. Set (300KVA) (stand By)	11	Adequate Stack Height	SO_2	100 ppm
3	D.G. Set (250 KVA) (stand By)	11	Adequate Stack Height	NO_x	50 ppm

5.3 There shall be no process gas emission from manufacturing process and other ancillary operations.

5.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limit specified hereunder as per National Ambient Air Quality Standards issued by MoEF & CC dated 16th Nov. 2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/m^3
1	Sulphur Dioxide (SO_2)	Annual	50
		24 Hours	80
2	Nitrogen Dioxide (NO_2)	Annual	40
		24 Hours	80
3	Particulate Matter (Size less than 10 µm) or PM_{10}	Annual	60
		24 Hours	100
4	Particulate Matter (Size less than 2.5 µm) or $PM_{2.5}$	Annual	40
		24 Hours	60

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
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Website : www.gpcb.gov.in

5.5 The applicant shall provide portholes ladder platform etc. at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

5.6 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB (a) during day time and 70 dB (A) during night time. Day time is reckoned in between 6a.m. and10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

5.7 **D.G. Sets Conditions**

The D.G. Set shall have acoustic enclosure and shall comply with the standards specified at Sr. no. 95 of Schedule-I of the rule-3 of E.P. Rules -1986 and Noise pollution level as per the Air Act-1981.

D.G. Sets standards: -

The flue gas emission through stack attached to D.G. Sets shall conform to the following standards

a) The minimum height of stack to be provided with each of the generator set shall be H=h + 0.2 (KVA) 1/2, where H= Total stack height in meter, h= height of the building in meters where or by the side of which the generator set is installed.

b) Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the users end.

c) The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Such circumstances the performance may be checked for noise reduction up to actual ambient noise level, preferably, in the night time). The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and the averaged.

d) The D.G. Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).

e) All efforts shall be made to bring down the noise level due to the D.G. Set, outside the premises, within the ambient noise requirements by proper siting and control measures. Installation of a D.G. Sets must be strictly in compliance with the recommendations of the D.G. Set manufacturer.

f) A proper routine and preventive maintenance procedure for the D.G. Set should be set and followed in consultation with the DG Set manufacture which would help prevent noise levels of the DG Set from deteriorating with use.

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6. **Condition no.6.2 of the said CCA order is amended as below**

6.2 M/s. Shreeji Liquid Storage Terminal Pvt. Ltd. is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Survey No. 7 JN Marg, Kandla Tal. Gandhidham Dist. Kutch

Sr. No	Waste	Total Quantity	Sch-Cat.	Facility
1	Waste oil/ Spent Oil	0.3 Kl/Year	5.1	Collection, storage, Transportation and send to registered recycler
2	Pigging Waste	3.6 MT/Year	5.1	Collection, storage, Transportation/ send to CHWIF of M/s. SEPPL, Kutch for incineration
3	Sludge containing oil /Chemical (Tank Bottom Residue)	3.5 MT/Year	5.1	Collection, storage, Transportation/ send to CHWIF of M/s. SEPPL, Kutch for incineration.
4	ETP Sludge	1.5 MT/Year	35.3	Collection, storage, transportation and send to TSDF site of M/s. SEPPL, Kutch

7. **The rest of the conditions of the above referred CCA order no. AWH- 89769 dated 11/12/2017 shall remain unchanged. You are directed to comply with these conditions judiciously.**

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Smt. U.K. Upadhyay)
Environment Engineer

SHREEJI LIQUID STORAGE TERMINAL PVT. LTD. KANDLA

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Test Report

Report No: IC588521000006616F	Issue Date: 16-12-2021
Discipline: Chemical	Group: Atmospheric Pollution

Customer Name & Address: **Shree Liquid Storage Terminals Pvt. Ltd**
Plot [illegible] N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample:	No Security Code		
Sampling By:	Vinodbhai Chauhan	Qty / Nos of Sample:	1 / 1 No
Date of Sampling:	07-12-2021	Packing / Seal:	Sealed
Sample Received Date:	10-12-2021	Protocol / Purpose:	Ambient Air Analysis
Date of Starting Test:	10-12-2021	Date of Completion:	14-12-2021
Sampling Details:	IS:5182 & As Per Instrument Instruction Manual	Sample ID:	1221/AA/06616
Duration of Sample:	24 Hrs		

Atmospheric Condition

Wind Direction	Weather Condition	Temperature (°C)
NW-NW	Sunny	Max.: 31 Min.: 20

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	GPCB LIMIT	METHOD REFERENCE
1	Particulate Matter (PM10)	µg/m³	82.5	100	IS:5182 (Part-23):2006
2	Particulate Matter (PM2.5)	µg/m³	35.0	60	SOP No. MAA/3*
3	Sulphur Dioxide (SO2)	µg/m³	30.8	80	IS:5182 (Part-2):2001
4	Nitrogen Dioxide (NO2)	µg/m³	25.2	80	IS:5182 (Part-6):2006

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AUTHORISED SIGNATORY
Chintan Desai (TM)

Note: This Report is subject to terms & conditions mentioned overleaf

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TC58821000006618I

Test Report

Report No: TC58821000006618I	Issue Date: 16.12.2021
Discipline: Chemical	Group: Atmospheric Pollution

Customer's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot No. 3 N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Monitoring	Ambient Noise Level Monitoring		
Sampling by	Vinodbhai G. Sukhan	Sampling & Test Method	IS 9989
Date of Sampling	9/12/2021	Duration of Sampling	1 hr / Location
Description of Location	As per Table given Below	Sample ID	12/21/8101/18
Type of Test	In Side Testing	Protocol	Noise Level Monitoring

RESULT TABLE

SR NO	LOCATION	DAY TIME NOISE LEVEL dB(A) Leq	NIGHT TIME NOISE LEVEL dB(A) Leq
1	Nr. Hot Wax Tank Farm	63.2	58.3
	GPCB LIMIT	75	70

NOTE: Day Time : 06.00 AM to 10.00 PM & Night Time : 10.00 PM To 06.00 AM

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CHECKED BY
Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chetan Desai (TM)

Note : This Report is subject to terms & condition, mentioned overleaf

ENPRO Enviro Tech and Engineers Pvt. Ltd.
Environmental Testing Laboratory
Laboratory : Plot No. B/29 & 17, Road No. 17, Bajwada Industrial Estate, Sachin Palsana Road, Sachin, Surat - 394 230, Gujarat, INDIA.
Tel/Fax : +91 261 2674344, email : info@enpro.co.in

TC - 5885

Test Report

Doc. No. : QR/7.8/02	Test Report No : TC588522000000192F	Issue Date : 17-01-2022
Ref. No. : TC588522000000192F	Discipline : Chemical	Group : Atmospheric Pollution

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N .Marg , Near Railway Crossing, Kandla - 370210, Gujarat, India.

Description of Sample	: Nr Security Gate		
Sampling By	: Jay Bhanderi	Qty / Nos of Sample	: 1 / 1 No.
Date of Sampling	: 10-01-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-01-2022	Protocol / Purpose	: Ambient Air Analysis
Date of Starting of Test	: 12-01-2022	Date of Completion	: 13-01-2022
Sampling Method	: IS 5182 & As Per Instrument Instruction Manual	Sample ID	: 0122/AA00192
Duration Sampling	: 24 Hrs		

Atmospheric Condition

Wind Direction	Weather Condition	Temperature (°C)
NE->SW	Sunny	Max. : 28 Min. : 19

RESULT TABLE

S.NO.	TEST PARAMETER	UNIT	RESULT	GPCB LIMIT	METHOD REFERENCE
1	Particulate Matter (PM10)	µg/m³	78.6	100	IS 5182 (Part-23):2006
2	Particulate Matter (PM2.5)	µg/m³	30.0	60	SOP No. WI/AA/01
3	Sulphur Dioxide (SO_2)	µg/m³	33.2	80	IS 5182 (Part-2):2001
4	Nitrogen Dioxide (NO_2)	µg/m³	28.5	80	IS 5182 (Part-6):2006

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Sweety Patel (Dy TM)
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ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.

ETL/22/01

*** End of Report ***

TC - 5885

Test Report

No : QR/7.8/03	Test Report No : TC5885220000000194F	Issue Date : 17-01-2022
No : TC5885220000000194F	Discipline : Chemical	Group : Atmospheric Pollution

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Monitoring	: Ambient Noise Level Monitoring		
Sampling By	: Jay Bhanderi	Sampling & Test Method	: WI/N/01
Date of Sampling	: 10-01-2022	Duration of Sampling	: 1 hr / Location
Description of Location	: As per Table Given Below	Sample ID	: 0122/N00194
Type of Test	: On Site Testing	Protocol	: Noise Level Monitoring

RESULT TABLE

SR NO	LOCATION	DAY TIME NOISE LEVELdB(A) Leq	NIGHT TIME NOISE LEVELdB(A) Leq
1	Nr Hot Water Generator	68.3	62.9
	GPCB LIMIT	75	70

NOTE : Day Time : 06:00 AM to 10:00 PM & Night Time : 10:00 PM To 06:00 AM

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD.

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Sweety Patel (Dy TM)
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AUTHORISED SIGNATORY
Chintan Desai (TM)

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ETL/22/21

*** End of Report ***

OR/7 B/02
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TC5885220000009771

Test Report

Report No : TC5885220000009771 | Issue Date : 16.02.2022

Discipline : Chemical | Group : Atmospheric Pollution

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no. 7, I.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Nr. Security Gate		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 1 / 1 No.
Date of Sampling	: 08.02.2022	Packing / Seal	: Sealed
Sample Received Date	: 10.02.2022	Protocol / Purpose	: Ambient Air Analysis
Date of Starting of Test	: 10.02.2022	Date of Completion	: 14.02.2022
Sampling Method	: IS 5182 & As Per Instrument Instruction Manual	Sample ID	: 022/AA00977
Duration Sampling	: 24 Hrs		

Atmospheric Condition

Wind Direction	Weather Condition	Temperature (°C)
NE-->SW	Sunny	Max. : 30 Min. : 20

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	GPCB LIMIT	METHOD REFERENCE
1	Particulate Matter (PM10)	$\mu g/m^3$	70.3	100	IS 5182 (Part 23) 2006
2	Particulate Matter (PM2.5)	$\mu g/m^3$	35.9	60	50074:2018 WEAA 01
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	28.3	80	IS 5182 (Part 2) 2001
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	24.1	80	IS 5182 (Part 6) 2006

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Chinton Desai (TM)

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SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

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TC5885220000009791

Test Report

ENPRO
Environment
Energy Water
Project Consultant

Report No: TC5885220000009791	Issue Date: 16-02-2022
Discipline: Chemical	Group: Atmospheric Pollution

Customer's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no.1, JN. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Monitoring:	Ambient Noise Level Monitoring		
Sampling By:	Vimalkumar Chauhan	Sampling & Test Method:	IS9989
Date of Sampling:	08-02-2022	Duration of Sampling:	1 hr / Location
Date of Receipt of Sample:	As per Table-1 as in Below	Sample ID:	0222N00979
Type of Test:	On Site Testing	Protocol:	Noise Level Monitoring

RESULT TABLE

SR NO	LOCATION	DAY TIME NOISE LEVELdB(A) Leq	NIGHT TIME NOISE LEVELdB(A) Leq
1	Nr. Hot Water Generator	65.9	59.7
	GPCB LIMIT	75	70

NOTE: Day Time: 06:00 AM to 10:00 PM & Night Time: 10:00 PM To 06:00 AM

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Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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Design, Engineering, Environmental Consulting, Monitoring & Testing Service Provider
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e QR/7.8/02
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o TC5885220000018381

Test Report

ENPRO
Environment
Energy Water
Project Consultant

Report No : TC5885220000018381 | Issue Date : 15-03-2022

Discipline : Chemical | Group : Atmospheric Pollution

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no [illegible] Marg, Near Railway Crossing, Kandla - 370210 [illegible]

Description of Sample	: Security Gate		
Sampling By	: Vimal Sonvane	Qty / Nos of Sample	: 1 / 1
Date of Sampling	: 14-03-2022	Packing / Seal	: Sealed
Sample Received Date	: 14-03-2022	Protocol / Purpose	: Ambient Air Analysis
Date of Starting of Test	: 14-03-2022	Date of Completion	: 21-03-2022
Sampling Method	: IS:5182 & As Per Instrument Instruction Manual	Sample ID	: 0322/AA/0005
Duration Sampling	: 8 Hrs.		

Atmospheric Condition

Wind Direction	Weather Condition	Temperature (°C)
NE-->SW	Sunny	Max. : 38 Min. : 23

RESULT TABLE

S.NO.	TEST PARAMETER	UNIT	RESULT	GPCB LIMIT	METHOD REFERENCE
1	Particulate Matter (PM 10)	µg/m³	84.0	100	IS 5182 (Part-23):2006
2	Particulate Matter (PM 2.5)	µg/m³	36.0	60	SOP No. WAA/01
3	Sulphur Dioxide (SO2)	µg/m³	33.7	80	IS 5182 (Part-2):2001
4	Nitrogen Dioxide (NO2)	µg/m³	28.7	80	IS 5182 (Part-6):2006

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Sweety Patel (Dy.TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

ENPRO Enviro Tech and Engineers Pvt. Ltd.
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Project Consultant

e : QR/7.8/03	
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e : TC5885220000001840F	Test Report

Report No : TC5885220000001840F	Issue Date : 15-03-2022
Discipline : Chemical	Group : Atmospheric Pollution

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7 , N Marg , Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Monitoring	Ambient Noise Level monitoring		
Sampling By	: Mehul Sonvane	Sampling & Test Method	: WI/NV/01
Date of Sampling	: 15-03-2022	Duration of Sampling	: 1 hr 1 Location
Description of Location	: As per Table Given Below	Sample ID	: BC220315184O
Type of Test	: In Site Testing	Protocol	: Noise Layout Monitoring

RESULT TABLE

SR NO.	LOCATION	DAY TIME NOISE LEVELdB(A) Leq	NIGHT TIME NOISE LEVELdB(A) Leq
1	Nr Hot Water Generator	71.3	69.3
	GPCB LIMIT	75	70

NOTE : **Day Time : 06:00 AM to 10:00 PM & Night Time : 10:00 PM To 06:00 AM**

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Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

Enpro Enviro Tech and Engineers Pvt. Ltd.
Design, Engineering, Environmental Consulting, Monitoring & Testing Service Provider,
Manufacturing & Supply of Pollution Control Devices.

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Project / Design / Environmental Testing Laboratory :
Plot no. D/29/16, Road No. 17, Hajuvala Industrial Estate,
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TC-5885

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Further Extended upto 31/05/2022

212202

R/7.8/02
ge 1 of 1

Test Report

ENPRO
Environment, Energy, Water
Project Consultant

t No : EP/0422/00543	Issue Date : 20-04-2022
e : Chemical	Group : Atmospheric Pollution

ner's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg , Near Railway Crossing, Kandla - 370210, Gujarat, India

scription of Sample	: Nr. Security Gate		
ampling By	: Mehul Sonvane	Qty / Nos of Sample	: 1 / 1 No
Date of Sampling	: 13-04-2022	Packing / Seal	: Sealed
Sample Received Date	: 15-04-2022	Protocol / Purpose	: Ambient Air Analysis
Date of Starting of Test	: 15-04-2022	Date of Completion	: 16-04-2022
Sampling Method	: IS 5182 & As Per Instrument Instruction Manual	Sample ID	: 0422/AA00543
Duration Sampling	: 24 Hrs		

Atmospheric Condition

Wind Direction	Weather Condition	Temperature (°C)
SW-->NE	Sunny	Max. : 38 Min. : 26

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	GPCB LIMIT	METHOD REFERENCE
1	Particulate Matter (PM10)	µg/m³	75.0	100	IS 5182 (Part-23) 2006
2	Particulate Matter (PM2.5)	µg/m³	33.0	60	SOP No. WI/AA/01
3	Sulphur Dioxide (SO_2)	µg/m³	27.4	80	IS 5182 (Part-2) 2001
4	Nitrogen Dioxide (NO_2)	µg/m³	21.6	80	IS 5182 (Part-6) 2006

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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R/7.8/03
ge 1 of 1

Test Report

ENPRO
Environment, Energy, Water
Project Consultant

t No : EP/0422/00545	Issue Date : 20-04-2022
e : Chemical	Group : Atmospheric Pollution

mer's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg , Near Railway Crossing, Kandla - 370210, Gujarat India

scription of Monitoring	: Ambient Noise Level Monitoring		
Sampling By	: Mehul Sonvane	Sampling & Test Method	: WI/N/01
Date of Sampling	: 13-04-2022	Duration of Sampling	: 1 hr / Location
Description of Location	: As per Table Given Below	Sample ID	: 0422/N00545
Type of Test	: On Site Testing	Protocol	: Noise Level Monitoring

RESULT TABLE

SR NO.	LOCATION	DAY TIME NOISE LEVELdB(A) Leq	NIGHT TIME NOISE LEVELdB(A) Leq
1	Nr Hot Water Generator	69.3	63.5
	GPCB LIMIT	75	70

NOTE : Day Time : 06:00 AM to 10:00 PM & Night Time : 10:00 PM To 06:00 AM

SHREEJI LIQUID STORAGE TERMINALS (P) LTD. KANDLA

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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Ph. : +91-98254 36776, Lab Ph. : +91-95128 74754
E-mail : lab@enpro.co.in, project@enpro.co.in

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212202

Test Report

QR/7.8/02	Test Report No : TC588522000002522F	Issue Date : 18-05-2022
TC588522000002522F	Discipline : Chemical	Group : Atmospheric Pollution

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no 7, J N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Nr. Security Gate		
Sampling By	: Vihang Patel	Qty / Nos of Sample	: 1 / 1 No
Date of Sampling	: 09-05-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-05-2022	Protocol / Purpose	: Ambient Air Analysis
Date of Starting of Test	: 12-05-2022	Date of Completion	: 14-05-2022
Sampling Method	: IS 5182 & As Per Instrument Instruction Manual	Sample ID	: 0522/AA02522
Duration Sampling	: 24 Hrs		

Atmospheric Condition

Wind Direction	Weather Condition	Temperature (°C)
SW->NE	Sunny	Max. : 36 Min. : 28

DETAILS OF INSTRUMENT USED FOR MONITORING

Instrument Name	ID No	Sr No	Cal Date	Cal Due Date
Ambient Fine Dust Sampler (EP/HOJ/HC-115/A)	EP/HOJ/HC-115/A	170302051	29-04-2022	28-04-2023
Respirable Dust Sampler (EP/HOJ/HC-116/B)	EP/HOJ/HC-116/B	150403D021	30-04-2022	29-04-2023

RESULT TABLE

S.NO.	TEST PARAMETER	UNIT	RESULT	GPCB LIMIT	METHOD REFERENCE
1	Particulate Matter (PM10)	µg/m³	79.0	100	IS 5182 (Part-23):2006
2	Particulate Matter (PM2.5)	µg/m³	35.0	60	SOP No. WI/AA/01
3	Sulphur Dioxide (SO_2)	µg/m³	29.4	80	IS 5182 (Part-2):2001
4	Nitrogen Dioxide (NO_2)	µg/m³	23.7	80	IS 5182 (Part-6):2006

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Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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ETL/223301

*** End of Report ***

ENPRO Enviro Tech and Engineers Pvt. Ltd

Environmental Testing Laboratory

Laboratory: Plot No. D/24 to 27, Road No. 17, Bajwa Industrial Estate, Nr. Sachin Palsana Road, Sachin, Surat - 394 230, Gujarat, INDIA.
Tele/Fax: +91-261-2674544, e-mail: info@enpro.co.in

Test Report

TC - 5885

QR/7.8/03	Test Report No : TC588522000002524F	Issue Date : 18-05-2022
TC588522000002524F	Discipline : Chemical	Group : Atmospheric Pollution

Customer's Name & Address	Shreeji Liquid Storage Terminals Pvt. Ltd. Plot no 7, J.N. Marg , Near Railway Crossing, Kandla - 370210. Gujarat. India		
Description of Monitoring	: Ambient Noise Level Monitoring		
Sampling By	: Vihang Patel	Sampling & Test Method	: WI/N/01
Date of Sampling	: 09-05-2022	Duration of Sampling	: 1 hr / Location
Description of Location	: As per Table Given Below	Sample ID	: 0522/N02524
Type of Test	: On Site Testing	Protocol	: Noise Level Monitoring

RESULT TABLE

SR. NO.	LOCATION	DAY TIME NOISE LEVELdB(A) Leq	NIGHT TIME NOISE LEVELdB(A) Leq
1	Nr Hot Water Generator	66.7	60.2
	GPCB LIMIT	75	70

NOTE : Day Time : 06:00 AM to 10:00 PM & Night Time : 10:00 PM To 06:00 AM

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD.

CHECKED BY
Sweety Patel (Dy.TM)
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Chintan Desai (TM)

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ETL/22301

*** End of Report ***

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...b : QR/7.8/01	
...: Page 1 of 6	
...b : TC5885210000006612I	**Test Report**

...Report No : TC5885210000006612F	Issue Date : 16-12-2021
Discipline : Chemical	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 10 L / 1 No.
Date of Sampling	: 07-12-2021	Packing / Seal	: Sealed
Sample Received Date	: 10-12-2021	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-12-2021	Date of Completion	: 15-12-2021
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 1221/W06612

RESULT TABLE

S NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	pH	-	7.84(at 26.3°C)	6.5 to 8.5	IS 3025 (Part-11) 1983
2	Colour	Pt. Co	Colourless	Max 5	APHA 23rd Edi. (Part-2060)
3	Turbidity	NTU	BDL	Max 1	IS 3025 (Part-10) 1984
4	Total Dissolved Solids (at 180°C)	mg/L	152	Max 500	IS 3025 (Part-16) 1984
5	Total Hardness (as $CaCO_3$)	mg/L	58.4	Max 200	IS 3025 (Part-21) 2009
6	Calcium (as Ca)	mg/L	14.0	Max 75	IS 3025 (Part-40) 1991 Clause 5
7	Magnesium (as Mg)	mg/L	6.7	Max 30	IS 3025 (Part-46) 1994 Clause 6
8	Chloride (as Cl)	mg/L	30.0	Max 250	IS 3025 (Part-32) 1988
9	Sulphate (as SO_4)	mg/L	8.2	Max 200	IS 3025 (Part-24) 1986 Clause 4
10	Iron (as Fe)	mg/L	BDL	Max 0.3	IS 3025 (Part- 53) 2003 Clause 6
11	Nitrate Nitrogen (as NO_3-N)	mg/L	BDL	Max 45	IS 3025 (Part-34) 1988 Clause 3
12	Total Alkalinity (as $CaCO_3$)	mg/L	39	Max 200	IS 3025 (Part 23) 1986
13	Copper (as Cu)	mg/L	BDL	Max 0.05	IS 3025 (Part- 42) 1992 Clause 5
14	Zinc (as Zn)	mg/L	BDL	Max 5	IS 3025 (Part-49) 1994 Clause 6
15	Cadmium (as Cd)	mg/L	BDL	Max 0.003	IS 3025 (Part-41) 1992 Clause 5
16	Lead (as Pb)	mg/L	BDL	Max 0.01	IS 3025 (Part-47) 1994 Clause 7

Continue.....

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Test Report

t Report No : TC588521000006612F	Issue Date : 16-12-2021
Discipline : Chemical	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 07-12-2021	Packing / Seal	: Sealed
Sample Received Date	: 10-12-2021	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-12-2021	Date of Completion	: 15-12-2021
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 1221/W/06612

RESULT TABLE

S NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
17	Mercury (as Hg)	mg/L	BDL	Max 0.001	APHA 23rd Edi. 3112-B: 2017
18	Hexavalent Chromium (as Cr)	mg/L	BDL	Max 0.05	IS 3025 (Part- 52) 2003 Clause 6
19	Arsenic (as As)	mg/L	BDL	Max 0.01	APHA 23rd Edi. 3114-C 3-40: 2017

Note : BDL - Below Detectable Limit (Turbidity<0.2, Fe<0.1, NO3-N<0.2, Cu<0.02, Zn<0.05, Cd<0.1, Pb<1, Mercury <0.001, Hexa Cr <0.01, Arsenic<0.001)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy.TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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Test Report

Report No : TC588521000006612F	Issue Date : 16-12-2021
Discipline : Chemical	Group : Residues In Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no. 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat India

Description of Sample	: Drinking Water		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 07-12-2021	Packing / Seal	: Sealed
Sample Received Date	: 10-12-2021	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-12-2021	Date of Completion	: 15-12-2021
Sampling Method	: IS 3025 (Part 1) & IS 1622 1981	Sample ID	: 1221/W06612

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
20	Methyl Parathion	µg/L	BDL	Max 0.3	SOP No WI/WW/58
21	Malathion	µg/L	BDL	Max 190	SOP No WI/WW/58
22	Chlorpyrifos	µg/L	BDL	Max 30	SOP No WI/WW/58
23	Alpha BHC	µg/L	BDL	Max 0.01	SOP No WI/WW/58
24	Gamma BHC	µg/L	BDL	Max 2	SOP No WI/WW/58
25	Beta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
26	Delta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
27	Heptachlor	µg/L	BDL	--	SOP No WI/WW/58
28	Aldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
29	Heptachlor epoxide	µg/L	BDL	--	SOP No WI/WW/58
30	4 4 DDE	µg/L	BDL	Max 1	SOP No WI/WW/58
31	Endosulfan I	µg/L	BDL	Max 0.4	SOP No WI/WW/58
32	Dieldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
33	Endrin	µg/L	BDL	--	SOP No WI/WW/58
34	4 4 DDD	µg/L	BDL	Max 1	SOP No WI/WW/58
35	Endosulfan II	µg/L	BDL	Max 0.4	SOP No WI/WW/58

Continue.....

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Test Report

...t Report No : TC5885210000006121	Issue Date : 16-12-2021
...scipline : Chemical	Group : Residues In Water

Customer's Name & Address : **Sheep Liquid Storage Terminals Pvt. Ltd.**
Plot no. ... J N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 07-12-2021	Packing / Seal	: Sealed
Sample Received Date	: 10-12-2021	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-12-2021	Date of Completion	: 15-12-2021
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 1221/W06612

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
36	4,4' DDT	µg/L	BDL	Max 1	SOP No.WI/WW/58
37	Endrin aldehyde	µg/L	BDL	---	SOP No.WI/WW/58
38	Endosulfan sulfate	µg/L	BDL	Max 0.4	SOP No.WI/WW/58

Note : BDL - Below Detectable Limit (Methyl Parathion<5000, Malathion<5000, Chlorpyrifos<5000, Alpha BHC<50, Gamma BHC <50, Beta BHC<50, Delta BHC<50, Heptachlor<50, Aldrin<50, Heptachlor epoxide<50, 4,4 DDE<50, Endosulfan I<50, Dieldrin<50, Endrin<50, 4,4 DDD<50, Endosulfan II<50, 4,4' DDT<50, Endrin aldehyde<50, Endosulfan sulfate<50)

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Chintan Desai (TM)

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Energy Water
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Test Report

Report No : TC5885210000066121	Issue Date : 16-12-2021
Discipline : Biological	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no : I.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water	Qty / Nos of Sample	: 10 L / 1 No
Sampling By	: Virendrasinh Chauhan	Packing / Seal	: Sealed
Date of Sampling	: 07-12-2021	Protocol / Purpose	: Water Analysis
Sample Received Date	: 10-12-2021	Date of Completion	: 15.12.2021
Date of Starting of Test	: 10-12-2021	Sample ID	: 1221/W06612
Sampling Method	: IS 3025 (Part 1) & IS 1622:1981		

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
38	Total Coliform	MPN/100 ml	Absent	Absent	IS 1622-1981

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

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Komal Patel (Dy. TM)

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Dinkal Patel

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	Page n of 5
e	N.A.

ENPRO
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Test Report

Report No : ETL/006861/21-22	Issue Date : 16-12-2021
cipline : Chemical	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 07-12-2021	Packing / Seal	: Sealed
Sample Received Date	: 10-12-2021	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-12-2021	Date of Completion	: 15-12-2021
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 1221/W06612

RESULT TABLE

S.NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
40	Odour	-	Agreeable	Agreeable	IS 3025 (Part-05) 1983
41	Taste	-	Agreeable	Agreeable	IS 3025 (Part-08) 1984
42	Boron (as B)	mg/L	BDL	Max 0.5	IS 3025 (Part-57) 2005
43	Manganese (as Mn)	mg/L	BDL	Max 0.1	APHA 23rd Edi (Part-3000,Section 3500-Mn B) 2017
44	Oil & Grease	mg/L	BDL	Max 0.5	IS 3025 (Part-39) 1991
45	Poly Aromatic Hydrocarbon (PAH)	mg/L	BDL	Max 0.0001	APHA -23rd Edition (Part – 6010, Section : 6440B)

Note : BDL = Below Detectable Limit

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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Sweety Patel (Dy TM)

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Test Report

Issue Date: [illegible]

Group: Pollution & Environment

Shreeji Liquid Storage Terminals Pvt. Ltd.

Sampling By:	[illegible] Chauhan	Qty. Nos. of Sample:	[illegible]
Date of Sampling:	[illegible]	Packing: Safe	Sealed
Sample Received Date:	[illegible]	Protocol Purpose:	Soil Analysis
Date of Starting Test:	[illegible]	Date of Completion:	[illegible]
Sampling Method:	[illegible]	Sample ID:	[illegible]

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
1	pH	-	[illegible]	-	IS 2720 (Part-26) : 87
2	Moisture Content	%	[illegible]	-	SOP NO.-WS/02
3	Water Holding Capacity (WHC)	%	[illegible]	-	SOP NO. WS/29
4	Bulk Density	gm/cm3	[illegible]	-	SOP NO. WS/27
5	Porosity	%	[illegible]	-	SOP NO. WS/07
6	Available Sulphur	kg/ha	384	-	SOP NO. WS/26
7	Available Potassium	kg/ha	[illegible]	-	SOP NO. WS/28
8	Calcium as Ca	meq/100 gm	[illegible]	-	SOP NO. WS/25
9	Magnesium as Mg	meq/100gm	[illegible]	-	SOP NO. WS/30
10	Chloride as Cl	kg/ha	[illegible]	-	SOP NO.-WS/11
11	Organic Matter as OM	%	[illegible]	-	SOP NO. WS/24
12	Available Nitrogen	kg/ha	[illegible]	-	SOP NO. WS/13
13	Available Phosphorous	kg/ha	[illegible]	-	SOP NO. WS/
14	Available Sulphur	kg/ha	[illegible]	-	SOP NO. WS/12
15	Cation Exchange Capacity (CEC)	meq/100 gm	[illegible]	-	SOP NO. WS/04

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

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AUTHORISED SIGNATORY
Dhiman Dasgupta

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Page 1 of 2	
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Project Consultant

Test Report

Report No : ETL/006868/21-22	Issue Date : 16-12-2021
Discipline : Chemical	Group : Pollution & Environment

Customer's Name & Address : **Shreeji Liquid Storage Tenninals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat India

Description of Sample	: Nr. ETP Area		
Sampling By	: Vinodrasinh Chauhan	Qty / Nos of Sample	: 1 kg / 1 No
Date of Sampling	: 07-12-2021	Packing / Seal	: Sealed
Sample Received Date	: 10-12-2021	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 10-12-2021	Date of Completion	: 14-12-2021
Sampling Method	: IS/S/A	Sample ID	: 1221/S06617

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
16	Clay	%	10.7	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
17	Silt	%	16	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
18	Sand	%	74	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
19	Texture	%	Loamy Sand	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
20	Permeability	%	4.2	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
21	Iron as Fe	mg/kg	BDL	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
22	Sodium Absorption Ratio (SAR)	-	0.78	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)

Note : BDL = Below Detectable Limit

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : This Report is subject to terms & conditions mentioned overleaf

QR-8/01	
Page 2 of 2	
N.A.	

Test Report

Report No: ETL/006868/21-22	Issue Date: 16-12-2021
Discipline: Chemical	Group: Pollution & Environment

Customer's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot No. 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Nr. I.T.P. Area		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 1 kg / 1 No.
Date of Sampling	: 07-12-2021	Packing / Seal	: Sealed
Sample Received Date	: 10-12-2021	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 10-12-2021	Date of Completion	: 14-12-2021
Sampling Method	: IS:S/A	Sample ID	: 1221/S06517

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
1	Clay	%	10.7	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
2	Silt	%	16	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
3	Sand	%	74	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
4	Texture	%	Loamy Sand	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
5	Permeability	%	4.2	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
6	Total as Fe	mg/kg	BDL	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
7	Sodium Adsorption Ratio (SAR)	-	0.78	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)

Note: BDL = Below Detectable Limit

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note: This Report is subject to terms & conditions mentioned overleaf

ENPRO Enviro Tech and Engineers Pvt. Ltd

Environmental Testing Laboratory

TC - 5885

Test Report

No : QR/7.8/01	Test Report No : TC5885220000000188F	Issue Date : 17-01-2022
ID : TC5885220000000188I	Discipline : Biological	Group : Water

Owner's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking water		
Sampling By	: Jay Bhanderi	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 10-01-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-01-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 12-01-2022	Date of Completion	: 15-01-2022
Sampling Method	: IS 3025 (Part 1) & IS 1622 1981	Sample ID	: 0122/W00188

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	Total Coliform	MPN/100 ml	Absent	Absent	IS 1622-1981

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Denkal Patel
164d

ENPRO Enviro Tech and Engineers Pvt. Ltd (ETL)

AUTHORISED SIGNATORY
Komal Patel (Dy. TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.

ETL/22/00

*** End of Report ***

Environmental Testing Laboratory

TC - 5885

Test Report

No : QR/7.8/01	Test Report No : TC5885220000000181F	Issue Date : 17-01-2022
ID : TC5885220000001881	Discipline : Chemical	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no 7, J N. Marg , Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking water		
Sampling By	: Jay Bhanderi	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 10-01-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-01-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 12-01-2022	Date of Completion	: 15-01-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 0122/W00188

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	pH	-	8.21(at 26.1°C)	6.5 to 8.5	IS 3025 (Part-11) 1983
2	Colour	Pt. Co	BDL	Max 5	APHA 23rd Edi (Part-2000)
3	Turbidity	NTU	BDL	Max 1	IS 3025 (Part-10) 1984
4	Total Dissolved Solids (at 180°C)	mg/L	172	Max 500	IS 3025 (Part-16) 1984
5	Total Hardness (as $CaCO_3$)	mg/L	70.7	Max 200	IS 3025 (Part-21) 2009
6	Calcium (as Ca)	mg/L	23.6	Max 75	IS 3025 (Part-40).1991 Clause 5
7	Magnesium (as Mg)	mg/L	2.8	Max 30	IS 3025 (Part-46) 1994 Clause 6
8	Chloride (as Cl)	mg/L	34.8	Max 250	IS 3025 (Part-32) 1988
9	Sulphate (as SO_4)	mg/L	7.4	Max 200	IS 3025 (Part-24):1986 Clause 4
10	Iron (as Fe)	mg/L	BDL	Max 0.3	IS 3025 (Part- 53):2003 Clause 7
11	Nitrate Nitrogen (as NO_3-N)	mg/L	BDL	Max 45	IS 3025 (Part-34).1988 Clause 3
12	Total Alkalinity (as $CaCO_3$)	mg/L	53	Max 200	IS 3025 (Part 23):1986
13	Copper (as Cu)	mg/L	BDL	Max 0.05	IS 3025 (Part- 42):1992 Clause 6
14	Zinc (as Zn)	mg/L	BDL	Max 5	IS 3025 (Part-49):1994 Clause 6
15	Cadmium (as Cd)	mg/L	BDL	Max 0.003	IS 3025 (Part-41):1992 Clause 5
16	Lead (as Pb)	mg/L	BDL	Max 0.01	IS 3025 (Part-47):1994 Clause 7
	Mercury (as Hg)	mg/L	BDL	Max 0.001	APHA -23rd Edition (Part – 3000, Section : 3112 B):2017
18	Hexavalent Chromium (as Cr)	mg/L	BDL	Max 0.05	IS 3025 (Part- 52):2003 Clause 6
19	Arsenic (as As)	mg/L	BDL	Max 0.01	APHA -23rd Edition (Part – 3000, Section : 3114 C):2017

Note: BDL - Below Detectable Limit (Colour<2 Pt. Co., Turbidity<0.2 NTU, Fe<0.2 mg/L, NO_3-N<0.2 mg/L, Cu<0.3 mg/L, Zn<0.05 mg/L, Cd<0.1 mg/L, Pb<1 mg/L, Hg<0.001 mg/L, Hexa Cr.<0.01 mg/L, As<0.001 mg/L)

CHECKED BY
Sweety Patel (Dy TM)

1647

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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Environmental Testing Laboratory

TC - 5885

Test Report

No : QR/7.8/01	Test Report No : TC5085220000001888F	Issue Date : 17-01-2022
No : TC5085220000001888F	Discipline : Chemical	Group : Residues In Water

Customer's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg , Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking water		
Sampling By	: Jay Bhanderi		
Date of Sampling	: 10-01-2022	Qty / Nos of Sample	: 10 L / 1 No
Sample Received Date	: 12-01-2022	Packing / Seal	: Sealed
Date of Starting of Test	: 12-01-2022	Protocol / Purpose	: Water Analysis
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Date of Completion	: 15-01-2022
		Sample ID	: 0122/W00188

RESULT TABLE

S NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
20	Methyl Parathion	µg/L	BDL	Max 0.3	SOP No.WI/WW/58
21	Malathion	µg/L	BDL	Max 190	SOP No.WI/WW/58
22	Chlorpyrifos	µg/L	BDL	Max 30	SOP No.WI/WW/58
23	Alpha BHC	µg/L	BDL	Max 0.01	SOP No.WI/WW/58
24	Gamma BHC	µg/L	BDL	Max 2	SOP No.WI/WW/58
25	Beta BHC	µg/L	BDL	Max 0.04	SOP No.WI/WW/58
26	Delta BHC	µg/L	BDL	Max 0.04	SOP No.WI/WW/58
27	Heptachlor	µg/L	BDL	--	SOP No.WI/WW/58
28	Aldrin	µg/L	BDL	Max 0.03	SOP No.WI/WW/58
29	Heptachlor epoxide	µg/L	BDL	--	SOP No.WI/WW/58
30	4,4 DDE	µg/L	BDL	Max 1	SOP No.WI/WW/58
31	Endosulfan I	µg/L	BDL	Max 0.4	SOP No.WI/WW/58
32	Dieldrin	µg/L	BDL	Max 0.03	SOP No.WI/WW/58
33	Endrin	µg/L	BDL	--	SOP No.WI/WW/58
34	4,4 DDD	µg/L	BDL	Max 1	SOP No.WI/WW/58
35	Endosulfan II	µg/L	BDL	Max 0.4	SOP No.WI/WW/58
36	4,4 DDT	µg/L	BDL	Max 1	SOP No.WI/WW/58
37	Endrin aldehyde	µg/L	BDL	--	SOP No.WI/WW/58
38	Endosulfan sulfate	µg/L	BDL	Max 0.4	SOP No.WI/WW/58

Note: BDL - Below Detectable Limit (Methyl Parathion<5000 µg/L, Malathion<6000 µg/L, Chlorpyrifos<5000 µg/L, Alpha BHC<50 µg/L, Gamma BHC <50 µg/L, Beta BHC<50 µg/L, Delta BHC<50 µg/L, Heptachlor<50 µg/L, Aldrin<50 µg/L, Heptachlor epoxide<50 µg/L, 4,4 DDE<50 µg/L, Endosulfan I<50 µg/L, Dieldrin<50 µg/L, Endrin<50 µg/L, 4,4 DDD<50 µg/L, Endosulfan II<50 µg/L, 4,4 DDT<50 µg/L, Endrin aldehyde<50 µg/L, Endosulfan sulfate<50 µg/L)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Keyur Patel (QM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

1650

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ETL/22/01

ENPRO Enviro Tech and Engineers Pvt. Ltd
Environmental Testing Laboratory
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Sachin Palsana Road, Sachin, Surat - 394 230, Gujarat, INDIA
Lab Ph.: +91 9512876843, email: lab@enpro.co.in

Test Report

Doc No : QR/7.8/01	Test Report No : ETL/000184/22	Issue Date : 17-01-2022
Ref No : N A	Discipline : Chemical	Group : Water

Customer's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking water		
Sampling By	: Jay Bhanderi	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 10-01-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-01-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 12-01-2022	Date of Completion	: 15-01-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 0122/W00188

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
39	Odour	-	Agreeable	Agreeable	IS: 3025 (Part 5) - 2018
40	Taste	-	Agreeable	Agreeable	IS 3025 (Part-08) 1984
41	Boron (as B)	mg/L	BDL	Max 0.5	IS 3025 (Part-57) :2005
42	Manganese (as Mn)	mg/L	BDL	Max 0.1	APHA -23rd Edition (Part – 3000, Section : 3111 B) 2017
43	Oil & Grease	mg/L	BDL	Max 0.5	IS 3025 (Part 39): 2021
44	Ploy Aromatic Hydrocarbon (PAH)	$m_g/_L$	BDL	Max 0.0001	APHA -23rd Edition (Part – 6010, Section : 6440B)

Note: BDL - Below Detectable Limit (Boron<1 mg/L, Mn<0.06 mg/L, O&G<0.4 mg/L, Ploy Aromatic Hydrocarbon (PAH)<5 mg/L)

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

1651

ETL222301

Note 1 : This Report is subject to terms & conditions mentioned overleaf.

*** End of Report ***

Environmental Testing Laboratory

TC - 5885

Test Report

Format No : QR/7.8/01	Test Report No : TC588522000000193F	Issue Date : 17-01-2022
Report No : TC588522000000193F	Discipline : Chemical	Group : Pollution & Environment

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: N- Tank No 103		
Sampling By	: Jay Bhandeu	Qty / Nos of Sample	: 1 Kg / 1 No
Date of Sampling	: 10-01-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-01-2022	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 12-01-2022	Date of Completion	: 13-01-2022
Sampling Method	: WI/S/A	Sample ID	: 0122/S00193

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
1	pH	--	7.72(at 26.1°C)	-	IS 2720 (Part-26) 1987
2	Moisture Content	%	10.2	-	SOP No.-WI/S/03
3	Water Holding Capacity (WHC)	%	10.0	-	SOP No. WI/S/06
4	Bulk Density	gm/cm3	1.3	-	SOP No. WI/S/07
5	Porosity	%	51.7	-	SOP No. WI/S/07
6	Available Sodium	mg/kg	372	-	SOP No. WI/S/08
7	Available Potassium	mg/kg	194	-	SOP No. WI/S/08
8	Calcium (as Ca)	meq/100 gm	30.3	-	SOP No. WI/S/09
9	Magnesium (as Mg)	meq/100gm	18.7	-	SOP No. WI/S/09
10	Chloride (as Cl)	mg/kg	131	-	SOP No.-WI/S/10
11	Organic Matter (as OM)	%	0.49	-	SOP No.WI/S/05
12	Available Nitrogen	mg/kg	26.7	-	SOP No. WI/S/13
13	Available Phosphorous	mg/kg	30.6	-	SOP No. WI/S/11
14	Available Sulphur	mg/kg	67.4	-	SOP No. WI/S/12
15	Cation Exchange Capacity (CEC)	meq/100 gm	32.9	-	SOP No.WI/S/04

KANDLA

CHECKED BY
Sweety Patel (Dy TM)
1651

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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ETL/22/001

ENPRO Enviro Tech and Engineers Pvt. Ltd.
Environmental Testing Laboratory
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Tel. No. : +91-261-2340343 E-mail : info@enpro.co.in

Test Report

Format No : QR/7.8/01	Test Report No : ETL/00135/22	Issue Date : 17-01-2022
Ref. No : N A	Discipline : Chemical	Group : Pollution & Environment

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg , Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Nr Tank No 103		
Sampling By	: Jay Bhanderi	Qty / Nos of Sample	: 1 Kg / 1 No
Date of Sampling	: 10-01-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-01-2022	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 12-01-2022	Date of Completion	: 13-01-2022
Sampling Method	: WI/S/A	Sample ID	: 0122/S00193

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
16	Clay	%	12.5	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
17	Silt	%	14	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
18	Sand	%	70	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
19	Texture	%	Sandy Loam	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
20	Permeability	%	3.5	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
21	Iron (as Fe)	mg/kg	BDL	-	SOP No. WI/S/18
22	Sodium Adsorption Ratio	-	1.04	-	Diagnosis and improvement of saline and alkali soils by USDA, Agricultural Handbook No. 60.-1954

Note : BDL - Below Detectable Limit (Fe<2 mg/kg)

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Sweety Patel (Dy TM)
1658

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORIZED SIGNATORY
Chintan Desai (TM)

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ETL/227/01

*** End of Report ***

QR/7 B/01
Page 1 of 6

Test Report

Report No TC5805220000000973F | Issue Date 16-02-2022

Group Water

Name & Address: Shreeji Liquid Storage Terminals Pvt. Ltd.
Plot no 7 I.N. Marg Near Railway Crossing Kandla (370210) Gujarat India

Description of Sample : Drinking Water
Sampled By : Surendrasinh Ghanshyam
Date of Sampling : 08-02-2022
Sample Received Date : 10-02-2022
Date of Testing / Analysis : 10-02-2022
Test Method : IS 3025 (Part-1) & IS 1622 1981

Qty / Nos. of Sample : 10 L / 1 No
Packing / Seal : Sealed
Protocol / Purpose : Water Analysis
Date of Completion : 15-02-2022
Sample ID : 0222/W00973

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500 2012 (RA 2018)	METHOD REFERENCE
1	pH		7.52(at 25.4°C)	6.5 to 8.5	IS 3025 (Part-11) 1983
2	Colour	Pt Co	Colourless	Max 5	APHA 23rd Edi (Part-2000)
3	Turbidity	NTU	BDL	Max 1	IS 3025 (Part-10) 1984
4	Total Dissolved Solids (at 180°C)	mg/L	1581	Max 500	IS 3025 (Part-16) 1984
5	Total Hardness (as CaCO3)	mg/L	641	Max 200	IS 3025 (Part-21) 2009
6	Calcium (as Ca)	mg/L	171	Max 75	IS 3025 (Part-40) 1991 Clause 5
7	Magnesium (as Mg)	mg/L	52	Max 30	IS 3025 (Part-46) 1994 Clause 6
8	Chloride (as Cl)	mg/L	297	Max 250	IS 3025 (Part-32) 1988
9	Sulphate (as SO4)	mg/L	67	Max 200	IS 3025 (Part-24) 1986 Clause 4
10	Iron (as Fe)	mg/L	BDL	Max 0.3	IS 3025 (Part- 53) 2003 Clause 7
11	Nitrate Nitrogen (as NO3-N)	mg/L	BDL	Max 45	IS 3025 (Part-34) 1988 Clause 3
12	Total Alkalinity (as CaCO3)	mg/L	46	Max 200	IS 3025 (Part 23) 1986
13	Copper (as Cu)	mg/L	BDL	Max 0.05	IS 3025 (Part-42) 1992 Clause 6
14	Zinc (as Zn)	mg/L	BDL	Max 5	IS 3025 (Part-49) 1994 Clause 6
15	Cadmium (as Cd)	mg/L	BDL	Max 0.003	IS 3025 (Part-41) 1992 Clause 5
16	Lead (as Pb)	mg/L	BDL	Max 0.01	IS 3025 (Part-47) 1994 Clause 7

Continue.....

Note : This Report is subject to terms & conditions mentioned overleaf

Design Engineering, Environmental Consulting, Monitoring & Testing Service Provider,
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4571

Test Report

ENPRO
Environment Energy Water
Project Consultant

Report No : TC5885220000000973F	Issue Date : 16-02-2022
Discipline : Chemical	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 08-02-2022	Packing / Seal	: Sealed
Sample Received Date	: 10-02-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-02-2022	Date of Completion	: 15-02-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 0222/W/00971

RESULT TABLE

S. NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
17	Mercury (as Hg)	mg/L	BDL	Max 0.001	APHA -23rd Edition (Part – 3000 Section : 3112 B : 2017
18	Hexavalent Chromium (as Cr)	mg/L	BDL	Max 0.05	IS 3025 (Part- 52) 2003 Clause 6
19	Arsenic (as As)	mg/L	BDL	Max 0.01	APHA -23rd Edition (Part – 3000 Section : 3114 C) 2017

Note : BDL - Below Detectable Limit (Turbiddy<0.2, Fe<0.2, NO3-N<0.2, Cu<0.3, Zn<0.05, Cd<0.1, Pb<1, Hg<0.001, Hexa Cr<0.01, As<0.001)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy.TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : This Report is subject to terms & conditions mentioned overleaf

Test Report

ENPRO
Environment
Energy, Water
Project Consultant

Report No : TC5885220000000973F	Issue Date : 16-02-2022
Discipline : Chemical	Group : Residues In Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water	Qty / Nos of Sample	: 10 L / 1 No
Sampling By	: Virendrasinh Chauhan	Packing / Seal	: Sealed
Date of Sampling	: 08-02-2022	Protocol / Purpose	: Water Analysis
Sample Received Date	: 10-02-2022	Date of Completion	: 15-02-2022
Date of Starting of Test	: 10-02-2022	Sample ID	: 0222/W00973
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981		

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
20	Methyl Parathion	µg/L	BDL	Max 0.3	SOP No WI/WW/58
21	Malathion	µg/L	BDL	Max 190	SOP No WI/WW/58
22	Chlorpyrifos	µg/L	BDL	Max 30	SOP No WI/WW/58
23	Alpha BHC	µg/L	BDL	Max 0.01	SOP No WI/WW/58
24	Gamma BHC	µg/L	BDL	Max 2	SOP No WI/WW/58
25	Beta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
26	Delta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
27	Heptachlor	µg/L	BDL	--	SOP No WI/WW/58
28	Aldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
29	Heptachlor epoxide	µg/L	BDL	--	SOP No WI/WW/58
30	4,4 DDE	µg/L	BDL	Max 1	SOP No WI/WW/58
31	Endosulfan I	µg/L	BDL	Max 0.4	SOP No WI/WW/58
32	Dieldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
33	Endrin	µg/L	BDL	--	SOP No WI/WW/58
34	4,4 DDD	µg/L	BDL	Max 1	SOP No WI/WW/58
35	Endosulfan II	µg/L	BDL	Max 0.4	SOP No WI/WW/58

Continue.....

Note : This Report is subject to terms & conditions mentioned overleaf

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Test Report

ENPRO
Environment
Energy Water
Project Consultant

Report No : TC5885220000000973F	Issue Date : 16-02-2022
Discipline : Chemical	Group : Residues In Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370230, Gujarat, India

Description of Sample	: Drinking Water		
Sampled by	: Vinodrasanna Chauhan	Qty / Nos of Sample	: 01 L / 1 No
Date of Sampling	: 09-02-2022	Packing / Seal	: Sealed
Sample Received Date	: 10-02-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-02-2022	Date of Completion	: 15-02-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622: 1981	Sample ID	: 0222/W00973

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
36	4,4' DDT	µg/L	BDL	Max 1	SOP No WI/WW/58
37	Endrin aldehyde	µg/L	BDL	--	SOP No WI/WW/58
38	Endosulfan sulfate	µg/L	BDL	Max 0.4	SOP No WI/WW/58

Note : BDL - Below Detectable Limit (Methyl Parathion<5000, Malathion<5000, Chlorpyrifos<5000, Alpha BHC<50, Gamma BHC <50, Beta BHC<50, Delta BHC<50, Heptachlor<50, Aldrin<50, Heptachlor epoxide<50, 4,4 DDE<50, Endosulfan I<50, Dieldrin<50, Endrin<50, 4,4 DDD<50, Endosulfan II<50, 4,4 DDT<50, Endrin aldehyde<50, Endosulfan sulfate<50)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Keyur Patel (QM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : This Report is subject to terms & conditions mentioned overleaf

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

ENPRO
Environment
Energy Water
Project Consultant

Test Report

Report No : TC588522000000973F	Issue Date : 16-02-2022
Discipline : Biological	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water	Qty / Nos of Sample	: 10 L / 1 No.
Sampling By	: Virendrasinh Chauhan	Packing / Seal	: Sealed
Date of Sampling	: 08-02-2022	Protocol / Purpose	: Water Analysis
Sample Received Date	: 10-02-2022	Date of Completion	: 15-02-2022
Date of Starting of Test	: 10-02-2022	Sample ID	: 0222/W00973
Sampling Method	: IS 3025 (Part-1) & IS 1622: 1981		

RESULT TABLE

SR. NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
19	Total Coliform	MPN/100 ml	Absent	Absent	IS 1622-1981

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Dinkal Patel

AUTHORISED SIGNATORY
Komal Patel (Dy. TM)

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Page 6 of 6	
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ENPRO
Environment Energy Water Project Consultant

Test Report

Report No : ETL/000926/22	Issue Date : 16-02-2022
Discipline : Chemical	Group : Water

Reviewer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: 10 L / 1 No.
Date of Sampling	: 08-02-2022	Packing / Seal	: Sealed
Sample Received Date	: 10-02-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-02-2022	Date of Completion	: 15-02-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0222020097.1

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
40	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5) : 2018
41	Taste	-	Agreeable	Agreeable	IS 3025 (Part 08) 1984
42	Boron (as B)	mg/L	BDL	Max 0.5	IS 3025 (Part 57) 2005
43	Manganese (as Mn)	mg/L	BDL	Max 0.1	APHA -23rd Edition (Part - 3030 Section - 3111B) 2017
44	Oil & Grease	mg/L	BDL	Max 0.5	IS 3025 (Part 39) 2021
45	Ploy Aromatic Hydrocarbon (PAH)	mg/L	BDL	Max 0.0001	APHA -23rd Edition (Part - 6010 Section - 6440B)

Note : BDL = Below Detectable Limit

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : This Report is subject to terms & conditions mentioned overleaf

Test Report

ENPRO
Environment
Energy, Water
Project Consultant

Report No : TC588522000000978F	Issue Date : 16-02-2022
Discipline : Chemical	Group : Pollution & Environment

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no.7, J.N. Marg, Near Railway Crossing, Kheda - 387121, Gujarat, India

Description of Sample	: Soil Sample (At Tanker Filling Loading Station North Side)		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	: Approx 1 kg / 1 No
Date of Sampling	: 08-02-2022	Packing / Seal	: Sealed
Sample Received Date	: 10-02-2022	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 10-02-2022	Date of Completion	: 15-02-2022
Sampling Method	: IS 2720 (Part-1) 1983	Sample ID	: 0222/S/0978

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
1	pH	-	7.49(at 25.4°C)	-	IS 2720 (Part-26) 1987
2	Moisture Content	%	12.6	-	SOP No. WIS/03
3	Water Holding Capacity (WHC)	%	8.7	-	SOP No. WIS/04
4	Bulk Density	gm/cm3	1.2	-	SOP No. WIS/07
5	Porosity	%	54.7	-	SOP No. WIS/07
6	Available Sodium	mg/kg	406	-	SOP No. WIS/08
7	Available Potassium	mg/kg	182	-	SOP No. WIS/08
8	Calcium (as Ca)	meq/100 gm	32.6	-	SOP No. WIS/09
9	Magnesium (as Mg)	meq/100gm	16.0	-	SOP No. WIS/09
10	Chloride (as Cl)	mg/kg	155	-	SOP No. WIS/10
11	Organic Matter (as OM)	%	0.51	-	SOP No. WIS/05
12	Available Nitrogen	mg/kg	28.0	-	SOP No. WIS/13
13	Available Phosphorous	mg/kg	32.5	-	SOP No. WIS/11
14	Available Sulphur	mg/kg	72.3	-	SOP No. WIS/12
15	Cation Exchange Capacity (CEC)	meq/100 gm	27.1	-	SOP No. WIS/04

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

CHECKED BY
Sangita Patel (TM)

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Design, Engineering, Environmental Consulting, Monitoring & Testing Service Provider,
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Test Report

ENPRO
Environment
Energy Water
Project Consultant

eport No ETL/000928/22	Issue Date 16-02-2022
pline Chemical	Group : Pollution & Environment

Name & Address	Shreeji Liquid Storage Terminals Pvt. Ltd Plot no 2 J N Marg Near Railway Crossing Kandla 370210 Gujarat India

Description of Sample	: Soil Sample (At Tanker Filling Loading Station North Side)		
Sampling By	: Virendrasinh Chauhan	Qty / Nos of Sample	Approx 1 kg / 1 No
Date of Sampling	: 08-02-2022	Packing / Seal	Sealed
Sample Received Date	: 10-02-2022	Protocol / Purpose	Soil Analysis
Date of Starting of Test	: 10-02-2022	Date of Completion	15-02-2022
Sampling Method	: WI/S/A	Sample ID	0222/S/00378

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
16	Clay	%	11.8	-	Methods of Soil plant and water Analysis ICARDA(3rd Edition)
17	Silt	%	15	-	Methods of Soil plant and water Analysis ICARDA(3rd Edition)
18	Sand	%	76	-	Methods of Soil plant and water Analysis ICARDA(3rd Edition)
19	Texture	%	Sandy Loam	-	Methods of Soil plant and water Analysis ICARDA(3rd Edition)
20	Permeability	%	3.9	-	Methods of Soil plant and water Analysis ICARDA(3rd Edition)
21	Water Soluble Fe	mg/kg	BDL	-	SOP No: WI/S/13
22	Sodium Adsorption Ratio		1.13	-	Diagnosis and improvement of saline and alkali soils by USDA Agricultural Handbook No: 60-1954

Note : BDL = Below Detectable Limit

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : This Report is subject to terms & conditions mentioned overleaf

ENPRO
Environment, Energy, Water
Project Consultant

Test Report

Report No : TC5885220000001834F	Issue Date : 15/03/2022
Discipline : Chemical	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no. : [illegible] Marg, Near Railway Crossing, Kandla - 370210, [illegible]

Description of Sample	: Drinking Water		
Sampling By	: Kamlesh Sonvane	Qty / Nos of Sample	: 1 Ltr. Cane
Date of Sampling	: 11/03/2022	Packing / Seal	: Sealed
Sample Received Date	: 11/03/2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 11/03/2022	Date of Completion	: 14/03/2022
Sampling Method	: IS 3025 (Part-1) Reaffirmed 1987	Sample ID	: 032220[illegible]

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	pH		8.31(at 26.2°C)	6.5 to 8.5	IS 3025 (Part-11) 1983
2	Colour	Pt. Co	Colourless	Max 5	APHA 23rd Ed. (Part-2055)
3	Turbidity	NTU	BDL	Max 1	IS 3025 (Part-10) 1984
4	Total Dissolved Solids (at 180°C)	mg/L	104	Max 500	IS 3025 (Part-16) 1984
5	Total Hardness (as CaCO3)	mg/L	72.9	Max 200	IS 3025 (Part-21) 2009
6	Calcium (as Ca)	mg/L	16.7	Max 75	IS 3025 (Part-40) 1991 Clause 3
7	Magnesium (as Mg)	mg/L	7.6	Max 30	IS 3025 (Part-46) 1994 Clause 3
8	Chloride (as Cl)	mg/L	30.9	Max 250	IS 3025 (Part-32) 1988
9	Sulphate (as SO4)	mg/L	8.6	Max 200	IS 3025 (Part-24) 1986 Clause 5
10	Iron (as Fe)	mg/L	BDL	Max 0.3	IS 3025 (Part-53) 2003 Clause 7
11	Nitrate Nitrogen (as NO3-N)	mg/L	BDL	Max 45	IS 3025 (Part-34) 1988 Clause 5
12	Total Alkalinity (as CaCO3)	mg/L	66	Max 200	IS 3025 (Part-23) 1986
13	Copper (as Cu)	mg/L	BDL	Max 0.05	IS 3025 (Part-42) 1992 Clause 6
14	Zinc (as Zn)	mg/L	BDL	Max 5	IS 3025 (Part-49) 1994 Clause 6
15	Cadmium (as Cd)	mg/L	BDL	Max 0.003	IS 3025 (Part-41) 1992 Clause 5
16	Lead (as Pb)	mg/L	BDL	Max 0.01	IS 3025 (Part-47) 1994 Clause 7

Continue.....

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Detection Limit, MU and Decision Rule are available with laboratory and same will be provided upon request.

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TC-5885 5143

ENPRO
Environment
Energy Water
Project Consultant

Test Report

Report No : TC5885220000001834F	Issue Date : 15-03-2022
Discipline : Chemical	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sample By	: Mr. Sonvane	Qty / Nos of Sample	: 10 L
Date of Sampling	: 11-03-2022	Packing / Seal	: Sealed
Sample Received Date	: 11-03-2022	Protocol / Purpose	: Water Testing
Date of Starting of Test	: 11-03-2022	Date of Completion	: 14-03-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 0322/W/0004

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
-	Mercury (as Hg)	mg/L	BDL	Max 0.001	APHA 23rd Edition (Part - 3030 Section - 3112 B, 2017
18	Hexavalent Chromium (as Cr)	mg/L	BDL	Max 0.05	IS 3025 (Part 52, 2003) Clause 6
19	Arsenic (as As)	mg/L	BDL	Max 0.01	APHA 23rd Edition (Part - 3030 Section - 3114 C, 2017

Note : BDL - Below Detectable Limit (Turbidity<0.1, Fe<0.2, NO3-N<0.2, Cu<0.3, Zn<0.05, Cd<0.1, Pb<1, Hg<0.001, Cr+6<0.01, As<0.001)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : 1. **This Report is subject to terms & conditions mentioned overleaf.**
2. Uncertainty of MU and **Decision Rules** are available with laboratory and same will be provided upon request.

ENPRO
Environment
Energy Water
Project Consultant

Test Report

Report No : TC588522000001834F | Issue Date : 15-03-2022

Discipline : Chemical | Group : Residues In Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water	Qty / Nos of Sample	: 10 L (1 Nos)
Sampling By	: Mehul Sonvane	Packing / Seal	: Sealed
Date of Sampling	: 09-03-2022	Protocol / Purpose	: Water Analysis
Sample Received Date	: 10-03-2022	Date of Completion	: 14-03-2022
Date of Starting of Test	: 10-03-2022	Sample ID	: 0322AW01418
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981		

RESULT TABLE

S.NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
20	Methyl Parathion	µg/L	BDL	Max 0.3	SOP No WI/WW/58
21	Malathion	µg/L	BDL	Max 190	SOP No WI/WW/58
22	Chlorpyrifos	µg/L	BDL	Max 30	SOP No WI/WW/58
23	Alpha BHC	µg/L	BDL	Max 0.01	SOP No WI/WW/58
24	Gamma BHC	µg/L	BDL	Max 2	SOP No WI/WW/58
25	Beta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
26	Delta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
27	Heptachlor	µg/L	BDL	–	SOP No WI/WW/58
28	Aldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
29	Heptachlor epoxide	µg/L	BDL	–	SOP No WI/WW/58
30	4,4 DDE	µg/L	BDL	Max 1	SOP No WI/WW/58
31	Endosulfan I	µg/L	BDL	Max 0.4	SOP No WI/WW/58
32	Dieldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
33	Endrin	µg/L	BDL	–	SOP No WI/WW/58
34	4,4 DDD	µg/L	BDL	Max 1	SOP No WI/WW/58
35	Endosulfan II	µg/L	BDL	Max 0.4	SOP No WI/WW/58
36	4,4 DDT	µg/L	BDL	Max 1	SOP No WI/WW/58

Continue....

Note : This Report is subject to terms & conditions mentioned overleaf
Method and Decision Rules are available with laboratory and same will be provided upon request.

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

Enpro Environment Engineers Pvt. Ltd.
Design, Engineering, Environmental Consulting, Monitoring & Testing Service Provider,
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ISO 9001 : 2015 ISO 14001 : 2015 ISO 45001 : 2018

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Test Report

ENPRO
Environment
Energy Water
Project Consultant

Report No : TC5885220000001834F	Issue Date : 15-03-2022
Discipline : Chemical	Group : Residues In Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, [illegible] Near Railway Crossing Kandla 370210 [illegible]

Description of Sample	: Drinking Water		
Sampling By	: Komal Sonvane	Qty / Nos of Sample	: 1 [illegible]
Date of Sampling	: 01-03-2022	Packing / Seal	: Sealed
Sample Received Date	: 10-03-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 11-03-2022	Date of Completion	: 14-03-2022
Sampling Method	: IS 1025 (Part-1) & IS 1622 1981	Sample ID	: 0322/A[illegible]

RESULT TABLE

NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	Endrin aldehyde	µg/l	BDL	–	SOP No:V/W/M/[illegible]
2	Endosulfan sulfate	µg/l	BDL	Max 0.4	SOP No:V/W/M/[illegible]

Note : BDL - Below Detectable Limit (Methyl Parathion<5000, Malathion<5000, Chlorpyrifos<5000, Alpha BHC<50, Gamma BHC<50, Beta BHC<50, Delta BHC<50, Heptachlor<50, Aldrin<50, Heptachlor epoxide<50, 4,4 DDE<50, Endosulfan II<50, Dieldrin<50, Endrin<50, 4,4 DOD<50, Endosulfan II<50, 4,4 DDT<50, Endrin aldehyde<50, Endosulfan sulfate<50)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(E T L)

CHECKED BY
Keyur Patel (QM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : 1. This Report is subject to terms & conditions mentioned overleaf.
2. [illegible] MU and Decision Rules are available with laboratory and same will be provided upon request.

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

Test Report

ENPRO
Environment Energy Water
Project Consultant

Report No : TC5885220000001834F	Issue Date : 15-03-2022
Discipline : Biological	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Kutch, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Mehul Sonvane	Qty / Nos of Sample	: 10 L / 1 Nos
Date of Sampling	: 09-03-2022	Packing / Seal	: Sealed
Sample Received Date	: 10-03-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 10-03-2022	Date of Completion	: 14-03-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 0322/W0184

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
30	Total Coliform	MPN/100 ml	Absent	Absent	IS 1622:1981

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Dinkal Raval

AUTHORISED SIGNATORY
Kunal Patel (Dy. TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about Test Methods and Decision Rules are available with laboratory and same will be provided upon request.

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Test Report

Report No ETL/001865/22 Issue Date 15-03-2022

Type Chemical Group Water

Customer's Name & Address Shreeji Liquid Storage Terminals Pvt. Ltd
Plot no 7, [illegible] Marg Near Railway Crossing Kandla 370210 [illegible]

Description of Sample	Drinking Water	Qty / Nos of Sample	01 LTR
Sampling By	Nirmal Soevane	Packing / Seal	Sealed
Date of Sampling	07-03-2022	Protocol / Purpose	Water Analysis
Sample Received Date	08-03-2022	Date of Completion	14-03-2022
Date of Starting of Test	08-03-2022	Sample ID	ETL/22/1865/W
Sampling Method	IS 3025 (Part 1) & IS 1622 1981		

RESULT TABLE

NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500 2012 (RA 2018)	METHOD REFERENCE
40	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5) 2018
41	Taste	-	Agreeable	Agreeable	IS 3025 (Part 8) 1984
42	Boron (as B)	mg/L	BDL	Max 0.5	IS 3025 (Part 57) 2005
43	Manganese (as Mn)	mg/l	BDL	Max 0.1	APHA 23rd Edition (2017) 3030 Section 3030 Part F
44	Oil & Grease	mg/L	BDL	Max 0.5	IS 3025 (Part 39) 2021
45	Poly Aromatic Hydrocarbon (PAH)	mg/L	BDL	Max 0.0001	APHA 23rd Edition (2017) 6210 Section 6210 B

Note : BDL = Below Detectable Limit

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy.TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request

OR/7.8/01
Page 1 of 2

Test Report

Report No TC5885220000018395 | Issue Date 15-03-2022

Discipline Chemical | Group : Pollution & Environment

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no [illegible] Marg Near Railway Crossing Kandla 370210 [illegible]

Description of Sample	Soil Sample (N [illegible] Tanker Filling Loading Station North Side)		
Sampling By	Komal Sonvane	Qty / Nos of Sample	Approx [illegible] kg
Date of Sampling	03-03-2022	Packing / Seal	Sealed
Sample Received Date	03-03-2022	Protocol / Purpose	Soil [illegible]
Date of Starting of Test	03-03-2022	Date of Completion	14-[illegible]
Sampling Method	IS/A	Sample ID	832 [illegible]

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
1	pH	-	7.62 at 26.2°C	-	IS 2[illegible] Part [illegible] 26)
2	Moisture Content	%	11.5	-	SOP No. [illegible] Rev. 3
3	Water Holding Capacity (WHC)	%	9.4	-	SOP No. [illegible] Rev. 3
4	Bulk Density	gm/cc	1.4	-	SOP No. [illegible] Rev. 3
5	Porosity	%	48.7	-	SOP No. [illegible] Rev. 3
6	Available Sodium	mg/kg	389	-	SOP No. [illegible] Rev. 3
7	Available Potassium	mg/kg	174	-	SOP No. [illegible] Rev. 3
8	Calcium (as Ca)	meq/100 gm	30.9	-	SOP No. [illegible] Rev. 3
9	Magnesium (as Mg)	meq/100 gm	15.1	-	SOP No. [illegible] Rev. 3
10	Chloride (as Cl)	mg/kg	146	-	SOP No. [illegible] Rev. 3
11	Organic Matter (as C)	%	0.53	-	SOP No. [illegible] Rev. 3
12	Available Nitrogen	mg/kg	31.3	-	SOP No. [illegible] Rev. 3
13	Available Phosphorus	mg/kg	33.6	-	SOP No. [illegible] Rev. 3
14	Available Sulphur	mg/kg	65.7	-	SOP No. [illegible] Rev. 2
15	Cation Exchange Capacity (CEC)	meq/100 gm	30.2	-	SOP No. [illegible] Rev. 3

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note : 1) This Report is subject to terms & conditions mentioned overleaf.
2) [illegible] and Decision Rules are available with laboratory and same will be provided upon request.

KANDLA

[illegible] Laboratories are [illegible] 17025:2017
[illegible] 21/3/2022

QR/7.8/01
Page 2 of 2
V.0

Test Report

Report No : ETL/0018719/22 Issue Date : 15.03.2022

Volume : Chemical Group : Pollution & Environment

Customer's Name & Address : Shreeji Liquid Storage Terminals Pvt. Ltd

Plot no [illegible] Opp. Near Railway Crossing Kandla - 370 210

Description of Sample : Sample (Near Filling Loading Station North Side)

Received Via : Hand Sorvane Qty / Nos of Sample : Adequate

Date of Sampling : 13.3.2022 Packing / Seal : Sealed

Sample Received Date : 14-03-2022 Protocol / Purpose : Sample

Date of Start of Test : 14-03-2022 Date of Completion : 14

Sampling Method : USA Sample ID : 032

RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	LIMIT	METHOD REFERENCE
	pH		7.5		Methods Manual Water and Waste Analysis 2nd Edition
	[illegible]		12	-	Methods Manual Water and Waste Analysis 2nd Edition
	Sand	%	82	-	Methods Manual Water and Waste Analysis 2nd Edition
	Texture		Sandy Loam		Methods Manual Water and Waste Analysis 2nd Edition
	Organic matter		3.2	-	Methods Manual Water and Waste Analysis 2nd Edition
	Phosphorus	mg/kg	BDL	-	Standard Methods
	Sodium Absorption Ratio		1.12	-	Diagnosis and improvement of saline and alkali soils Agriculture Handbook-1954

Note : BDL = Below Detectable Limit

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Swamy Patel (Dy Tech)

AUTHORISED SIGNATORY
Chetan Gohil (TM)

Note : 1. This Report is subject to terms & conditions mentioned overleaf.
2. Details about Method and Decision Rules are available with laboratory and same will be provided upon request.

Project Branch : Environmental Testing Laboratories
Plot no. D-29 to 37, Road No. 17, Bojva Ki Industrial Estate,
Sarkari Pakhan Road, Kandla Sez, Gandhidham (Kutch),
Ph. : 02836-234 Fax No. 02836-234
E-mail : info@enpro-india.com

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7.8/01
e 1 of 6

Test Report

No : EP/0422/00539	Issue Date : 20-04-2022
Chemical	Group : Water

Environment
Energy Water
Project Consultant

Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Nature of Sample	: Drinking water		
Sampling By	: Mehul Sonvane	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 13-04-2022	Packing / Seal	: Sealed
Sample Received Date	: 15-04-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 15-04-2022	Date of Completion	: 19-04-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0422/W00539

RESULT TABLE

SR NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	pH	-	7.62(at 24.8°C)	6.5 to 8.5	IS 3025 (Part-11) 1983
2	Colour	Pt. Co	Colourless	Max 5	APHA 23rd Edi (Part-2000)
3	Turbidity	NTU	BDL	Max 1	IS 3025 (Part-10) 1984
4	Total Dissolved Solids (at 180°C)	mg/L	164	Max 500	IS 3025 (Part-16) 1984
5	Total Hardness (as $CaCO_3$)	mg/L	54.4	Max 200	IS 3025 (Part-21) 2009
6	Calcium (as Ca)	mg/L	13.1	Max 75	IS 3025 (Part-40) 1991 Clause 5
7	Magnesium (as Mg)	mg/L	5.3	Max 30	IS 3025 (Part-46) 1994 Clause 6
8	Chloride (as Cl)	mg/L	24.9	Max 250	IS 3025 (Part-32) 1988
9	Sulphate (as SO_4)	mg/L	8.2	Max 200	IS 3025 (Part-24) 1986 Clause 4
10	Iron (as Fe)	mg/L	BDL	Max 1.0	IS 3025 (Part- 53) 2003 Clause 7
11	Nitrate Nitrogen (as NO_3-N)	mg/L	BDL	Max 45	IS 3025 (Part-34) 1988 Clause 3
12	Total Alkalinity (as $CaCO_3$)	mg/L	50	Max 200	IS 3025 (Part 23) 1986
13	Copper (as Cu)	mg/L	BDL	Max 0.05	IS 3025 (Part- 42) 1992 Clause 6
14	Zinc (as Zn)	mg/L	BDL	Max 5	IS 3025 (Part-49) 1994 Clause 6
15	Cadmium (as Cd)	mg/L	BDL	Max 0.003	IS 3025 (Part-41) 1992 Clause 5
16	Lead (as Pb)	mg/L	BDL	Max 0.01	IS 3025 (Part-47) 1994 Clause 7
17	Mercury (as Hg)	mg/L	BDL	Max 0.001	APHA -23rd Edition (Part – 3000 Section : 3112 B) 2017

Continue.....

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

Design, Engineering, Environmental Consulting, Monitoring & Testing Service Provider,
Manufacturing & Supply of Pollution Control Devices

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Project / Design / Environmental Testing Laboratory :
Plot no. D/29/46, Road No. 17, Bajrangbali Industrial Estate,
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TC 5885

4001

Test Report

No : EP/0422/00539	Issue Date : 20-04-2022
: Chemical	Group : Water

ENPRO
Environment
Energy Water
Project Consultant

's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

tion of Sample	: Drinking water		
ing By	: Mehul Sonvane	Qty / Nos of Sample	: 10 L / 1 No
of Sampling	: 13-04-2022	Packing / Seal	: Sealed
Received Date	: 15-04-2022	Protocol / Purpose	: Water Analysis
Starting of Test	: 15-04-2022	Date of Completion	: 19-04-2022
Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0422/W00539

RESULT TABLE

S.NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
19	Hexavalent Chromium (as Cr)	mg/L	BDL	Max 0.05	IS 3025 (Part- 52) 2003 Clause 6
19	Arsenic (as As)	mg/L	BDL	Max 0.01	APHA -23rd Edition (Part – 3000 Section 3114 C) 2017

Note: BDL - Below Detectable Limit (Turbidity<0.2 NTU, Fe<0.2 mg/L, NO_3-N<0.2 mg/L, Cu<0.3 mg/L, Zn<0.05 mg/L, Cd<0.1 mg/L, Pb<1 mg/L, Hg<0.001 mg/L, Hexa Cr <0.01mg/L, As<0.001mg/L)

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD.

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

Test Report

No : EP/0422/00539	Issue Date : 20-04-2022
Chemical	Group : Residues In Water

ENPRO
Environment, Energy, Water
Project Consultant

Name & Address **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210 Gujarat, India

Description of Sample	: Drinking water		
Sampling By	: Mehul Sonvane	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 13-04-2022	Packing / Seal	: Sealed
Sample Received Date	: 15-04-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 15-04-2022	Date of Completion	: 19-04-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0422/W00539

RESULT TABLE

NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
20	Methyl Parathion	µg/L	BDL	Max 0.3	SOP No WI/WW/58
21	Malathion	µg/L	BDL	Max 190	SOP No WI/WW/58
22	Chlorpyrifos	µg/L	BDL	Max 30	SOP No WI/WW/58
23	Alpha BHC	µg/L	BDL	Max 0.01	SOP No WI/WW/58
24	Gamma BHC	µg/L	BDL	Max 2	SOP No WI/WW/58
25	Beta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
26	Delta BHC	µg/L	BDL	Max 0.04	SOP No WI/WW/58
27	Heptachlor	µg/L	BDL	--	SOP No WI/WW/58
28	Aldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
29	Heptachlor epoxide	µg/L	BDL	--	SOP No WI/WW/58
30	4.4 DDE	µg/L	BDL	Max 1	SOP No WI/WW/58
31	Endosulfan I	µg/L	BDL	Max 0.4	SOP No WI/WW/58
32	Dieldrin	µg/L	BDL	Max 0.03	SOP No WI/WW/58
33	Endrin	µg/L	BDL	--	SOP No WI/WW/58
	4.4 DDD	µg/L	BDL	Max 1	SOP No WI/WW/58
	Endosulfan II	µg/L	BDL	Max 0.4	SOP No WI/WW/58
36	4.4 DDT	µg/L	BDL	Max 1	SOP No WI/WW/58
37	Endrin aldehyde	µg/L	BDL	--	SOP No WI/WW/58

Continue.....

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Test Report

No. EP/0422/00539	Issue Date : 20-04-2022
: Chemical	Group : Residues In Water

ENPRO
Environment, Energy, Water
Project Consultant

r's Name & Address	**Shreeji Liquid Storage Terminals Pvt. Ltd.** Plot no 7, J N Marg , Near Railway Crossing, Kandla - 370210, Gujarat, India

ription of Sample	: Drinking water		
ling By	: Mehul Sonvane	Qty / Nos of Sample	: 10 L / 1 No
te of Sampling	: 13-04-2022	Packing / Seal	: Sealed
Sample Received Date	: 15-04-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 15-04-2022	Date of Completion	: 19-04-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0422/W00539

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
38	Endosulfan sulfate	µg/L	BDL	Max 0.4	SOP No WI/WW/058

Note : BDL - Below Detectable Limit (Methyl Parathion<5000 µg/L, Malathion<5000 µg/L, Chlorpyrifos<5000 µg/L, Alpha BHC<50 µg/L, Gamma BHC <50 µg/L, Beta BHC<50 µg/L, Delta BHC<50 µg/L, Heptachlor<50 µg/L, Aldrin<50 µg/L, Heptachlor epoxide<50 µg/L, 4,4 DDE<50 µg/L, Endosulfan I<50 µg/L, Dieldrin<50 µg/L, Endrin<50 µg/L, 4,4 DDD<50 µg/L, Endosulfan II<50 µg/L, 4,4 DDT<50 µg/L, Endrin aldehyde<50 µg/L, Endosulfan sulfate<50 µg/L)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Keyur Patel (QM)

AUTHORISED SIGNATORY
Chirtan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
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Page 5 of 6

Test Report

Report No. : EP/0422/00539	Issue Date : 20-04-2022
Type : Biological	Group : Water

ENPRO
Environment
Energy, Water
Project Consultants

Client's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking water	Qty / Nos of Sample	: 10 L / 1 No
Sampling By	: Mehul Sonvane	Packing / Seal	: Sealed
Date of Sampling	: 13-04-2022	Protocol / Purpose	: Water Analysis
Sample Received Date	: 15-04-2022	Date of Completion	: 19-04-2022
Date of Starting of Test	: 15-04-2022	Sample ID	: 0422/W00539
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981		

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
39	Total Coliform	MPN/100 ml	Absent	Absent	IS:1622-1981

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Dinkal Patel (Dy TM)

AUTHORISED SIGNATORY
Komal Patel (TM)

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R/7.8/01
Page 6 of 6

Test Report

Report No. TEE/000492/22-	Issue Date : 20-04-2022
Type : Chemical	Group : Water

ENPRO
Environment
Energy Water
Project Consultant

M/s Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking water		
Sampling By	: Mehul Sonvane	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 13-04-2022	Packing / Seal	: Sealed
Sample Received Date	: 15-04-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 15-04-2022	Date of Completion	: 19-04-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0422/W00539

RESULT TABLE

S NO.	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
40	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5) - 2018
41	Taste	-	Agreeable	Agreeable	IS 3025 (Part-08) 1984
42	Boron (as B)	mg/L	BDL	Max 0.5	IS 3025 (Part-57) 2005
43	Manganese (as Mn)	mg/L	BDL	Max 0.1	APHA -23rd Edition (Part – 3000, Section 3111B) 2017
44	Oil & Grease	mg/L	BDL	Max 1.0	IS 3025 (Part 39) 2021
45	Ploy Aromatic Hydrocarbon (PAH)	mg/L	BDL	Max 0.0001	APHA -23rd Edition (Part – 6010 Section 6440B)

Note : BDL - Below Detectable Limit (Boron<1 mg/L, Mn<0.05 mg/L, O&G<0.4 mg/L, Ploy Aromatic Hydrocarbon (PAH)<5 mg/L)

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

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Page 1 of 2

Test Report

Report No : EP/0422/00544	Issue Date : 20-04-2022
Type : Chemical	Group : Pollution & Environment

ENPRO
Environment Energy Water Project Consultant

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Soil Sample (Nr. Chemical Pump House)		
Sampling By	: Mehul Sonvane	Qty / Nos of Sample	: Approx 1 kg / 1 No.
Date of Sampling	: 13-04-2022	Packing / Seal	: Sealed
Sample Received Date	: 15-04-2022	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 15-04-2022	Date of Completion	: 19-04-2022
Sampling Method	: WI/S/A	Sample ID	: 0422/S00544

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
1	pH	--	7.56(at 24.8°C)		IS 2720 (Part 26) 1987
2	Moisture Content	%	13.7		SOP No. WI/S/03
3	Water Holding Capacity (WHC)	%	9.2	-	SOP No. WI/S/06
4	Bulk Density	gm/cm3	1.5	-	SOP No. WI/S/07
5	Porosity	%	43.0	-	SOP No. WI/S/07
6	Available Sodium	mg/kg	427	-	SOP No. WI/S/08
7	Available Potassium	mg/kg	175	-	SOP No. WI/S/08
8	Calcium (as Ca)	meq/100 gm	34.7	-	SOP No. WI/S/09
9	Magnesium (as Mg)	meq/100gm	17.6	-	SOP No. WI/S/09
10	Chloride (as Cl)	mg/kg	167	-	SOP No. WI/S/10
11	Organic Matter (as OM)	%	0.45	-	SOP No. WI/S/05
12	Available Nitrogen	mg/kg	34.6	-	SOP No. WI/S/13
13	Available Phosphorous	mg/kg	27.6	-	SOP No. WI/S/11
14	Available Sulphur	mg/kg	68.3	-	SOP No. WI/S/12
15	Cation Exchange Capacity (CEC)	meq/100 gm	33.4	-	SOP No. WI/S/04

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request

F/ 8/01
e 2 of 2

Test Report

No TEE/000505/22	Issue Date 20-04-2022
Chemical	Group Pollution & Environment

Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Type of Sample	: Soil Sample (Nr. Chemical Pump House)		
Sent By	: Mehul Sonvane	Qty / Nos of Sample	: Approx 1 kg / 1 No
Date of Sampling	: 12-04-2022	Packing / Seal	: Sealed
Date of Received Date	: 15-04-2022	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 15-04-2022	Date of Completion	: 19-04-2022
Testing Method	: WI/S/A	Sample ID	: 0422/S00544

RESULT TABLE

NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
[illegible]	[illegible]	%	13.6	-	Methods of Soil, plant, and water Analysis (CARDA) 3rd Edition)
[illegible]	Silt	%	13	-	Methods of Soil, plant, and water Analysis (CARDA) 3rd Edition)
[illegible]	Sand	%	68	-	Methods of Soil, plant, and water Analysis (CARDA) 3rd Edition)
[illegible]	Texture	%	Loamy sand	-	Methods of Soil, plant, and water Analysis (CARDA) 3rd Edition)
[illegible]	Permeability	%	4.1	-	Methods of Soil, plant, and water Analysis (CARDA) 3rd Edition)
[illegible]	[illegible] as Fe	mg/kg	BDL	-	SOP No. WI/S/16
[illegible]	Sodium Absorption Ratio	-	1.15	-	Diagnosis and improvement of saline and alkali soils by USDA Agricultural Handbook No. 60 - 1954

Note: BDL = Below Detectable Limit (For<2 mg/kg)

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

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ENPRO Enviro Tech and Engineers Pvt. Ltd.

Environmental Testing Laboratory

TC - 5885

Test Report

No : QR/7.8/01	Test Report No : TC588522000002518F	Issue Date : 18-05-2022
No : TC588522000002518F	Discipline : Biological	Group : Water

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Vihang Patel	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 09-05-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-05-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 12-05-2022	Date of Completion	: 17-05-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0522/W02518

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	Total Coliform	MPN/100 ml	Absent	Absent	IS 1622-1981

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Dinkal Patel (Dy TM)
292

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Komal Patel (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

*** End of Report ***

ENPRO Enviro Tech and Engineers Pvt. Ltd
Environmental Testing Laboratory

TC - 5885

Test Report

No. QR/7.8/01	Test Report No : TC5885220000002518F	Issue Date : 18-05-2022
No : TC5885220000002518F	Discipline : Chemical	Group : Water

Owner's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Vihang Patel	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 09-05-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-05-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 12-05-2022	Date of Completion	: 17-05-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0522/W02518

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
1	pH	-	7.71(at 25.9°C)	6.5 to 8.5	IS 3025 (Part-11): 1983
2	Colour	Pt Co	Colourless	Max 5	APHA 23rd Edi. (Part-2060)
3	Turbidity	NTU	BDL	Max 1	IS 3025 (Part-10):1984
4	Total Dissolved Solids (at 180°C)	mg/L	168	Max 500	IS 3025 (Part-16):1984
5	Total Hardness (as $CaCO_3$)	mg/L	61.5	Max 200	IS 3025 (Part-21):2009
6	Calcium (as Ca)	mg/L	16.4	Max 75	IS 3025 (Part-40):1991 Clause 5
7	Magnesium (as Mg)	mg/L	5.0	Max 30	IS 3025 (Part-46):1994 Clause 6
8	Chloride (as Cl)	mg/L	34.8	Max 250	IS 3025 (Part-32):1988
9	Sulphate (as SO_4)	mg/L	7.2	Max 200	IS 3025 (Part-24):1986 Clause 4
10	Iron (as Fe)	mg/L	BDL	Max 1.0	IS 3025 (Part- 53) 2003 Clause 7
11	Nitrate Nitrogen (as NO_3-N)	mg/L	BDL	Max 45	IS 3025 (Part-34):1988 Clause 3
12	Total Alkalinity (as $CaCO_3$)	mg/L	44	Max 200	IS 3025 (Part 23):1986
13	Copper (as Cu)	mg/L	BDL	Max 0.05	IS 3025 (Part- 42):1992 Clause 6
14	Zinc (as Zn)	mg/L	BDL	Max 5	IS 3025 (Part-49):1994 Clause 6
15	Cadmium (as Cd)	mg/L	BDL	Max 0.003	IS 3025 (Part-41):1992 Clause 5
16	Lead (as Pb)	mg/L	BDL	Max 0.01	IS 3025 (Part-47):1994 Clause 7
17	Mercury (as Hg)	mg/L	BDL	Max 0.001	APHA -23rd Edition (Part – 3000, Section : 3112 B):2017
18	Hexavalent Chromium (as Cr)	mg/L	BDL	Max 0.05	IS 3025 (Part- 52) 2003 Clause 6
19	Arsenic (as As)	mg/L	BDL	Max 0.01	APHA -23rd Edition (Part – 3000, Section : 3114 C):2017

Note : BDL : Below Detectable Limit (Turbidity<0.2 NTU, Fe<0.2 mg/L, NO_3-N<0.2 mg/L, Cu<0.3 mg/L, Zn<0.05 mg/L, Cd<0.1 mg/L, Pb<1 mg/L, Hg<0.001 mg/L, Hexa Cr <0.01 mg/L, As<0.001 mg/L)

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

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Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with Laboratory and same will be provided upon request.

Ref. No. : QR/7.8/01	Test Report No : TC5885220000002518F	Issue Date : 18-05-2022
[illegible]	Discipline : Chemical	Group : Residues In Water

Customer's Name & Address: **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Vihang Patel	Qty / Nos. of Sample	: 10 L / 1 No
Date of Sampling	: 09-05-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-05-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 12-05-2022	Date of Completion	: 17-05-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622:1981	Sample ID	: 0522/W02518

RESULT TABLE

S.NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
20	Methyl Parathion	µg/l	BDL	Max 0.3	SOP No.WI/WW/58
21	Malathion	µg/l	BDL	Max 190	SOP No.WI/WW/58
22	Chlorpyrifos	µg/l	BDL	Max 30	SOP No.WI/WW/58
23	Alpha BHC	µg/l	BDL	Max 0.01	SOP No.WI/WW/58
24	Gamma BHC	µg/l	BDL	Max 2	SOP No.WI/WW/58
25	Beta BHC	µg/l	BDL	Max 0.04	SOP No.WI/WW/58
26	Delta BHC	µg/l	BDL	Max 0.04	SOP No.WI/WW/58
27	Heptachlor	µg/l	BDL	--	SOP No.WI/WW/58
28	Aldrin	µg/l	BDL	Max 0.03	SOP No.WI/WW/58
29	Heptachlor epoxide	µg/l	BDL	--	SOP No.WI/WW/58
30	4,4 DDE	µg/l	BDL	Max 1	SOP No.WI/WW/58
31	Endosulfan I	µg/l	BDL	Max 0.4	SOP No.WI/WW/58
32	Dieldrin	µg/l	BDL	Max 0.03	SOP No.WI/WW/58
33	Endrin	µg/l	BDL	--	SOP No.WI/WW/58
34	4,4 DDD	µg/l	BDL	Max 1	SOP No.WI/WW/58
35	Endosulfan II	µg/l	BDL	Max 0.4	SOP No.WI/WW/58
36	4,4 DDT	µg/l	BDL	Max 1	SOP No.WI/WW/58
37	Endrin aldehyde	µg/l	BDL	--	SOP No.WI/WW/58
38	Endosulfan sulfate	µg/l	BDL	Max 0.4	SOP No.WI/WW/58

Note: BDL - Below Detectable Limit (Methyl Parathion<5000 µg/L, Malathion<5000 µg/L, Chlorpyrifos<5000 µg/L, Alpha BHC<50 µg/L, Gamma BHC <50 µg/L, Beta BHC<50 µg/L, Delta BHC<50 µg/L, Heptachlor<50 µg/L, Aldrin<50 µg/L, Heptachlor epoxide<50 µg/L, 4,4 DDE<50 µg/L, Endosulfan I<50 µg/L, Dieldrin<50 µg/L, Endrin<50 µg/L, 4,4 DDD<50 µg/L, Endosulfan II<50 µg/L, 4,4 DDT<50 µg/L, Endrin aldehyde<50 µg/L, Endosulfan sulfate<50 µg/L)

CHECKED BY
Keyur Patel (QM)
294

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

Test Report

No : QR/7.8/01	Test Report No : ETL/002487/22	Issue Date : 18-05-2022
: N A	Discipline : Chemical	Group : Water

Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J.N. Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Drinking Water		
Sampling By	: Vihang Patel	Qty / Nos of Sample	: 10 L / 1 No
Date of Sampling	: 09-05-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-05-2022	Protocol / Purpose	: Water Analysis
Date of Starting of Test	: 12-05-2022	Date of Completion	: 17-05-2022
Sampling Method	: IS 3025 (Part-1) & IS 1622 1981	Sample ID	: 0522/W02518

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	DESIRABLE LIMIT AS PER IS 10500: 2012 (RA 2018)	METHOD REFERENCE
39	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5) : 2018
40	Taste	-	Agreeable	Agreeable	IS 3025 (Part 08) 1984
41	Boron (as B)	mg/L	BDL	Max 0.5	IS 3025 (Part 57) 2005
42	Manganese (as Mn)	mg/L	BDL	Max 0.1	APHA 23rd Edition (Part – 3000, Section : 3111B) 2017
43	Oil & Grease	mg/L	BDL	Max 0.5	IS 3025 (Part 39) : 2021
44	Ploy Aromatic Hydrocarbon (PAH)	mg/L	BDL	Max 0.0001	APHA -23rd Edition (Part – 6010, Section : 6440B)

Note : BDL - Below Detectable Limit (Boron<1 mg/L, Mn<0.05 mg/L, O&G<0.4 mg/L, Ploy Aromatic Hydrocarbon (PAH)<5 mg/L)

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

*** End of Report ***

Environmental Testing Laboratory

Laboratory Plot No. B-2/2/1, Block No. 1, Bagge Industrial Estate,
Nr. Jolva Petrol Pump, Near Atul Bridge, Jolva
Taluka: Vagra, Dist: Bharuch (Gujarat) India

TC - 5885

Test Report

No. QR/7.8/01	Test Report No : TC588522000002523F	Issue Date : 18-05-2022
TC588522000002523F	Discipline : Chemical	Group : Pollution & Environment

Owner's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd**
Plot no 7, J N Marg , Near Railway Crossing, Kandla - 370210, Gujarat India

Description of Sample	: Soil Sample (Nr Chemical Pump House)		
Sampling By	: Vihang Patel	Qty / Nos of Sample	: Approx 1 kg / 1 No
Date of Sampling	: 09-05-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-05-2022	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 12-05-2022	Date of Completion	: 17-05-2022
Sampling Method	: WI/S/A	Sample ID	: 0522/S02523

RESULT TABLE

S NO.	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
1	pH	--	8.13(at 25.9°C)	-	IS 2720 (Part-26) 1987
2	Moisture Content	%	11.7	-	SOP No.-WI/S/03
3	Water Holding Capacity (WHC)	%	8.3	-	SOP No. WI/S/06
4	Bulk Density	gm/cm3	1.4	-	SOP No. WI/S/07
5	Porosity	%	44.2	-	SOP No. WI/S/07
6	Available Sodium	mg/kg	386	-	SOP No. WI/S/08
7	Available Potassium	mg/kg	188	-	SOP No. WI/S/08
8	Calcium (as Ca)	meq/100 gm	37.1	-	SOP No. WI/S/09
9	Magnesium (as Mg)	meq/100gm	16.6	-	SOP No. WI/S/09
10	Chloride (as Cl)	mg/kg	147	-	SOP No.-WI/S/10
11	Organic Matter (as OM)	%	0.67	-	SOP No.WI/S/05
12	Available Nitrogen	mg/kg	27.9	-	SOP No. WI/S/13
13	Available Phosphorous	mg/kg	29.6	-	SOP No. WI/S/11
14	Available Sulphur	mg/kg	60.9	-	SOP No. WI/S/12
15	Cation Exchange Capacity (CEC)	meq/100 gm	31.9	-	SOP No.WI/S/04

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

CHECKED BY
Sweety Patel (Dy TM)

AUTHORISED SIGNATORY
Chintan Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.

Test Report

Ref. : QR/7.8/01	Test Report No : ETL/002492/22	Issue Date : 18-05-2022
Ref. : N.A	Discipline : Chemical	Group : Pollution & Environment

Customer's Name & Address : **Shreeji Liquid Storage Terminals Pvt. Ltd.**
Plot no 7, J N Marg, Near Railway Crossing, Kandla - 370210, Gujarat, India

Description of Sample	: Soil Sample (Nr. Chemical Pump House)		
Sampling By	: Vihang Patel	Qty / Nos of Sample	: Approx 1 kg / 1 No
Date of Sampling	: 09-05-2022	Packing / Seal	: Sealed
Sample Received Date	: 12-05-2022	Protocol / Purpose	: Soil Analysis
Date of Starting of Test	: 12-05-2022	Date of Completion	: 17-05-2022
Sampling Method	: WI/S/A	Sample ID	: 0522/S02523

RESULT TABLE

S NO	TEST PARAMETER	UNIT	RESULT	LIMIT	METHOD REFERENCE
16	Clay	%	10.5	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
17	Silt	%	14	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
18	Sand	%	70	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
19	Texture	%	Loamy Sand	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
20	Permeability	%	3.2	-	Methods of Soil, plant, and water Analysis ICARDA(3rd Edition)
21	Iron (as Fe)	mg/kg	BDL	-	SOP No. WI/S/18
22	Sodium Adsorption Ratio	-	1.02	-	Diagnosis and improvement of saline and alkali soils by USDA, Agricultural Handbook No. 60 -1954

Note : BDL - Below Detectable Limit (Fe<2 mg/kg)

SHREEJI LIQUID STORAGE TERMINALS PVT. LTD. KANDLA

CHECKED BY
Sweety Patel (Dy TM)

ENPRO Enviro Tech and Engineers Pvt. Ltd.(ETL)

AUTHORISED SIGNATORY
Chirman Desai (TM)

Note 1 : This Report is subject to terms & conditions mentioned overleaf.
Note 2 : Details about MU and Decision Rules are available with laboratory and same will be provided upon request.
*** End of Report ***

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address- Plot No-07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

OIL SPIL CONTINGENCY PLAN

M/s Shreeji Liquid Storage Terminals Private Limited is situated at Plot No.7, J.N.Road, Near railway crossing, Kandla. Main activity of installation is to receive, store and despatch of chemical and edible oils to meet the requirements of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution process on stored product is carried out.

Objectives:

- To provide oil spill response preparedness in line.
- To develop a plan which can guide us to combact oil spill incident effectively.

Oil Spill Contingency plan:

- Sources and expected quantity of oil spill
  - Flow line/hose/arms
  - Main oil line
  - From coupling
  - Valve/blinds
  - Flange joints
  - Swivel joints
  - From tank lorry leakage
  - Identify the characteristics of spillage oil

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address- Plot No-07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

OIL SPIL CONTINGENCY PLAN

Procedure for spillage at tank lorry filling station (gantry) & pump house:

- As soon as spillage takes place, loading is to be stopped at once by shutting off the pump and closing the valve
- Communicate incident to higher authority and F&S department
- Spilled product being a fluid will spread out in the surrounding areas. First and for most task is to arrest the spread of spilled material
- Simultaneously cordon off the area with the help of fire and safety personnel
- Ensure that no vehicle standing in the vicinity of spilled area attempt to start as the spark so generated may lead to catastrophic incident
- Minimum working staff wearing proper PPE only is allowed to collect the spilled product in empty drums. The remaining product which is not possible to be retrieved is to be soaked by proper absorbent/sand (dolomite)
- Collect spillages in drum in liquid form and absorbent soaked product in solid form are placed at designated area and later to be disposed through authorized vendor

Procedure for transfer of product from leaky tank & dyke wall

- Any storage tank if suffers major leakage needs immediate transfer of hold up product and spilled our product spread inside the dyke wall area to nearby empty tank

The product spilled out of the tank is accumulated inside the dyke wall and to be transferred to adjoining empty tank by following steps:

- The area around the leaking tank is to be isolated by proper barricading and sign mark to debar external persons

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address- Plot No-07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

OIL SPIL CONTINGENCY PLAN

- Only authorised persons with proper PPE are allowed to attend the job
- Put trolley mounted portable pump, hoses and fittings near the leaky tank
- Hoses are dipped in the pool of products inside the dyke wall and one end is connected to the suction of the pump, while discharge of pump is connected to internal pipe line through hoses to adjacent empty tank earmarked to receive the leaked product
- All valves of adjacent tank remain closed except the one through which potable pump discharge is connected
- Internal pipeline with appropriate reducer is used to connect leaky tank and empty tank
- Trolley mounted pump is fitted with flameproof fittings
- The pump is started to transfer entire product from dyke wall area of leaky tank to adjacent empty tank as fast as possible
- Once the entire product (hold up as well as dyke wall) from leaky tank is transferred to the adjacent empty tank, the tank cleaned, inspected and put to repair as required

Regd.Office : Plot No.247,Ward 12-B,Gandhidham (Kutch) 370 201. Ph. : (02836) 225210/11/12,225311
Fax : (02836) 225411 E-mail :shreeji.lstpl@shreeji-group.com * im.kandla@shreeji-group.com
CIN No.U74900GJ2015PTC082198- GST No.24AAVCS4294G2ZS

Annexure V

Form 59

[illegible] Certificate

10/02/2022
12:33:05 PM
04/08/2022

Vehicle Photo with Registration plate
60 mm x 30 mm

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission Limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon (THC HC)	ppm		
High idling emissions	CO	percentage (%)		
	RPM	rpm	2500 ± 200	
Smoke Density	Lambda	-	1 ± 0.03	
	Light absorption coefficient	1/meter	2.43	2.19

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature

Note: 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to https://vahan.parivahan.gov.in

Authorized Signature with stamp of PUC operator
60mm x 20 mm

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address- Plot No-07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

TRAFFIC MANAGEMENT SYSTEM

M/s Shreeji Liquid Storage Terminals Private Limited is situated at Plot No.7, J.N.Road, Near railway crossing, Kandla. Main activity of installation is to receive, store and despatch of chemical and edible oils to meet the requirement of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution process on stored product is carried out.

Traffice Management System:

- Security shall maintain a log of all personnel vehicle within the depot premises at any point of time
- All the vehicles are thoroughly checked before entry as per checklist at the security gate
- Security staff is present for controlling of traffic around the terminal
- Roads inside the hazardeous area of installation shall be restricted
- Vehicles required for operational, maintenance and safety/security reasons are allowed only with proper safety fittings and authorized from in charge/designated safety officer
- The emergency gate is away from the main gate for evacuation of vehicles and personnel
- Emergency gate is always be kept free from obstruction in emergency

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address- Plot No-07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

TRAFFIC MANAGEMENT SYSTEM

- Congestion of parking is avoided with effective planning
- Proper ground surface is provided
- Proper illumination is ensured at all places
- Speed is limited to 10 km in the terminal
- Proper training and awareness to the truck operator
- Zebra lines are provided at tanker loading unloading area (gantry)
- Proper safe distance maintained between the adjoining vehicles at parking
- In case of fire/emergency siren the loading will be stopped and tts at the parking are routed to emergency gate
- Tanker lorry loading at loading point following action will be taken
  - Loading hose, wheel chocks and earthling clamp will be routed to emergency gate
  - In case of blockage of one route all the vehicles are evacuated to other route
  - In case of emergency well trained and proper evacuation procedure adopted

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address- Plot No-07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

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Regd.Office : Plot No.247,Ward 12-B,Gandhidham (Kutch) 370 201. Ph. : (02836) 225210/11/12,225311
Fax : (02836) 225411 E-mail :shreeji.lstpl@shreeji-group.com * tm.kandla@shreeji-group.com
CIN No.U74900GJ2015PTC082198- GST No.24AAVCS4284G2ZS

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address- Plot No-07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

TRAFFIC MANAGEMENT SYSTEM

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- Tanker lorry loading at loading point following action will be taken
  - Loading hose, wheel chocks and earthling clamp will be routed to emergency gate
  - In case of blockage of one route all the vehicles are evacuated to other route
  - In case of emergency well trained and proper evacuation procedure adopted

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Fax : (02836) 225411 E-mail :shreeji.lstpl@shreeji-group.com * tm.kandla@shreeji-group.com
CIN No.U74900GJ2016PTC082198- GST No 24AAVCS4294G2ZS

Shreeji Liquid Storage Terminals Pvt. Ltd.

Site Address Plot No 07 , J.N.Marg , Kandla-Kutch (Gujarat)-370210

SOLAR ENERGY MANAGEMENT PLAN

M/s Shreeji Liquid Storage Terminals Private Limited is situated at Plot No.7, J.N.Road, Near railway crossing, Kandla. Main activity of installation is to receive, store and despatch of chemical and edible oils to meet the requirement of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution process on stored product is carried out.

Solar Energy Management Plan:

- The terminal has planned reduction in usage of traditional light bulbs and has installed latest energy efficient lights which reduces the usage of power to 1/4th of the total energy consumption
- Proper ventilation has been provided on each floor of the office premises to allow the maximum use of sunlight and artificially lighting is reduced to bare minimum. Maximum use of natural light is an integral part of architectural design of the office building
- Usage of solar energy at different locations in the facility like parking light, roadside light etc. will be explored
- Solar energy would be used for lighting purpose in open area.

DEENDAYAL PORT AUTHORITY
FINANCE DEPARTMENT
F-48 SECTION.

No FA/F-48/ACA/GST/2020/ 76 Dated 11.07.2022

*** CIRCULAR ***

As per Notification No.12/2017 dated 28.06.2017 and 2/2018 dated 25.01.2018 issued by GoI, Ministry of Finance (Department of Revenue), and the GST rate is "NIL" on Services provided:-

(a) an arbitral tribunal to –

(i) any person other than a business entity; or

(ii) a business entity with an aggregate turnover up to twenty lakh rupees (ten lakh rupees in the case of special category states) in the preceding financial year;

(iii) the Central Government, State Government, Union territory, local authority, Governmental Authority or Government Entity;"

(b) a partnership firm of advocates or an individual as an advocate other than a senior advocate, by way of legal services to-

(i) any advocate or partnership firm of advocates providing legal services;

(ii) any person other than a business entity; or

(iii) a business entity with an aggregate turnover up to twenty lakh rupees (ten lakh rupees in the case of special category states) in the preceding financial year;

(iv) the Central Government, State Government, Union territory, local authority, Governmental Authority or Government Entity;";

(c) a senior advocate by way of legal services to-

(i) any person other than a business entity; or

(ii) a business entity with an aggregate turnover up to twenty lakh rupees (ten lakh rupees in the case of special category states) in the preceding financial year.

"(iii) the Central Government, State Government, Union territory, local authority, Governmental Authority or Government Entity."

In view of above, the entire concerned are directed to discontinue preparing vouchers in respect of Legal Bills by RCM methodology with effect from 01.08.2022. The legal bills to be prepared only by deducting TDS at applicable rates.

This has approval of FA & CAO.

Chief Engineer, DPA.

Accounts Officer (F-48)
DEENDAYAL PORT AUTHORITY

Copy to ALL HoD's/ All Divisions/ Law Officer / M/s Ashok Chajjed & Associates.

CIN No. : U32109GJ2000PLC037590

FRIENDS BULK HANDLERS LIMITED

(Division-Liquid Storage Tank Terminal)

Plot No. 10, Opp. Booster Pump Station, Kandla - Kharirohar Road, Old Kandla, Kachchh, Pin Code - 370 210
Tel. No. : 02836 - 270108, 271110 • E-mail : fbhl@friendsgroupindia.com, cdcfbhl@gmail.com

Date : 22.07.2022

To,
The OSD (Estate)
Land Section,Kandla Port Trust
Administrative Office,
P B No-50,Gandhidham (kutch)
Gujarat - 370201

Subject: Submission of Compliance report for the period Dec-21 to May-22

With reference to the above, we herewith enclosed the compliance report for your ready references

1. Data Sheet
2. CRZ Recommendation
3. NOC
4. Compliance of CRZ for devlopment of liquid storage tank
5. Environment Monitering Report
6. Traffic Management Plan
7. Oil Spill Contigency Plan

Thanking You

Yours Faithfully,

For FRIENDS BULK HANDLERS LTD

Authorised Signatory

Monitoring the implemental Safe guards
Ministry of Environment & Forests
Regional office (W), Bhopal.
Monitoring Report (Period of December-21 to May-22)
Part – 1
DATA SHEET

1. Project type : River valley/ Mining/Industry/ thermal/nuclear/Other (specify)	Infrastructure and Miscellaneous Projects + CRZ
2. Name of the project	**FRIENDS BULK HANDLERS LTD**
3. Clearance Letter (s). OM no and date	MoEF, New Delhi vide File No. 10-36/2008 – IA-III dated 2/02/2010 had granted Environmental/ CRZ Clearance to Kandla Port Trust for the subject project. Further, MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	Dist: Kutch State: Gujarat Location: kharirohar road, 23° 0'29.3076"Nand 70°11'14.118"E
5. Address for Correspondence a) address of Concerned Project Chief Engineer(with pin code & telephone/telex/fax numbers b) Address of Executive project Engineer/manager/(with pin code fax numbers)	HEAD OFFICE 'MAITRI BHAVAN'18, sector-8, post box no - 106Gandhidham- Kutch. Gujarat Pin – 370201 Tel : 02836-231588/232227, Fax-02836-233924. Plot No:- 10,b/h HPCL Booster Station, K.K Road ,Old Kandla,Tal: Gandhidham, Dist:Kutch- 370 201
6. Salient features of the project	1. Plot No. 10 has been developed for the for Liquid storage Tank farm. 2. The tentative capacity works out for the proposed tank farm is 79000 Kiloliters. 3. This liquid storage terminal used for

b) Salient features of the Environmental management plan	storage of liquid cargo as permitted in CRZ Notification, 2011 and amendment from time to time. 1. Provision of Parking of heavy vehicles and sufficient space for loading / unloading of trucks within individual plot limit have been made by us. 2. We had already placed the detailed on site and off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date. 3. The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room had already been provided by us during the construction activities. 5. Secure construction practices have been adopted by us in which no any construction spoils take placed. 6. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities. 7. We have already earmarked the area for storage of storm water and same will be re-use for green belt development at the premises of the each plots.
7. Break up of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land & landless labourers/artisen a) SC. ST/Adivasis b) Others (please indicate whether these figures are based on any scientific and systematic survey carried out of only provisionalfigures, if a survey is carried out givedetails and years of survey).	Nil Nil Nil
9. Financial details	

a) Project cost as originally planned and subsequent revised estimates and the year of prices reference	45 Crores
b) Allocation made for environmental management plans with item wise and year wise break-up	**For the year 202-2021** 2021-22? **Allocation : 6 lacs** **Expenditure : 3.20,000 lacs**
c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) includes the cost of environmental management plans so far.	FIRR EIRR
d) Actual expenditure incurred on the project	43.5 CR
e) Actual expenditure incurred on the Environmental management plans so far.	3.20,000 lacs
10.Forest land requirement	Nil
a) The status of approval for diversion of forest land for non-forestry use	Nil- Not related.
b) The status of clear felling	NIL
c) The status of compensatory a forestation, if any	Nil
d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	NIL
11. The status of clear felling in non-forest areas (such as submergence area ofreservoir, approach roads), if anywith quantitative information.	Nil
12. Status of construction a) Date of commencement (Actual and/or planned)	May-15

b) Date of completion (Actual and/or planned)	December 2015
13. Reasons for the delay if the Project is yet to start	----------
Date of site visited a) The dates on which the project was monitored by the regional office on pervious occasion, if any b) The date site visit for this monitoring report	----------

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kachchh.

CRZ Recommendations: Letter No. ENV-10/2008 (A) Dated 31st March 2009 of Industries (Environment), Forest & Environment Department, Govt. Further MOEF&CC, New Delhi vide File No. 10-36/2008-IA III dated 18/08/2015 had extended the validity period of Environmental and CRZ Clearance up to 1/02/2020.

Sr. No.	Conditions in CRZ Recommendation Letter	Compliances
	Specific Conditions	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued by MoEF, GoI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments / agencies shall be obtained by the KPT before commencing the expansion activities.	We had obtained the EC/CRZ Clearance from the MoEF, GoI on 2/02/2010 and MoEF&CC, New Delhi vide File No. 10-36/2008-IA III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020. (Copy placed at **Annexure – A**) Further, we had had obtained NOC/ CTE from GPCB on 13/07/2009 and GPCB vide letter no. GPCB/CCA-Kutch- 1285/GPCB ID 4636 / dated 28/8/2016 had extended the validity period of NOC up to 5/08/2020. (Copy placed at **Annexure – B**)
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued from time to time.	We are handling only permissible cargo (edible oil) as per the CRZ Notification, 1991 and its amendments issued from time to time.
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	No any ground water have been tapped to meet the water requirements during the construction phase as we have appointed local authority water supplier
5	The Kandla Port Trust shall undertaken roof – top water harvesting in areas wherever it is feasible.	We have already undertaken the roof – top water harvesting at our premises.

	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We will contribute towards the cost of any common study that may be carried out for KPT region for environmental protection and management issues.
7	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Diaster Management Plan at the earliest and submit a copy to this Department.	We had already submitted the Disaster Management Plan.
8	The project proponents shall implement all the suggestion' recommendations given by the NIOT in their Rapid EIA report.	We will comply and implementation recommendations given by the NIOT in their rapid EIA report.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complying the conditions stipulated by GPCB in Consent to Establish (NOC) and condition mentioned in NOC.
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We will bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department.	We have already developed greenbelt area along the periphery area of 2088.79 SqMts.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We will comply all the stipulated by Forest and Environmental Department, GoG from time to time for environmental protection / management purpose.
	General Conditions	
1	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.	No any construction camps had required at Project site because only local peoples / labours involved for the construction activities. As local peoples/labours involved for the construction so there wasn't any need of amenities. Further drinking water and basic requirement are fulfilled by us No any environmental conditions have been deteriorated by construction labours during the construction activities carried out by us.
2	The KPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the	We will contribute to socio-economic upliftment activity in the region is done with concern government organisation.

	District Collector / District Development Officer.	
:	A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	A separate budget for environmental protection has been maintained by us. **The total Rs. 6 lakhs** Details of above said budget for Environmental Management and socioeconomic activities have been submitted to statutory authorities regularly along with six monthly compliance report. The expenditure form the above said budget are is 3,20,000 lacs
4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	We have appointed GPCB approved Environmental Consultant (which having approved laboratories with standard equipment and facilities, qualified staff) to carry out the Environmental Monitoring during construction and operational phase at our premises.
5	An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.	We have appointed environment consultant and regular monitoring of ambient air,stack,water and noise are done by us time to time
6	Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.	Compliance mentioned by authorities are being complied by us wherever applicable.
7	Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.	We will also comply any other condition that may be stipulated by statutory authorities from time to time for environmental protection / management purpose.

SUBJECT: Compliance report of Environmental / CRZ Clearance for the development of plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat – reg.

MoEF, New Delhi vide File No. 10-36/2008 –IA-III dated 2/02/2010 had granted Environmental/ CRZ Clearance to Kandla Port Trust for the subject project. Further, MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.

SPECIFIC CONDITION		
Construction Phase		
I	All the conditions stipulated by Govt. of Gujarat vide letter no. ENV – 110 – 2008 – 366 – E dated 09.03.2009 and Gujarat Pollution Control Board vides letter No.PC/NOC/CCA-Kutch-78 (2)/GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 9/03/2009 is enclosed as **Annexure – A.** Further, GPCB vide letter dated 28/08/2015 had extended the validity period of NOC/ CTE up to 5/08/2020. Accordingly, Compliance report of NOC/CTE granted by GPCB on 28/08/2015 is enclosed as **Annexure – B.**
II	The entire water supply shall be managed by the Port. Waste water will be treated and utilized.	We appointed local water supplier for our requirement. Waste water will be treated and utilized for gardening purpose.
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading /unloading of trucks within the Port complex.	Provision of Parking of heavy vehicles and sufficient space for loading / unloading of trucks within our premises have been made.
IV	The proponent shall put in place the detailed on site and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also.	The detailed on site and off site emergency management plan as per manufacture ,storage and import of Hazardous chemical rules 1989had been prepared and submitted.
V	The proponent shall put in place the Oil Spill Contingency Plan.	We have provided dyke wall to the tank farm from oil spillage will run to oil water separator and collected in to it.
VI	The proponent shall strictly comply the measures proposed as per their letter No EG/WK/4684/EC/388, dated 01.12.2009.	We will comply as per the letter no EG/WK/4684/EC/388, dated 01.12.2009.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991.	The FSI on the plot was done as per CRZ notification 1991
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent Authority prior to construction /operation of the project.	No any ground water drawled by us as we have arranged the local water supply for our water requirement during construction activity.
IX	Sewage Treatment facilities should be provided	We have provided soak pit /septic tank for sewage

	in accordance with the CRZ notification.	water.
	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and Handling) Rules, 2016.	No solid waste is generated. Generated waste is semi -solid which is sent by us to incineration plant on time to time.
xi	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP, safe drinking water , medical health care , creche etc.	There are no any labor camp required as local public / labor mainly engaged for construction activities.
	The housing may be in the form of temporary structure to be removed after completion of the project.	Only container cabins / offices and temporary housing structure have been placed which are removed after completion of projects.
xii	A first Aid Room will be provided in the project both during construction and operation of the project.	A first Aid Room is provided by us during the construction activities. Further, same is provided in the operation phase by us.
xiii	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	No excavation is required during Construction activities.
xiv	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval sites with the approval of competent authority.	No any neighboring communities located at project site. Further, construction waste is disposed off as per the construction and demolition Rule, 2016 by us.
xv	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other trace contaminants.	Soil test was done at the site before construction and the site found to be ok.
xvi	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Secure construction practices was adopted by us during construction phase in which no any construction spoils take placed.
xvii	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	None of the hazardous waste is generated during construction phase.
xviii	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We are operating the DG sets as per the requirement and as per the guideline of GPCB/CPCB.
xix	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to Environmental (Protection) Rules prescribed for air and noise	The diesel which we had used for diesel generator during construction phase is low in sulphur content conforming Environmental Rule prescribed for air and noise emission standard.

	emission standards.	
	The diesel required for operation DG sets shall be stored in underground tanks and if required clearance from Chief Controller of Explosives shall be taken.	The diesel required for operation of DG is stored as per rules.
xxi	Vehicles hired for bringing construction materials to the site should be in good condition and should have a pollution check certificate and should confirm to applicable air and noise emission standards and should be operated only during non-peak hours.	We had only hired those Vehicles having valid pollution under control license granted by statutory authorities. Project area is connected with national highway, so transporting activities have been carried out only at day time by us.
xxii	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to confirm to the stipulated standards by CPCB/GPCB.	Ambient and noise level are conforming the residential standards report are attached If there is any incremental pollution load will be closely monitored during construction phase We had taken adequate measure to reduce ambient air and noise level during construction phase
xxiii	Storm water control and its re-use as per CGWB and BIS standards for various applications.	We have already earmarked the area for storage of storm water and same will be re-using for green belt development at the premises of the plot.
xxiv	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	We had reduced water demand during construction by use of pre-mixed concrete, curing agents and other best practices referred.
xxv	The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipments , etc. as per National Building Code including protection measures from lighting etc.	We had obtain the approval of competent authority for structural safety of the building due to earthquake, adequacy of fire fighting equipments etc.
xxvi	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	We had appointed a site inspection team for regular supervision of construction activities carried out by us.
xxvii	Under the provisions of Environmental (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found the construction of the project has been started without obtaining environmental clearance.	We had started construction activities only after obtained the necessary clearance from statutory authority's i.e. EC/ CRZ Clearance from MoEF&CC, New Delhi, and CRZ Recommendation from Forest & Environment Department, GoG and NOC / CTE from GPCB, GoG.
II. Operation Phase		
i	The installation of the Sewage Treatment Plant (STP), if any, should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation.	We have provided soak pit/septic tank for the disposal of sewage water.

	Treated affluent emanating from STP shall be recycled /reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done.	We are reusing treated water to the maximum extent possible for development of greenbelt area.
	Discharge of unused treated effluent shall confirm to the norms and standards of the Gujarat Pollution Control Board.	As we are only edible oil storage firm we haven't any effluent generated
	Necessary measures should be made to mitigate the odour problem from STP	We have taken adequate measure to mitigate the odour problem from soak pit/septic tank.
ii	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and confirm to rules made under the Environment (Protection) Act, 1986.	We have adopted best practices to use of Diesel power generating sets and to rules made under the Environment (Protection) Act, 1986.
	The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with Gujarat Pollution Control Board.	We have placed the DG sets with considering the location, fuel type and the height of the DG sets after approval of / consulting with GPCB.
iii	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	We ensure that Noise level should be in prescribed standard. Further, We have appointed GPCB approved Environmental Consultant for carrying out Environmental Monitoring at our premises as per the norms.
iv	The greenbelt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We had developed Greenbelt area @ **2088.79** sqmt at periphery area of plot.
v	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area during the monsoon period.	We had already provided the area for weep holes in the compound walls to ensure natural drainage of rainwater in the catchment area during the monsoon period.
vi	Rain water harvesting for roof run –off , as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground table.	Rain water harvesting for roof run-off is implemented.
vii	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	No ground water is extracted by us.
viii	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	Adequate parking places had been provided by us at our premises premises to avoid the traffic congestion near the entry and exit point.

	Effort may be made to use solar energy to the maximum extent possible.	We had provided vent and open areas to use solar energy to the maximum extent possible. Further we had prepared solar management plan for better use of solar energy.
	Adequate measures should taken to prevent odour problem from solid waste processing plant and STP.	Adequate measures are taken by us to prevent odour problems.
General Conditions		
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously confirming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat.	We had constructed the structures as per the approved plan by Kandla Port Trust (statutory authority of Kandla Port Trust, Ministry of Shipping is approving the construction plan). Further, we had constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department, GoG on 9/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests.	We will make fresh reference to the MoEF&CC, GoI in the event of any change in the project profile.
III	This Ministry reserves the right to revoke the clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Agree with the ministry
IV	This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Agree with the competent authorities.
V	Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protection activities.	We will provide full support to officials of GPCB, GPCB Approved Schedule – I Environmental auditors, etc during their visit at Project site.
8.	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and control of Pollution) Act 1981, the environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000, including the amendments and rules made thereafter.	The Above mentioned Stipulations are strictly followed by us under the water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act 1986, the Hazardous Chemicals (Manufactures, storage and Import) Rules, 1989, the Coastal Regulation Zone Notification, 1991 and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made there under from time to time.
9.	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife	Yes we had obtain the statutory requirement for storage of diesel from, fire department, civil aviation department from height point of view and other respective competent authorities

	Effort may be made to use solar energy to the maximum extent possible.	We had provided vent and open areas to use solar energy to the maximum extent possible. Further we had prepared solar management plan for better use of solar energy.
	Adequate measures should taken to prevent odour problem from solid waste processing plant and STP.	Adequate measures are taken by us to prevent odour problems.
General Conditions		
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously confirming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat.	We had constructed the structures as per the approved plan by Kandla Port Trust (statutory authority of Kandla Port Trust, Ministry of Shipping is approving the construction plan). Further, we had constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department, GoG on 9/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests.	We will make fresh reference to the MoEF&CC, GoI in the event of any change in the project profile.
III	This Ministry reserves the right to revoke the clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Agree with the ministry
IV	This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Agree with the competent authorities.
V	Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protection activities.	We will provide full support to officials of GPCB, GPCB Approved Schedule – I Environmental auditors, etc during their visit at Project site.
8.	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and control of Pollution) Act 1981, the environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000, including the amendments and rules made thereafter.	The Above mentioned Stipulations are strictly followed by us under the water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act 1986, the Hazardous Chemicals (Manufactures, storage and Import) Rules, 1989, the Coastal Regulation Zone Notification, 1991 and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made there under from time to time.
9.	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife	Yes we had obtain the statutory requirement for storage of diesel from, fire department, civil aviation department from height point of view and other respective competent authorities

	Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	
	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. the advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhopal.	We will advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in.
11.	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	We have carried out the construction / operation activities as per the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004. (wherever applicable)
12.	Any appeal against this clearance shall lie with the National Environmental Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997.	Point Noted.
13.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	N/A
14.	The Proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance, CRZ Recommendation and NOC/ CTE to the statutory authorities We are monitor pollutants like SPM, RSPM, SO2, NOx and display at a convenient location near the main gate of the company in the public domain.
15.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of	We will submit the compliance report as wherever applicable. Further we are submitting the six monthly compliances to DPT.

monitoring data (both in hard copies as well as by emailto the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB	
The environmental statement for each financial year ending 31st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of MoEF by e – Mail.	The environmental statement for each financial year ending 31st march in FORM-V is submitted to the Honorable state pollution control board as prescribed under the Environment (Protection) Rule 1986.

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla,Kandla Port Trust, District Kachchh .

Gujarat Pollution Control Board vide letter no. PC/NOC/CCA-Kutch-78(2)/GPCB ID 17832/14401dated 13/07/2009 had granted NOC/CTE to KPT for the subject project. Further, GPCB vide letter no. GPCB/CCA-KUTCH-12BS/ GPCB ID 46364 dated 28/08/2015 had extended the validity period of NOC/ CTE up to 5/08/2020.

Sr. No.	Conditions	Compliances
1	**Specific Conditions**	
1	Unit shall not start any construction activities till extending the validity of EC& CRZ from Competent Authority.	Construction activities have been started only after extending the validity of EC and CRZ Clearance from MoEF & CC, New Delhi.(MoEF&CC, New Delhi vide letter no. F. No. 10 – 36/ 2008 – IA.III dated 18/08/2015 had already extended the validity period for Environmental and CRZ Clearance up to 1.02.2020.)
2	No Ground water shall be used for the project coming under dark zone without permission of competent authority.	We are using local approved water supplier for our water requirement.
3	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projectionis of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products,Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid CargoStorage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and POLand Acid of 472 tankswith 12,08,369 Kl. The tentative tankage capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We will strictly adhere the Environmental and CRZ Clearance conditions no. 2. Necessary permission will be obtained by us in case of storage of additional quantity.
4	Unit shall strictly adhere to all condition of EC &CRZ issued by MoEF vide letter No-F.	We are strictly comply the conditions stipulated in Environment and CRZ

	No. 10-36/200B-IA-111dated 02/02/2010 for old Kandla.	clearance granted by MoEF&CC, New Delhi on 2/02/2010 and validity extended on 18/08/2015.
5	You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities.	We had obtained the CCA from Gujarat Pollution Control Board.
6	Applicant is required to comply with provision of Manufacturing, Storage and Import of HazardousChemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complying with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
2.	**Conditions Under Water Act 1974:**	
2.1	There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.	N/A as we are only for storage of liquid cargo.
2.2	The quantity of domestic waste water (Sewage) shall not exceed 4.5 KL/Day	Noted and we are not exceeding the limit.
2.3	Sewage shall be disposed of through septic tank/soak pit system.	We are disposing the sewage through septic tank/soak pit system as they have already earmarked the area for STP/septic tank/ soak pit system at their own premises.
2.4	The unit shall install flow meters at utilities for measuring category wise (category as given in water – cess act – 1977 Schedule II) consumption of water.	We had installed the flow meter wherever applicable.
2.5	Domestic effluent shall be disposed off through septic tank / soak pit system confirm to the followingstandards. **Parameters** / **Permissible Limit** BOD (5 days at 20^0 C) – 30mg/lit Suspended Solid – 20mg/lit Residual Chlorine – Minimum 0.5 mg/lit	Noted.
3	**Conditions under air act 1981:**	
3.1	There shall be no use of fuel; hence there is no flue gas emission from manufacturing activities and other ancillary operations.	We are not going to use any fuel as this project is only for storage of Liquid cargo. Hence, there is no any flue gas emission generation.
3.2	There shall be no process gas emission from manufacturing and other ancillary activities.	We are not using any fuel as this project is only for storage of Liquid cargo. Hence, there is no any gas emission generation.
3.3	The concentration of the following parameters	Noted and report is attached

	in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009. **Parameters** / **Time Weighted Average** / **Concentration in Ambient air in $\mu g/M^3$** Sulphur Dioxide (SO_2) — Annual: 50; 24 Hours: 80 Nitrogen Dioxide (NO_2) — Annual: 40; 24 Hours: 80 Particulate Matter (Size less than 10 µm) OR PM_{10} — Annual: 60; 24 Hours: 100 Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$ — Annual: 40; 24 Hours: 60	
3.4	The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels: Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A)	Noted and report is attached
4	**Conditions under Hazardous waste :**	
4.1	The applicant shall provide temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.	We had provided the storage facilities for Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.
5	**General Condition:**	
5.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.	We will intimate to GPCB, GoG if there are any change in personnel, equipment or working condition as mentioned in the consents form / order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehendedto occur in excess of standards laid down such information shall be forthwith	We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in

	reported to Board,concerned Police Station, Office of Directorate of Health Service, Department of Explosives,Inspectorate of Factories and local body. In case of failure of pollution control equipment, the production process connected to it shall be stopped. Remedial actions/measures shall beimplemented immediately to bring entire situation normal.	excess of standards at their premises. In case of failure of Pollution control equipment, we will stop the storage activities connected with the pollution control equipment. We will take necessary actions / measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.	We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our own premises. Further, Monitoring report will be submitted to GPCB regularly during the operation phase.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We have appointed GPCB approved Environmental Consultant (which having approved laboratories with standard equipment and facilities, qualified staff) to carry out the Environmental Monitoring during construction and operational phase at our own premises. GPCB approved Environmental Consultant (appointed by Successful plot allottees) will directly report to the Chief Executive of the organization for internalizing environmental issues. GPCB approved Environmental Consultant (appointed by Successful plot allottees) will also coordinate the exercise of environmental audit and preparation of environmental statements.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be	Environmental statement for the previous year is submitted by us to GPCB within stipulated time period.

	submitting to this State Board latest by 30th September every year.	
5.6	The Board reserves the right to review and/or revoke the consent and/or make varintions in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Agree with the Gujarat Pollution Control Board, GoG for review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.
5.7	In Case of change of ownership/management the name and address of new owners/partners/directors/proprietor should immediately be intimated to the Board.	We will intimate to GPCB, GoG immediately in case of change of ownership/management the name and address of new owners/partners/directors/proprietor.
5.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.	We had obtain TSDF membership certificate for collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal of waste generated at our own premises.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.	We are maintaining the records for waste generation and its management. We have submitted the Annual returns to GPCB in prescribed form within stipulated time period.
5.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We will keep all the necessary insurance policy including the"Public Liability Insurance Act – 91".
5.11	Unit shall take all concrete measures to show tangible results in waste generation,reduction,avoidance, reuse and recycle.Action taken in this regards shall be submitted within three months and also along with Form-4.	We have adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form.
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous ChemicalsRules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complying with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.6S7 of 199s-dated 14th October-2003.	We are displaying displayed the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.6S7 of 199s-dated 14th October-2003.
5.14	Industry shall have to display on-line data	We had display on-line data outside the

	outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within their own premise.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We had submitted a copy of onsite emergency plan as required as under the rule 13 and 14 of the handling ,Manufacturer, Storage and Import of the Hazardous Chemical Rules ,1989 to the GPCB,GOG

FRIENDS BULK HANDLERS LTD

OIL SPILL CONTIGENCY PLAN

M/s Friend bulk handler's ltd is situated on plot no.10 behind BPCL booster station K.K road old kandla.Main activity of installation is to receive, store and dispatch of edible oil to meet the requirement of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution, process on stored product is carried out at site

Objective:

- To provide oil spill response preparedness in line.
- To develop a plan which can guide us to compact oil spill incident effectively.

Oil Spill contingency plan

- Sources and expected quantity of oil spill
  - Flow line/hose /arms
  - Main oil line
  - From coupling
  - Valve /blinds
  - Flange joints
  - Swivel joints
  - From tank lorry leakage
  - ➢ Identify the characteristic of spillage oil.

Procedure for spillage at tank lorry filing station(gantry) & pump house

- As soon as spillage takes place, loading is to be stopped at once by shutting off the pump and closing the valves.
- Communicate incident to higher authorities and F&S department.
- Spilled product being a fluid will spread out in the surrounding areas. First and for-most task is to arrest the spread of spilled material.
- Simultaneously cordon off the area with the help of Fire& safety personnel.
- Ensure that no vehicle standing in the vicinity of spilled area attempt to start as the spark so generated may lead to catastrophic incident.
- Minimum working staff wearing proper PPE only is allowed to collect the spilled product in empty drums. The remaining product which is not possible to be retrieved is to be soaked by proper absorbent/sand (Dolamite).
- Collect spillages in drum in liquid form and absorbent soaked product in solid form are placed at designated area and later to be disposed through authorized vendor

Procedure for transfer of product from leaky tank & dyke wall

- Any storage tank if suffers major leakage needs immediate transfer of hold up product and spilled out product spread inside the dyke wall area to nearby empty tank.

The product spilled out of the tank is accumulated inside the dyke wall and to be transferred to adjoining empty tank by following steps:--

- The area around the leaking tank is to be isolated by proper barricading and sign mark to debar external persons.
- Only authorized persons with proper PPE are allowed to attend the job.
- Put trolley mounted portable pump, hoses and fittings near the leaky tank.
- Hoses are dipped in the pool of product inside the dyke wall and one end is connected to the suction of the pump, while discharge of pump is connected to internal pipe line through hoses to adjacent empty tank earmarked to receive the leaked product.
- All valves of adjacent tank remain closed except the one through which potable pump discharge is connected.
- Internal pipeline with appropriate reducer is used to connect leaky tank and empty tank.
- Trolley mounted pump is fitted with flameproof fittings .
- The pump is started to transfer entire product from dyke wall area of leaky tank to adjacent empty tank as fast as possible.
- Once the entire product (hold up as well as dyke wall) from leaky tank is transferred to the adjacent empty tank, the tank cleaned, inspected and put to repair as required.

FRIENDS BULK HANDLERS LTD

TRAFFIC MANGMENT SYSTEM

M/s Friend bulk handlers ltd is situated on plot no.10 behind BPCL booster station K.K road old kandla.Main activity of installation is to receive, store and dispatch of edible oil to meet the requirement of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution, process on stored product is carried out at site

TRAFFIC MANAGEMENT SYSTEM

- Security shall maintain a log of all personnel vehicles within the depot premises at any point of time.
- All the vehicles are thoroughly checked before entry as per checklist at the security gate.
- Security staff is present for controlling of traffic around the terminal
- Roads inside the hazardous area of installation shall be restricted.
- Vehicles required for operational, maintenance and safety/security reasons are allowed only with proper safety fittings and authorization from location in-charge/designated safety officer.
- The emergency gate is away from the main gate for evacuation of vehicles and personnel.
- Emergency gate always be kept free from obstruction in emergency.
- Congestion of parking is avoided with effective planning.

- Proper ground surface is provided.
- Proper illumination is ensured at all places.
- Speed is limited to 10 km in the terminal
- Proper training and awareness to the truck operators
- Zebra lines are provided at Tanker loading unloading area (gantry)
- Proper safe distance maintained between the adjoining vehicles at parking.
- In case of fire /emergency siren the loading will be stopped and tts at the parking are routed to emergency gate.
- Tanklorrys loading at loading point following action will be taken Loading hose, wheel chockes, and erthing clamp will be routed to emergency gate.

- In case of blockage of one route all the vehicles are evacuated to other route.
- In case of emergency well trained and proper evacuation procedure adopted.

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Ref.: EEC/LAB/STK/21-22/041207

24th December, 2021

TEST REPORT

Name & Address of Client	: **M/s. Friends Bulk Handlers Ltd** Plot No.10 B/H BRCL Booster Station, K.K. Road, Old Kandala, Ta. Gandhidham Dist. Kutch		
Date & Time Of Sampling	: 16/12/2021;01:00pm	Sample collected By	: EEC Team
Date of Receipt of Sample	: 18/12/2021	Analysis Starting Date	: 18/12/2021
Description Of Sample	: Stack attached to D.G.Set-1	Analysis Completion Date	: 24/12/2021

MONITORING DATA:

Fuel Used	: Diesel
Stack Height (Meter)	: 3.0
Ambient Temperature (°C)	: 32
Temperature of Stack Gas (°C)	: 89
Manometer Reading (mm)	: 1.5
Average Velocity of Stack Gas (m/Sec)	: 4.55
Duration of Sampling (Minutes)	: 60
Volume of Gas Sampled (Nm^3)	: 0.735

RESULT TABLE:

Parameters	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM	IS: 11255 (Part-I) 1985	21-11/73/PM	mg/Nm^3	62.2	150
SO_2	IS: 11255 (Part-II) 1985	21-11/73/SO_x	ppm	23.4	100
NOx	IS: 11255 (Part-VII) 2005	21-11/73/NOx	ppm	12.9	50

For, Envisafe Environment Consultants,

Authorized Signatory

----------End of Test Report----------

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4. Samples will be retained for a period of fifteen (15) days after completion of the analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all the analysis and test result of sample(s) collected by us / supplied by customer and not reveal to third party unless required by the statutory or legal requirement.

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Envisafe
Environment Consultants
Environmental Consultancy & Laboratory

Ref.: EEC/LAB/STK/21-22/041208

24th December, 2021

TEST REPORT

Name & Address of Client :	**M/s. Friends Bulk Handlers Ltd** Plot No.10 B/h BPCL Booster Station, K.K. Road,Old Kandala, Ta. Gandhidham Dist. Kutch		
Date & Time Of Sampling :	16/12/2021;11:38 am	Sample collected By :	EEC Team
Date of Receipt of Sample :	18/12/2021	Analysis Starting Date :	18/12/2021
Description Of Sample :	Stack attached to D.G.Set-2	Analysis Completion Date :	24/12/2021

MONITORING DATA:

Fuel Used	: Diesel
Stack Height (Meter)	: 3.0
Ambient Temperature (^{0}C)	: 33
Temperature of Stack Gas (^{0}C)	: 95
Manometer Reading (mm)	: 1.6
Average Velocity of Stack Gas (m/Sec)	: 4.73
Duration of Sampling (Minutes)	: 60
Volume of Gas Sampled (Nm^3)	: 0.726

RESULT TABLE:

Parameters	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM	IS: 11255 (Part-I) 1985	21-11/74/PM	mg/Nm^3	52.8	150
SO_2	IS: 11255 (Part-II) 1985	21-11/74/SO_x	ppm	19.2	100
NOx	IS: 11255 (Part-VII) 2005	21-11/74/NOx	ppm	16.1	50

For, Envisafe Environment Consultants,

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EEC/LAB/SOL/21-22/041202

24th December, 2021

TEST REPORT

Name & Address of Client :	**M/s. Friends Bulk Handlers Ltd** Plot No.10 B/h BPCL Booster Station, K.K. Road, Old Kandala, Ta. Gandhidham, Dist. Kutch		
Date & Time Of Sampling :	16/12/2021 ; 12:50pm	Sample collected By	: EEC Team
Date of Receipt of Sample :	18/12/2021	Mode of Sampling	: Grab
Description Of Sample :	Soil Sample	Lab ID Code	: 21-11/77
Analysis Starting Date :	18/12/2021	Packing/Seal	: Satisfactory
Analysis Completion Date :	24/12/2021	Quantity/ No. of Sample	: 5 KG

RESULT TABLE:

Sr. No.	Parameters	Reference	Unit	Results
1.	*pH	IS 2720 (part 26): 1987	-	7.86
2.	*Electrical Conductivity	IS 14767: 2000	µs/cm	487
3.	Water Holding Capacity	Lab STP No.STP/SoII06 Issue No. 02 Dated. 0111012015	%	40.6
4.	Moisture Content	IS 2720 (Part 2): 1973	%	13.8
5.	*Calcium	Lab STP No. STP/SoII08 Issue No. 02 Dated. 01110/2015	mg/kg	17.4
6.	*Magnesium	Lab STP No. STP/SoII089Issue No. 02 Dated. 01110/2015	mg/kg	6.8
7.	*Chloride	Lab STP No. STP/Soll/IO Issue No. 02, Dated. 0111012015	mg/kg	138.2
8.	*Phosphorus	Lab STP No. STP/SoII13 Issue No. 02 Dated. 0111012015	mg/kg	1.7
9.	SAR	Calculation Method	-	1.8
10.	Organic Matter	Lab STP No. STP/SoII07 Issue No. 02, Dated. 01110/2015	%	0.78

*** Indicates these parameters are performed in 10 % of Leachate Solution.**

For, Envisafe Environment Consultants,

Authorized Signatory

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Ref.: EEC/LAB/NSL/21-22/041201

24th December, 2021

TEST REPORT

Name & Address of Client	:	**M/s. Friends Bulk Handlers Ltd** Plot No.10 B/h BPCL Booster Station, K.K. Road ,OldKandala, Ta. Gandhidham Dist. Kutch
Date & Time Of Monitoring	:	16/12/2021; **Day Time** 10:42 am to 10:51 am
Mode of Sampling	:	Grab
Monitoring done by	:	EEC
Measuring Condition	:	**Type - 2 SLM** Frequency Weighing: Network - A Time Weighing: Slow

RESULT TABLE:

Sr. No.	Location	Noise Level, db (A)		
		Min	Max	MoEF/Factory Act Std
1.	Nr. Main Gate	58.2	73.1	75 (Ambient Air)
2.	Inside Fire Room	76.6	87.2	90 (Work Zone Area)
3.	Nr. DG Set	66.8	80.4	90 (Work Zone Area)
4.	Nr. Admin Office	62.9	70.5	75(Ambient Air)
5.	Nr.Pump room	72.3	83.6	90 (Work Zone Area)

Ambient Noise Standard: Day time shall mean from 6.00 a.m. to 10.00 p.m.
Reference Method: IS9989:1981 Assessment of Noise with Respect to Community Response.

For, Envisafe Environment Consultants,

Authorized Signatory

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Ref.: EEC/LAB/NSL/21-22/041202

24th December, 2021

TEST REPORT

Name & Address of Client	:	**M/s. Friends Bulk Handlers Ltd** Plot No.10 B/h BPCL Booster Station, K.K. Road,OldKandala, Ta. GandhidhamDist.Kutchh
Date & Time Of Monitoring	:	16/12/2021; **Night Time** 10:50 pm to 11:15 pm
Mode of Sampling	:	Grab
Monitoring done by	:	EEC
Measuring Condition	:	**Type - 2 SLM** Frequency Weighing: Network – A Time Weighing: Slow

RESULT TABLE:

Sr. No.	Location	Noise Level, db (A)		
		Min	Max	MoEF/Factory Act Std
1.	Nr. Main Gate	54.5	65.1	70 (Ambient Air)
2.	Inside Fire Room	59.2	77.8	90 (Work Zone Area)
3.	Nr. DG Set	64.9	86.2	90 (Work Zone Area)
4.	Nr. Admin Office	59.5	64.4	70 (Ambient Air)
5.	Nr.PumpRoom	52.6	83.7	90 (Work Zone Area)

Ambient Noise Standard: Night time shall mean from 10.00 p.m. to 6.00 a.m.
Reference Method: IS9989:1981 Assessment of Noise with Respect to Community Response.

For, Envisafe Enviroament Consultants,

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Environmental Consultancy & Laboratory

Ref.: EEC/LAB/AMB/21-22/041201

24th December, 2021

TEST REPORT

Name & Address of Client	:	**M/s. Friends Bulk Handlers Ltd** Plot No.10 B/h BPCL Booster Station, K.K. Road,OldKandala, Ta. Gandhidham Dist. Kutchh		
Date & Time Of Sampling	:	16/12/2021;01:50pm	Sample collected By	: EEC Team
Date of Receipt of Sample	:	18/12/2021	Analysis Starting Date	: 18/12/2021
Description Of Sample	:	Ambient Air (Nr. Main Gate)	Analysis Completion Date	: 24/12/2021

MONITORING DATA:

Wind Direction	:	NE to SW
Duration of Sampling	:	24 Hrs
Ambient Temperature	:	29°C

RESULT TABLE:

Parameter	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM_{10}	IS:5182 (Part - XXIII) 2006	21-11/76/PM_{10}	$\mu g/m^3$	89.7	100
$PM_{2.5}$	Gravimetric Method	21-11/76/$PM_{2.5}$	$\mu g/m^3$	48.1	60
SO_x	IS: 5182 (Part- II) 2001	21-11/76/SO_x	$\mu g/m^3$	24.8	80
NO_x	IS: 5182 (Part- VI) 2006	21-11/76/NO_x	$\mu g/m^3$	21.3	80

For,Envisafe Environment Consultants,

Authorized Signatory

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3. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of Laboratory Department, Envisafe Environment Consultant.
4. Samples will be retained for a period of Fifteen (15) days after completion of the analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all the analysis and test result of sample(s) collected by us / supplied by customer and not reveal to third party unless required by the statutory or legal requirement.

H. OFF:
Floor, Akash Ganga Complex, B/s. Suvidha Shopping Centre,
Nirmal Underpass, Paldi, Ahmedabad-380 007, Gujarat, INDIA.
Tel/Fax : +91 79 2665 0878 Mobile : +91 93771 58335
E-mail: info@envisafe.in, envisafe@gmail.com Web: www.envisafe.in

Envisafe
Environment Consultants
Environmental Consultancy & Laboratory

Ref.: EEC/LAB/AMB/21-22/041202

24th December, 2021

TEST REPORT

Name & Address of Client	:	**M/s. Friends Bulk Handlers Ltd** Plot No.10 B/h BPCL Booster Station, K.K. Road,Old Kandala, Ta. Gandhidham Dist. Kutchh		
Date & Time Of Sampling	:	16/12/2021;01:34pm	Sample collected By	: EEC Team
Date of Receipt of Sample	:	18/12/2021	Analysis Starting Date	: 18/12/2021
Description Of Sample	:	Ambient Air Nr. MCC Room	Analysis Completion Date	: 24/12/2021

MONITORING DATA:

Wind Direction	:	NE to SW
Duration of Sampling	:	24 Hrs
Ambient Temperature	:	29°C

RESULT TABLE:

Parameter	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM_{10}	IS:5182 (Part - XXIII) 2006	21-11/75/PM_{10}	$\mu g/m^3$	92.8	100
$PM_{2.5}$	Gravimetric Method	21-11/75/$PM_{2.5}$	$\mu g/m^3$	45.5	60
SO_x	IS: 5182 (Part- II) 2001	21-11/75/SO_x	$\mu g/m^3$	23.7	80
NO_x	IS: 5182 (Part- VI) 2006	21-11/75/NO_x	$\mu g/m^3$	21.2	80

For, Envisafe Environment Consultants,

Authorized Signatory

End of Test Report

This Report is issued under the following terms & conditions:

1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including, temperature, humidity, pressure, retention time etc.
3. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of Laboratory Department, Envisafe Environment Consultant.
4. Samples will be retained for a period of fifteen (15) days after completion of the analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all the analysis and test result of sample(s) collected by us / supplied by customer and not reveal to third party unless required by the statutory or legal requirement.

Envisafe
Environment Consultants
Environmental Consultancy & Laboratory

Ref: EEC/LAB/AMB/21-22/241203

24th December, 2021

TEST REPORT

Name & Address of Client	: **M/s Friends Bulk Handlers Ltd** Plot No 10 B/h BPCL Booster Station, K.K. Road, Old Kandala, Ta Gandhidham Dist. Kutchh		
Date & Time Of Sampling	: 16/12/2021;04:00pm	Sample collected By	: EEC Team
Date of Receipt of Sample	: 18/12/2021	Analysis Starting Date	: 18/12/2021
Description Of Sample	: Ambient Air Nr. Pump Room	Analysis Completion Date	: 24/12/2021

MONITORING DATA:

Wind Direction	: NE to SW
Duration of Sampling	: 24 Hrs
Ambient Temperature	: 31°C

RESULT TABLE:

Parameter	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM_{10}	IS:5182 (Part - XXIII) 2006 Gravimetric Method	21-06/66/PM_{10}	$\mu g/m^3$	97.1	100
$PM_{2.5}$		21-06/66/$PM_{2.5}$	$\mu g/m^3$	34.7	60
SO_x	IS: 5182 (Part- II) 2001	21-06/66/SO_x	$\mu g/m^3$	25.5	80
NO_x	IS: 5182 (Part- VI) 2006	21-06/66/NO_x	$\mu g/m^3$	18.3	80

For,Envisafe Environment Consultants,

Authorized Signatory

----------End of Test Report----------

This Report is issued under the following terms & conditions:

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5. We strictly maintain the confidentiality of all the analysis and test result of sample(s) collected by us / supplied by customer and not reveal to third party unless required by the statutory or legal requirement.

CIN : U63011GJ1995PTC025611

VIKING LIGHTERAGE & CARGO HANDLERS PVT. LTD.

Group

Admn. Off. : Plot No. 24/26/54, Sector 10/C, GIDC Area, GANDHIDHAM - 370 201
Phone : 02836 - 222999, 232605, 230345 Fax : 02836 - 228911, 234930

Date: 21.07.22

To,
The OSD (Estate)
Land Section,Kandla Port Trust
Administrative Office,
P B No-50,Gandhidham (kutch)
Gujarat - 370201

Subject: Submitting Compliance report for the period Dec-21to May-22

As required by you compliance for our unit **VIKING LIGHTERAGE AND CARGO HANDLERS PVT LTD**

We here with for attached the following documents for your ready referance..

1. Data Sheet
2. CRZ Recommendation
3. NOC
4. Compliance of CRZ for devlopment of liquid storage tank
5. Environment Monitering Report
6. Traffic Management Plan
7. Oil Spill Contigency Plan

1239
22/7/22

Thanking You,

Yours faithfully,

For VIKING LIGHTERAGE AND CARGO HADLERS PVT LTD

Authorised Signatory

22/7/22

Head Off. : "MAITRI BHAWAN", PLOT NO. 18, Sector 8, **GANDHIDHAM** (kutch) Pin - 370 201 (INDIA)
Tel : 91-2836 - 232227, 231586, 220183 Fax No. : 91 - 2836 - 250787, 233924

Monitoring the implemental Safe guards Ministry of Environment & Forests

Regional office (W), Bhopal.

Monitoring Report (Period Dec-21 to May-22)

Part – I

DATA SHEET

1. Project type : River valley/ Mining/Industry/ thermal/nuclear/Other (specify)	Infrastructure and Miscellaneous Projects + CRZ
2. Name of the project	**VIKING LIGHTERAGE AND CARGO HANDLERS PVT LTD**
3. Clearance Letter (s). OM no and date	MoEF, New Delhi vide File No. 10-36/2008 –IA-III dated 2/02/2010 had granted Environmental/ CRZ Clearance to Kandla Port Trust for the subject project. Further, MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	Dist: Kutch State: Gujarat Location: Kandla Port Trust, 23° 0'29.3076"Nand 70°11'14.118"E
5. Address for Correspondence a) address of Concerned Project Chief Engineer(with pin code & telephone/telex/fax numbers b) Address of Executive project Engineer/manager/(with pin code fax numbers)	HEAD OFFICE 'MAITRI BHAVAN'18, sector-8, post box no - 106Gandhidham- Kutch. Gujarat Pin – 370201 Tel : 02836-231588/232227, Fax-02836-233924. ..... Plot no -12,B/h LPG Gas plant ,KK Road Old kandla, Gandhidham- Kutch. Gujarat Pin – 370201
6. Salient features of the project	1. Plot no 12 has been developed for the for Liquid storage Tank farm. 2. The tentative capacity works out for the proposed tank farm is 66,354 Kiloliters (Approx). 3. The liquid storage terminal mainly used for storage of liquid cargo as permitted in CRZ Notification, 2011 and amendment from time to time. 1. Provision of Parking of heavy vehicles and sufficient space for loading / unloading of

b) Salient features of the Environmental management plan	trucks within individual plot limit will be made by us. 2. We will place the detailed on site and off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date. 3. The solid waste will be properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room had already been provided by us during the construction activities. 5. Secure construction practices have been adopted by us in which no any construction spoils take placed. 6. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities. 7. We have already earmarked the area for storage of storm water and same will be re-use for green belt development at the premises of the each plots.
7. Break up of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land & landless labourers/artisen a) SC. ST/Adivasis b) Others (please indicate whether these figures are based on any scientific and systematic survey carried out of only provisionalfigures, if a survey is carried out givedetails and years of survey).	Nil Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference	28.5 CR (8 lacs)
b) Allocation made for environmental management plans with item wise and year wise break-up	2021-2022 Allocation:8 lacs **Expenditure : 2.10 lacs**
c) Benefit cost ratio/Internal rate of Return and	FIRR EIRR

the year of assessment Whether (c) includes the cost of environmental management plans so far. d) Actual expenditure incurred on the project e) Actual expenditure incurred on the environmental management plans so far.	 2.10 lacs
010.Forest land requirement a) The status of approval for diversion of forest land for non-forestry use b) The status of clear felling c) The status of compensatory a forestation, if any d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	Nil Nil- Not related. NIL Nil NIL
11. The status of clear felling in non-forest areas (such as submergence area ofreservoir, approach roads), if anywith quantitative information.	Nil
12. Status of construction a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	October-2016 Work in progress
13. Reasons for the delay if the Project is yet to start	----------
Date of site visited a) The dates on which the project wasmonitored by the regional office onpervious occasion, if any b) The date site visit for this monitoring report	 ---------- ----------

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kachchh .

CRZ Recommendations: Letter No. ENV-10-2008-366-E March9, 2009 of Director (Environment), Forest & Environment Department, GoG. Further, MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of Environmental and CRZ Clearance up to 1/02/2020.

r. o.	Conditions in CRZ Recommendation Letter	Compliances
	Specific Conditions	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued by MoEF, GoI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments / agencies shall be obtained by the KPT before commencing the expansion activities.	We had obtained the EC/CRZ Clearance from the MoEF, GoI on 2/02/2010 and MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020. (Copy placed at **Annexure – A**) Further, we had had obtained NOC/ CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch- 1285/GPCB ID 46364 / dated 28/8/2016 had extended the validity period of NOC up to 5/08/2020. (Copy placed at **Annexure – B**)
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued from time to time.	We will handle only permissible cargo as per the CRZ Notification, 1991 and its amendments issued from time to time.
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	No any ground water have been tapped to meet the water requirements during the construction phase as we have appointed local authority water supplier
5	The Kandla Port Trust shall undertaken roof – top water harvesting in areas wherever it is feasible.	We will undertake the roof – top water harvesting at our premises.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We will contribute towards the cost of any common study that may be carried out for KPT region for environmental protection and management issues.

	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department.	We will incorporate the above mentioned activities and update its Disaster Management Plan at the earliest.
8	The project proponents shall implement all the suggestion/ recommendations given by the NIOT in their Rapid EIA report.	We will implement all the suggestion /recommendation given by the NIOT in their Rapid EIA report.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complying the conditions stipulated by GPCB in Consent to Establish (NOC) and condition mentioned in NOC.
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We will bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department.	We have the developed greenbelt in periphery of terminal area of 353.97 SqMts,.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We are complying all the stipulated by Forest and Environmental Department, GoG from time to time for environmental protection / management purpose.
	General Conditions	
1	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.	No any construction camps had required at Project site because only local peoples / labours involved for the construction activities. As local peoples/labours involved for the construction so there wasn't any need of amenities. No any environmental conditions have been deteriorated by construction labours during the construction activities carried out us.
2	The KPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the District Collector / District Development Officer.	We will contribute financially for talking up to the socio-economic upliftment activity in the region with respective competent authority if applicable to us.
3	A separate budget shall be earmarked for environmental management and socioeconomic activities	A separate budget for environmental protection has been maintained by us. The total Rs. 8 lacs

	and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	Details of above said budget for Environmental Management and socioeconomic activities have been submitted to statutory authorities regularly along with six monthly compliance report. The expenditure form the above said budget is – 2,20,000 lacs
4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	We have appointed GPCB approved Environmental Consultant (which having approved laboratories with standard equipment and facilities, qualified staff) to carry out the Environmental Monitoring during construction and operational phase at our premises.
5	An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.	We have appointed environment consultant and regular monitoring of ambient air,stack,water and noise are done by us time to time.
6	Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.	Compliance mentioned by authorities will be complied by us wherever applicable.
7	Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.	We will comply any other condition that may be stipulated by statutory authorities from time to time for environmental protection / management purpose.

SUBJECT: Point wise compliance report of Environmental / CRZ Clearance for the development of plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat – reg.

MoEF, New Delhi vide File No. 10-36/2008 -IA-III dated 2/02/2010 had granted Environmental/ CRZ Clearance to Kandla Port Trust for the subject project. Further, MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.

SPECIFIC CONDITION		
Construction Phase		
I	All the conditions stipulated by Govt. of Gujarat vide letter no. ENV – 110 – 2008 – 366 – E dated 09.03.2009 and Gujarat Pollution Control Board vides letter No.PC/NOC/CCA-Kutch-78 (2)/GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 9/03/2009 is enclosed as **Annexure – A.** Further, GPCB vide letter dated 28/08/2015 had extended the validity period of NOC/ CTE up to 5/08/2020. Accordingly, Compliance report of NOC/CTE granted by GPCB on 28/08/2015 is enclosed as **Annexure – B.**
II	The entire water supply shall be managed by the Port. Waste water will be treated and utilized.	We have arranged the local authority to fulfill our water requirement at our premises. Waste water will be treated and utilized for greenbelt development
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading /unloading of trucks within the Port complex.	Provision of Parking of heavy vehicles and sufficient space for loading / unloading of trucks within our premises is provided.
IV	The proponent shall put in place the detailed on site and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also.	The detailed on site and off site emergency management plan as per the Manufacture, Storage and Import of Hazardous chemical Rules 1989,as amended to date had been prepared and submitted.
V	The proponent shall put in place the Oil Spill Contingency Plan.	We have provided dyke wall to the tank farm from oil spillage will run to oil water separator and collected in to it.
VI	The proponent shall strictly comply the measures proposed as per their letter No EG/WK/4684/EC/388, dated 01.12.2009.	We will strictly comply the measures proposed as per the letter No EG/WK/4684/EC/388, dated 01.12.2009
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991.	The FSI on the plot will be done as per CRZ notification 1991
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent Authority prior to	We have arranged the local authority to fulfill our water requirement at our premises. So there wasn't any drawl from ground surface.

	construction /operation of the project.	
	Sewage Treatment facilities should be provided in accordance with the CRZ notification.	We have provided soak pit /septic tank for sewage water.
	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and Handling) Rules, 2000.	No solid waste is generated .Generated waste is semi-solid which is sent by us to TSDF site.
Xi	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP, safe drinking water medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the project.	There are no any labor camp required as local public/ labor mainly engaged for construction activities. Only container cabins / offices and temporary housing structure have been placed which will be removed after completion of projects.
Xii	A first Aid Room will be provided in the project both during construction and operation of the project.	A first Aid Room had already been provided by us during the construction activities. Further, same is provided in the operation phase by us.
xiii	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	No excavation is required during construction activities.
Xiv	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval sites with the approval of competent authority.	No any neighboring communities located at project site. Further, construction waste will be disposed off as per the construction and demolition Rule, 2016 by us.
Xv	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Soil test was done at the site before construction and the site found to be ok.
xvi	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Secure construction practices have been adopted by us in which no any construction spoils take placed.
xvii	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	None of the hazardous waste is generated during construction phase.
xviii	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	DG set installed is operated as per the guideline of CPCB.
xix	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to Environmental (Protection) Rules prescribed for air and noise emission standards.	The diesel which we will use for diesel generator during construction phase is low in sulphur content conforming Environmental Rule prescribed for air and noise emission standard.
xx	The diesel required for operation DG sets shall	The diesel required for operation of DG is stored as

	be stored in underground tanks and if required clearance from Chief Controller of Explosives shall be taken	per rules
xxiv	Vehicles hired for bringing construction materials to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non peak hours	We had only hired those Vehicles having valid pollution under control license granted by statutory authorities Project area is connected with national highway. So transporting activities have been carried out only at day time by us
xxv	Ambient noise levels should conform to residential standards both during day and night	Ambient and noise level are conforming the residential standards report are attached
	Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase	If there is any incremental pollution load will be closely monitored during construction phase
	Adequate measures should be made to reduce ambient air and noise level during construction phase so as to confirm to the stipulated standards by CPCB/SPCB	We will take adequate measure to reduce ambient air and noise level during construction phase
xxvii	Storm water control and its re use as per CPWD and ISI standards for various applications	We have already earmarked the area for storage of storm water and same will be re using for green belt development at the premises of the plot
xxviii	Water demand during construction should be reduced by use of pre mixed concrete, curing agents and other best practices referred	We had reduced water demand during construction by use of pre mixed concrete, curing agents and other best practices referred
xxix	The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipments, etc as per National Building Code including protection measures from lightning etc.	We had obtain the approval of competent authority for structural safety of the building due to earthquake, adequacy of fire fighting equipments etc. Where ever required
xxx	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	We had appointed a site inspection team for regular supervision of construction activities carried out by us.
xxxi	Under the provisions of Environmental (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found the construction of the project has been started without obtaining environmental clearance	We had started construction activities only after obtained the necessary clearance from statutory authority's i.e. EC/ CRZ Clearance from MoEF&CC, New Delhi, and CRZ Recommendation from Forest & Environment Department, GoG and NOC / CTE from GPCB, GoG.
II. Operation Phase		
i	The installation of the Sewage Treatment Plant (STP), if any, should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation.	We have provided soak pit/septic tank for the disposal of sewage water.
	Treated effluent emanating from STP shall be recycled /reused to the maximum extent	We will reuse treated water to the maximum extent possible for development of greenbelt area.

	possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall confirm to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP	As we are only edible oil storage firm we haven't any effluent generated. We will take adequate measure to mitigate the odour problem from septic /s soak pit tank
ii	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and confirm to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with Gujarat Pollution Control Board.	We will adopt best practices to use of Diesel power generating sets and to rules made under the Environment (Protection) Act, 1986. We had place the DG sets with considering the location, fuel type and the height of the DG sets after approval of / consulting with GPCB.
iii	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	We will ensure that Noise level should be in prescribed standard. Further, We have appointed GPCB approved Environmental Consultant for carrying out Environmental Monitoring at our premises as per the norms.
iv	The greenbelt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We had developed Greenbelt area @353.97 Sqmts at periphery area of plot.
v	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area during the monsoon period.	We had already provided the area for weep holes in the compound walls to ensure natural drainage of rainwater in the catchment area during the monsoon period.
vi	Rain water harvesting for roof run -off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground table.	Rain water harvesting for roof run-off will be implemented.
vii	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	No ground water is extracted by us.
viii	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	Adequate parking places will be provided by us at our premises premises to avoid the traffic congestion near the entry and exit point.
ix	Effort may be made to use solar energy to the maximum extent possible.	We have provided vent and open areas to use solar energy to the maximum extent possible. Further we

		have prepared solar management plan for better use of solar energy.
	Adequate measures should taken to prevent odour problem from solid waste processing plant and STP.	Adequate measures will be taken by us to prevent odour problems from septic/soak pit tank.
General Conditions		
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously confirming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat.	We had constructed the structures as per the approved plan by Kandla Port Trust (statutory authority of Kandla Port Trust, Ministry of Shipping is approving the construction plan). Further, we had constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department, GoG on 9/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests.	We will make fresh reference to the MoEF&CC, GoI in the event of any change in the project profile.
III	This Ministry reserves the right to revoke the clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Agree with the ministry
IV	This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Agree with the competent authorities.
V	Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protection activities.	We will provide full support to officials of GPCB, GPCB Approved Schedule – I Environmental auditors, etc during their visit at Project site.
8.	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and control of Pollution) Act 1981, the environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000, including the amendments and rules made thereafter.	The Above mentioned Stipulations will strictly followed by us under the water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act 1986, the Hazardous Chemicals (Manufactures, storage and Import) Rules, 1989, the Coastal Regulation Zone Notification, 1991 and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made there under from time to time.
9.	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as	All the statutory clearance such as the approvals for storage of diesel from chief controller of Explosive ,Fire Department ,civil Aviation department and other respective competent authority will be obtain by us.

	applicable by project proponents from the respective competent authorities.	
	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. the advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhopal.	We will advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. We will make advertise in two news papers
11.	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	We will carry out the construction / operation activities as per the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004. (wherever applicable)
12.	Any appeal against this clearance shall lie with the National Environmental Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997.	Point Noted.
13.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	N/A
14.	The Proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance, CRZ Recommendation and NOC/ CTE as applicable to us We are monitoring the pollutant like SPM, RSPM, SO2, NOx will be done and same will be displayed at a convenient location near the main gate of the company in the public domain
15.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of	We will submit the compliance report as wherever applicable.

	monitoring data (both in hard copies as well as by email) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	
16	The environmental statement for each financial year ending 31st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of MoEF by e – Mail.	The environmental statement for each financial year ending 31st march in FORM-V will be submitted to the Honorable state pollution control board as prescribed under the Environment (Protection) Rule 1986.

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla,Kandla Port Trust, District Kachchh

Gujarat Pollution Control Board vide letter no PC/NOC/CCA Kutch 78(2)/GPCB ID 17832/14401dated 13/07/2009 had granted NOC /CTE to KPT for the subject project. Further, GPCB vide letter no GPCB/CCA KUTCH 12BS/ GPCB 10 46364 dated 28/08/2015 had extended the validity period of NOC/ CTE up to 5/08/2020.

Sr. No.	Conditions	Compliances
1	**Specific Conditions**	
1	Unit shall not start any construction activities till extending the validity of EC & CRZ from Competent authority.	Construction activities have been started only after extending the validity of EC and CRZ Clearance from MoEF & CC, New Delhi (MoEF&CC, New Delhi vide letter no F. No. 10 - 36/ 2008 - IA.III dated 18/08/2015 had already extended the validity period for Environmental and CRZ Clearance up to 1.02.2020.)
2	No Ground water shall be used for the project coming under dark zone without permission of competent authority.	We are using local approved water supplier for our water requirement.
3	Unit shall strictly adhere to CRZand ECcondition no 2 that "Expected liquid cargo traffic projectionis of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products,Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid CargoStorage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and POLand Acid of 472 tankswith 12,08,369 Kl. The tentative tankage capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We will strictly adhere the Environmental and CRZ Clearance conditions no. 2. Necessary permission will be obtained by us in case of storage of additional quantity.
4	Unit shall strictly adhere to all condition of EC &CRZ issued by MoEF vide letter No-F. No. 10-36/200B-IA-11Idated 02/02/2010 for old Kandla.	We are strictly complying the conditions stipulated in Environment and CRZ clearance granted by MoEF&CC, New Delhi on 2/02/2010 and validity extended on 18/08/2015.
5	You shall have to obtain Consent to Operate	We had obtained the CCA from Gujarat

<table>
<tr><td></td><td>from Gujarat Pollution Control Board before commencing any activities.</td><td>Pollution Control Board.</td></tr>
<tr><td>6</td><td>Applicant is required to comply with provision of Manufacturing, Storage and Import of HazardousChemicals Rules-1989 framed under the Environment (Protection) Act-1986.</td><td>We are strictly complying with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.</td></tr>
<tr><td>2.</td><td colspan="2">Conditions Under Water Act 1974:</td></tr>
<tr><td>2.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillaryindustrial operations.</td><td>N/A as we are only for storage of liquid cargo.</td></tr>
<tr><td>2.2</td><td>The quantity of domestic waste water (Sewage) shall not exceed 4.5 KL/Day</td><td>Noted</td></tr>
<tr><td>2.3</td><td>Sewage shall be disposed of through septic tank/soak pit system.</td><td>We are disposing the sewage through septic tank/soak pit system.</td></tr>
<tr><td>2.4</td><td>The unit shall install flow meters at utilities for measuring category wise (category as given in water – cess act – 1977 Schedule II) consumption of water.</td><td>We will install flow meters wherever applicable</td></tr>
<tr><td>2.5</td><td>Domestic effluent shall be disposed off through septic tank / soak pit system confirm to the following standards.
<table>
<tr><th>Parameters</th><th>Permissible Limit</th></tr>
<tr><td>BOD (5 days at 20^0 C)</td><td>30mg/lit</td></tr>
<tr><td>Suspended Solid</td><td>20mg/lit</td></tr>
<tr><td>Residual Chlorine</td><td>Minimum 0.5 mg/lit</td></tr>
</table></td><td>Noted.</td></tr>
<tr><td>3</td><td colspan="2">Conditions under air act 1981:</td></tr>
<tr><td>3.1</td><td>There shall be no use of fuel; hence there is no flue gas emission from manufacturing activities and other ancillary operations.</td><td>We are not going to use any fuel as this project is only for storage of Liquid cargo. Hence, there is no any flue gas emission generation.</td></tr>
<tr><td>3.2</td><td>There shall be no process gas emission from manufacturing and other ancillary activities.</td><td>We are not using any fuel as this project is only for storage of Liquid cargo. Hence, there is no any gas emission generation.</td></tr>
<tr><td>3.3</td><td>The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009.
<table>
<tr><th>Parameters</th><th>Time Weighted Average</th><th>Concentration in Ambient air in µg/M^3</th></tr>
</table></td><td>Noted and report are attached.</td></tr>
</table>

	Sulphur Dioxide (SO_2)	Annual	50	
		24 Hours	80	
	Nitrogen Dioxide (NO_2)	Annual	40	
		24 Hours	80	
	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual	60	
		24 Hours	100	
	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual	40	
		24 Hours	60	
3.4	The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels: Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A)			Noted and reports are attached.
4	**Conditions under Hazardous waste :**			
4.1	The applicant shall provide temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.			We have provided the temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.
5	**General Condition:**			
5.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.			We will intimate to GPCB, GoG if there are any change in personnel, equipment or working condition as mentioned in the consents form / order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehendedto occur in excess of standards laid down such information shall be forthwith reported to Board,concerned Police Station, Office of Directorate of Health Service, Department of Explosives,Inspectorate of Factories and local body. In case of failure of pollution control equipment, the production process connected to it shall be stopped.			We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehendedto occurring in excess of standards at their premises. In case of failure of Pollution control equipment, we will stop the storage activities connected with the pollution control equipment. We will take necessary actions /

	Remedial actions/measures shall be implemented immediately to bring entire situation normal.	measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.	We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our premises. Further, Monitoring report will be submitted to GPCB regularly during the operation phase.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We have appointed GPCB approved Environmental Consultant (which having approved laboratories with standard equipment and facilities, qualified staff) to carry out the Environmental Monitoring during construction and operational phase at our own premises. GPCB approved Environmental Consultant (appointed by Successful plot allottees) will directly report to the Chief Executive of the organization for internalizing environmental issues. GPCB approved Environmental Consultant (appointed by Successful plot allottees) will also coordinate the exercise of environmental audit and preparation of environmental statements.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.	We will submit the environmental statements pertaining the previous year to the state board.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Agree with the Gujarat Pollution Control Board, GoG for review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.
5.7	In Case of change of ownership/management the name and address of new owners/partners/directors/proprietor should	We will intimate to GPCB, GoG immediately in case of change of ownership/management the name and

	immediately be intimated to the Board.	address of new owners/partners/directors/proprietor.
5.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.	We have obtained TSDF membership for collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal of waste generated at our own premises.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.	We will maintain the records for waste generation and its management. We will submit the Annual returns to GPCB in prescribed form within stipulated time period.
5.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We will get all the necessary insurance policy including the"Public Liability Insurance Act – 91".
5.11	Unit shall take all concrete measures to show tangible results in waste generation,reduction,avoidance, reuse and recycle.Action taken in this regards shall be submitted within three months and also along with Form-4.	We have adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form.
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous ChemicalsRules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complying with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.6S7 of 199s-dated 14th October-2003.	We will display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.6S7 of 199s-dated 14th October-2003.
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We will display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within their own premise.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling,Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We will submit a copy of onsite emergency plan as required under the rule 13 and 14 of the handling, Manufacture, storage and Import of the Hazardous chemicals Rules 1989 to the GPCB,GOG.

VIKING LIGHTERAGE AND CARGO HANDLERS PVT LTD

OIL SPILL CONTIGENCY PLAN

M/s. **VIKING LIGHTERAGE AND CARGO HANDLERS PVT LTD** is situated Plot No-12 behind LPG terminal K.K road Old kandla .Main activity of installation is to receive, store and dispatch of edible oil to meet the requirement of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution, process on stored product is carried out at site

Objective:

- To provide oil spill response preparedness in line.
- To develop a plan which can guide us to compact oil spill incident effectively.

Oil Spill contingency plan

- Sources and expected quantity of oil spill
  - Flow line/hose /arms
  - Main oil line
  - From coupling
  - Valve /blinds
  - Flange joints
  - Swivel joints
  - From tank lorry leakage
  - Identify the characteristic of spillage oil.

VIKING LIGHTERAGE AND CARGO HANDLERS PVT LTD

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  - Flow line/hose /arms
  - Main oil line
  - From coupling
  - Valve /blinds
  - Flange joints
  - Swivel joints
  - From tank lorry leakage
  - ➢ Identify the characteristic of spillage oil.

Procedure for spillage at tank lorry filing station(gantry) & pump house

- As soon as spillage takes place, loading is to be stopped at once by shutting off the pump and closing the valves.
- Communicate incident to higher authorities and F&S department.
- Spilled product being a fluid will spread out in the surrounding areas. First and for-most task is to arrest the spread of spilled material.
- Simultaneously cordon off the area with the help of Fire& safety personnel.
- Ensure that no vehicle standing in the vicinity of spilled area attempt to start as the spark so generated may lead to catastrophic incident.
- Minimum working staff wearing proper PPE only is allowed to collect the spilled product in empty drums. The remaining product which is not possible to be retrieved is to be soaked by proper absorbent/sand (Dolamite).
- Collect spillages in drum in liquid form and absorbent soaked product in solid form are placed at designated area and later to be disposed through authorized vendor

Procedure for transfer of product from leaky tank & dyke wall

- Any storage tank if suffers major leakage needs immediate transfer of hold up product and spilled out product spread inside the dyke wall area to nearby empty tank.

The product spilled out of the tank is accumulated inside the dyke wall and to be transferred to adjoining empty tank by following steps:--

- The area around the leaking tank is to be isolated by proper barricading and sign mark to debar external persons.
- Only authorized persons with proper PPE are allowed to attend the job.
- Put trolley mounted portable pump, hoses and fittings near the leaky tank.
- Hoses are dipped in the pool of product inside the dyke wall and one end is connected to the suction of the pump, while discharge of pump is connected to internal pipe line through hoses to adjacent empty tank earmarked to receive the leaked product.
- All valves of adjacent tank remain closed except the one through which potable pump discharge is connected.
- Internal pipeline with appropriate reducer is used to connect leaky tank and empty tank.
- Trolley mounted pump is fitted with flameproof fittings .
- The pump is started to transfer entire product from dyke wall area of leaky tank to adjacent empty tank as fast as possible.
- Once the entire product (hold up as well as dyke wall) from leaky tank is transferred to the adjacent empty tank, the tank cleaned, inspected and put to repair as required.

M/s. **VIKING LIGHTERAGE AND CARGO HANDLERS PVT LTD** is situated on Plot No-12 behind LPG Terminal K.K road Old kandla.Main activity of installation is to receive, store and dispatch of edible oil to meet the requirement of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution, process on stored product is carried out at site

TRAFFIC MANAGEMENT SYSTEM

- Security shall maintain a log of all personnel vehicles within the depot premises at any point of time.
- All the vehicles are thoroughly checked before entry as per checklist at the security gate.
- Security staff is present for controlling of traffic around the terminal
- Roads inside the hazardous area of installation shall be restricted.
- Vehicles required for operational, maintenance and safety/security reasons are allowed only with proper safety fittings and authorization from location in-charge/designated safety officer.
- The emergency gate is away from the main gate for evacuation of vehicles and personnel.
- Emergency gate always be kept free from obstruction in emergency.
- Congestion of parking is avoided with effective planning.

- Proper ground surface is provided.
- Proper illumination is ensured at all places.
- Speed is limited to 10 km in the terminal
- Proper training and awareness to the truck operators
- Zebra lines are provided at Tanker loading unloading area (gantry)
- Proper safe distance maintained between the adjoining vehicles at parking.
- In case of fire /emergency siren the loading will be stopped and tts at the parking are routed to emergency gate.
- Tanklorrys loading at loading point following action will be taken Loading hose, wheel chockes, and erthing clamp will be routed to emergency gate.

- In case of blockage of one route all the vehicles are evacuated to other route.
- In case of emergency well trained and proper evacuation procedure adopted.

Envisafe
Environment Consultancy & Laboratory
Ref.: EEC/LAB/AMB/21-22/041208

4th December, 2021

TEST REPORT

Name & Address of Client	:	**M/s. Viking Ltd & Cargo Handlers Ltd** Plot no-12,Nr. IOCL(LPG)Terminal kandla, Tal: gandhidham-370201, Dist Kutch East			
Date & Time Of Sampling	:	26/11/2021; 12:40 pm	Sample collected By	:	EEC Team
Date of Receipt of Sample	:	27/11/2021	Analysis Starting Date	:	29/11/2021
Description Of Sample	:	Ambient Air (Nr. Main Gate)	Analysis Completion Date	:	03/12/2021

MONITORING DATA:

Wind Direction	:	NE to SW
Duration of Sampling	:	24 Hrs
Ambient Temperature	:	30°C

RESULT TABLE:

Parameter	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM_{10}	IS:5182 (Part - XXIII) 2006	21-11/97/PM_{10}	$\mu g/m^3$	97.8	100
$PM_{2.5}$	Gravimetric Method	21-11/97/$PM_{2.5}$	$\mu g/m^3$	58.1	60
SO_x	IS: 5182 (Part- II) 2001	21-11/97/SO_x	$\mu g/m^3$	22.6	80
NO_x	IS: 5182 (Part- VI) 2006	21-11/97/NO_x	$\mu g/m^3$	21.2	80

For,Envisafe Environment Consultants,

Authorized Signatory

----------End of Test Report----------

This Report is issued under the following terms & conditions:

1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including, temperature, humidity, pressure, retention time etc.
3. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of Laboratory Department, Envisafe Environment Consultants
4. Samples will be retained for a period of Fifteen (15) days after completion of the analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all the analysis and test result of sample(s) collected by us / supplied by customer and not reveal to third party unless required by the statutory or legal requirement.

Complex, B/s. Suvidha Shopping Centre,
Paldi, Ahmedabad-380 007. Gujarat, INDIA.
2665 0878, 2665 0473 E-mail : envisafe@gmail.com

Envisafe

Consultancy & Laboratory

Ref.: EEC/LAB/AMB/21-22/041209

4th December, 2021
Page 1 of 1

TEST REPORT

Name & Address of Client	: **M/s. Viking Ltd & Cargo Handlers Ltd** Plot no-12,Nr. IOCL(LPG)Terminal kandla, Tal: gandhidham-370201, Dist Kutch East		
Date & Time Of Sampling	: 26/11/2021; 12:59 pm	Sample collected By	: EEC Team
Date of Receipt of Sample	: 27/11/2021	Analysis Starting Date	: 29/11/2021
Description Of Sample	: Ambient Air Nr. Admin area	Analysis Completion Date	: 03/12/2021

MONITORING DATA:

Wind Direction	:	NE to SW
Duration of Sampling	:	24 Hrs
Ambient Temperature	:	30°C

RESULT TABLE:

Parameter	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM_{10}	IS:5182 (Part - XXIII) 2006	21-11/98/PM_{10}	$\mu g/m^3$	95.2	100
$PM_{2.5}$	Gravimetric Method	21-11/98/$PM_{2.5}$	$\mu g/m^3$	49.5	60
SO_x	IS: 5182 (Part- II) 2001	21-11/98/SO_x	$\mu g/m^3$	19.1	80
NO_x	IS: 5182 (Part- VI) 2006	21-11/98/NO_x	$\mu g/m^3$	21.2	80

For,Envisafe Environment Consultants,

Authorized Signatory

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Ref.: EEC/LAB/AMB/21-22/041210

4th December, 2021

TEST REPORT

Name & Address of Client	: **M/s. Viking Ltd & Cargo Handlers Ltd** Plot no-12,Nr. IOCL(LPG)Terminal kandla, Tal: gandhidham-370201, Dist Kutch East		
Date & Time Of Sampling	: 26/11/2021; 01:10pm	Sample collected By	: EEC Team
Date of Receipt of Sample	: 27/11/2021	Analysis Starting Date	: 29/11/2021
Description Of Sample	: Ambient Air Nr. Fire Pump Room	Analysis Completion Date	: 03/12/2021

MONITORING DATA:

Wind Direction	:	NE to SW
Duration of Sampling	:	24 Hrs
Ambient Temperature	:	30°C

RESULT TABLE:

Parameter	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM_{10}	IS:5182 (Part - XXIII) 2006	21-11/99/PM_{10}	$\mu g/m^3$	98.9	100
$PM_{2.5}$	Gravimetric Method	21-11/99/$PM_{2.5}$	$\mu g/m^3$	56.2	60
SO_2	IS: 5182 (Part- II) 2001	21-11/99/SO_2	$\mu g/m^3$	22.0	80
NO_2	IS: 5182 (Part- VI) 2006	21-11/99/NO_2	$\mu g/m^3$	21.9	80

For, Envisafe Environment Consultants,

Authorized Signatory

End of Test Report

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Envisafe Environment Consultants
Laboratory

Ref: EEC/LAB/STK/21-22/041217

4th December, 2021
Page 1 of 1

TEST REPORT

Name & Address of Client	:	**M/s. Viking Lighterage And Cargo Handlers Pvt. Ltd.,** Plot no-12, Nr. IOCL (LPG) Terminal kandla, Tal: Gandhidham-370201, Dist Kutch.	
Date & Time Of Sampling	:	26/11/2021; 09:40am	Sample collected By :-EEC Team
Date of Receipt of Sample	:	27/11/2021	Analysis Starting Date : 29/11/2021
Description Of Sample	:	Stack attached to D.G.Set	Analysis Completion Date : 03/12/2021

MONITORING DATA:

Fuel Used	:	Diesel
Stack Height (Meter)	:	3.0
Ambient Temperature (°C)	:	32
Temperature of Stack Gas (°C)	:	102
Manometer Reading (mm)	:	1.6
Average Velocity of Stack Gas (m/Sec)	:	4.77
Duration of Sampling (Minutes)	:	60
Volume of Gas Sampled (Nm^3)	:	0.794

RESULT TABLE:

Parameters	Reference Method	Lab ID Code	Unit	Result	GPCB Limit
PM	IS: 11255 (Part-I) 1985	21-11/96/PM	mg/Nm^3	52.7	150
SO_2	IS: 11255 (Part-II) 1985	21-11/96/SOx	ppm	21.1	100
NOx	IS: 11255 (Part-VII) 2005	21-11/96/NOx	ppm	11.8	50

For, Envisafe Environment Consultants,

Authorized Signatory

----------End of Test Report----------

This Report is issued under the following terms & conditions:

1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including, temperature, humidity, pressure, retention time etc.
3. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of Laboratory Department, Envisafe Environment Consultants.
4. Samples will be retained for a period of fifteen (15) days after completion of the analysis. Longer retention periods can be arranged, on request of the customer.
5. We strictly maintain the confidentiality of all the analysis and test result of sample(s) collected by us / supplied by customer and not reveal to third party unless required by the statutory or legal requirement.

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Envisafe
Environmental Consultants
Environmental Consultancy & Laboratory

Ref.: EEC/LAB/NSL/21-22/041209

4th Dec,2021

TEST REPORT

Name & Address of Client	:	**M/s. Viking Ltd & Cargo Handlers Ltd** Plot no-12,Nr. IOCL(LPG)Terminal kandla, Tal: Gandhidham-370201, Dist Kutch East
Date & Time Of Monitoring	:	26/11/2021; **Day Time** 04:30 pm to 04:45 pm
Mode of Sampling	:	Grab
Monitoring done by	:	EEC
Measuring Condition	:	**Type - 2 SLM** Frequency Weighing: Network – A Time Weighing: Slow

RESULT TABLE:

Sr. No.	Location	Noise Level, db (A)		
		Min	Max	MoEF/Factory Act Std
1.	Nr Admin Area	62.5	77.4	75 (Ambient Air)
2.	Nr Gantry Area	73.9	83.5	75 (Ambient Air)
3.	Nr D G Set	78.4	82.1	75 (Ambient Air)
4.	Nr Office	66.4	73.7	75 (Ambient Air)

Ambient Noise Standard: Day time shall mean from 6.00 a.m. to 10.00 p.m.
Reference Method: IS9989:1981 Assessment of Noise with Respect to Community Response.

For, Envisafe Environment Consultants,

Authorized Signatory

End of Test Report

This Report is issued under the following terms & conditions:
1. The results shown in this test report may differ based on various factors including, temperature, humidity, pressure, etc.
2. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of Laboratory Department, Envisafe Environment Consultants.
3. We strictly maintain the confidentiality of all the monitoring result and not reveal to third party unless required by the statutory or legal requirement.

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Envisafe
Environment Consultants
Environmental Consultancy & Laboratory

Ref : EEC/LAB/NSL/21-22/041210

4th Dec, 2021

TEST REPORT

Name & Address of Client	:	**M/s. Viking Ltd & Cargo Handlers Ltd** Plot no-12,Nr. IOCL(LPG)Terminal kandla, Tal: Gandhidham-370201, Dist Kutch East
Date & Time Of Monitoring	:	26/11/2021; **Night Time** 10:30 pm to 10:50 pm
Mode of Sampling	:	Grab
Monitoring done by	:	EEC
Measuring Condition	:	**Type - 2 SLM** Frequency Weighing: Network – A Time Weighing: Slow

RESULT TABLE:

Sr. No.	Location	Noise Level, db (A)		
		Min	Max	MoEF/Factory Act Std
1.	Nr Admin Area	61.2	75.1	75 (Ambient Air)
2.	Nr Gantry Area	70.5	73.4	75 (Ambient Air)
3.	Nr D G Set	61.8	72.4	75 (Ambient Air)
4.	Nr Office	62.4	71.0	75 (Ambient Air)

Ambient Noise Standard: Night time shall mean from 10.00 p.m. to 6.00 a.m.
Reference Method: IS9989:1981 Assessment of Noise with Respect to Community Response.

For, Envisafe Environment Consultants,

Authorized Signatory

----------**End of Test Report**----------

This Report is issued under the following terms & conditions:

1. The results shown in this test report may differ based on various factors including, temperature, humidity, pressure, etc.
2. The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of Laboratory Department, Envisafe Environment Consultants.
3. We strictly maintain the confidentiality of all the monitoring result and not reveal to third party unless required by the statutory or legal requirement.

Sunshine Liquid
STORAGE PVT LTD

Ref. No. CMP/SLSPL/2022/07

Date: 16/07/2022

To, SE (Land)
Environment Management Cell,
DEENDAYAL PORT AUTHORITY,
Administrative Office,
PB No. 50, Gandhidham (Kutch),
Gujarat - 370201,

Sub. : Submission of Six Monthly Compliance Report of Environmental/CRZ Clearance, CRZ Recommendation and NOC/ CTE granted by GPCB. (Compliance Report for the Period of **December-2021 to May-2022**).

Ref.: EC/CRZ issued vide letter no. : **F. No. 10-36/2008-IA-III** dated **02/02/2010**.

Dear Sir,

We are setting up Edible Oil Storage Terminal at Plot No. 18.

Accordingly, please find enclosed here with point wise compliance report of the stipulated condition in EC/CRZ Clearance. (Encl. as **Annexure - A**)

Also here we have enclosed the detail Compliance Report of CRZ Recommendation as **Annexure-B**, detailed Compliance Report of Consent to Establish (NOC) as **Annexure-C**, Monitoring Data Sheet as **Annexure-D**, and Approved Competition Drawing with Greenbelt area as **Annexure-F** and Environment Monitoring Reports for the period of **December-2021 to March-2022** (Encl. as **Annexure - G**).

We hope the above is in line with your requirements.

Thanking you
Yours sincerely,
M/s. SUNSHINE LIQUID STORAGE PVT. LTD.,

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

Authorized Signatory

20/7/22

Manager (Env)/Sh. Pandya
EMC

805
20/07/2022

Plot # 18,
Nr. IOCL LPG Plant,
Kandla, Gujarat.

+91-2836-236699
+91-2836-233790
sunshineliquid1@gmail.com

Annexure - A

COMPLIANCE STATUS REPORT OF EC

EC Issued vide letter No. F. No. 10-36/2008 – IA-III dated 2ndFebruary 2010

Extension of validity of EC issued Vide Letter No. F. No. 10-36/2008– IA-III dated 18th August, 2015

NO.	BRIEF DESCRIPTION	COMPLIANCE REPORT
6	**Specific conditions :**	
A	**Construction Phase :**	
I	All the conditions stipulated by the Govt. of Gujarat vide letter No. ENV -10-2008-366-E, dated 09.03.2009 and Gujarat Pollution Control Board vide letter No. PC/NOC/CCA-Kutch-78(2) GPCB ID 17832/14401, dated 13.07.2009,	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009 is enclosed as **Annexure B.** Further, Compliance report of NOC/CTE granted by GPCB (Valid up to 05/08/2020) is enclosed as **Annexure C.**
II	The entire water supply shall be managed by the port; waste water will be treated and utilized.	We have commenced business activities and buy water from nearby water suppliers. Additionally, no effluent is produced during the construction process.
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading/unloading of trucks within the port complex.	We have set aside enough space within the premises for vehicle parking as well as for loading and unloading cargo.
IV	The proponent shall put in the place the detailed on site and off site emergency Management Plan as per the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, as amended to date which may cover the natural disasters also.	We have already developed a working on-site and off-site emergency management plan in accordance with the Hazardous Chemicals Manufacture, Storage, and Import Rules, 1989, as revised to date, which may also cover natural calamities.
V	The proponent shall put in the place the Oil Spill Contingency Plan.	We have prepared the Oil Spill Contingency Plan and follow the same.
VI	The proponent shall strictly comply the measures proposed as per their letter No. EG/WK/4684/EC/388, dated 01.12.2009	Not Applicable as we are only edible oil storage Terminal.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991	We are done the FSI at plot No. 19 as per the CRZ Notification 1991 and as amended from time to time.
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent authority prior to construction/operation of the project.	Instead of extracting water from the ground, we will buy it from nearby water suppliers.
IX	Sewage Treatment facility should be provided in accordance with the CRZ notification.	Domestic Waste water disposed through septic tank/Soak pit system accordance with the CRZ notification.
X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and handling) Rules, 2000.	The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016.
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure	There is no any labor camp required as local public/labor mainly engaged for

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	and facilities such as fuel for cooking, mobile toilets, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	construction activities and Now we have started commercial operation.
XII	A first aid room will be provided in the project both during the construction and operation of the project.	We have provided the first aid room during construction phase as well as during operation phase.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	The whole topsoil removed after excavation was conserved and used for landscaping and greenbelt construction inside the plot's limits.
XIV	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	There are no nearby communities around the project site, and no negative effects were created during the development phase. In addition, the construction trash was disposed of in accordance with the construction and demolition Rules, 2016, and now we have started commercial operation.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	The quality of ground water was found to be unaffected by the leaching of heavy metals and other dangerous pollutants after thorough testing of soil and ground water samples.
XVI	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Secure construction practices was adopted by us during construction phase in which no any construction spoils take place.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	We had disposed off our hazardous waste During construction as per Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016. At our unit we are disposing the hazardous waste by sending it to TSDF site, Incineration site and by sending to registered recyclers as per characteristic of hazardous waste. **Please refer Annexure-E.**
XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We have installing and operating the DG sets as per the requirement and as per the guidelines of GPCB/CPCB.
XIX	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	We are operating the D. G. sets as per the requirement and as per the guidelines of GPCB / CPCB.
XX	The diesel required for operating DG Sets shall be stored in underground tanks and if required, clearance from chief controller of explosives shall be taken.	Diesel required for the operation of DG has been stored as per rules.
XXI	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should	Only rented vehicles that have been granted a valid pollution control licence by the relevant authorities are used by us. Transportation activities have been

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

	be operated only during non-peak hours.	restricted to the daytime hours due to the project area's connection to a national highway. We've started doing business now.
XXII	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/GPCB	We have monitored the ambient air and noise level on regular basis and the ambient and noise level is confirming the residential standards and the report is attached as **Annexure-G**, We have taken the adequate measures to reduce ambient air and noise level during construction phase.
XXIII	Storm water control and its re-use as per CGWB and BIS standards for various applications.	We have constructed the Rain Water Harvesting system as per drawing submitted to DPA.
XXIV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	By using pre-mixed concrete, curing agents, preventing losses from leaks and spills, and other best practises for construction and related operations, we have decreased the water demand during construction..
XXV	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of firefighting equipment's, etc. as per National Building Code including protection measures from lightening etc.	We have Already obtained the necessary clearances from DPA and maintained the same as per the norms at premises.
XXVI	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Noted. DPA is having dedicated EMC for regular supervision for environmental parameters. However, we are also having our dedicated team for compliance of Environmental conditions including monitoring.
XXVII	Under the provisions of the Environment protection Act 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	We had started construction activities after obtained the necessary clearance from statutory authorities i.e. EC/CRZ Clearance from MoEF&CC. New Delhi, CRZ Recommendation from Forest & Environment Department, GOG and NOC/CTE from GPCB, GOG.
B. OPERATION PHASE		
I	The installation of the Sewage Treatment Plant (STP) if any should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	For sewage treatment and disposal, we have provided septic tanks and soak pits. If any STPs are erected, the Ministry will be notified and given the relevant information.
II	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during	In accordance with the regulations established by the Environment

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	operation phase should be enclosed type and conform to the rules under the Environment (Protection) Act, 1986. The height of stack of DG sets, Use of low Sulphur diesel. The location of the DG Sets may be decided with in consultation with Gujarat Pollution Control Board.	(Protection) Act of 1986, we have adopted best practises for using diesel power generating units. According to the CTE/CCA obtained from the Board, we have provided the stack height for the DG sets.
III	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	The noise level confirming the standards and we have appointed Environmental consultant for carrying out Environmental Monitoring at our own premises as per the norms. We have attached the noise level monitoring Report as **Annexure-G.**
IV	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	The space around the edges of the plots has already been set aside for the establishment of a greenbelt. An about 250 square metre area has been set aside for a greenbelt. Enclosed herewith approved drawing in **Annexure-F.**
V	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	During the monsoon season, we have installed weep holes in the compound walls to ensure natural rainwater drainage in the catchment region.
VI	Rain water harvesting for roof run-off and surface rum-off, as plan submitted should be implemented, before recharging the surface run-off, pretreatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground water table.	We have constructed the Rain water harvesting for roof run-off at our premises.
VII	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	In cooperation with the Central Ground Water Authority, we have been checking up on the quantity and quality of ground water.
VII	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	We have created a Traffic Management Plan for the facility and installed it, as well as enough parking places, to lessen traffic congestion near the entry and departure points.
IX	Efforts may be made to use solar energy to the maximum extent possible.	We have prepared and submitted the Solar Energy Utilization Plan.
X	Adequate measures should be taken to prevent odor problem from solid waste processing plant and STP.	We have taken the adequate measures to prevent odor problems from solid waste processing plant and STP by providing the adequate lighting and ventilation as well as by regular cleaning of plant.
7.	**General Conditions:**	
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/ local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of the Coastal regulation zone notification dated 19.02.1991 and the approved coastal zone	We have constructed the structures as per the approved plan by Deendayal Port Authority (statutory authority of Deendayal Port Authority, Ministry of Shipping are approved the construction plan)

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	management plan of Gujarat	Further, We have constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department, GOG on 09/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and forests.	We are agreed with this and complied.
III	This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	We are agreeing with this condition and assure that we have complied with this.
IV	The ministry or other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	We are agreeing with this condition and assure that we complied with this.
V	Full support should be extended to the officers of this Ministry's regional office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protective activities.	We would offer proper assistance to the Central and State Pollution Control Board offices in Bhopal and the Ministry's Regional Office during their inspection of the project site.
VI	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public liability (Insurance) Act, 1991 and municipal solid wastes (Management) & Handling Rules, 2000 including the amendments and rules made thereafter.	We are strictly followed provisions of water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, the Hazardous Chemicals (Manufactures. storage and Import) Rules, 1989, the Coastal Regulation Zone Notification, 1991 and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made there under from time to time. We are fully complied with this. Monitoring report is attached here as **Annexure-G.**
VII	All other statutory clearance such as the approvals for storage of diesel from chief controller of Explosives, Fore Department and Civil Aviation Department from height point of view, Forest conservation Act, 1980 and wildlife (Protection) Act, 1972 etc. shall be obtained as applicable by project proponents from the respective competent authorities.	All required clearances, licences, and standards have been obtained from the appropriate; responsible authorities.
VIII	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorder CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be	Deendayal Port Authority had already advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

	made within 10 days from the date of receipt of the clearance letter and its copy of the same should be forwarded to the Regional office oh this ministry at Bhopal.	and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. Deendayal Port Authority had made advertised in two news papers i.e Divya Bhasker and Kutch Mitra on 17/02/2010. Further, Deendayal Port Authority vide letter dated 17/02/2010 had already been submitted to Regional Office of this Ministry at Bhopal.
IX	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (civil) No. 460 of 2004 as may be applicable to this project.	Point Noted.
X	Any appeal against this clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.	Point Noted.
XI	A copy of the clearance letter shall be sent by the proponent to the concerned zillaParishad/Municipal corporation, urban local body and the local NGO, if any from whom suggestions if any were received while processing the proposal. The clearance letter shall also be put on website of the company by the proponent.	N/A
XII	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF, the respective zonal office of CPCBand SPCB. The criteria pollutant levels namely SPM, RSPM,SO_2,NO,or critical sector parameters indicated for the project shall be monitored and displayed at s convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance. CRZ Recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on Deendayal Port Authority's website. i.e. www.deendayalport.gov.in. We are monitored the pollutants like SPM, RSPM, SO2, NOx and monitoring report is attached here in **Annexure-G.**
XIII	The project proponent shall also submit six monthly reports on the status of the stipulated EC conditions including results of monitored data (both in hard copies as well as by email) to the respective regional office of MoEF, the respective zonal office of CPCB and the SPCB.	We will submit the compliance report as wherever applicable. Further we are regularly submitting the six monthly compliance Report to DPA.
XIV	The environmental statement for each financial year ending 31st March in form –V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	The Environmental Statement for each financial year ending 31st march in Form –V is submitted to the Honorable State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986. **Please refer Annexure - I.**

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

Annexure -B

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kachchh.

CRZ Recommendations: Letter No.ENV-10-2008-366-E March 9th, 2009 of Director (Environment), Forest & Environment Department, GOG.

STATUS OF COMPLIENCE OF THE CONDITIONS STIPULATED BY GUJARAT STATE COASTAL ZONE MANAGEMENT AUTHORITY, GANDHINAGAR IN CRZ RECOMMENDATIONS LETTER

Sr. No.	Conditions in CRZ Recommendation Letter	Compliances
	Specific Conditions	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued by MoEF, GOI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments/agencies shall be obtained by the KPT before commencing the expansion activities.	We had obtained the EC/CRZ Clearance from the MoEF, GOI on 02/02/2010 and MOEF &CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020. Further, Deendayal Port Authority had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 /dated 28/8/2016 had extended the validity period of NOC up to 05/08/2020, and we have also obtained the Valid NOC or CCA separately for the Plot No. 18. (Copy placed at **Annexure-H)**
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued from time to time.	We are handling only permissible cargo as per the CRZ Notification, 1991 and its amendments issued from time to time.
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	We have purchased water from a nearby water supply, and we don't intend to draw water from the ground.
5	The Kandla Port Trust shall undertake roof –top water harvesting in areas wherever it is feasible.	We have made necessary arrangement for the rooftop water harvesting our premises.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We have agreed to contribute to the cost of any joint study that may be conducted for the DPA region to address environmental protection and management challenges.
7	The Kandla Port Trust shall duly incorporate the	We have already prepared the detailed Disaster

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

4/01/21

	above-mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department.	Management Plan and also submitted it to DPA.
8	The project proponents shall implement all the suggestion/ recommendations given by the NIOT in their Rapid EIA report.	Suggestion/recommendation given by the NIOT in their Rapid EIA reports being strictly followed by us.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complied with the conditions stipulated by GPCB in Consent to Establish (NOC) and as well as also following the all condition stipulated in CCA.
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We have appointed the dedicated Environmental Consultant for compliance of Environmental Conditions Including Monitoring.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department.	The space for the establishment of a greenbelt along the periphery has already been designated within plant premises.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We have started commercial operation after obtaining statutory clearances as applicable.
	General Conditions	
1	The construction camps shall be located outside the CRZ area and the construction labor shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labors.	No any construction camps had required at Project site because only local peoples/labours involved for the construction activities. Now, we have started the commercial operation.
2	The KPT shall have to contribute financially for talking up the socio-economic up liftment activities in this region in construction with the Forest and Environment Department and the District Collector / District Development Officer.	DPA is already engaged in numbers of CSR activities in the area. Also, we are carried out CSR at our own level in addition to the CSR by DPA.
3	A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	We have earmark separate budget for environmental protection& Socio economic activity. Please refer below table:

Budget for	Planned cost for F.Y. 2021-2022	Actual Cost for F.Y. 2021-2022
EMP	3.5 Lakh	2.9 Lakh
CSR	---	---
CER	---	---

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	We have appointed GPCB approved Environmental Consultant to carry out the Environmental Monitoring during construction and operational phase at our own premises.
5	An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.	We are submitting the reports every year if any change with respect to the baseline environmental quality in the coastal and marine environment reports will be submitted to the respective authority.
6	Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.	Six Monthly reports on Compliance report condition mentioned in EC/CRZ Clearance have been furnished by us on regular basis to this department / MoEF, GOI through DPA. Last six monthly EC/CRZ compliance report submitted vide **Ref. No. CMP/SLSPL/2022/02, date: 04/02/2022.**
7	Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.	Noted.

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

Annexure –C

COMPLIANCE REPORT OF CONSENT TO ESTABLISH (NOC)

(CTE NO: 72308 ON DATED 28/08/2015 Is valid up to 05/08/2020)

SR NO.	CONSENT CONDITION POINTS	COMPLIANCE
1.	**SPECIFIC CONDITIONS:**	
i	Unit shall not start any construction activities till extending the validity of EC& CRZ from Competent Authority.	We are complied with this. We had started the construction activity after extending the validity of EC and CRZ Clearance from MoEF& CC, New Delhi.(MoEF&CC, New Delhi vide letter no. F. No. 10 – 36/ 2008 – IA.III dated 18/08/2015, extended the validity period for Environmental and CRZ Clearance up to 01.02.2020.
2.	No ground water shall be used for the project coming under Dark zone without permission of competent authority.	We have purchased water from a nearby water supply, and we don't intend to draw water from the ground.
3.	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and PO land Acid of 472 tanks with 12,08,369 Kl. The tentative tankage capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We do meet the condition. We have stored only permissible cargo as per EC & CRZ Clearance accorded by the MoEF, GoI.
4.	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10– 36/2008-IA-III dated 02/02/2010 for old Kandla.	We have started the commercial operation and strictly complied with the condition of EC & CRZ issued by MoEF.
5.	You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities.	We have obtained the valid CTE and CCA from hard and strictly complied with this.
6.	Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complied with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986 wherever applicable.
2	CONDITIONS UNDER THE WATER ACT 1974:	

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

2.1	There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.	We are not engaged in any manufacturing activity, we are only an edible oil storage facility.
2.2	The quantity of domestic waste water (Sewage) shall not exceed 0.5 Kl./Day	We do meet the condition. Our Domestic Wastewater generation will never exceed the limit.
2.3	Sewage shall be disposed of through septic tank/soak pit system.	We do meet the condition. We have provided the septic tank/soak pit for disposal of sewage.
2.4	The unit shall install flow meters for measuring category wise (Category as given in Water Cess 1977 Schedule II) consumption of water.	We have purchased water from local water Supplier.
2.5	Domestic effluent shall be disposed off through septic tank/soak pit system confirm to the following standards. **Parameter** — **Permissible Limit** BOD (5 days at 20° C) — 30 mg/Liter Suspended Solid — 20 mg/Liter Residual Chlorine — Minimum 0.5 mg/Liter	We have provided the septic tank/soak pit for disposal of sewage.
3.	**CONDITIONS UNDER THE AIR ACT 1981:**	
3.1	There shall be no use of fuel; hence there is no flue gas emission from manufacturing activities and other ancillary operations.	Due to the fact that we won't be engaging in any manufacturing processes or activities, there won't be any flue gas emissions or process gas emissions.
3.2	There shall be no process emission from the manufacturing and other ancillary activities	
3.3	The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009.	Ambient Air quality within plant premises will be confirmed to the prescribed norms. Refer **Annexure-G.**

Pollutant	Time weighted average	Concentration in ambient air in µg/M3
SO2	Annual 24 hours	50 80
NO2	Annual 24 hours	40 80
Particulate Matter (Size less than 10 µm) OR PM10	Annual 24 hours	60 100
Particulate Matter (Size less than 2.5 mm) OR PM 2.5	Annual 24 hours	40 60

4.4	The concentration of Noise in ambient air within the premises of Industrial unit shall not exceed following	We do meet the condition. Refer **Annexure-F.**

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

	levels: Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A).	
4.	**CONDITIONS UNDER HAZARDOUS WASTE:**	
4.1	The applicant shall provide temporary storage facilities and maintain the record for each type of Hazardous Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.	According to the Hazardous Waste (Management, Handling, and Transboundary Movement) Rules, 2008, as revised from time to time, we have provided storage facilities for each form of hazardous waste.
5.	**GENERAL CONDITIONS :**	
5.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.	We will intimate to GPCB, GoG, if there are any change in personnel, equipment or working condition as mentioned in the consents form / order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipment's, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.	We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in excess of standards at their premises and we will take necessary actions / measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.	We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our own premises.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We complied with this. We have dedicated team/ Environmental Consultant for compliance of Environmental conditions including monitoring.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous	Environmental Statement is regularly submitted by us within

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

	year shall be submitting to this State Board latest by 30th September every year.	stipulated time period
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Agree with the condition.
5.7	In case of change of ownership/management the name and address of the new owners /partners /directors /proprietor should immediately be intimated to the board.	Agree with the condition.
5.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.	We have received a TSDF membership certificate for trash collection, storage, encapsulation, incineration, treatment, transportation, and final disposal on our own property.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31st January of every year	For the generation and management of garbage, we are keeping records. We regularly submit the annual returns to the GPCB in the required format.
5.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We have all the necessary insurance policy including the "Public Liability Insurance Act - 91.
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.	We had adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form-4.
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complied with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act- 1986.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.657 of 199s-dated 14th October-2003.	We are complied with this condition.
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We are monitored the pollutants like SPM, RSPM, SO2, NOx and displayed at a convenient location near the main gate of the company in the public domain.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules,	We have already prepared a complete On-Site and Off-Site Emergency Management Plan in

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

	1989 should be submitted to the Board.	accordance with the Hazardous Chemicals Manufacture, Storage and Import Rules, 1989, as revised to date, which may also cover natural disasters.

Annexure –D

Monitoring the implementation of environmental Safeguards
Ministry of Environment, Forest and Climate Change
Western Region, Regional Office, Bhopal.
MONITORING REPORT
Part – 1
DATA SHEET

1. Project type : River valley/ Mining/Industry/ thermal/nuclear/Other (specify)	Liquid Storage Terminal

SUNSHINE LIQUID STORAGE PVT. LTD. KATHOLA

2. Name of the project	**M/s SUNSHINE LIQUID STROAGE PVT.LTD.**
3. Clearance Letter (s). OM no and date	MoEF , New Delhi vide File No.10-36/2008-IA-III dated 02/02/2010 had granted Environmental /CRZ Clearance to Deendayal Port Authority for the subject project. Further, MoEF& CC, New Delhi vide File No.10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	Dist. : Kutch State : Gujarat Location : Deendayal Port Authority. 23° 1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address of Concerned Project Chief Engineer(with pin code & telephone/telex/fax numbers b) Address of Executive project Engineer/manager/(with pin code fax numbers)	"Akshat House", Plot No.220, Sector -1-A, Gandhidham (Kutch) Tele fax | +91 2836 226699 | 231790. Plot No. 18, Liquid Storage Tank Farm, Nr. Jawaharlal Road, Kandla, Gandhidham-Kutch, Gujarat, Pin-370201
6. Salient features of the project b) Salient features of the Environmental management plan	1. Plot no. 18 have been developed for the Liquid storage Tank farm. 2. The Tentative capacity works out for the proposed tank farm is 27674 Kiloliters (20 tanks). 3. This Plot is mainly used for storage of liquid cargo as permitted in CRZ Notification from time to time. 1. Provision of parking of heavy vehicles and sufficient space for loading /unloading of trucks within individual plot limit have been made by us. 2. We had already placed the detailed on site and Off site Emergency management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules,1989, as amended to date. 3. The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room had already been provided by successful plot allottees during the construction activities.

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

	5. Secure construction practices have been adopted by successful plot allotter in which no any construction spoils take placed. 6. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities 7. We have already earmarked the area for storage of storm water and same will be reuse for green belt development at the premises of the each plot.
7. Break up of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land & landless labourers/artisen a) SC. ST/Adivasis b) Others (please indicate whether these figures are based on any scientific and systematic survey carried out of only provisional figures, if a survey is carried out give details and years of survey).	Nil Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference b) Allocation made for environmental management plans with item wise and year wise break-up c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) Includes the cost of environmental management plans so far. d) Actual expenditure incurred on the project e) Actual expenditure incurred on the Environmental management plans so far.	Planned Project Cost: 23 Crore Planned EMP Cost: 3.5 Lakh FIRR EIRR Actual Project Cost: **14.46 Crore** Actual provided fund for EMP: 2.9 Lakh
10. Forest land requirement a) The status of approval for diversion of forest land for non-forestry use b) The status of clear felling c) The status of compensatory a forestation, if any	Nil Nil-Not related Nil Nil

SUNSHINE LIQUID STORAGE PVT. LTD. MANGLIA

d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	Nil
11. The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	Nil
12. Status of construction a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	**We have completed Construction and obtain Consent To operate from GPCB on dated 02/01/2018 with Consent Order No. AWH-90274.**
13. Reasons for the delay if the Project is yet to start	N/A
Date of site visited a) The dates on which the project was monitored by the regional office on pervious occasion. if any b) The date site visit for this monitoring report	--- ---

SUNSHINE LIQUID STORAGE PVT. LTD. KANDLA

ANNEXURE – E

TSDF Membership Certificate

DETOX GROUP

Saurashtra Enviro Projects Pvt. Ltd.

Integrated Common Hazardous Waste Management Facility

Certificate

Certificate No : 1200002987

To Whomsoever it may concern

This is to certify that

SUNSHINE LIQUID STORAGE PVT. LTD.

PLOT NO.18,
LIQUID TERMINAL,
NEAR JAWAHARLAL ROAD KANDLA,
TAL: GANDHIDHAM,
KUTCH

is a valid member of

SAURASHTRA ENVIRO PROJECTS PVT. LTD.

for Integrated Common Hazardous Waste Management Facility.

This membership is valid for a period of

5 Years

Date of issue : *24.11.2017*

Date of expiration : *23.11.2022*

Place of issue : *Surat*

For, Saurashtra Enviro Projects Pvt. Ltd.

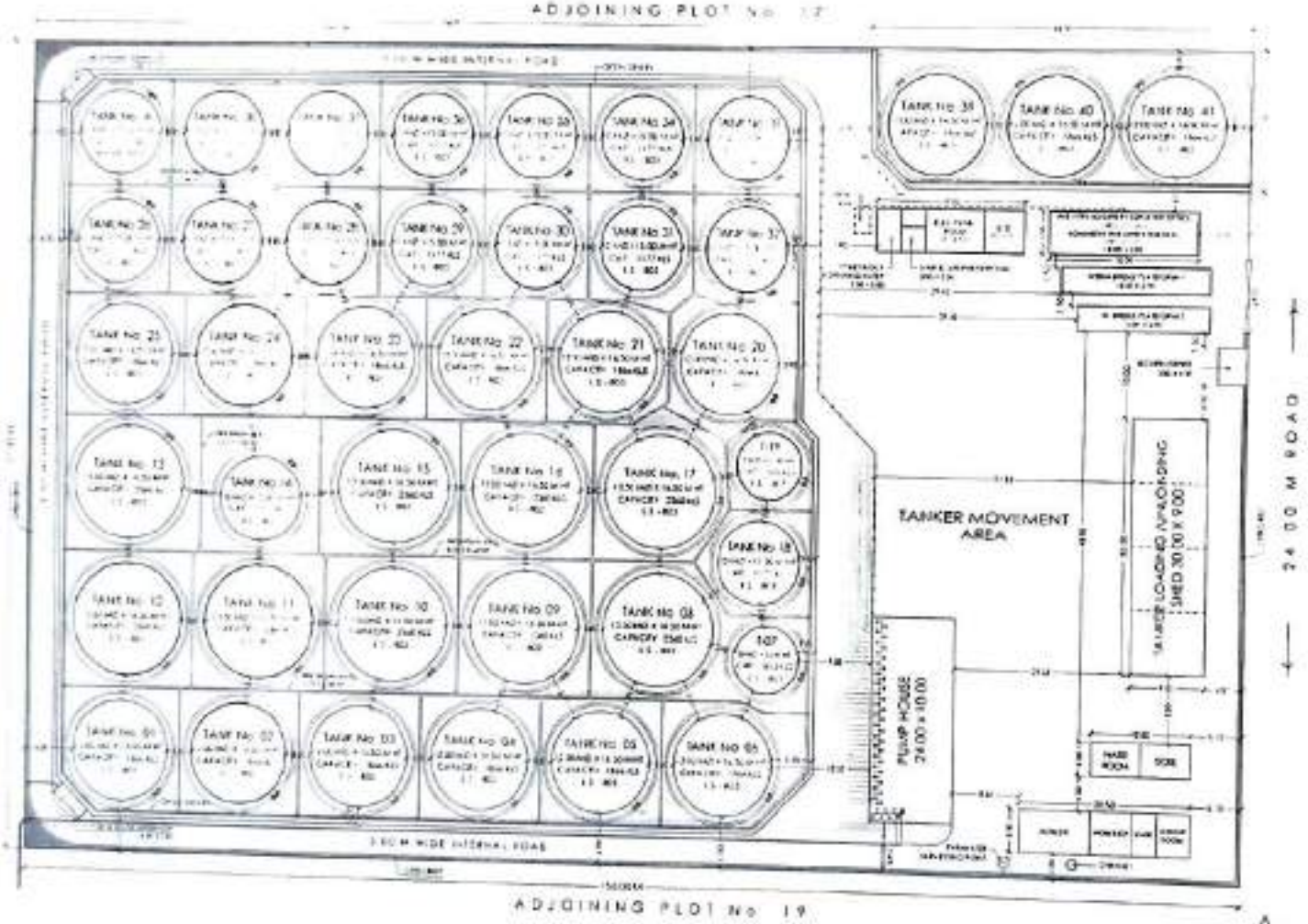
Director

SUBJECT TO SURAT JURISDICTION

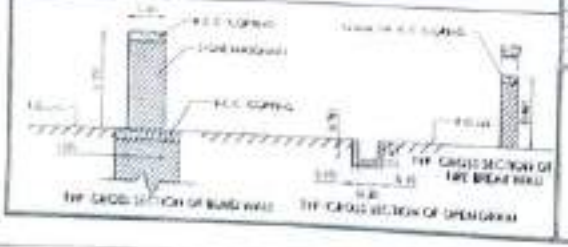
Corporate Office : Detox House, Opp. Gujarat Samachar Press, Udhna Darwaja, Ring Road, Surat - 395 002. (Guj.)
p. +91 261 2351248, 2346181 f. +91 261 2354068
e. info@sepplindia.com w. www.detoxgroup.in
CIN :- U51100GJ2006PTC047689

ANNEXURE – F

Approved Competition Drawing with Greenbelt

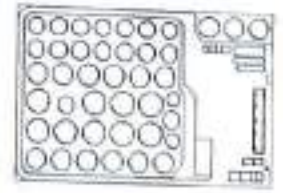


GENERAL LAYOUT PLAN FOR EDIBLE OIL STORAGE TANK TERMINAL



WATER STORAGE TANK

SL. NO.	TANK NO.	DIA	HEIGHT	CAPACITY
		TOTAL CAPACITY		



TITLE	LAYOUT PLAN FOR EDIBLE OIL STORAGE TANK TERMINAL
SCALE	1:300
DRG. NO.	
REV. NO.	1

SUNSHINE LIQUID STORAGE PVT. LTD.

sreyas

ANNEXURE – G

Environmental Monitoring Report

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No. - EE/ENV/2022/03/118

Date: 31/03/2022

ANALYSIS REPORT
(For the Month of march - 2022)

Client Details		Sample Details	
Name	M/s. Sunshine Liquid Storage Pvt.Ltd	Sample Code	SLSPL/AA1
Address	Plot No: 18,Liquid Terminal Nr.Jawaharlal Road, Kandla, Gandhidham, Dist. Kutch.	Location	Near Main Gate
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	23/03/2022
Analysis Starts on	24/03/2022	Sampling Method	IS 5182: Part – 5: 2014
Analysis Completion On	31/03/2022	Sample Received Date	24/03/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	$\mu g/m^3$	63.5	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	27.1	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	$\mu g/m^3$	13.6	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	16.9	80	IS 5182 Part 6 : 2017

Checked By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

EARTH envirotech

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY
GPCB Approved Environmental Auditor

Report No: - EE/ENV/2022/03/119

Date: 31/03/2022

ANALYSIS REPORT
(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Sunshine Liquid Storage Pvt.Ltd	Sample Code	SLSPL/AA2
Address	Plot No: 18,Liquid Terminal Nr.Jawaharlal Road, Kandla, Gandhidham, Dist. Kutch.	Location	Near pump house
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	23/03/2022
Analysis Starts on	24/03/2022	Sampling Method	IS 5182: Part – 5: 2014
Analysis Completion On	31/03/2022	Sample Received Date	24/03/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	µg/m³	68.58	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	µg/m³	24.2	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	µg/m³	16.32	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	µg/m³	21.12	80	IS 5182 Part 6 : 2017

Checked By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2022/03/120

Date: 31/03/2022

ANALYSIS REPORT

(For the Month of march - 2022)

Client Details		Sample Details	
Name	M/s. Sunshine Liquid Storage Pvt.Ltd	Sample Code	SLSPL/N1-N5
Address	Plot No: 18,Liquid Terminal Nr.,Jawaharlal Road, Kandla, Gandhidham, Dist. Kutch.	Location	As per table
		Quantity	NA
		Date of Measurement	23/03/2022
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Sound Level Meter (HTC/SL-1350)
Measurement Completion Date	23/03/2022	Sampling Method	IS 9876 : 1981 & 9989 : 1981

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time	
			Observed Value	Standard Limit
1.	Near Main Gate	dB (A)	65.3	75.0
2.	Near Admin Office	dB (A)	60.6	75.0
3.	Near Tank Farm Area	dB (A)	63.2	75.0
4.	Near Tanker Loading / Unloading Shed	dB (A)	69.3	75.0
5.	Near Weigh Bridge Platform	dB (A)	71.9	75.0

Checked By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2022/03/121

Date: 31/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Sunshine Liquid Storage Pvt.Ltd	Sample Code	SISPL/SA1
Address	Plot No: 18,Liquid Terminal Nr.,Jawaharlal Road, Kandla, Gandhidham, Dist. Kutch.	Location	Composite Sample
		Nature of Sample	Soil Sample
		Quantity	1 Kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	23/03/2022
Analysis Starts on	24/03/2022	Sampling Method	--
Analysis Completion On	31/03/2022	Sample Received Date	24/03/2022

SOIL ANALYSIS REPORT

Sr.No	Parameter	Unit	Result	Test Method
1.	Texture	---	Sandy Loam	Methods manual of Soil testing in India (January 2011)
1.a	Sand	%	72.88	Methods manual of Soil testing in India (January 2011)
1.b	Silt	%	18.40	Methods manual of Soil testing in India (January 2011)
1.c	Clay	%	8.72	Methods manual of Soil testing in India (January 2011)
2.	pH	--	8.12	IS 2720 (P-26)
3.	Moisture Content	%	0.92	IS 2720 (P-2)
4.	Organic Matter	%	0.49	Method manual Soil testing in India (January 2011)
5.	Conductivity	µs/cm	5326	IS 14767:2021
6.	Available Nitrogen as N	%	4.1	Method manual Soil testing in India (February 2011)
7.	Available Phosphorus as P	mg/kg	18.2	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
8.	Potassium as K	mg/kg	23.2	Method manual Soil testing in India (January 2011)
9.	Cation Exchange Capacity	Meq/100 gm	10.2	IS:2720 (P- XXIV)-2020
10.	Magnesium as Mg	me/100 gm	3.4	Method manual Soil testing in India (January 2011)
11	Calcium as Ca	me/100 gm	13.9	Method manual Soil testing in India (January 2011)
12.	Bulk Density	gm/cc	1.26	IS 2720 (P-7)

Checked By:

Authorized Signatory

- Analysis is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

ANNEXURE – H

(Copy of CTE/CCA Order obtained from board)

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone (079) 23222425
(079) 23232152
Fax (079) 23232156
Website www.gpcb.gov.in
BY R.P.A.D

CONSENT TO ESTABLISH
CTE-64697

No. PCB/CCA-KUTCH-1402/GPCB ID 52362 Date:

To,
M/s. Sunshine Liquid Storage Pvt Ltd.
Plot No. 18
Liquid Terminal, Near Jawaharlal road,
Taluka: Gandhidham,
Dist: Kutch- 370201.

Subject : **Consent to Establish (NOC)** under Section 25 of Water (Prevention and Control of Pollution) Act 1974 and Section 21 of Air (Prevention and Control of Pollution) Act 1981.

Reference : Your CTE Application **Inward ID No.112863 dated 20/01/2017**

Sir,

Without prejudice to the powers of the Board under the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment Protection Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that the Board grants **Consent to Establish (NOC)** of industrial activity at **Plot No. 18, Liquid Terminal, Near Jawaharlal road, Taluka: Gandhidham, Dist: Kutch- 370201.**

1. The validity period of the order shall be up to **19/01/2024**

Sr. No.	PRODUCT	QUANTITY
1	Storage & distribution facility for edible oils	30637 KL

SUBJECT TO FOLLOWING SPECIFIC CONDITIONS:

1. You shall not carry out any activity which may attract the applicability of E.I.A notification-2006.
2. No ground water shall be withdrawal without obtaining prior permission from competent authority.
3. There shall be no manufacturing activities and only storage of edible oil for storage by importer and selling it all to end user.
4. The loading and unloading activity of the edible oil should be in such a way that there will not be any spillages and proper storage and collection facility should be provided to avoid any oil contamination.

Clean Gujarat Green Gujarat
ISO 9001 : 2008 & ISO 14001 : 2004 Certified Organisation

5. Applicant is require to comply with the manufacturing, storage and import of Hazardous Chemical Rules – 1989 framed under environment (protection) act – 1986.
6. You shall adhere to notarized U/T dated 06/03/2017 for storage of edible oil.

2. CONDITIONS UNDER WATER ACT 1974:

2.1 The generation of industrial effluent from washing of tank shall not exceed of **0.1 KL/day** & shall be given treatment & shall be used for gardening & plantation purpose within premises.

2.2 The quantity of Domestic waste water (Sewage) shall not exceed **2 KL/ltr.**

2.3 The quality of the sewage shall conform to the following standards:

PARAMETERS	GPCB NORMS
BOD (5 days at 20° C)	20 mg/L
Suspended solids	30 mg/L
Residual Chlorine	Minimum 0.5 mg/L

2.4 Sewage shall be disposed off through septic tank / soak pit system.

2.5 The unit shall install meters at utilities for measuring category wise (Category as given in Schedule II of "Water (Prevention & Control of Pollution) Cess Act-1977") consumption of water.

2.6 Domestic effluent shall be disposed off through septic tank / soak pit system.

3. CONDITIONS UNDER AIR ACT 1981:

3.1 The following shall be used as fuel in Boiler/Thermic fluid heater respectively.

Sr. No.	Fuel	Quantity
1.	Diesel	15 Ltr/hour

3.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below:

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1.	D. G. Sets	11	PM SO_2 NO_x	150 mg/Nm^3 100ppm 50ppm

3.3 There shall be no process gas emission from the manufacturing activities and other ancillary operations due to proposed expansion.

3.4 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone (079) 23222425
(079) 23232152
Fax (079) 23232156
Website : www.gpcb.gov.in

3.5 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MoEF&CC dated 16th November-2009

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in $\mu g/m^3$
1	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

3.6 The level of Noise in ambient air within the premises of industrial unit shall not exceed following levels

Between 6 A.M. to 10 P.M. : 75 dB(A)
Between 10 P.M. to 6 A.M. : 70 dB(A)

4. CONDITIONS UNDER HAZARDOUS WASTE:

4.1 The applicant shall provide temporary storage facilities for each type of Hazardous Waste as per Hazardous & Other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time.

4.2 The applicant shall obtain membership of common TSDF site for disposal Hazardous Waste as categorized in Hazardous & other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time.

5. GENERAL CONDITIONS

5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

5.2 The waste generator shall be totally responsible for (i.e. Collection, storage, transportation and ultimate disposal) of the wastes generated.

5.3 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

5.4 In case of any accident, details of the same shall be submitted in Form – 5 to Gujarat Pollution Control Board.

5.5 Applicant shall comply relevant provision of "Public Liability Insurance Act-91"

5.6 Unit shall take all concrete measures to show tangible results in waste generation reduction, voidance, reuse and recycle. Action taken in this regards shall be submitted within 03 months and also along with Form 4.

5.7 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

5.8 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width shall be developed.

5.9 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)
Senior Environment Engineer

Outward No:413408, 26/05/2017

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector 10 A Gandhinagar 382 010
Phone (079) 23222425
(079) 23232152
Fax (079) 23232156
Website www.gpcb.gov.in

By R.P.A.D

Consent to Establish (NOC) Amendment
CTE - 89504

No PC/CCA-KUTCH-1401/GPCB ID-52382/ **Date.**

To,
Sunshine Liquid Storage Pvt. Ltd.
"Akshat House", First Floor,
Plot No. 220, Sector 1-A,
Ta Gandhidham,
Dist Kutch – 370 201

Subject : Amendment to Consent to Establish (CTE)

Reference 1) CTE of the Board issued to your unit vide letter no PC/CCA-KUTCH-1402 /GPCB ID 52382/413408 dated 26/05/2017

2) Your CTE Amendment Application Inward ID No. 124668, dated 31/08/2017

Sir,

In exercise of the power conferred under section-27 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016 & as amended framed under the Environmental (Protection) Act-1986 and without reducing your responsibility under the said Acts/Rules in anyway; this Board is empowered to amend consent order conditions. Accordingly, the Consent to Establish issued vide letter no. PC/CCA-KUTCH-1402 /GPCB ID 52382/413408 dated 26/05/2017 under reference (1) stands amended in respect of the following conditions,

- The validity period of the order shall be up to14/11/2022.
- The list of the proposed activity is as below

Sr. No.	Activity	Quantity Per Month		
		Existing	Proposed	Total
1	Receiving, Storage & Distribution facility for Edible Oil	30637 KL	37454 KL	68091 KL

- **CONDITIONS UNDER WATER ACT 1974 AMENDED AS FOLLOWS:**
  - The condition no. 2.1 shall be read as
  2.1 (a) The generation of industrial effluent from washing of tank shall not exceed 1.0 KL/day
  2.1 (b) The generated effluent shall confirm the following standards.

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40 °C
Colour	100 units
Suspended Solids	100 mg / l
Oil & Grease	10 mg / l

Clean Gujarat Green Gujarat

PARAMETER	PERMISSIBLE LIMIT
Phenolic Compounds	1.0 mg/l
Ammonia Nitrogen	50 mg/l
BOD, Diluted 3 (3Cr)	30 mg/l
COD	100 mg/l
Chlorides	600 mg/l
Sulphates	1000 mg/l
Total Dissolved Solids	2100 mg/l
pH Value	6.0 to 8.5
Cyanides	0.2 mg/l

(ii) The treated effluent confirming to the above standards shall be utilized for [illegible] within factory premises.

- The other terms and conditions of CTE vide letter no. PCI/CCA-KUTCH-1402/GPCB ID 52382/413408 dated 26/05/2017 shall remain unchanged.

For and on behalf of
Gujarat Pollution Control Board
(P. J. Vachhani)
Senior Environment Engineer

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016, framed under the Environmental (Protection) Act-1986.

And whereas Board has received application inward No 129970 dated **27/11/2017** for the **Consolidated Consent and Authorization** (CC&A) of the Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To,
Sunshine Liquid Storage Pvt. Ltd.
"Akshat House", First Floor,
Plot No. 220, Sector 1-A,
Ta. Gandhidham, Dist. Kutch – 370 201

1. **Consent Order No. AWH-90274 Date of Issue: 02/01/2018.**
2. The consent shall be valid up to **26/11/2022** for storage facility:

Sr. No.	Product	Quantity
1.	Storage & Distribution facility for Edible Oil	27674 KL (20 tanks)

3. **SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:**

3.1 You shall not carry out any activities which may attract the applicability of EIA notification-2006

3.2 No ground water shall be withdrawal without obtaining prior permission from competent authority.

3.3 The loading and unloading activity of the edible oil should be such that there shall not be any spillages.

3.4 Applicant shall comply with the manufacturing, storage and import of Hazardous Chemical Rules – 1989 framed under environment (protection) act – 1986.

4. **CONDITIONS UNDER WATER ACT 1974:**

4.1 The industrial water consumption shall not exceed 0.1 KL/day and domestic water consumption shall not exceed 3.0 KL/day.

4.2 The quantity of industrial effluent shall not exceed 0.1 from storage, handling and other ancillary operations.

4.3 The quantity of Sewage effluent shall not exceed 2.0 KL/Day.

4.4 The quality of generated industrial waste water shall conform to the following standards:

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C
Colour (Pt. Co. scale units)	100 units
Suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Phenolic Compound	01 mg/L
Amonical Nitrogen	50 mg/L
BOD (3 Days at 27°C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/L
Total Dissolved Solids	2100 mg/L
Sodium Absorption Ratio	26
Percent Sodium	60 %

All efforts shall be made to remove colour & unpleasant odour as far as practicable.

4.5 The treated effluent confirming to above standards shall be used for gardening and plantation within premises.

4.6 Sewage shall be disposed off through septic tank / soak pit system.

5. CONDITIONS UNDER AIR ACT 1981:

5.1 The following shall be used as fuel in D. G. set respectively.

Sr. No.	Fuel	Quantity
1.	Diesel	15 Liter/hour

5.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below;

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1.	D. G. Set	11	NO_x+HC CO PM Smoke limit (Light absorbtion coefficient)	≤ 4.0 g/kW-hr ≤ 3.5 g/kW-hr ≤ 0.2 g/kW-hr ≤ 0.7 m^{-1}

5.3 There shall be no process gas emission from manufacturing process and other ancillary operations.

5.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MOEF&CC dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/m^3
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

5.5 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 am to 10 pm: 75 dB (A)
Between 10 pm to 6 am: 70 dB (A)

6. **Authorization under Hazardous and Other Waste [Management & Transboundary Movement] Rules, 2016 & amended.**

6.1 **Authorization Number: AWH- 90274 and shall valid up to 26/11/2022.**

6.2 **Sunshine Liquid Storage Pvt. Ltd** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot No – 18, Liquid Terminal, Near Jawaharlal Road, Kandla, Tal: Gandhidham, Dist: Kutch. 370201.

Sr. No.	Waste	Quantity Per Year	Category	Facility
1.	Used Oil	0.025 MT	5.1	Collection, storage, transportation, disposal by selling out to registered recycler.
2.	Empty Barrels/ containers/ liners	0.01	33.1	Collection, storage, transportation, disposal by selling out to registered recycler.
3.	Pigging Waste	0.5 MT	C3, Sch II	Collection, Storage, Transportation, Disposal to CHWIF site
4.	Chemical sludge from waste water treatment	0.5 MT	35.3	Collection, Storage, Transportation, Disposal to TSDF

6.3 The authorization is granted to operate a facility for collection, storage, within factory premises, transportation, and ultimate disposal of Hazardous wastes by selling out to registered recyclers, TSDF and incineration facility.

6.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6.5 **GENERAL CONDITIONS OF AUTHORIZATION:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;

6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"

7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.

8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.

11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

12. An application for the renewal of an authorization shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

7. GENERAL CONDITIONS

7.1 Unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within premises, the unit shall tie up with local agencies like gram panchayat, school, social forestry office etc. for the plantation at suitable open land in nearby locality and submit an action plan of plantation for next three years to GPCB.

7.2 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width shall be developed.

7.3 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

7.4 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.

7.5 The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to the Board for this purpose in the prescribed forms under the provisions of the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986.

7.6 The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act, 1986 & Noise Pollution (Regulation and Control) Rules, 2000.

7.7 Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

7.8 If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property in that case they are obliged to pay the compensation as determined by the competent authority.

7.9 Applicant shall have to comply with all the guidelines / directive issued / being issued by MoEF&CC / CPCB / DoEF from time to time.

7.10 Environmental cell shall be setup and shall be responsible for the total Environmental management.

7.11 Monitoring in respect to Air, Water, Noise level shall be carried out and results shall be submitted to GPCB on quarterly basis.

For and on behalf of
Gujarat Pollution Control Board

(P. J. Vachhani)
Senior Environmental Engineer

NO: PC/ CCA- KUTCH- 1401/GPCB ID: 52382/ **Date:**

ISSUED TO:
Sunshine Liquid Storage Pvt. Ltd.
"Akshat House", First Floor,
Plot No. 220, Sector 1-A,
Ta. Gandhidham, Dist. Kutch – 370 201

ANNEXURE – I

(Environment statement Form-V)

Sunshine Liquid
STORAGE PVT LTD

Ref.: GPCB/SLPL/ENV/2022/07

Date: 19/07/2022

PCB ID:52382

To
Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector: 10 - A,
Gandhinagar – 382010,

K. A.: Smt. U. K. Upadhyay (Senior Environment Engineer)

Sub. : Submission of Environmental Statement Form-V for the year ending on 31st March, 2022.

Respected Mam,

We are pleased enclose herewith Environmental Statement Form-V duly filled in, for the financial year ending on 31st March, 2022.

We hope you find the above in order.

Thanking you and Regards.

Yours sincerely,

For,
M/s. Sunshine Liquid Storage Pvt. Ltd

Authorized Signatory

Encl.: Environmental Statement – Form V

FORM- V

for the Year APRIL 2021- MARCH 2022

ENVIRONMENTAL STATEMENT REPORT For Year 2021-2022

M/s. Sunshine Liquid Storage Pvt. Ltd

PART - A

i.	Name & address of the owner/ Occupier of the industry operation or process	:	M/S. Sunshine Liquid Storage Pvt. Ltd Plot No. 18, Liquid terminal Nr.Jawaharlal Road, Kandla, Taluka: Gandhidham, Dist. : Kutch – 370210
ii.	Industry category Primary – (STC Code) Secondary – (SIC Code)	:	Red/Small Scale unit
iii.	Production Capacity	:	Annexure -A
iv.	Year of Establishment	:	01/04/2017
v.	Last Environmental Statement Submitted	:	27/08/2021

PART – B

WATER AND RAW MATERIAL CONSUMPTION

(i) Water Consumption, m^3/day

Domestic : 03 KL/DAY
Washing : 0.1 KL/DAY

Name of Products	Water (PROCESS) consumption per unit of product output	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
	(1)	(2)
Storage & Distribution facility For Edible oil	NA	NA

(ii) Raw material consumption

Name of raw material consume	Name of Products	Raw material consumption
No Raw Material used as we are only Providing storage facilities.		

PART - C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/day)	Percentage of variation from prescribed standards with reasons.
(a) Water	**INDUSTRIAL-NIL**	**NA**	**NA**
	DOMESTIC – 02 KLD	**As per GPCB Norms.**	**NO PERCENTAGE VARIATION**
(b) Air			
D. G. SET	---	**NO_x+HC≤ 4.0 g/KW-hr CO ≤ 3.5 g/KW-hr PM ≤ 0.2 g/KW-hr Smoke limit≤ 0.7 m^{-1} (Light absorption coefficient)**	**NO PERCENTAGE VARIATION**

PART – D

HAZARDOUS WASTES

Hazardous Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process		
(b) From pollution control facility		
Pigging Waste	0.3 MT	0.5 MT
USED/ Spent Oil	NIL	NIL
Empty Barrels/Container	NIL	NIL
ETP SLUDGE	NIL	NIL

PART – E

SOLID WASTES

Solid Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process	**NIL**	**NIL**
(b) From pollution control facility	**NIL**	**NIL**
(c) (1) Quantity recycled or re-utilized within the unit	**NIL**	**NIL**
(2) Sold	**NIL**	**NIL**
(3) Disposed	**NIL**	**NIL**

PART - F

Please specify the characteristics (in terms of concentration & quantum) of hazardous as well as solid wastes & indicate disposal practice adopted for both these categories of wastes.

5.1/I - USED OIL – 0.025 MT/YEAR
C3/II - PIGGING WASTE- 0.5 MT/YEAR
33.11/I – EMPTY BARRELS/CONTAINER-0.01 MT/YEAR
35.3/I – CHEMICAL SLUDGE FROM WASTEWATER TREATMENT-0.5 MT/YEAR

USED OIL AND DISCARDED CONTAINER ARE DISPOSED BY SELLING OUT TO REGISTERED RECYCLER.
PIGGING WASTE IS DISPOSED AT CHWIF SITE.
CHEMICAL SLUDGE FROM WASTEWATER TREATMENT IS DISPOSED AT TSDF SITE.

PART - G

Impact of the pollution control measures taken on conservation of natural resources & consequently on the cost of production

AIR	SEPARATE STACK ATTACHED TO D. G. SET. AS DIESEL IS USED AS A FUEL, ADEQUATE STACK HEIGHT IS PROVIDED.
	NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.
WATER	INDUSTRIAL – TREATED INDUSTRIAL EFFELUNT IS REUSED FOR GARDENING PURPOSE AND PLANTATION PURPOSE.
	DOMESTIC- DOMESTIC EFFLUENT IS DISCHARGED IN TO SEPTIC TANK/ SOAK PIT SYSTEM.
	NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.
SOLID WASTE	USED OIL AND DISCARDED CONTAINER ARE DISPOSED BY SELLING OUT TO REGISTERED RECYCLER.
	PIGGING WASTE IS DISPOSED AT CHWIF SITE.
	CHEMICAL SLUDGE FROM WASTEWATER TREATMENT IS DISPOSED AT TSDF SITE.
	NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.

PART – H

Additional measures /investment proposal for environmental protection including abatement of pollution, prevention of pollution

UNIT IS DEVELOPING GREEN BELT WITHIN PREMISES.

PART – I

Any other particulars for improving the quality of the environment

ADEQUATE PLANTATION IS CARRIED OUT ALONG THE PERIPHERY OF THE INDUSTRIAL PREMISES.

Prepared By

For
M/s. Sunshine Liquid Storage Pvt. Ltd

Date: 19/07/2022

(AUTHORIZED SIGNATORY)

ANNEXURE – A

LIST OF PRODUCT

Sr. No.	Product	Quantity
01	Storage & Distribution facility For Edible oil	27674 KL (Total tank-20)

DEENDAYAL PORT AUTHORITY

Chief Engineer Department
(Land Section)

Sub: Six Monthly Compliance Report of Environmental / CRZ Clearance.

*****

With reference to above, it is inform that, this office is in receipt of 'Six monthly Compliance Report of Environmental / CRZ Clearance, **for the Period of Dec - 2021 to May - 2022'** submitted by **M/s. Seabridge Terminals Pvt. Ltd., Gandhidham. (Pertains to Plot No: 15 at Kandla)**

The originals of the above are enclosed herewith for ready reference,

This is for kind information and necessary action please.

Encl: As above.

S.E. (Kandla Land)
Deendayal Port Authority

S.E. (PL) & EMC (I/c)

No: LW/PL/3301-VII/ 714. **Dated: 27.06.2022**
28

Manager (Env.)/Shri Padulia
EMC

565
28/06/2022

26/6

SEABRIDGE TERMINALS

Plot No. 15, Jawaharlal Nehru Road,
Near IOCL LPG Terminal, Kandla - 370 201
E-mail : info@seabridge.co.in

Ref. No. STPL/2022/Jun/01
Date: June 24, 2022

The Supt. Engineer (Kandla Land),
Deendayal Port Trust,
Administrative Office,
Gandhidham (Kutch) – 370201,

Dear Sir,

Sub. : Submission of Six Monthly Compliance report of Environmental / CRZ Clearance, (Compliance Report for the Period of Dec 2021 to May 2022)
Ref.: EC/CRZ issued vide letter No.: F. No. 10-36/2008-IA-III dated 02/02/2010.

We have set up an Edible Oil Storage Terminal at Plot No. 15 and in this connection, please find enclosed here with point wise compliance report of the stipulated conditions in EC/CRZ Clearance.

I. Detail Compliance Status Report of EC - **Annexure – A**
II. Detail Compliance Report of CRZ Recommendation. - **Annexure - B**
III. Detail Compliance Report of Consent to Establish (NOC) - **Annexure – C**
IV. Data Sheet - **Annexure – D**
V. Environment Monitoring Reports for the period Dec 2021 to May 2022 - **Annexure – E** for the following
    a. Ambient Air Analysis Report.
    b. Noise Monitoring Report.
    c. Soil Analysis Report.
    d. Sewage Water Analysis Report.
    e. Stack Monitoring Analysis Report.

Vehicular Parking and Traffic Management Plan, Solar Energy Management Plan, Water Harvesting Plan submitted earlier remains same. Also approved Completion Drawing along with Green Belt Highlighted is already submitted.

We hope the above is in line with your requirements.

Thanking you,

Yours faithfully,

For SEABRIDGE TERMINALS PVT. LTD.

Authorized Signatory

Office No C/6, Gruhu Nagar, Post Box No. 200, Gandhidham (Kutch) 370201 - Gujarat
Regd. Office : 117, Vipul Bhu, Cricket Bunglow, Jamnagar - 361 001, Gujarat.
CIN : U63040GJ2015PTC084854

T +91 2636 288100
www.parekhgroup.in
PAREKHGROUP

Annexure - A

COMPLIANCE STATUS REPORT OF EC

EC issued vide letter No. F. No. 10-36/2008 – IA- III dated 2nd February 2010

Extension of validity of EC issued Vide Letter No. F. No. 10-36/2008– IA-III dated 18th August, 2015

NO.	BRIEF DESCRIPTION	COMPLIANCE REPORT
6	**Specific conditions :**	
A	Construction Phase	
I	All the conditions stipulated by the Govt. of Gujarat vide letter No. ENV -10-2008-366-E, dated 09.03.2009 and Gujarat Pollution Control Board vide letter No. PC/NOC/CCA-Kutch-78(2) GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009 is enclosed as **Annexure B.** Further, Compliance report of NOC/CTE granted by GPCB (Valid up to 5/8/2020) is enclosed as **Annexure C.**
II	The entire water supply shall be managed by the port, waste water will be treated and utilized.	We have purchased water from local water supplier and generated wastewater treated and utilized for green belt development at our own premises.
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading/unloading of trucks within the port complex.	we have provided provision of Parking of heavy vehicles and sufficient space for loading /unloading of trucks within our individual plot
IV	The proponent shall put in the place the detailed on site and off site emergency Management Plan as per the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, as amended to date which may cover the natural disasters also.	The detailed on site and off site emergency management plan as per the manufacture, storage and Import of Hazardous Chemical rules 1989 as amended to date is prepared and put into place as per statutory requirement wherever applicable.
V	The proponent shall put in the place the Oil Spill Contingency Plan.	We have prepared and placed the oil spillage Contingency plan at our premises. Also Oil Spill Contingency plan has been prepared by DPT and we will follow the same.

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VI	The proponent shall strictly comply the measures proposed as per their letter No. EG/WK/4684/EC/388, dated 01.12.2009	Not Applicable as we are only edible oil storage Terminal.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991	The FSI on the plots are done as per CRZ notification 1991 as amended from time to time.
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent authority prior to construction/operation of the project.	No any ground water drawn by us, We have arranged the water supply from the authorized water supplier.
IX	Sewage Treatment facility should be provided in accordance with the CRZ notification.	Domestic waste water disposed through septic tank /Soak pit system in accordance with the CRZ notification.
X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and handling) Rules, 2000.	The solid waste has been properly collected, segregated and disposed off as per the provision of Solid Waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016.
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	There are no any labor camp required as local public/labor mainly engaged during construction activities. Now we have started commercial operations
XII	A first aid room will be provided in the project both during the construction and operation of the project.	We have already provided first aid room.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	We have stored all the topsoil excavated during the construction activities and same is used for landscape / greenbelt development inside the plot premises
XIV	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	No any neighboring communities located at project site. Further construction wastes have been disposed off as per the construction and demolition Rule, 2016.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Adequate measure were been taken for testing of soil and ground water sample and it is assured that there are no threats to ground water quality by leaching of heavy

		metals and other toxic contaminants.
XVI	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Adequate measure were taken for secure construction practices so that no construction spoils were contaminate watercourse and were not leach into ground water.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	No Hazardous waste were generated during construction phase. We disposed off our Hazardous Wastes as per Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016.
XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We have installed and operating the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.
XIX	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	We have used low Sulphur diesel in DG set during the construction phase and also followed the Environment (Protection) Rules prescribed for air and noise emission standard.
XX	The diesel required for operating DG Sets shall be stored in underground tanks and if required, clearance from chief controller of explosives shall be taken.	Diesel required for operation of DG has been stored as per rules.
XXI	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	We have only hired those vehicles having valid pollution under control license granted by statutory authorities. Project area is connected with national highway, so transporting activities have been carried out only at day time. Now we have started commercial operations
XXII	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/GPCB	We had taken adequate measure to reduce ambient air and noise level during construction phase.
XXIII	Storm water control and its re-use as per CGWB and BIS standards for various applications.	We have already earmarked the area for storage of storm water and same will be reused for green belt development at the premises.

XXIV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	We had reduced water demand during construction by use of pre – mixed concrete, curing agent, prevention of losses due to leak & spill and other best practices for construction & allied works.
XXV	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipment's, etc as per National Building Code including protection measures from lightening etc.	We have already obtained the necessary clearance from DPT and maintained the same as per the norms at premises.
XXVI	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	We had appointed a site inspection team for regular supervision of construction activity carried out by us. DPT is also having a dedicated EMC for regular supervision for environmental parameters.
XXVII	Under the provisions of the Environment protection Act 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	We had started construction activities only after obtaining the necessary clearance from statutory authorities i.e. EC/CRZ Clearance from MoEF & CC. New Delhi, CRZ Recommendation from Forest & Environment Department, GoG and NOC/CTE from GPCB, GoG
B. OPERATION PHASE		
I	The installation of the Sewage Treatment Plant (STP) if any, should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	Domestic Waste water disposed through septic tank /Soak pit system. We will discharge unused treated effluent only after confirming to the norms and standards of the GPCB.
II	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be enclosed type and conform to the rules under the Environment (Protection) Act, 1986 The height of stack of DG sets, Use of low Sulphur diesel. The location of the DG Sets may be decided with in consultation with Gujarat Pollution Control Board.	We have adopted best practices to use of Diesel power generating sets and to rules made under the Environment (Protection) Act, 1986. We have placed the DG sets considering the location, fuel type and the stack height of the DG sets

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		as per CTE/CCA obtained from GPCB.
III	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	We will ensure that Noise level should be in prescribed standard. We have appointed Environmental Consultant for carrying out environmental monitoring at our premises as per the norms. Noise level monitoring reports attached as **Annexure – E**
IV	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We have already earmarked the area for development of greenbelt at periphery area of plot. Drawings with greenbelt area of about 200 Sq. Mtrs already submitted
V	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	We have already earmarked the area for weep holes in the compound walls to ensure natural drainage of rainwater in the catchment area during the monsoon period.
VI	Rain water harvesting for roof run-off and surface rum-off, as plan submitted should be implemented, before recharging the surface run-off, pretreatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground water table.	We have already included the rain water harvesting for roof run-off at our premises.
VII	The ground water level and its quantity should be monitored regularly in consultation with Central Ground Water Authority.	We will regularly monitor the ground water level and its quality in consultation with Central Ground Water Authority.
VII	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	We have provided adequate parking places to avoid the traffic congestion near the entry and exit point.
IX	Efforts may be made to use solar energy to the maximum extent possible.	We have provided vent and open areas to use solar energy to the maximum extent possible.
X	Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.	Adequate measures are taken by us to prevent odor problem.
7.	**General Conditions:**	
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/ local administration,	We have constructed the structures as per the plan approved by Deendayal Port Trust

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	meticulously conforming to the existing local and Central rules and regulations including the provisions of the Coastal regulation zone notification dated 19.02.1991 and the approved coastal zone management plan of Gujarat.	(statutory authority), Ministry of Shipping. Further, We have constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department. GOG on 9/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and forests.	We will comply with this condition.
III	This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Agree with the ministry.
IV	The ministry or other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Agree with the competent authorities.
V	Full support should be extended to the officers of this Ministry's regional office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protective activities.	We will provide full support to the officials of Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board during their inspection at Project Site
8.	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public liability (Insurance) Act, 1991 and municipal solid wastes (Management) & Handling Rules, 2000 including the amendments and rules made thereafter.	We have complied with this. Monitoring reports are attached herewith as Annexure.
9.	All other statutory clearance such as the approvals for storage of diesel from chief controller of Explosives, Fore Department and Civil Aviation Department from height point of view, Forest conservation Act, 1980 and wildlife (Protection) Act, 1972 etc. shall be obtained as applicable by project proponents from the respective competent authorities.	As & when required, we will obtain the required statutory clearance and approvals from respective competent authorities. However, CCOE/PESO not applicable to our project as we are into business of Non classified products

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10.	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorder CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the clearance letter and its copy of the same should be forwarded to the Regional office oh this ministry at Bhopal.	Deendayal Port Trust had already advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in
11	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (civil) No. 460 of 2004 as may be applicable to this project.	Point Noted.
12	Any appeal against this clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under section 11 of the National Environment Apellate Act, 1997.	Point Noted.
13	A copy of the clearance letter shall be sent by the proponent to the concerned zilla Parishad/Municipal corporation, urban local body and the local NGO, if any from whom suggestions if any were received while processing the proposal. The clearance letter shall also be put on website of the company by the proponent.	Not Applicable.
14	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF, the respective zonal office of CPCB and SPCB. The criteria pollutant levels namely SPM, RSPM, SO2, NOX or critical sectoral parameters indicated for the project shall be monitored and displayed at s convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance. CRZ Recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on Deendayal Port Trust website. i.e. www.deendayalport.gov.in we are monitoring pollutants like SPM, RSPM, SO_2,NO_x, and monitoring report is attached herewith and marked as **Annexure-E**

15	The project proponent shall also submit six monthly reports on the status of the stipulated EC conditions including results of monitored data (both in hard copies as well as by email) to the respective regional office of MoEF, the respective zonal office of CPCB and the SPCB.	We are regularly submitting the six monthly compliance to DPT.
16	The environmental statement for each financial year ending 31st March in form –V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	The Environmental Statement for each financial year ending 31st march in Form –V is submitted to the Honorable State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986.

Annexure – B

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kachchh.

CRZ Recommendations: Letter No. ENV-10-2008-366-E March 9th, 2009 of Director (Environment), Forest & Environment Department, GoG.

STATUS OF COMPLIENCE OF THE CONDITIONS STIPULATED BY GUJARAT STATE COASTAL ZONE MANAGEMENT AUTHORITY, GANDHINAGAR IN CRZ RECOMMENDATIONS LETTER.

Sr. No.	Conditions in CRZ Recommendation Letter	Compliances
	Specific Conditions	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued by MoEF, GoI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments/agencies shall be obtained by the KPT before commencing the expansion activities.	We had obtained the EC/CRZ Clearance from the MoEF, GoI on 2/02/2010 and MOEF &CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020. Further, Deendayal Port Trust had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 /dated 28/8/2016 had extended the validity period of NOC up to 5/08/2020. We have also obtained the valid CTE or CCA separately for the Plot No. 15.
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991,	We are handling only permissible cargo as per the CRZ Notification, 1991 and its amendments issued from time to time.

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	and its amendments issued from time to time.	
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	No any ground water has been tapped to meet the water requirements during the construction phase as we have appointed local vendor for water supply.
5	The Kandla Port Trust shall undertaken roof –top water harvesting in areas wherever it is feasible.	We have made necessary arrangement for the roof top water harvesting at our premises.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We will contribute towards the cost of any common study that may be carried out for DPT region for environmental protection and management issues.
7	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Diaster Management Plan at the earliest and submit a copy to this Department.	DPT is already having updated Disaster Management Plan prepared by M/s Telos Consultancy, Mumbai and same as been submitted to Forest and Environment Department.
8	The project proponents shall implement all the suggestion/ recommendations given by the NIOT in their Rapid EIA report.	Suggestion / recommendation given by the NIOT in their Rapid EIA report are being strictly followed by us wherever applicable to our business
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complying the conditions stipulated by GPCB in Consent to Establish (NOC) and in CCA.
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We have already appointed a dedicated Environmental Consultant for compliance of Environmental Conditions and monitoring.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat	We have already developed the area earmarked for greenbelt along the periphery of the plot.

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	Institute of Desert Ecology/Forest Department.	
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We have started commercial operations after obtaining statutory clearance as applicable.
	General Conditions	
1	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.	No any construction camps were required at Project site because only local peoples /labours involved/engaged for the construction activities. We had provided the necessary amenities, sanitation, water and fuel to the labour during the construction phase. No any environmental conditions have been deteriorated by construction labours during the construction activities carried out by us. Now we have already started commercial operations.
2	The KPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the District Collector / District Development Officer.	DPT is already engaged in number of CSR activities in the area. We have also carried out CSR activity at our level in addition to the CSR activity by DPT.
3	A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	We will earmark separate budget for environmental protection & Socio economic activity in this region. We also have expenditure on monitoring of environmental parameters by Environmental consultant.
4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	We have appointed GPCB approved Environmental Consultant to carry out the Environmental Monitoring during construction and operational phase.

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5	An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.	We will submit reports every year if any change with respect to the baseline environmental quality in the coastal and marine environment reports will be submitted to the respective authority.
6	A six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.	Six Monthly reports on Compliance report condition mentioned in EC/CRZ Clearance will be furnished by us on regular basis to this department / MoEF, GOI through DPT.
7	Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.	We will also comply with any other conditions that may be stipulated by statutory authorities from time to time for environmental protection /management purpose.

Annexure – C

COMPLIANCE REPORT OF CONSENT TO ESTABLISH (NOC)

(CTE NO: 72308 ON DATED 28/08/2015 is valid up to 05/08/2020)

NO	CONSENT CONDITION POINTS	COMPLIANCE
	SPECIFIC CONDITIONS:	
1	Unit shall not start any construction activities till extending the validity of EC& CRZ from Competent Authority.	Construction activity have been started only after extending the validity of EC & CRZ clearance from MoEF & CC.
2	No ground water shall be used for the project coming under Dark zone without permission of competent authority.	We are not using ground water. We will use water supplied by approved water supplier.
3	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and PO land Acid of 472 tanks with 12,08,369 Kl. The tentative tankage capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We will strictly adhere to the environment and CRZ clearance condition no. 2. Necessary permission will be obtained by us in case of storage of additional quantity.
4	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter	We have started the commercial operations and will strictly adhere to the

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<table>
<tr><th>NO</th><th>CONSENT CONDITION POINTS</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>No-F. No. 10~ 36/200B-IA-III dated 02/02/2010 for old Kandla.</td><td>environment and CRZ clearance condition issued by MoEF.</td></tr>
<tr><td>5</td><td>You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities.</td><td>We have obtained Consent To Operate from Gujarat Pollution Control Board.</td></tr>
<tr><td>6</td><td>Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.</td><td>We are strictly complying with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under Environment Protection Act -1986 wherever applicable.</td></tr>
<tr><td>2</td><td colspan="2">CONDITIONS UNDER THE WATER ACT 1974:</td></tr>
<tr><td>2.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.</td><td>We are only storing Edible Oils and we are not doing any manufacturing activity and quantity of industrial effluent is nil</td></tr>
<tr><td>2.2</td><td>The quantity of domestic waste water (Sewage) shall not exceed 4.5 KL/Day</td><td>Domestic waste water generation will not exceed the limit.</td></tr>
<tr><td>2.3</td><td>Sewage shall be disposed of through septic tank/soak pit system.</td><td>We do meet the condition</td></tr>
<tr><td>2.4</td><td>The unit shall install flow meters for measuring category wise (Category as given in Water Cess 1977 Schedule II) consumption of water.</td><td>We are purchasing water from local water suppliers.</td></tr>
<tr><td>2.5</td><td>Domestic effluent shall be disposed off through septic tank / soak pit system confirm to the following standards.
<table>
<tr><td>Parameter</td><td>Permissible Limit</td></tr>
<tr><td>BOD (5 days at 20° C)</td><td>30 mg/Liter</td></tr>
<tr><td>Suspended Solid</td><td>20 mg/Liter</td></tr>
<tr><td>Residual Chlorine</td><td>Minimum 0.5 mg/ Liter</td></tr>
</table></td><td>We have disposed the sewage through septic tank / soak pit system.</td></tr>
</table>

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<table>
<tr><th>NO</th><th>CONSENT CONDITION POINTS</th><th>COMPLIANCE</th></tr>
<tr><td>3</td><td colspan="2">CONDITIONS UNDER THE AIR ACT 1981:</td></tr>
<tr><td>3.1</td><td>There shall be no use of fuel hence there shall be no flue gas emission from the manufacturing process and other ancillary industrial operation.</td><td>We are only storing Edible Oils and there is no manufacturing operations. Hence there is no fuel gas emission generation from manufacturing and other ancillary activity.</td></tr>
<tr><td>3.2</td><td>There shall be no process emission from the manufacturing and other ancillary activities</td><td>We are only storing Edible Oils and there is no process gas emission from our unit</td></tr>
<tr><td>3.3</td><td>The concentration of the following parameters in the ambient air within the premises of the Industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009..
<table>
<tr><th>Pollutant</th><th>Time weighted average</th><th>Concentrat air in µg/M.</th></tr>
<tr><td>SO2</td><td>Annual
24 hours</td><td>50
80</td></tr>
<tr><td>NO2</td><td>Annual
24 hours</td><td>40
80</td></tr>
<tr><td>Particulate Matter
(Size less than 10 µm) OR PM10</td><td>Annual
24 hours</td><td>60
100</td></tr>
<tr><td>Particulate Matter
(Size less than 2.5 mm) OR PM 2.5</td><td>Annual
24 hours</td><td>40
60</td></tr>
</table></td><td>Ambient Air quality within plant premises will be confirmed to the prescribed norms. Attached Annexure-E</td></tr>
</table>

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NO	CONSENT CONDITION POINTS	COMPLIANCE
3.4	The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels: Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A).	We do meet the condition. Attached **Annexure-E**
4	**CONDITIONS UNDER HAZARDOUS WASTE:**	
4.1	The applicant shall provide temporary storage facilities and maintain the record for each type of Hazardous Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.	We have provided the storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time wherever applicable.
4.2	The applicant shall obtain membership of common TSDF site for disposal of hazardous waste as categorized in Hazardous waste (Movement, Handling and Transboundary Movement) rules 2016 as amended from time to time.	We have complied with this condition.
5	**GENERAL CONDITIONS :**	
5.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.	We will intimate to GPCB, GoG if there are any change in personnel, equipment or working condition as mentioned in the consents form / order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipment's, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented	We will report to statutory authorities immediately if any accident or other unforeseen act or such emissions occurs or is apprehended to occurring in excess of standards at our premises and will take necessary actions / measures immediately to bring entire situation normal.

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NO	CONSENT CONDITION POINTS	COMPLIANCE
	immediately to bring entire situation normal.	
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.	We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our premises. Further, Monitoring report will be submitted to GPCB regularly during the operation phase.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We have dedicated team/Environmental Consultant for compliance of Environmental conditions including monitoring.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.	We will submit environmental statement within stipulated time limit.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the	Agreed with this condition.

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NO	CONSENT CONDITION POINTS	COMPLIANCE
	Board deems, fit in accordance with Section 27 of the Act.	
5.7	In case of change of ownership/management the name and address of the new owners /partners /directors /proprietor should immediately be intimated to the board.	Agreed with this condition.
5.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.	We have obtained TSDF membership certificate for collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal of waste generated at our premises.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31st January of every year	We are maintaining the records for waste generation and its management. We will submit the Annual returns to GPCB in prescribed form within stipulated time period
5.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We will keep all the necessary insurance policies including the Public Liability Insurance Act - 91.
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.	We have adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form.
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We will strictly complying with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the	We are displaying the relevant information.

SEABRIDGE TERMINALS PVT. LTD.

NO	CONSENT CONDITION POINTS	COMPLIANCE
	Courts Order in W.P. No.657 of 199s-dated 14th October-2003.	
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We have displayed data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within our premise.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We are only edible oil storage tank terminal. We have prepared detailed On site and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also wherever applicable

SEABRIDGE TERMINALS PVT. LTD.

Annexure – D

Monitoring the implementation of environmental Safeguards
Ministry of Environment, Forests and Climate Change
Western Region, Regional office, Bhopal.

Monitoring Report
Part – 1
DATA SHEET

1. Project type : River valley/ Mining/Industry/ thermal/nuclear/Other (specify)	Infrastructure and Miscellaneous Projects+CRZ
2. Name of the project	SEABRIDGE TERMINALS PVT. LTD.
3. Clearance Letter (s). OM no and date	MoEF , New Delhi vide File No.10-36/2008-IA-III dated 2/02/2010 had granted Environmental /CRZ Clearance to Kandla Port Trust for the subject project. Further, MoEF & CC, New Delhi vide File No.10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	 Dist : Kutch State : Gujarat Location : Kandla Port Trust, 23° 1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address of Concerned Project Chief Engineer(with pin code & telephone/telex/fax numbers b) Address of Executive project Engineer/manager/(with pin code fax numbers)	C-8 Shakti Nagar, Post Box No.-200, Gandhidham- Kutch. Gujarat Pin – 370201 Tel : 02836-269100, Plot No. 15, Near Jawaharlal Road, Kandla - Kutch. Gujarat Pin – 370210
6. Salient features of the project	1. Plot No 15 has being developed for storage of Edible Oils (Liquid Storage Tank Farm) 2. CTO obtained from GPCB and Commercial operations started for plot No. 15. Total area 14,550 Sq. Mtrs

SEABRIDGE TERMINALS PVT. LTD.

b) Salient features of the Environmental management plan	3. The Tentative capacity for the tank farm works out to 66,115 Kiloliters. 4. This storage terminal mainly used for storage of liquid cargo as permitted in CRZ Notification 2011 and amended from time to time. 1. Provision of parking of heavy vehicles and sufficient space for loading /unloading of trucks within individual plot limit has been made by us. 2. We have already placed the detailed On site and Off site Emergency management Plan. 3. The solid waste has been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room has been provided. 5. All the topsoil excavated during the construction activities is used for landscape /greenbelt development inside the plot premises. 6. Secure construction practices had been adopted in which no any construction spoils have taken place. 7. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities. 8. We have already earmarked the area for storage of storm water and same will be re-used for green belt development and maintenance at the premises. 9. DPT has already formed EMC for environmental activities including direct/indirect environmental monitoring.
7. Break up of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Break up of the project affected population with enumeration of those	

SEAMRIDGE TERMINALS PVT. LTD.

losing houses/dwelling units only agricultural land & landless labourers/artisen a) SC. ST/Adivasis b) Others (please indicate whether these figures are based on any scientific and systematic survey carried out of only provisional figures, if a survey is carried out give details and years of survey).	 Nil Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference b) Allocation made for environmental management plans with item wise and year wise break-up c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) includes the cost of environmental management plans so far. d) Actual expenditure incurred on the project e) Actual expenditure incurred on the Environmental management plans so far.	Total project Cost estimated: 35 Crores. Project Costs incurred uptill 31st March 2022 – Rs. 36 Crores Project already started commercial Operations Project Capex Costs incurred during six months ending May 2022 – Nil For the Year 2021-22 – Rs Nil/-
10. Forest land requirement a) The status of approval for diversion of forest land for non-forestry use b) The status of clear felling c) The status of compensatory a forestation, if any d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	Nil Nil-Not related Nil Nil Nil
11. The status of clear felling in non-forest areas (such as submergence area	Nil

SEAMRIDGE TERMINALS PVT. LTD.

of reservoir, approach roads), if any with quantitative information.	
12. Status of construction a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	January -2017 21st November 2017
13. Reasons for the delay if the Project is yet to start	NA
Date of site visited a) The dates on which the project was monitored by the regional office on pervious occasion, if any b) The date site visit for this monitoring report	....

SEABRIDGE TERMISAS PVT. LTD.

Report No. - EE/LAB/EMR/2021/Q3/12/001

Date: 18/12/2021

ANALYSIS REPORT
(For the Month of December-2021)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020
Analysis Start on	14/12/2021
Analysis end on	18/12/2021

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	13/12/2021
				Date of Sample Receipt	13/12/2021
				Code	EE/1221/STPL/AA1
1	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	61.76
2	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	17.51
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	13.35
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	16.95

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

EC-5975

Report No: - EE/LAB/EMR/2022/Q4/01/001

Date: 12/01/2022

ANALYSIS REPORT

(For the Month of January - 2022)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020
Analysis Start on	07/01/2022
Analysis end on	10/01/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	06/01/2022
				Date of Sample Receipt	06/01/2022
				Code	EE/0122/STPL/AA1
1.	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	55.13
2.	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	13.77
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	10.36
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	13.86

Analyzed By:

EARTH ENVIRONMENTAL & ANALYTICAL ENGINEERING LABORATORY GUJARAT

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: - EE/LAB/EMR/2022/Q4/02/005 Date: 17/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No : 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020
Analysis Start on	12/02/2022
Analysis end on	16/02/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	11/02/2022
				Date of Sample Receipt	11/02/2022
				Code	EE/0222/STPL/AA1
1.	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	59.73
2.	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	18.76
3.	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	13.56
4.	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	15.42

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No : EE/LAB/EMR/2022/Q4/03/005 Date: 12/03/2022

ANALYSIS REPORT
(For the Month of March - 2022)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No : 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020
Analysis Start on	07/03/2022
Analysis end on	10/03/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	05/03/2022
				Date of Sample Receipt	05/03/2022
				Code	EE/0322/STPL/AAI
1	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	56.11
2	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	21.27
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	15.55
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	18.43

Analyzed By:

GUJARAT
Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No. : EE/LAB/EMR/2022/Q4/04/001

Date: 11/04/2022

ANALYSIS REPORT

(For the Month of April-2022)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No. 15, Liquid Storage Tank Farm, Nawahorial Road, Near IOC LPG Terminal, Kandla, Gandhidham-Kutch – 370210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020- Gaseous pollutants IS 5182 Part 23:2017- PM_{10} CPCB manual volume I-$PM_{2.5}$
Analysis Start on	06/04/2022
Analysis end on	09/04/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	05/04/2022
				Date of Sample Receipt	05/04/2022
				Code	EE/0122/STPL/AA1
1	Particulate Matter PM_{10}	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	62.33
2	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	60	CPCB manual Volume I	23.76
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	17.43
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	20.41

END OF TEST REPORT

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis is subject to the conditions in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: EC/LAB/ENR/2022/05/001 Date: 14/05/2022

ANALYSIS REPORT

(For the Month of May-2022)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No. 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 5182 (Part – 5): 2020- Gaseous pollutants IS 5182 (Part 24) : 2017- PM2.5 CPCB manual volume I (PM10)
Analysis Start on	09/05/2022
Analysis end on	12/05/2022

AMBIENT AIR MONITORING RESULTS

Sr No	Parameters	Unit	National Ambient Air Quality Standards (NAAQS)	Reference Method	Results
				Location of Sampling	Near Security Gate
				Date of Sampling	07/05/2022
				Date of Sample Receipt	09/05/2022
				Code	EC/0522/ENR/AA1
1	Particulate Matter (PM_{10})	$\mu g/m^3$	100	IS 5182 Part 23 : 2017	55.14
2	Particulate Matter ($PM_{2.5}$)	$\mu g/m^3$	60	CPCB manual Volume I	23.27
3	Sulphur Dioxide (SO_2)	$\mu g/m^3$	80	IS 5182 Part 2 : 2017	BDL
4	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	80	IS 5182 Part 6 : 2017	15.83

END OF TEST REPORT

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained Month max from the date of sampling.

Report No - EE/LAB/EMR/2021/Q3/12/003 Date: 18/12/2021

ANALYSIS REPORT
(For the Month of December-2021)

Name and Address Of Client	**M/s. Sea bridge Terminals Pvt. Ltd.** Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	13/12/2021
Sampling end on	14/12/2021
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/1221/STPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1.	Near Main gate	dB (A)	67.8	75.0	62.1	70.0
2.	Near DG set	dB (A)	73.6	75.0	67.3	70.0
3.	Near Storage Tank	dB (A)	72.5	75.0	68.4	70.0

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

EE-5975

Report No - EE/LAB/EMR/2022/Q4/01/003

Date: 12/01/2022

ANALYSIS REPORT

(For the Month of January - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	06/01/2022
Sampling end on	06/01/2022
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/0122/STPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1	Near Main gate	dB (A)	69.4	75.0	61.4	70.0
2	Near DG set	dB (A)	71.8	75.0	65.2	70.0
3.	Near Storage Tank	dB (A)	70.7	75.0	66.9	70.0

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling

Date: 17/02/2022

Report No: - EE/LAB/EMR/2021/Q4/02/007

ANALYSIS REPORT
(For the Month of February - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	11/02/2022
Sampling end on	11/02/2022
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/0222/STP1/NL-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1.	Near Main gate	dB (A)	65.4	75.0	60.3	70.0
2.	Near DG set	dB (A)	72.8	75.0	67.4	70.0
3.	Near Storage Tank	dB (A)	68.2	75.0	62.8	70.0

Analyzed By:

Authorized Signatory:

- Analyst is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

02836-247357 02836-237350 info@earthenvirotech.com www.earthenvirotech.com
Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, 370201, Gujarat, India

Report No: - EE/LAB/EMR/2022/Q4/03/007

Date: 12/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	05/03/2022
Sampling end on	05/03/2022
Method used for Sampling	IS 9876 : 1981 & 9989 : 1981
Sampling code	EE/0322/STPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1.	Near Main gate	dB (A)	67.2	75.0	62.5	70.0
2.	Near DG set	dB (A)	73.5	75.0	68.1	70.0
3.	Near Storage Tank	dB (A)	69.7	75.0	64.7	70.0

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No. - EE/LAB/EMR/2022/Q4/04/003

Date: 11/04/2022

ANALYSIS REPORT

(For the Month of April-2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd Plot No.- 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Sampling Equipment	Sound Level Meter (HTC/SL-1350)
Sampling Start on	05/04/2022
Sampling end on	05/04/2022
Method used for Sampling	IS 9989 : 2020
Sampling code	EE/0422/STPL/N1-N3

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1	Near Main gate	dB (A)	59.2	75.0	63.8	70.0
2	Near DG set	dB (A)	72.7	75.0	67.3	70.0
3	Near Storage Tank	dB (A)	70.4	75.0	65.4	70.0

END OF TEST REPORT

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No. : EE/LAB/EMR/2022/Q1/05/003

Date: 14/05/2022

ANALYSIS REPORT
(For the Month of May-2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No. 15, Liquid Storage Tank Farm, Tuwaharbil Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Lamotech Team
Sampling Equipment	Sound Level Meter (HTC/SL 1350)
Sampling Start on	07/05/2022
Sampling end on	07/05/2022
Method used for Sampling	IS 9989 : 2020
Sampling code	EE/0522/STPL/N1-N3

NOISE MONITORING RESULTS

Sr. No	Location Name	Units	Day Time		Night Time	
			Observed Value	Standard Limit	Observed Value	Standard Limit
1	Near Main gate	dB (A)	68.6	75.0	62.4	70.0
2	Near DG set	dB (A)	73.4	75.0	68.1	70.0
3	Near Storage Tank	dB (A)	69.2	75.0	64.8	70.0

----------END OF TEST REPORT----------

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No. : EE/ENV/2021/12/058 Date: 18/12/2021

ANALYSIS REPORT
(For the Month of December-2021)

Client Details		Sample Details	
Name	M/s. Seabridge Terminals Pvt. Ltd.	Sample Code	SITPL/SA1
Address	Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham Kutch – 370 210	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	13/12/2021
Analysis Starts on	14/12/2021	Sampling Method	IS 2720 Part 1
Analysis Completion On	18/12/2021	Sample Received Date	13/12/2021

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1.	Texture	--	Sandy Loam	Methods manual of Soil testing in India (January 2011)
1.a	Sand	%	76.08	Methods manual of Soil testing in India (January 2011)
1.b	Silt	%	7	Methods manual of Soil testing in India (January 2011)
1.c	Clay	%	16.92	Methods manual of Soil testing in India (January 2011)
2.	pH	--	7.86	IS 2720 (P-26)
3.	Moisture Content	%	1.96	IS 2720 (P-2)
4.	Organic Matter	%	0.84	Methods manual of Soil testing in India (January 2011)
5.	Conductivity	ms/cm	2311	IS 14767:2021
6.	Available Phosphorus as P	mg/kg	19.2	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7.	Potassium as K	mg/kg	46	Methods manual of Soil testing in India (January 2011)
8.	Calcium +magnesium	me/100 gm	17.28	Methods manual of Soil testing in India (January 2011)
9.	Calcium as Ca	me/100 gm	14.28	Methods manual of Soil testing in India (January 2011)

Analyzed By: Authorized Signatory:

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- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained for one month from the date of sampling.

Report No. - EE/ENV/2022/01/013 Date: 12/01/2022

ANALYSIS REPORT
(For the Month of January - 2022)

Client Details			Sample Details	
Name	M/s. Seabridge Terminals Pvt. Ltd.		Sample Code	STPL/SA1
Address	Plot No.: T5, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham-Kutch – 370 210		Sample Type	Composite Soil Sample
			Quantity	2 kg
Sampling Done By		Earth Envirotech Team	Date of Sampling	06/01/2022
Analysis Starts on		07/01/2022	Sampling Method	IS 2720 Part 1
Analysis Completion On		12/01/2022	Sample Received Date	06/01/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1.	Texture	--	Sandy Loam	Methods manual of Soil testing in India (January 2011)
1.a	Sand	%	75.87	Methods manual of Soil testing in India (January 2011)
1.b	Silt	%	9.20	Methods manual of Soil testing in India (January 2011)
1.c	Clay	%	14.93	Methods manual of Soil testing in India (January 2011)
2.	pH	--	8.12	IS 2720 (P-26)
3.	Moisture Content	%	1.60	IS 2720 (P-2)
4.	Organic Matter	%	0.78	Methods manual of Soil testing in India (January 2011)
5.	Conductivity	µmhos/cm	2132	IS 14767:2021
6.	Available Phosphorus as P	mg/kg	20.3	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7.	Potassium as K	mg/kg	41	Methods manual of Soil testing in India (January 2011)
8.	Calcium +magnesium	me/100 gm	16.59	Methods manual of Soil testing in India (January 2011)
9.	Calcium as Ca	me/100 gm	12.84	Methods manual of Soil testing in India (January 2011)

Analyzed By:

Authorized Signatory

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- Sample will be retained for one month from the date of sampling.

Report No: - EE/ENV/2022/02/053 Date: 17/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Client Details		Sample Details	
Name	M/s. Seabridge Terminals Pvt. Ltd.	Sample Code	STPL/SA1
Address	Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	11/02/2022
Analysis Starts on	12/02/2022	Sampling Method	IS 2720 Part 1
Analysis Completion On	16/02/2022	Sample Received Date	11/02/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1.	Texture	--	Sandy Loam	Methods manual of Soil testing in India (February 2011)
1.a	Sand	%	78.08	Methods manual of Soil testing in India (February 2011)
1.b	Silt	%	7.40	Methods manual of Soil testing in India (February 2011)
1.c	Clay	%	14.52	Methods manual of Soil testing in India (February 2011)
2.	pH	--	8.36	IS 2720 (P-26)
3.	Moisture Content	%	2.22	IS 2720 (P-2)
4.	Organic Matter	%	0.60	Methods manual of Soil testing in India (February 2011)
5.	Conductivity	µs/cm	2156	IS 14767:2021
6.	Available Phosphorus as P	mg/kg	17.01	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
7.	Potassium as K	mg/kg	51.1	Methods manual of Soil testing in India (February 2011)
8.	Calcium +magnesium	Meq/100 gm	18.38	Methods manual of Soil testing in India (February 2011)
9.	Calcium as Ca	Meq/100 gm	12.60	Methods manual of Soil testing in India (February 2011)

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- Sample will be retained till one month from the date of sampling.

Report No: - EE/ENV/2022/03/015

Date: 12/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Client Details		Sample Details	
Name	M/s. Seabridge Terminals Pvt. Ltd.	Sample Code	STPL/SA1
Address	Plot No : 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	05/03/2022
Analysis Starts on	07/03/2022	Sampling Method	IS 2720 Part 1
Analysis Completion On	12/03/2022	Sample Received Date	05/03/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1.	Texture	--	Loamy Sand	Methods manual of Soil testing in India (March 2011)
1.a	Sand	%	87.28	Methods manual of Soil testing in India (March 2011)
1.b	Silt	%	2	Methods manual of Soil testing in India (March 2011)
1.c	Clay	%	10.72	Methods manual of Soil testing in India (March 2011)
2.	pH	-	7.5	IS 2720 (P-26)
3.	Moisture Content	%	4.91	IS 2720 (P-2)
4.	Organic Matter	%	0.50	Methods manual of Soil testing in India (March 2011)
5.	Conductivity	µs/cm	602	IS 14767:2021
6.	Available Phosphorus as P	mg/kg	0.41	P.K. Gupta soil , Plant, water and Fertilizer Analysis (Second Edition)
7.	Potassium as K	mg/kg	147.63	Methods manual of Soil testing in India (March 2011)
8.	Calcium +magnesium	Meq/100 gm	20.50	Methods manual of Soil testing in India (March 2011)
9	Calcium as Ca	Meq/100 gm	17.40	Methods manual of Soil testing in India (March 2011)

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- Sample will be retained for one month from the date of sampling.

Report No: EE/LAB/EMR/2022/Q4/04/006 Date: 11/04/2022

ANALYSIS REPORT

(For the Month of April-2022)

Client Details		Sample Details	
Name	M/s. Seabridge Terminals Pvt. Ltd	Sample Code	STPL/SA1
Address	Plot No. 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210	Sample Type	Composite Soil Sample
		Quantity	2 kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	05/04/2022
Analysis Starts on	07/04/2022	Sampling Method	Methods manual of Soil testing in India (January 2011)
Analysis Completion On	11/04/2022	Sample Received Date	05/04/2022

SOIL ANALYSIS RESULT

Sr. No.	Parameters	Unit	Result	Test Method Used
1	Texture	--	Sandy loam	Methods manual of Soil testing in India (March 2011)
1.a	Sand	%	78.40	Methods manual of Soil testing in India (March 2011)
1.b	Silt	%	7	Methods manual of Soil testing in India (March 2011)
1.c	Clay	%	14.60	Methods manual of Soil testing in India (March 2011)
2	pH	--	8.15	IS 2720 (P-26)
3.	Moisture Content	%	2.19	IS 2720 (P-2)
4.	Organic Matter	%	0.51	Methods manual of Soil testing in India (March 2011)
5.	Conductivity	µs/cm	2015	IS 14767:2021
6	Available Phosphorus as P	mg/kg	15.98	P.K. Gupta soil ,Plant, water and Fertilizer Analysis [Second Edition]
7.	Potassium as K	mg/kg	56.10	Methods manual of Soil testing in India (March 2011)
8	Calcium +magnesium	Meq/100 gm	18.10	Methods manual of Soil testing in India (March 2011)
9.	Calcium as Ca	Meq/100 gm	15.30	Methods manual of Soil testing in India (March 2011)

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- Sample will be retained at one month from the date of sampling.

Report No: EE/LAB/ENVR/2022/Q1/05/006

Date: 14/05/2022

ANALYSIS REPORT

(For the Month of May-2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	Methods manual of Soil testing in India (January 2011)
Date of Sampling	07/05/2022
Date of Sample receipt	07/05/2022
Date of Analysis	09/05/2022 to 14/05/2022
Type of Sample	Composite Soil Sample

SOIL ANALYSIS RESULT

Sr No	Parameters	Unit	Reference Method	Result
	Sample Code	--	--	EE/0522/STPL/SA1
a	Texture	--	Methods manual of Soil testing in India (March 2011)	Sandy loam
1 a	Sand	%	Methods manual of Soil testing in India (March 2011)	78.48
1 b	Silt	%	Methods manual of Soil testing in India (March 2011)	8.20
1 c	Clay	%	Methods manual of Soil testing in India (March 2011)	13.32
2	pH	--	IS 2720 (P-26)	8.21
3	Moisture Content	%	IS 2720 (P-2)	2.24
4	Organic Matter	%	Methods manual of Soil testing in India (March 2011)	0.58
5	Conductivity	µs/cm	IS 14767-2021	2106
6	Available Phosphorus as P	mg/kg	P.K. Gupta soil ,Plant, water and Fertilizer Analysis [Second Edition]	15.06
7	Potassium as K	mg/kg	Methods manual of Soil testing in India (March 2011)	57.80
8	Calcium +magnesium	Meq/100 gm	Methods manual of Soil testing in India (March 2011)	19.80
9	Calcium as Ca	Meq/100 gm	Methods manual of Soil testing in India (March 2011)	16.40

--END OF TEST REPORT--

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Name & Designation

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- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Samples will be retained for one month from the date of sampling.

Date: 18/12/2021

Report No: ET/LAB/EMR/2021/Q3/12/004

ANALYSIS REPORT

(For the Month of December-2021)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No - 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	13/12/2021
Date of Sample receipt	13/12/2021
Date of Analysis	14/12/2021-18/12/2021
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/1221/STPL/WW1	EE/1221/STPL/WW2
1	pH at 25°C	---	IS 3025 (P-11)	7.42	7.59
2	Temperature	°C	APHA 2550 B	25.5	25.6
3	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1556	1510
4	Total Suspended Solids	mg/l	IS 3025 (P-17)	95.4	39.6
5	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	72	76
6	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	25.4	20.7
7	Oil & Grease	mg/l	IS 3025 (P-39)	1.5	1.3
8	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	6.8	2.4
9	Chloride	mg/l	IS 3025 (P-32)	309.6	275.9
10	Percent Sodium	%	IS 3025 (P-45)	6.2	-

Authorized Signatory:

Analyzed By:

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- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one months from the date of sampling.

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Report No: - EE/LAB/EMR/2022/Q4/01/004

Date: 17/01/2022

ANALYSIS REPORT

(For the Month of January - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	06/01/2022
Date of Sample receipt	06/01/2022
Date of Analysis	07/01/2022 to 12/01/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/0122/STPL/WW1	EE/0123/STPL/WW2
1	pH at 25°C	---	IS 3025 (P-11)	7.21	7.42
2	Temperature	°C	APHA 2550 B	25.5	25.6
3	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1684	1452
4	Total Suspended Solids	mg/l	IS 3025 (P-17)	31.4	26.2
5	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	79.68	67.73
6	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	24.7	20.3
7	Oil & Grease	mg/l	IS 3025 (P-39)	1.50	0.69
8	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	7.5	3.3
9	Chloride	mg/l	IS 3025 (P-32)	359.9	281.9
10	Percent Sodium	%	IS 3025 (P-45)	6.6	

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- Sample will be retained till one month from the date of sampling

Report No: - EE/LAB/EMR/2022/Q4/02/008

Date: 17/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	11/02/2022
Date of Sample receipt	11/02/2022
Date of Analysis	12/02/2022 to 16/02/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/0222/STPL/WW1	EE/0222/STPL/WW2
1.	pH at 25°C	---	IS 3025 (P-11)	7.36	7.53
2.	Temperature	°C	APHA 2550 B	25.4	25.5
3.	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1572	1374
4.	Total Suspended Solids	mg/l	IS 3025 (P-17)	34.6	24
5.	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	75.70	59.8
6.	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	23.9	19.7
7.	Oil & Grease	mg/l	IS 3025 (P-39)	1.2	0.8
8.	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	8.4	2.7
9.	Chloride	mg/l	IS 3025 (P-32)	309.6	256.7
10.	Percent Sodium	%	IS 3025 (P-45)	6.2	

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Report No:- EE/LAB/EMR/2022/Q4/03/008

Date: 12/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	IS 3025 Part 1
Date of Sampling	05/03/2022
Date of Sample receipt	05/03/2022
Date of Analysis	07/03/2022 to 12/03/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/0322/STPL/WW1	EE/0322/STPL/WW2
1.	pH at 25°C	---	IS 3025 (P-11)	7.54	7.69
2.	Temperature	°C	APHA 2550 B	26.1	26.3
3.	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1428	1308
4.	Total Suspended Solids	mg/l	IS 3025 (P-17)	28	30
5.	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	72	64
6.	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	21.8	19.3
7.	Oil & Grease	mg/l	IS 3025 (P-39)	2	1.20
8.	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	9.3	4
9.	Chloride	mg/l	IS 3025 (P-32)	287.4	231.6
10.	Percent Sodium	%	IS 3025 (P-45)	156	--

Analyzed By:

Authorized Signatory

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Report No: EE/LAB/EMR/2022/04/04/004

Date: 11/04/2022

ANALYSIS REPORT

(For the Month of April-2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch - 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	APHA-1060B
Date of Sampling	05/04/2022
Date of Sample receipt	05/04/2022
Date of Analysis	06/04/2022 to 11/04/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/0422/STPL/WW1	EE/0422/STPL/WW2
1	pH at 25°C	---	IS 3025 (P-11)	7.31	7.43
2	Temperature	°C	APHA 2550 B	25.9	26.7
3	Total Suspended Solids	mg/l	IS 3025 (P-17)	29.8	33
4	Oil & Grease	mg/l	IS 3025 (P-39)	0.8	0.5
5	Phenolic compound	mg/l	IS 3025 (P-43)	0.2	0.088
6	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	8.5	6.7
7.	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	21.3	16.4
8	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	64	60
9.	Chloride	mg/l	IS 3025 (P-32)	332.7	251.9
10.	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1458	1270

END OF TEST REPORT

Analyzed By:
Name & Designation

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- Analysis subject to the condition in which the Sample is received at our Laboratory.
- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: - EE/LAB/EMR/2022/Q4/04/005

Date: 11/04/2022

ANALYSIS REPORT
(For the Month of April-2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No. 15, Liquid Storage Tank Farm, Jawahar Lal Road, Near IOC LPG Terminal, Kandla, Gandhidham Kutch 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	APHA 1060B
Date of Sampling	05/04/2022
Date of Sample receipt	05/04/2022
Date of Analysis	06/04/2022 to 11/04/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/0422/STPL/WW1	EE/0422/STPL/WW2
1	Colour	Unit	IS 3025 (P-4)	2	3
2	Sulphate	mg/l	IS 3025 (P-24)	195.1	159.8

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Report No :- EE/LAB/ENVR/2022/Q1/05/004

Date: 14/05/2022

ANALYSIS REPORT

(For the Month of May-2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	APHA-1060B
Date of Sampling	07/05/2022
Date of Sample receipt	07/05/2022
Date of Analysis	09/05/2022 to 14/05/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/0522/STPL/WW1	EE/0522/STPL/WW2
1	pH at 25°C	---	IS 3025 (P-11)	7.24	7.58
2	Temperature	°C	APHA 2550 B	27.1	26.9
3	Total Suspended Solids	mg/l	IS 3025 (P-17)	17	20.8
4	Oil & Grease	mg/l	IS 3025 (P-39)	1.2	0.4
5	Phenolic compound	mg/l	IS 3025 (P-43)	0.17	0.054
6.	Ammonical Nitrogen	mg/l	IS 3025 (P-34)	9.5	4.3
7.	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	IS 3025 (P-44)	16.6	13.5
8.	Chemical Oxygen Demand	mg/l	IS 3025 (P-58)	55.55	43.65
9.	Chloride	mg/l	IS 3025 (P-32)	307.4	227.4
10.	Total Dissolved Solids	mg/l	IS 3025 (P-16)	1296	1118

END OF TEST REPORT

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

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- Sample will be retained till one month from the date of sampling.

Report No. - EE/LAB/EMR/2022/Q1/05/005

Date: 14/05/2022

ANALYSIS REPORT

(For the Month of May-2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.- 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Method of Sampling	APHA-1060B
Date of Sampling	07/05/2022
Date of Sample receipt	07/05/2022
Date of Analysis	09/05/2022 to 14/05/2022
Type of Sample	Waste Water

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Reference Method	Result	
	Sampling Location	--	--	ETP outlet	STP outlet
	Sample Code	--	--	EE/0522/STPL/WW1	EE/0522/STPL/WW2
1	Colour	Unit	IS 3025 (P-4)	4	L
2	Sulphate	mg/l	IS 3025 (P-24)	172.3	139.4

END OF TEST REPORT

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

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- Sample will be retained till one month from the date of sampling.

Report No. - EE/LAB/EMR/2021/Q3/12/002

Date: 18/12/2021

ANALYSIS REPORT

(For the Month of December-2021)

Name and Address Of Client	M/s. Sea bridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Date of Sampling	13/12/2021
Sample Receipt in lab	13/12/2021
Sample ID	EE/1221/STPL/ST1
Method Used for Sampling	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Sampling equipment	Yash stack monitoring kit
Date of Analysis	14/12/2021 to 16/12/2021

Details required for Isokinetic Sampling

Stack Attached To	D.G. Set
Fuel Used	HSD
APCM provided	--
Stack Height (m)	7
Stack Diameter(mm)	101
Stack Temperature (K)	456
Ambient temperature (K)	305
Velocity (m/s)	10.41
Flow rate (LPM)	13.22

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1.	Particulate Matter (PM)	mg/Nm^3	73.91	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	18.61	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NOx)	ppm	14.24	50	IS 11255 : Part 7

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

IC-5975

Report No: - EE/LAB/EMR/2022/Q4/01/002

Date: 12/01/2022

ANALYSIS REPORT

(For the Month of January - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 1S, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Date of Sampling	05/01/2022
Sample Receipt in lab	05/01/2022
Sample ID	EE/0122/STPL/ST1
Method Used for Sampling	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Sampling equipment	Yash stack monitoring kit
Date of Analysis	07/01/2022 to 10/01/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G. Set
Fuel Used	HSD
APCM provided	--
Stack Height (m)	7
Stack Diameter(mm)	101
Stack Temperature (K)	451
Ambient temperature (K)	300
Velocity (m/s)	10.42
Flow rate (LPM)	13.15

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1.	Particulate Matter (PM)	mg/Nm^3	69.20	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	21.56	100	IS 11255 : Part 2
3.	Oxides of Nitrogen [NOx]	ppm	18.16	50	IS 11255 : Part 7

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission
- Sample will be retained till one month from the date of sampling.

Report No: - EE/LAB/EMR/2022/Q4/02/006 Date: 17/02/2022

ANALYSIS REPORT

(For the Month of February - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Date of Sampling	11/02/2022
Sample Receipt in lab	11/02/2022
Sample ID	EE/0222/STPL/ST1
Method Used for Sampling	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Sampling equipment	Yash stack monitoring kit
Date of Analysis	12/02/2022 to 16/02/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G. Set
Fuel Used	HSD
APCM provided	--
Stack Height (m)	7
Stack Diameter(mm)	101
Stack Temperature (K)	458
Ambient temperature (K)	301
Velocity (m/s)	10.33
Flow rate (LPM)	12.88

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1.	Particulate Matter (PM)	mg/Nm^3	72.48	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	18.61	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NOx)	ppm	15.80	50	IS 11255 : Part 7

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No:- EE/LAB/EMR/2022/Q4/03/006

Date: 12/03/2022

ANALYSIS REPORT

(For the Month of March - 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No.: 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Date of Sampling	05/03/2022
Sample Receipt in lab	05/03/2022
Sample ID	EE/0322/STPL/ST1
Method Used for Sampling	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Sampling equipment	Yash stack monitoring kit
Date of Analysis	07/03/2022 to 10/03/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G. Set
Fuel Used	HSD
APCM provided	--
Stack Height (m)	7
Stack Diameter(mm)	101
Stack Temperature (K)	458
Ambient temperature (K)	302
Velocity (m/s)	9.90
Flow rate (LPM)	12.27

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1.	Particulate Matter (PM)	mg/Nm^3	70.49	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	16.27	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NOx)	ppm	13.76	50	IS 11255 : Part 7

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: - EE/LAB/EMR/2022/Q4/04/002

Date: 11/04/2022

ANALYSIS REPORT

[For the Month of April-2022]

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No : 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham- Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Date of Sampling	05/04/2022
Sample Receipt in lab	05/04/2022
Sample ID	EE/0422/STPL/ST1
Method Used for Sampling	IS:11255 (Part-2)-2019-Sulphur dioxide IS:11255 (Part-7)-2017- Nitrogen Oxide IS 11255(Part-1)-2019-Particulate matter
Sampling equipment	Yash stack monitoring kit
Date of Analysis	07/04/2022 to 09/04/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G. Set
Fuel Used	HSD
APCM provided	--
Stack Height (m)	7
Stack Diameter(mm)	101
Stack Temperature (K)	468
Ambient temperature (K)	305
Velocity (m/s)	10.43
Flow rate (LPM)	12.91

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1	Particulate Matter (PM)	mg/Nm^3	73.88	150	IS 11155 : Part 1
2	Sulphur dioxide (SO_2)	ppm	19.52	100	IS 11155 : Part 2
3	Oxides of Nitrogen (NOx)	ppm	16.85	50	IS 11155 : Part 7

---END OF TEST REPORT---

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation
Parimal Jewrajani
Chemical Engineer

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No.: EE/LAB/ENVR/2022/Q1/05/002 Date: 14/05/2022

ANALYSIS REPORT
(For the Month of May 2022)

Name and Address Of Client	M/s. Seabridge Terminals Pvt. Ltd. Plot No. 15, Liquid Storage Tank Farm, Jawaharlal Road, Near IOC LPG Terminal, Kandla, Gandhidham, Kutch – 370 210
Sampling Done By	Earth Envirotech Team
Date of Sampling	07/05/2022
Sample Receipt in lab	07/05/2022
Sample ID	EE/05.22/STPE/ST1
Method Used for Sampling	IS 11255 (Part-2)-2019-Sulphur dioxide IS 11255 (Part-7)-2017- Nitrogen Oxide IS-11255(Part-1)-2019-Particulate matter
Sampling equipment	Vayutak monitoring kit
Date of Analysis	09/05/2022 to 12/05/2022

Details required for Isokinetic Sampling

Stack Attached To	D.G. Set
Fuel Used	HSD
APCM provided	--
Stack Height (m)	7
Stack Diameter(mm)	101
Stack Temperature (K)	465
Ambient temperature (K)	307
Velocity (m/s)	9.93
Flow rate (LPM)	12.45

Result of Analysis

Sr. No.	Parameter	Unit	Result	Limit as per GPCB	Method used
1	Particulate Matter (PM)	mg/Nm^3	70.64	150	IS 11155 : Part 1
2	Sulphur dioxide (SO_2)	ppm	17.40	100	IS 11155 : Part 2
3	Oxides of Nitrogen (NOx)	ppm	14.92	50	IS 11155 : Part 7

----------END OF TEST REPORT----------

Analyzed By:
Name & Designation

Authorized Signatory:
Name & Designation

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Report cannot be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be returned Before month from the date of sampling

KOASI

KUTCH OIL AND SOAP INDUSTRY

OFFICE - Plot No 121, Bhanani Chamber, Sector 9/C, Opp. Khodiyar Nagar, National Highway, Gandhidham (Kutch) Tel 02836 222318, 228014 • E-mail : kutchoil@rediffmail.com

Ref. No. CMP/KOSI/2022/07 **Date: 19/07/2022**

To, SE (Land)
Environment Management Cell,
DEENDAYAL PORT TRUST,
Administrative Office,
PB No. 50, Gandhidham (Kutch),
Gujarat – 370201.

Sub. : Submission of Six Monthly Compliance Report of Environmental / CRZ Clearance, CRZ Recommendation and NOC/ CTE granted by GPCB.(Compliance Report for the Period of **December-2021 to May-2022**).

Ref.: EC/CRZ issued vide letter No.: **F. No. 10-36/2008-IA-III** dated **02/02/2010.**

Dear Mam,

We are setting up Edible Oil Storage Terminal at **Plot No. 14.**

Accordingly, please find enclosed here with point wise compliance report of the stipulated condition in EC/CRZ Clearance. (Encl. as **Annexure - A)**

Also here we have enclosed the detail Compliance Report of CRZ Recommendation as **Annexure-B**, detailed Compliance Report of Consent to Establish (NOC) as **Annexure-C**, Monitoring Data Sheet as **Annexure-D**, and Approved Competition Drawing as **Annexure-E**, and Environment Monitoring Reports for the period of **December-2021 to May-2022** are Enclosed here as **Annexure – F.**

We hope the above is in line with your requirements.

Thanking you

Yours sincerely,
M/s. KUTCH OIL AND SOAP INDUSTRY,

For Kutch Oil And Soap Industry

Partner

Authorized Signatory

12/9
20/07/22

19/7/22

Manager (Env.)/Shri Pachaiya
EM2

20/7/22

304
20/7/2022

ANNEXURE - A

COMPLIANCE STATUS REPORT OF EC

EC issued vide letter No. F. No. 10-36/2008 – IA-III dated 2nd February 2010

Extension of validity of EC issued Vide Letter No. F. No. 10-36/2008– IA-III dated 18th August, 2015

SR. NO.	BRIEF DESCRIPTION	COMPLIANCE REPORT
6	**Specific conditions :**	
A	**Construction Phase :**	
I	All the conditions stipulated by the Govt. of Gujarat vide letter No. ENV -10-2008-366-E, dated 09.03.2009 and Gujarat Pollution Control Board vide letter No. PC/NOC/CCA-Kutch-78(2) GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009 is enclosed as **Annexure B.** Further, Compliance report of NOC/CTE granted by GPCB (Valid up to 05/08/2020) is enclosed as **Annexure C.**
II	The entire water supply shall be managed by the port; waste water will be treated and utilized.	Commercial operations have already begun. We get our water from a local supplier, and our waste water is treated and used for green belt development in the plant premises..
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading/unloading of trucks within the port complex.	We provided parking for large vehicles during the construction phase, as well as sufficient space for loading and unloading trucks within the port complex
IV	The proponent shall put in the place the detailed on site and off site emergency Management Plan as per the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, as amended to date which may cover the natural disasters also.	We created a complete on-site and off-site emergency management plan in accordance with the Hazardous Chemicals Manufacturing, Storage, and Importation Rules 1989, as revised to date, which may encompass natural disasters as well as the construction period.
V	The proponent shall put in the place the Oil Spill Contingency Plan.	We have prepared the Oil Spill Contingency Plan and follow this plan.
VI	The proponent shall strictly comply the measures proposed as per their letter No. EG/WK/4684/EC/388, dated 01.12.2009	Not Applicable as we are only edible oil storage Terminal.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991	The FSI on the plots are done as per CRZ notification 1991.
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent authority prior to construction/operation of the project.	No any ground water drawn will be done by us; We have arranged the water supply from the local water supplier.
IX	Sewage Treatment facility should be provided in accordance with the CRZ notification.	Domestic Waste water disposed through septic tank/Soak pit system accordance with the CRZ notification.
X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and handling) Rules, 2000.	The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016.

For Kutch Oil And Soap Industry

Partner

XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	We have started commercial operation.
XII	A first aid room will be provided in the project both during the construction and operation of the project.	We have provided the first aid room during construction phase as well as during operation phase.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	We stored all the topsoil excavated during the construction activities and same will be used for landscape/greenbelt development inside the plot premises.
XIV	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Construction wastes have been disposed off as per the construction and demolition Rule, 2016 during Construction. There is no any neighboring communities are located at project site.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	It shall be ensured that there are no hazards to ground water quality due to leaching of heavy metals and other harmful substances by taking adequate measures for evaluating soil and ground water samples.
XVI	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Properly adequate measure were taken for secure construction practices so that no construction spoils were contaminate watercourse and were not leach into ground water During Construction and Now we have started commercial operation.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	We had disposed off our hazardous waste During construction as per Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016. Hazardous waste has been disposed by sending to registered recyclers and TSDF/Incineration site as per waste characteristics. Membership certificate is attached here in **Annexure-H.**
XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We are operating the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.
XIX	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	We are using the low Sulphur diesel in DG set during the construction phase and also follow the Environment (Protection) Rules prescribed for air and noise emission standard.
XX	The diesel required for operating DG Sets shall be stored in underground tanks and if required, clearance from chief controller of explosives shall be taken.	Diesel required for the operation of DG has been stored as per rules.
XXI	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to	We have only hired those vehicles having valid pollution under control license granted by statutory authorities. Project area is

For Kutch Oil And Soap

	applicable air and noise emission standards and should be operated only during non peak hours	connected with national highway, so transporting activities have been carried out only at day time. Now we have started commercial operation.
XXII	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/GPCB.	We have monitored the ambient air and noise level on regular basis and the ambient and noise level is confirming the residential standards and the report is attached as **Annexure-F**. We have taken the adequate measures to reduce ambient air and noise level during construction phase.
XXIII	Storm water control and its re-use as per CGWB and BIS standards for various applications.	We have constructed the Rain Water Harvesting system as per drawing submitted to DPA.
XXIV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	We minimized the water demand during the construction phase by using pre-mixed concrete, curing agents, preventing losses due to leaks and spills, and other best practices for construction and related operations.
XXV	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of firefighting equipment's, etc. as per National Building Code including protection measures from lightening etc.	We have Already obtained the necessary clearances from DPA and maintained the same as per the norms at premises.
XXVI	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Noted and complied. DPA is having dedicated EMC for regular supervision for environmental parameters. However, we are also having our dedicated team for compliance of Environmental conditions including monitoring.
XXVII	Under the provisions of the Environment protection Act 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	We had started construction activities after obtained the necessary clearance from statutory authorities i.e. EC/CRZ Clearance from MoEF&CC. New Delhi, CRZ Recommendation from Forest & Environment Department, GOG and NOC/CTE from GPCB, GOG.
B. OPERATION PHASE		
I	The installation of the Sewage Treatment Plant (STP) if any should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	We have provided the septic tank and soak pit for the sewage treatment and disposal and if any STP will be installed, it will be informed to Ministry along with necessary details.
II	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be enclosed type and conform to the rules under the Environment	We have install the DG sets with considering the location, fuel type and the height of the DG sets after getting approval of / consulting with GPCB.

For Kutch Oil And Soap Industry

Partner

	(Protection) Act, 1986. The height of stack of DG sets, Use of low Sulphur diesel. The location of the DG Sets may be decided with in consultation with Gujarat Pollution Control Board.	
III	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	We are ensuring that Noise level within premises follow the norms. We have adopted measure for noise control and they were under the prescribed standards. We have attached the noise level monitoring Report as **Annexure-F**.
IV	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We have already provided the area for development of Greenbelt at periphery area of plots. We have provided approx. 250 square meter area for greenbelt. Earmarked area with drawing is Enclosed herewith in **Annexure-E**.
V	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	We have provided the weep holes in the compound walls to ensure natural drainage of rainwater in the catchment area during the monsoon period.
VI	Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented, before recharging the surface run-off, pretreatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground water table.	We have constructed the Rain water harvesting for roof run-off at our premises.
VII	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	We are regularly monitoring the ground water level and its quality in consultation with Central Ground Water Authority.
VII	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	To reduce traffic congestion around the entry and exit points, we prepared and placed a Traffic Management Plan for the premises, as well as adequate parking spaces.
IX	Efforts may be made to use solar energy to the maximum extent possible.	We have prepared and submitted the Solar Energy Utilization Plan.
X	Adequate measures should be taken to prevent odor problem from solid waste processing plant and STP.	Adequate measures are taken by us to prevent odor problem by providing the proper ventilation, by regular cleaning and scrubbing in plant.
7.	**General Conditions:**	
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/ local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of the Coastal regulation zone notification dated 19.02.1991 and the approved coastal zone management plan of Gujarat.	We have constructed the structures as per the approved plan by Deendayal Port Authority (statutory authority of Deendayal Port Authority, Ministry of Shipping are approved the construction plan). Further, We have constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department. GOG on 09/03/2009 with considering CRZ notification, 1991 and subsequently amendment from time to time.

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II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and forests.	We are agreed with this and complied.
III	This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Agree with the ministry.
IV	The ministry or other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Agree with the competent authorities.
V	Full support should be extended to the officers of this Ministry's regional office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental protective activities.	We are providing full support to the officials of Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection at Project site.
VI	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public liability (Insurance) Act, 1991 and municipal solid wastes (Management) & Handling Rules, 2000 including the amendments and rules made thereafter.	We are fully complied with this. Monitoring report is attached here as **Annexure-F.**
VII	All other statutory clearance such as the approvals for storage of diesel from chief controller of Explosives, Fore Department and Civil Aviation Department from height point of view, Forest conservation Act, 1980 and wildlife (Protection) Act, 1972 etc. shall be obtained as applicable by project proponents from the respective competent authorities.	When we require, we will obtain the statutory clearance for storage of Diesel from chief controller of explosive, fire department, civil aviation department from height point of view and other respective competent authorities.
VIII	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorder CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the clearance letter and its copy of the same should be forwarded to the Regional office oh this ministry at Bhopal.	Deendayal Port Authority had already advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. Deendayal Port Authority had made advertised in two news papers i.eDivyaBhasker and Kutch Mitra on 17/02/2010. Further, Deendayal Port Authority vide letter dated 17/02/2010 had already been submitted to Regional Office of this Ministry at Bhopal.
IX	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (civil) No. 460 of 2004 as may be applicable to this project.	Point Noted.

For Kutch Oil And Soap Industry

Partner

X	Any appeal against this clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.	Point Noted.
XI	A copy of the clearance letter shall be sent by the proponent to the concerned zillaParishad/Municipal corporation, urban local body and the local NGO, if any from whom suggestions if any were received while processing the proposal. The clearance letter shall also be put on website of the company by the proponent.	N/A
XII	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF, the respective zonal office of CPCBand SPCB. The criteria pollutant levels namely SPM, RSPM,SO_2,NO_Xor critical sector parameters indicated for the project shall be monitored and displayed at s convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance, CRZ Recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on Deendayal Port Authority website. i.e. www.deendayalport.gov.in. We are monitored the pollutants like SPM, RSPM, SO2, NOx and monitoring report is attached here in **Annexure-F**.
XIII	The project proponent shall also submit six monthly reports on the status of the stipulated EC conditions including results of monitored data (both in hard copies as well as by email) to the respective regional office of MoEF, the respective zonal office of CPCB and the SPCB.	We will submit the compliance report as wherever applicable. Further we are regularly submitting the six monthly compliance Report to DPA.
XIV	The environmental statement for each financial year ending 31st March in form –V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	The Environmental Statement for each financial year ending 31st march in Form –V is submitted to the Honorable State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986. **Please refer Annexure-I.**

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Partner

ANNEXURE –B

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kutch.

CRZ Recommendations: Letter No. ENV-10-2008-366-E March 9th, 2009 of Director (Environment), Forest & Environment Department, GOG.

STATUS OF COMPLIENCE OF THE CONDITIONS STIPULATED BY GUJARAT STATE COASTAL ZONE MANAGEMENT AUTHORITY, GANDHINAGAR IN CRZ RECOMMENDATIONS LETTER

Sr. No.	Conditions in CRZ Recommendation Letter	Compliances
	SPECIFIC CONDITIONS	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly following the provisions of the CRZ notification of 1991 and subsequent amendments issued by MoEF, GOI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments/agencies shall be obtained by the KPT before commencing the expansion activities.	We had obtained the EC/CRZ Clearance from the MoEF, GOI on 02/02/2010 and MOEF &CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020. Further, Deendayal Port Authority had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 /dated 28/8/2016 had extended the validity period of NOC up to 05/08/2020, and we have also obtained the Valid NOC or CCA separately for the Plot No. 14. (Copy placed at **Annexure-G)**
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued from time to time.	We are handling only permissible cargo as per the CRZ Notification, 1991 and its amendments issued from time to time.
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	No any ground water has been tapped to meet the water requirements during the construction phase as we have appointed local authority water supplier.
5	The Kandla Port Trust shall undertake roof -top water harvesting in areas wherever it is feasible.	We have made necessary arrangement for the roof top water harvesting our premises.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental	We have contributed towards the cost of any common study that may be carried out for DPA region for environmental protection and

For Kutch Oil And Soap Industry,

Partner

	protection and management issues.	management issues
7	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department.	We have already prepared the detailed Disaster Management Plan and also submitted it to DPA.
8	The project proponents shall implement all the suggestion, recommendations given by the NIOT in their Rapid EIA report.	Suggestion / recommendation given by the NIOT in their Rapid EIA reports are being strictly followed by us.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complied with the conditions stipulated by GPCB in Consent to Establish (NOC) and as well as in CCA.
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We have appointed dedicated Environmental Consultant for compliance of Environmental Conditions including Monitoring.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department.	We have already provided the area for development of greenbelt along the periphery area. We have provided approx. 250 square meter area for greenbelt. Earmarked area with drawing is Enclosed herewith in **Annexure-E.**
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We have started commercial operation after obtaining statutory clearances as applicable. We will comply all the stipulated by Forest and Environmental Department. GOG from time to time for environmental protection /management purpose.
	GENERAL CONDITIONS	
1	The construction camps shall be located outside the CRZ area and the construction labor shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labors.	No any construction camps had required at Project site because only local peoples /labors involved for the construction activities. Now, we have started the commercial operation. No any environmental conditions have been deteriorated by construction labors during the construction activities carried out by us.
2	The KPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the District Collector / District Development Officer.	N/A

For Kutch Oil And Soap Industry

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<table>
<tr><td>3</td><td>A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.</td><td>We have earmark separate budget for environmental protection& Socio economic activity. Please refer below table:
<table><tr><th>Budget for</th><th>Planned cost for F.Y. 2021-2022</th><th>Actual Cost for F.Y. 2021-2022</th></tr><tr><td>EMP</td><td>4 Lakh</td><td>3.6 Lakh</td></tr><tr><td>CSR</td><td>-</td><td>-</td></tr><tr><td>CER</td><td>-</td><td>-</td></tr></table></td></tr>
<tr><td>4</td><td>A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.</td><td>We have appointed GPCB approved Environmental Consultant to carry out the Environmental Monitoring during construction and operational phase at our own premises.</td></tr>
<tr><td>5</td><td>An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.</td><td>If there is any change in the baseline environmental quality in the coastal and marine environment, we shall submit reports to the appropriate authority every year.</td></tr>
<tr><td>6</td><td>Sixmonthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.</td><td>Six Monthly reports on Compliance report condition mentioned in EC/CRZ Clearance will be furnished by us on regular basis to this department / MoEF, GOI through DPA.
Last six monthly EC/CRZ compliance report submitted vide Ref. No. CMP/KOSI/2021/12, date: 27/12/2021.</td></tr>
<tr><td>7</td><td>Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.</td><td>Noted.</td></tr>
</table>

For Kutch Oil And Soap Industry

Partner

ANNEXURE –C

COMPLIANCE REPORT OF CONSENT TO ESTABLISH (NOC)

(CTE NO: 72308 ON DATED 10/03/2015 is valid up to 05/08/2020)

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
1.	SPECIFIC CONDITIONS:	
1.1	Unit shall not start any construction activities till extending the validity of EC& CRZ from Competent Authority.	We began building after extending the validity of the EC and CRZ clearances from the Ministry of Environment, Forests and Climate Change in New Delhi. The validity term for Environmental and CRZ Clearance has been extended until 01.02.2020 (MoEF&CC, New Delhi, vide letter no. F. No. 10 – 36/ 2008 – IA.III dated 18/08/2015). (Annexure B is attached.)
1.2	No ground water shall be used for the project coming under Dark zone without permission of competent authority.	We are not use ground water. We will use water supplied by local water supplier..
1.3	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and PO land Acid of 472 tanks with 12,08,369 Kl. The tentative tankage capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We will strictly adhere the environment and CRZ clearance condition no. 2. Necessary permission will be obtained by us in case of storage of additional quantity.
1.4	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10~ 36/2008-IA-III dated 02/02/2010 for old Kandla.	We have started the commercial operation and strictly complied with the condition of EC & CRZ issued by MoEF.
1.5	You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities.	We have obtained the valid CTE and CCA from board and strictly complied with this. CTE/CCA Orders are enclosed here as **Annexure-G.**
1.6	Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complied with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act- 1986 wherever applicable.

For Kutch Oil And Soap Industry

Partner

<table>
<tr><th>SR. NO.</th><th>CONSENT CONDITION POINTS</th><th>COMPLIANCE</th></tr>
<tr><td>2</td><td colspan="2"><u>CONDITIONS UNDER THE WATER ACT 1974:</u></td></tr>
<tr><td>2.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.</td><td>We are only Edible oil Storage terminal and we are not doing any manufacturing activity.</td></tr>
<tr><td>2.2</td><td>The quantity of domestic waste water (Sewage) shall not exceed 0.5 Kl./Day</td><td>We do meet the condition. Our Domestic Wastewater generation will never exceed the limit.</td></tr>
<tr><td>2.3</td><td>Sewage shall be disposed of through septic tank/soak pit system.</td><td>We do meet the condition. We have provided the septic tank/soak pit for disposal of sewage.</td></tr>
<tr><td>2.4</td><td>The unit shall install flow meters for measuring category wise (Category as given in Water Cess 1977 Schedule II) consumption of water.</td><td>We have purchased water from local water Supplier.</td></tr>
<tr><td>2.5</td><td>Domestic effluent shall be disposed off through septic tank/soak pit system confirm to the following standards.
<table><tr><th>Parameter</th><th>Permissible Limit</th></tr><tr><td>BOD (5 days at 20° C)</td><td>30 mg/Liter</td></tr><tr><td>Suspended Solid</td><td>20 mg/Liter</td></tr><tr><td>Residual Chlorine</td><td>Minimum 0.5 mg/Liter</td></tr></table></td><td>We have provided the septic tank/soak pit for disposal of sewage.</td></tr>
<tr><td>3.</td><td colspan="2"><u>CONDITIONS UNDER THE AIR ACT 1981:</u></td></tr>
<tr><td>3.1</td><td>There shall be no use of fuel; hence there is no flue gas emission from manufacturing activities and other ancillary operations.</td><td rowspan="2">We are not going to use any fuel as this project is only for storage of Edible Oil. Hence, there is no flue gas emission generation from manufacturing & other ancillary operations. As well as we are not going to carry out manufacturing process. Hence, there is no process gas emission generation from manufacturing & other ancillary activities</td></tr>
<tr><td>3.2</td><td>There shall be no process emission from the manufacturing and other ancillary activities</td></tr>
<tr><td>3.3</td><td>The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009.
<table><tr><th>Pollutant</th><th>Time weighted average</th><th>Concentration in ambient air in µg/M3</th></tr><tr><td>SO2</td><td>Annual
24 hours</td><td>50
80</td></tr><tr><td>NO2</td><td>Annual
24 hours</td><td>40
80</td></tr><tr><td>Particulate Matter</td><td>Annual</td><td>60</td></tr></table></td><td>Ambient Air quality within plant premises has been confirmed to the prescribed norms. Refer Annexure-F.</td></tr>
</table>

For Kutch Oil And Soap Industry

Partner

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
	(Size less than 10 µm) OR PM10 — 24 hours — 100 Particulate Matter (Size less than 2.5 mm) OR PM 2.5 — Annual 40, 24 hours 60	
4.4	The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels: Between 6 A.M. and 10 P.M.: 75 dB (A) Between 10 P.M. and 6 A.M.: 70 dB (A)	We do meet the condition. Refer **Annexure-F**.
4.	**CONDITIONS UNDER HAZARDOUS WASTE:**	
4.1	The applicant shall provide temporary storage facilities and maintain the record for each type of Hazardous Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.	We have provided the storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time wherever applicable.
5.	**GENERAL CONDITIONS :**	
5.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.	We will intimate to GPCB, GoG, if there are any change in personnel, equipment or working condition as mentioned in the consents form / order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipment's, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.	We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in excess of standards at their premises and we will take necessary actions / measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples	We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our own premises.

For Kutch Oil And Soap Industry

Partner

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
	of effluent get collected and analyzed by one of the laboratories recognized by the state Board.	
5.4	The Environmental Management Dutt/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Dutt shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We complied with this. We have dedicated team/ Environmental Consultant for compliance of Environmental conditions including monitoring.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.	Environmental Statement will be submitted by us within stipulated time period.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Agreed with the condition.
5.7	In case of change of ownership/management the name and address of the new owners /partners /directors /proprietor should immediately be intimated to the board.	We will intimate to GPCB, GoG immediately in case of change of ownership/management the name and address of new owners/partners/directors/proprietor.
5.8	The waste generator shall be totally responsible for [i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal] of the wastes generated.	We have obtained the TSDF membership certificate for collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal of waste generated at our own premises. Here in **Annexure-H**, we have attached the provisional membership certificate.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31st January of every year	We are maintaining the records for waste generation and its management. We have submitted the Annual returns to GPCB in prescribed form within stipulated time period.
5.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We have all the necessary insurance policy including the "Public Liability Insurance Act – 91.
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.	We had adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG

For Kutch Oil And Soap Industry

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SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
		in prescribed form-4. **Please refer Annexure-I.**
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complied with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act- 1986 wherever applicable.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.657 of 199s-dated 14th October-2003.	We are complied with this condition.
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We are monitored the pollutants like SPM, RSPM, SO2, NOx and displayed at a convenient location near the main gate of the company in the public domain.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We have already prepared detailed On site and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also wherever applicable.

For Kutch Oil And Soap Industry

Partner

ANNEXURE - D

Monitoring the implementation of environmental Safeguards
Ministry of Environment, Forest and Climate Change
Western Region, Regional Office, Bhopal.
MONITORING REPORT
Part – 1
DATA SHEET

1. Project type : River valley/ Mining/ Industry/thermal/nuclear/Other (specify)	Liquid Storage Terminal
2. Name of the project	**M/s. KUTCH OIL AND SOAP INDUSTRY**
3. Clearance Letter (s). OM no and date	MoEF , New Delhi vide File No.10-36/2008-IA-III dated 02/02/2010 had granted Environmental/CRZ Clearance to Deendayal Port Authority for the subject project. Further, MoEF& CC, New Delhi vide File No.10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	Dist. : Kutch State : Gujarat Location : Deendayal Port Authority. 23° 1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address of Concerned Project Chief Engineer(with pin code & telephone/telex/fax numbers b) Address of Executive project Engineer/manager/(with pin code fax numbers)	"Bhimani Chamber", Plot No.121, Sector9/C, Opp. Khodiyar Nagar, National Highway Gandhidham (Kutch) Tele fax | +91 2836 222314 | 2280 Plot No. 14. Liquid Storage Tank Farm. Nr. Jawaharlal Road, Kandla, Gandhidham-Kutch. Gujarat, Pin-370201
6. Salient features of the project b) Salient features of the Environmental management plan	1. Plot no. 14 have been developed for the Liquid storage Tank farm. 2. The Tentative capacity works out for the proposed tank farm is 33845 Kiloliters. 3. This Plot mainly used for storage of liquid cargo as permitted in CRZ Notification from time to time. 1. Provision of parking of heavy vehicles and sufficient space for loading/unloading of trucks within individual plot limit has been made by us. 2.We had already placed the detailed on site and Off site Emergency management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules,1989, as amended to date.

For Kutch Oil And Soap Industry

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	3. The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room had already been provided by successful plot allottees during the construction activities. 5. Secure construction practices have been adopted by successful plot allottee in which no any construction spoils take placed. 6. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities. 7. We have already earmarked the area for storage of storm water and same will be reuse for green belt development at the premises of the each plot.
7. Break-up of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Break-up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land & landless laborers/artisan. a) SC, ST/Adivasis b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out of only provisional figures. if a survey is carried out give details and years of survey).	 Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference b) Allocation made for environmental management plans with item wise and year wise break-up c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) includes the cost of environmental management plans so far. d) Actual expenditure incurred on the project	 Planned Project Cost :22 Crore. Planned EMP Cost: **4 Lakh.** FIRR EIRR Actual Project Cost: **22 Crore**

For Kutch Oil And Soap Industry

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e) Actual expenditure incurred on the Environmental management plans so far.	Actual provided fund for EMP: 3.6 lakh
10. Forest land requirement	Nil
a) The status of approval for diversion of forest land for non-forestry use	Nil-Not related
b) The status of clear felling	Nil
c) The status of compensatory a forestation, if any	Nil
d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	Nil
11. The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	Nil
12. Status of construction a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	a) 14/09/2017. b) 01/04/2019.
13. Reasons for the delay if the Project is yet to start	----
Date of site visited a) The dates on which the project was monitored by the regional office on pervious occasion, if any b) The date site visit for this monitoring report	---- ----

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ANNEXURE – E

Approved Competition Drawing along with Greenbelt area measurement and Drawing

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

For Kutch Oil And Soap Industry

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ANNEXURE – F

Environmental Monitoring Report

Report No: - EE/LAB/EMR/2022/05/075

Date: 31/05/2022

ANALYSIS REPORT
(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Kutch Oil & Soap Industry	Sample Code	KOSI/AA1
Address	Plot No.: 14, Near Jawaharlal Road, Liquid Storage Tank Farm, Kandla KhariRohar Road, Village: Kandla, Tal: Gandhidham, Dist.: Kutch – 370201.	Location	Near Main Gate
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	24/05/2022
Analysis Starts on	25/05/2022	Sampling Method	IS 5182 (Part – 5): 2020 Gaseous pollutants IS 5182 Part 23:2017- PM_{10} CPCB manual volume I - $PM_{2.5}$
Analysis Completion On	31/05/2022	Sample Received Date	24/05/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	µg/m³	75.64	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	µg/m³	25.15	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	µg/m³	15.97	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	µg/m³	19.22	80	IS 5182 Part 6 : 2017

Checked By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

For Kutch Oil And Soap Industry

Partner

Report No: - EE/LAB/EMR/2022/05/076 Date: 31/05/2022

ANALYSIS REPORT
(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Kutch Oil and Soap Industry	Sample Code	KOSI/AA2
Address	Plot No. 14, Near Jawaharlal Road, Liquid Storage Tank Farm, Kandla KhanRohar Road, Village: Kandla, Tal: Gandhidham, Dist.: Kutch – 370201.	Location	Near Pump Room
		Nature of Sample	Ambient Air
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	24/05/2022
Analysis Starts on	25/05/2022	Sampling Method	IS 5182 (Part – 5): 2020 Gaseous pollutants IS 5182 Part 23:2017- PM_{10} CPCB manual volume I - $PM_{2.5}$
Analysis Completion On	31/05/2022	Sample Received Date	24/05/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	µg/m³	72.91	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	µg/m³	28.11	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	µg/m³	17.41	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	µg/m³	22.33	80	IS 5182 Part 6 : 2017

Checked By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

For Kutch Oil And Soap Industry

Partner

[redacted]

Report No : EE/LAB/EMR/2022/05/027

Date: 31/05/2022

ANALYSIS REPORT
(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Kutch Oil and Soap Industry	Sample Code	KOSI/ST1
Address	Plot No. 14, Near Jawaharlal Road, Liquid Storage Tank Farm, Kandla Kharikhar Road, Village: Kandla, Tal: Gandhidham, Dist: Kutch – 370201.	Location	D. G. Set
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	Earth Envirotech Team	Date of Sampling	24/05/2022
Analysis Starts on	25/05/2022	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	31/05/2022	Sample Received Date	24/05/2022

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Limit as per GPCB Norms	Reference Method
			D. G. Set		
1.	Particulate Matter (PM)	mg/Nm³	78.67	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	22.21	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NO_x)	ppm	16.53	50	IS 11255 : Part 7

Checked By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission
- Sample will be retained till 15 days from the date of sampling.

For Kutch Oil And Soap Industry

Partner

Report No. - EE/LAB/EMR/2022/05/078 Date: 31/05/2022

ANALYSIS REPORT
(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Kutch Oil and Soap Industry	Sample Code	KOSM/II-115
Address	Plot No.: 14, Near Jawaharlal Road, Liquid Storage Tank Farm, Kandla KhariRohar Road, Village: Kandla, Tal: Gandhidham, Dist.: Kutch – 370201.	Location	As per table
		Quantity	NA
		Date of Measurement	24/05/2022
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Sound Level Meter (HTC/SL-1350)
Measurement Completion Date	24/05/2022	Sampling Method	IS 9876 : 1981 & 9989 : 1981

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time	
			Observed Value	Standard Limit
1.	Near Main Gate Area	dB (A)	66.1	75.0
2.	Near Admin Office Area	dB (A)	72.2	75.0
3.	Near Tank Farm Area	dB (A)	70.9	75.0
4.	Near Tanker Loading / Unloading Shed Area	dB (A)	73.8	75.0
5.	Near Pump Room Area	dB (A)	71.3	75.0

Checked By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our laboratory.
- Report cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

For Kutch Oil And Soap Industry

Partner

Report No. - EE/LAB/ENR/2022/05/079 Date: 31/05/2022

ANALYSIS REPORT

(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Kutch Oil And Soap Industry	Sample Code	KOSI/WW1
Address	Plot No. 14, Near Jawaharlal Road, Liquid Storage Tank Farm, Kandla KhariRohar Road, Village: Kandla, Tal: Gandhidham, Dist: Kutch – 370201.	Location	Effluent Water (Outlet)
		Quantity	5 L
Sampling Done By	Earth Envirotech Team	Date of Sampling	24/05/2022
Analysis Starts on	25/05/2022	Sampling Method	APHA 1060
Analysis Completion On	31/05/2022	Sample Received Date	24/05/2022

WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
1.	pH at 25°C	—	7.16	IS 3025 (P-11)
2.	Temperature	°C	27.6	APHA 2550
3.	Colour	Units	19	IS 3025 (P-04)
4.	Total Suspended Solids	mg/l	32	IS 3025 (P-17)
5.	Oil & Grease	mg/l	0.9	IS 3025 (P-39)
6.	Phenolic Compound	mg/l	BDL	IS 3025 (P-43)
7.	Ammonical Nitrogen	mg/l	8.6	IS 3025 (P-34)
8.	Biochemical Oxygen Demand (3 days at 27°C)	mg/l	19.6	IS 3025 (P-44)
9.	Chemical Oxygen Demand	mg/l	59	IS 3025 (P-58)
10.	Chlorides	mg/l	250.3	IS 3025 (P-32)
11.	Sulphates as SO_4	mg/l	102.6	IS 3025 (P-24)
12.	Total Dissolved Solids	mg/l	1462	IS 3025 (P-16)
13.	Percent Sodium	%	7.2	IS 3025 (P-45)
14.	Sulphide	mg/l	0.6	APHA 22nd Ed. 4500-S-2 D
15.	Total Chromium	mg/l	BDL	IS 3025 (P-52)

BDL - Below detectable Limit

Checked By:

Authorised Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

For Kutch Oil And Soap Industry

Partner

ANNEXURE – G

Copy of CTE/CCA Order obtained from board

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website www.gpcb.gov.in
BY R.P.A.D

CONSENT TO ESTABLISH
CTE-86051

No.PC/CCA-KUTCH-1415/GPCB ID 54026/ Date:

TO,
M/s. Kutch Oil and Soap Limited,
Plot No. 14, Liquid Storage Tank Farm,
Near Jawaharlal Road, Kandla-Kharirohar Road,
Vill: Kandla,
Tal: Gandhidham,
Dist: Kutch– 370201.

Subject : **Consent to Establish (NOC)** under Section 25 of Water (Prevention and Control of Pollution) Act 1974 and Section 21 of Air (Prevention and Control of Pollution) Act 1981.

Reference : Your CTE Application **Inward ID No.118468 dated 02/05/2017**

Sir,

Without prejudice to the powers of the Board under the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that the Board grants **Consent to Establish (NOC)** of industrial activity at **Plot No. 14, Liquid Storage Tank Farm, Near Jawaharlal Road, Kandla-Kharirohar Road, Vill: Kandla, Tal: Gandhidham, Dist: Kutch– 370201,** for storage of edible oil only.

1. The validity period of the order shall be up to **01/05/2022.**
2. The list of the products to be manufacture is as below from timber logs:

Sr. No.	PRODUCT	QUANTITY PER MONTH
1.	Receiving, Storage & Distribution facility for Edible Oils (Edible Oils storage Terminal)	35283.75 KL

SUBJECT TO FOLLOWING SPECIFIC CONDITIONS:

1. You shall not carry out any activity which may attract the applicability of EIA notification-2006 & store only Edible oil products.
2. No ground water shall be withdrawal without obtaining prior permission from competent authority.

Order No. 114380 K/06/2017

For Kutch Oil And Soap Industry
Partner

3 You shall adhere to all conditions mentioned in KPT letter dated 28/03/2017 for storage of edible oil

3. CONDITIONS UNDER WATER ACT 1974:

3.1 There shall be no industrial effluent generation from manufacturing process and other ancillary operations where generated washing effluent from tank washing shall be treated in proposed ETP & treated waste water shall be reused in gardening and plantation purpose with in premises.

3.2 The quantity of Domestic waste water (Sewage) shall not exceed 4 KL/Day.

3.3 The quality of the sewage shall conform to the following standards

PARAMETERS	GPCB NORMS
BOD (5 days at 20° C)	20 mg/l.
Suspended solids	30 mg/l.
Residual Chlorine	Minimum 0.5 mg/l.

3.4 Sewage shall be disposed off through septic tank / sonk pit system.

3.5 The unit shall install meters at utilities for measuring category wise (Category as given in Schedule II of "Water (Prevention & Control of Pollution) Cess Act-1977") consumption of water

4. CONDITIONS UNDER AIR ACT 1981:

4.1 The following shall be used as fuel in D.G. set respectively

Sr. No.	Fuel	Quantity
1.	Diesel	15 L/hr

4.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below:

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1.	D.G. Sets	11	PM SO_2 NO_x	150 mg/Nm^3 100ppm 50ppm

4.3 There shall be no process gas emission from the manufacturing activities and other ancillary operations due to proposed expansion.

4.4 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection. The chimney(s) vents

Order No. 41980, 15/06/2017

For Kutch Oil And Soap Industry

Partner

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attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

4.5 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MoEF&CC dated 16th November-2009

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in $\mu g/m^3$
1.	Sulphur Dioxide (SO_2)	Annual	50
		24 Hours	80
2.	Nitrogen Dioxide (NO_2)	Annual	40
		24 Hours	80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual	60
		24 Hours	100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual	40
		24 Hours	60

4.6 The level of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. to 10 P.M. : 75 dB(A)
Between 10 P.M. to 6 A.M. : 70 dB(A)

5. CONDITIONS UNDER HAZARDOUS WASTE:

5.1 The applicant shall provide temporary storage facilities for each type of Hazardous Waste as per Hazardous & Other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time.

5.2 The applicant shall obtain membership of common TSDF site for disposal Hazardous Waste as categorized in Hazardous & other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time.

6. GENERAL CONDITIONS :

6.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

6.2 The waste generator shall be totally responsible for (i.e. Collection, storage, transportation and ultimate disposal) of the wastes generated.

6.3 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

6.4 In case of any accident, details of the same shall be submitted in Form – 5 to Gujarat Pollution Control Board.

6.5 Applicant shall comply relevant provision of "Public Liability Insurance Act-91".

For Kutch Oil And Soap Industry

Partner

6.6 Unit shall take all concrete measures to show tangible results in waste generation reduction, voidance, reuse and recycle. Action taken in this regards shall be submitted within 03 months and also along with Form 4.

6.7 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

6.8 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width shall be developed.

6.9 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)
Senior Environment Engineer

Outward No:414980, 15/06/2017

For Kutch Oil And Soap Industry

Partner

GPCB

GUJARAT POLLUTION CONTROL BOARD
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Sector-10-A, **Gandhinagar** 382 010
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BY R.P.A.D.

Consent to Establish (NOC)
CTE - 59103

No. PC/CCA-KUTCH-1415/GPCB ID-54026/ **Date:**

To,
Kutch Oil & Soap Industry
Plot No. 121, "Bhimani Chamber",
Sector 9/C, Opp. Khodiyar Nagar,
National Highway,
Ta. Gandhidham,
Dist. Kutch – 370 201

Subject : **Consent to Establish (NOC)** under Section 25 of Water (Prevention and Control of Pollution) Act 1974 and Section 21 of Air (Prevention and Control of Pollution) Act1981.

Reference : Your CTE Amendment Application **Inward ID No. 124407 dated 14/09/2017.**

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants **Consent to Establish (NOC)** for product expansion located at **Plot No. 121, "Bhimani Chamber", Sector 9/C, Opp. Khodiyar Nagar, National Highway, Ta. Gandhidham, Dist. Kutch – 370 201.**

1. The validity period of the order shall be up to **31/10/2022.**
2. The list of the proposed activity is as below:

Sr. No.	Activity	Quantity Per Month		
		Existing	Proposed	Total
1.	Receiving, Storage & Distribution facility for Edible Oil (Edible Oil Storage Terminal)	35283.75 KL	29713.25 KL	64997 KL

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

1. The applicant shall not carry out any activity which may attract the applicability of EIA notification-2006 due to proposed expansion.
2. No ground water shall be withdrawal without obtaining prior permission from competent authority.

Outward No. 427 Date 05/10/2017

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

For Kutch Oil And Soap Industry

Partner

3. You shall obtain revised letter from KPT for Receiving, Storage & Distribution quantity of edible oil.

4. There shall be no change in water consumption, waste water generation and its disposal and in flue gas stack due to proposed amendment.

5. All other terms and conditions of CTE - 89103 vide letter no. PC/CCA-KUTCH-1415/GPCB ID 54026/414960 dated 15/06/2017 shall remain unchanged.

For and on behalf of
Gujarat Pollution Control Board

(P. J. Vachhani)
Senior Environment Engineer

Outward No: 427345, 09/11/2017

For Kutch Oil And Soy...

Partner

GPCB

GUJARAT POLLUTION CONTROL BOARD
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By R.P.A.D

No. PC/CCA-KUTCH-1415/GPCB ID 54026/ Date:

Correction in CTE – 89103, dated 09/11/2017
(Under the provisions/rules of Environmental acts)

To,
Kutch Oil & Soap Industry
Plot No. 121, "Bhimani Chamber",
Sector 9/C, Opp. Khodiyar Nagar,
National Highway,
Ta. Gandhidham,
Dist. Kutch – 370 201

Subject : Correction in CTE – 89103, dated 09/11/2017

1. The location of plant shall be read as

   "Plot no. 14, Near Jawaharlal Road,
   Liquid Storage Tank Farm,
   Village: Kandla, Taluka: Gandhidham,
   Dist. Kutch"

   And Correspondence address shall be read as

   "Plot No. 121, "Bhimani Chamber",
   Sector 9/C, Opp. Khodiyar Nagar,
   National Highway,
   Ta. Gandhidham,
   Dist. Kutch – 370 201"

2. The other terms and condition mentioned in the CTE – 89103 issued vide letter **PC/CCA-KUTCH-1415/GPCB ID – 54026/427345, dated 09/11/2017** shall remain unchanged.

For and on behalf of
Gujarat Pollution Control Board

(P. J. Vachhani)
Senior Environment Engineer

Outward No: 421636, 13/11/2017

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 : 2004 Certified Organisation

For Kutch Oil And Soap Industry

Partner

GPCB

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By R.P.A.D

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous and Other Waste (Management and Transboundary) Rules, 2016 framed under the Environmental (Protection) Act-1986 This Board is empowered to Grant CC&A.

And whereas Board has received consolidated consent application inward no **155113dated 08/06/2019** for the **Consolidated Consent and Authorization** (CC & A) of this Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To,
M/S Kutch Oil And Soap Industry (ID-54026),
Plot no. 14, Nearjawaharlal road, Liquid storage tank farm,
kandla -kharirohar road, village: kandla,
kandla – 370201,
tal :gandhidham
Dist.:Kutch

1. **Consent Order No. AWH-102274Date of Issue: 15/06/2019.**
2. **The consents shall be valid upto 07/06/2024for the** use of outlet for the discharge of treated effluent and emission due to operationof industrial plant for storage of the following items/ products:

Sr. No.	Activities	Storage Quantity
1	Receiving, Storage & Distribution facility for Edible Oil(Total Nos. of Storage tanks:15 tanks)	33845 KL

Subject to specific condition:

1. Industry shall not carryout any activities which attract provision of EIA Notification-2006 and CRZ Notification as amended time to time.
2. Industry shall not withdraw groundwater without prior NOC from from CGWA as per Hon. National Green Tribunal order.

3. **CONDITIONS UNDER THE WATER ACT:**

3.1. Source of Water. -Tanker
3.2. The quantity of the fresh water consumption forindustrial purpose shall not exceed 0.5 KL/Day.
3.3. The quantity of the fresh water consumption for domestic purpose shall not exceed 3 KL/Day.
3.4. The quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall not exceed 0.5KL/Day.

OUTWARD No. 2[illegible]

For Kutch Oil And Soap Industry

Partner

3.5. The quantity of domestic waste water shall not exceed 2 KL/Day.
3.6 The applicant shall operate effluent treatment system efficiently so that effluent from the industrial unit shall conform to the following prescribed standards.

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C
Colour (Pt. Co. scale units)	100 units
Suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Phenolic Compound	01 mg/L
Amonical Nitrogen	50 mg/L
BOD (3 Days at 27°C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/L
Total Dissolved Solids	2100 mg/L
Percent Sodium	60%
Sulphides	02 mg/L
Total Chromium	02 mg/ L

3.7 The final treated effluent shall conform to the above standards shall be discharged on land used for Gardening & plantation purpose within premises of the unit and alsorecycle in process after tertiary and polishing treatment and in no case,effluent shall not be discharged outside premises..
3.8. Industry shall provide fixed pipeline network with flow meter for even distribution of treated effluent and maintain its records.
3.9. Unit shall provide flow meters at inlet & outlet of ETP & maintain its record.
3.10. Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.
3.11. Sewage shall be disposed off through septic tank / soak pit system.

4. CONDITIONS UNDER THE AIR ACT:

4.1. The following shall be used as a fuel in D.G.Set;

Sr. No.	Utility	Fuel	Quantity
1)	D. G. Set	Diesel	15 Lit/Hr

4.2. The applicant shall install & operate comprehensive adequate air pollution control system in order to achieve prescribed norms.

For Kutch Oil And Soap Industry

Partner

GUJARAT POLLUTION CONTROL BOARD
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4.3. The flue gas emission through stack attached to D. G. Set shall conform to the following standards

Stack No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1	D. G. Set Standby facility	11	PM SO_2 NO_x	150 mg/NM^3 100 ppm 50 ppm

4.4 There shall be no process gas emission from storage and distribution activities and other ancillary operations.

4.5 The concentration of the following parameters in the ambient air within the premises of the industry and a distance of 10meters from the source) other than the stack/vent) shall not exceed the following levels.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/M^3
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

4.6 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection toland for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.

4.7 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(A) during day time and70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

4.8 D.G. Sets Conditions

The D.G. Set shall have acoustic enclosure and shall comply sith the standards specified at Sr. no. 95 of Schedule-I of the rule-3 of E.P. Rules -1986 and Noise pollution level as per the Air Act-1981.

Consent No: 51[illegible]27/8[illegible]

For Kutch Oil And Soap Industry

Partner

D.G. Sets standards:-

The flue gas emission through stack attached to D.G. Sets shall confoom to the following standards

a) The minimum height of stack to be provided with each of the generator set shall be H=h + 0.2 (KVA) 1/2, where H= Total stack height in meter, h= height of the building in meters where or by the side of which the generator set is installed

b) Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the users end

c) The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Such circumstances the performance may be checked for noise reduction up to actual ambient noise level, preferably, in the night time) The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and the averaged.

d) The D.G. Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).

e) All efforts shall be made to bring down the noise level due to the D.G. Set, outside the premises, within the ambient noise requirements by proper siting and control measures.

f) Installation of a D.G. Sets must be strictly in compliance with the recommendations of the D.G. Set manufacturer.

g) A proper routine and preventive maintenance procedure for the D.G. Set should be set and followed in consultation with the DG Set manufacture which would help prevent noise levels of the DG Set from deteriorating with use.

6. AUTHORIZATION as per HAZARDOUS AND OTHER WASTE (MANAGEMENT AND TRANSBOUNDARY) RULES, 2016 Form-2 [See rule 6 (2)]

Form for grant of authorization for occupier or operator handling Hazardous waste \

6.1 Authorization orderNo:-AWH-102274date of issue. 15/06/2019.

M/S Kutch Oil And Soap Industryis hereby granted an authorization to operate facility for following hazardous wastes on the premises situated atPlot no. 14, Near jawaharlal road, Liquid storage tank farm,kandla kharirohar road, village kandla,kandla – 370201,gandhidham, Dist :Kutch

Sr. No	Waste	Quantity	Schedule/ Category	Facility
1	Discarded drums/ barrels/ Bag/ hose pipe etc.	0.01 MT	I-33.1	Collection, storage, transportation and disposal by selling out to registered recycler
2	ETP Sludge	1 MT	I-35.3	Collection, storage, transportation and send to TSDF Site

For Kutch Oil And Soap

Partner

GPCB

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3	Used Oil	0.025 MT	I-5.1	Collection, storage, transportation and disposal by selling out to registered recycler
4	Pig Waste	0.50 MT	B-C3	Collection, storage, transportation and send to CHWIF

5.2 The authorization shall be valid up to 07/05/2024.

5.3 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

5.4 The authorization is granted tooperate a facility for collection, storage within factory premises transportation and ultimatedisposal of Hazardouswastes as per condition no 5.2 to the industry having valid CCA of this Board.

6. TERMS AND CONDITIONS OF AUTHORISATION

6.1. The applicant shall comply with the provisions of the Environment (Protection) Act-1986 and the rules made there under.

6.2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.

6.3. The persons authorized shall not rent, lend, sell, and transfer or otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.

6.4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a beach of this authorization.

6.5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;

6.6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Wastes and Penalty"

6.7. It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.

6.8. An application for the renewal of an authorization shall be made as laid down in rules 6(2) under Hazardous and Other Waste Rules, 2016.

6.9. The importad hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

6.10. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

6.11. The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.

6.12. The importer or exporter shall bear the cost of import or export and mitigation of damages if any

For Kutch Oil And Su...

Partner

6.13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

6.14. The waste generator shall be totally responsible for (i.e. collection, storage, transportation and ultimate disposal) the wastes generated

6.15. Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form-4 by 30th day of June of every year for the preceding period April to March.

6.16. In case of any accident, details of the same shall be submitted on Form-11 to Gujarat Pollution Control Board.

6.17. As per "Public Liability Insurance Act-91" company shall get insurance Policy, if applicable.

6.18. Empty drums and containers of toxic and hazard material shall be treated as per guideline published for "Management & Handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.

6.19. In case of transport of hazardous wastes to a facility for (i.e. treatment, storage and disposal) existing in a State other than the State where hazardous wastes are generated, the occupier shall obtain 'No Objection Certificate' from the State Pollution Control Board or Committee of the concerned State of Union Territory Administration where the facility exists.

6.20. Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and also along with Form-4.

6.21. Industry shall have to display the relevant information with regards to hazardous waste as indicated in the Hon. Supreme Court's Order in W.P. No.857 of 1995 dated 14th October, 2003.

6.22. Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within the factory premises.

7. **GENERAL CONDITIONS: -**

7.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

7.2 Applicant shall also comply with the general conditions given in annexure I.

7.3 Whenever due to accident or other unforeseen act or over, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body.

7.4 In case of failure of pollution control equipments, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.

7.5 The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing

For Kutch Oil And Soap Industry

Partner

GPCB

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environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.

7.6 The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.

7.7 The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.

7.8 In case of change of ownership/management the name and address of the new owners/ partners/directors/proprietor should immediately be intimated to the Board.

7.9 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Hon. Supreme order in w.p. no. 657 of 1995 dated 14th October 2003.

8. SPECIFIC CONDITIONS:-

8.1. The authorized actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorization.

8.2. Handing over of the hazardous and other wastes to the authorized actual user shall be only after making the entry in the passbook of the actual user.

8.3. In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.

8.4. The occupier of the facility shall comply Standard operating procedure/guidelines published by MOEF&CC or CPCB or GPCB from time to time.

8.5. Unit shall comply provisions of E-Waste Management Rules-2016.

8.6 The disposal of Hazardous Waste shall be carried out as per the waste Management hierarchy.

8.7. The occupiers of facilities shall not store the hazardous and other wastes for a period not exceeding **ninety days**. Prior permission of the Board shall be obtained for extension of the storage period.

8.8. The occupier shall maintain the records of generation, sale, storage, transport, recycling, co processing and disposal of hazardous waste and make available during the inspection.

8.9. The transportation of the hazardous waste shall be carried out in GPS mounted dedicated vehicles.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Smt. U.K. Upadhyay)
Environmental Engineer
Date:-

NO: GPCB/CCA-Kutch- 1415/ID-54026/
Issued to:
M/S Kutch Oil And Soap Industry (ID-54026).
Plot no. 14, Near jawaharlal road, Liquid storage tank farm,
kandla-kharichar road, village: kandla,
kandla – 370201,Tal : gandhidham,
Dist.:Kutch

22/08/2019

GUJARAT POLLUTION CONTROL BOARD

For Kutch Oil And Soap Industry

Partner

ANNEXURE – H

PROVISIONAL TSDF MEMBERSHIP

DETOX GROUP

Saurashtra Enviro Projects Pvt. Ltd.

Integrated Common Hazardous Waste Management Facility

REF No: SEPPL/1200003624/2018-19/234

Date of Issue: 28/03/2019

TO WHOMSOEVER CONCERN

PROVISIONAL MEMBERSHIP CERTIFICATE

This is to certify that **M/s. Kutch Oil and Soap Industry (Generator)** having its Production Unit at **Plot No.14, Nr. Jawaharlal Road, Kandla, Dist: Kutch** has approached **M/s. Saurashtra Enviro Projects Pvt. Ltd. (Operator)** for obtaining membership of its Integrated Common Hazardous Waste Management Facility (I.C.H.W.M.F) for disposal of Industrial Hazardous Waste generated from their Production activities.

This Provisional Certificate with validity of 06 (six) months from date of issue has been issued for meeting and complying any immediate requirement of the Regulators.

Final Membership Certificate shall be awarded subject to successful completion of all essential membership formalities.

Note: **Waste disposal activities shall commence post receipt of Final Membership Certificate by the Generator.**

In event of any clarification/discussion, please feel free to contact us at info@detoxindia.com for further assistance.

Thanks & Regards,

For, Saurashtra Enviro Projects Pvt. Ltd

(Director)

Corporate Office : Detox House, Opp. Gujarat Samachar Press, Udhna Darwaja, Ring Road, Surat - 395 002. (Guj.)
p. +91 261 2351248, 2346181 f. +91 261 2354068
e. info@sepplindia.com w. www.detoxgroup.in
CIN :- U51100GJ2006PTC047689

For Kutch Oil And Soap Industry

Partner

ANNEXURE – I

ENVIRONMENT STATEMENT FORM-5

KUTCH OIL AND SOAP INDUSTRY

Ref.: GPCB/KOST/ENV/2021/07 Date: 19/07/2021

To
Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector: 10 - A,
Gandhinagar - 382010

K. A.: Smt. U. K. Upadhyay (Senior Environment Engineer)

Sub. : Submission of Environmental Statement Form V for the year ending on 31st March, 2022.

Respected Mam,

We are pleased enclose herewith Environmental Statement Form-V duly filled in, for the financial year ending on 31st March, 2022.

We hope you find the above in order.

Thanking you and Regards.

Yours sincerely,

For,
M/s. Kutch Oil and Soap Industries,

For, Kutch Oil And Soap Industry

Partner

Authorized Signatory

Encl.: Environmental Statement – Form V

Annexure – A Detail of Product & Raw Material Consumption

FORM- V

For the Year APRIL 2021 - MARCH 2022

ENVIRONMENTAL STATEMENT REPORT For Year 2020-2021

M/s. KUTCH OIL AND SOAP INDUSTRIES,

PART - A

i	Name & address of the owner/ Occupier of the industry operation or process	:	M/s. KUTCH OIL AND SOAP INDUSTRIES. Plot no. 14, Near jawaharlal road, Liquid storage tank farm, Kandla-Kharirohar road, Village: Kandla, Kandla- 370201, Tal: gandhidham, Dist- Kutch.
ii.	Industry category Primary – (STC Code) Secondary – (SIC Code)	:	 Red Category Medium Scale Unit
iii.	Production Capacity	:	Please Refer Annexure-A.
iv.	Year of Establishment	:	01/12/2017
v	Last Environmental Statement Submitted	:	02/02/2017

PART - B

WATER AND RAW MATERIAL CONSUMPTION

(i) Water Consumption, m^3 / day

Washing : 0.5 KL/DAY
Domestic : 3 KL/DAY

Name of Products	Water (PROCESS) consumption per unit of product output	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
	(1)	(2)
1. Receiving, Storage & Distribution facility for Edible Oil (Total Nos. of storage tanks:15 tanks0	NA	NA

(ii) Raw material consumption

Name of raw material consume	Name of Products	Raw Material Consumption During the current financial year (2020-2021)
No Raw Material used as we are only Providing storage facilities.		

PART – C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/day)	Percentage of variation from prescribed standards with reasons.
(a) Water	**INDUSTRIAL – 0.5 KL/DAY**	**As per GPCB Norms**	**NO PERCENTAGE VARIATION**
	DOMESTIC – 2 KL/DAY	**NA**	**NA**
(b) Air			
D. G. SET Standby facility	---	**PM ≤ 150 mg/Nm^3 SO_2 ≤ 100 ppm NO_x ≤ 50 ppm**	**NO PERCENTAGE VARIATION**

PART – D

HAZARDOUS WASTES

Hazardous Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process	---	---
(b) From pollution control facility		
USED OIL	0.00	0.00
ETP Sludge	0.00	0.00
Discarded Drum / bags/ barrel/ hose pipe etc.	0.00	0.00
Pig Waste	0.00	0.149

PART - E

SOLID WASTES

Solid Wastes	Total Quantity (kg)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
(a) From process	NIL	NIL
(b) From pollution control facility	NIL	NIL
(c) (1) Quantity recycled or re-utilized within the unit	NIL	NIL
(2) Sold	NIL	NIL
(3) Disposed	NIL	NIL

PART - F

Please specify the characteristics (in terms of concentration & quantum) of hazardous as well as solid wastes & indicate disposal practice adopted for both these categories of wastes.

I-5.1-USED OIL - 0.025 MT/YR
I-35.3-ETP SLUDGE - 1 MT/YR
I-33.1-DISCARDED DRUM/ CONTAINERS /BAGS/ BARREL - 0.01 MT/YR
II-C3-PIG WASTE-0.50 MT/YR

USED OIL IS SELLING OUT TO REGISTERED RECYCLER.
ETP SLUDGE IS SENT TO TSDF.
DISCARDED CONTAINERS ARE SELLING OUT TO REGISTERED RECYCLER.
PIG WASTE IS SEND TO CHWIF.

PART - G

Impact of the pollution control measures taken on conservation of natural resources & consequently on the cost of production.

AIR SEPARATE STACK IS ATTACHED TO DG SET, AS DIESEL IS USED AS FUEL, ADEQUATE STACK HEIGHT IS PROVIDED.

NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.

WATER INDUSTRIAL: FINAL TREATED EFFLUENT WILL BE USED FOR GARDENING AND PLANTATION PURPOSE WITHIN THE PREMISES.

DOMESTIC: DOMESTIC EFFLUENT SHALL BE DISPOSED OFF THROUGH SEPTIC TANK / SOAK PIT SYSTEM.

NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.

SOLID WASTE	USED OIL IS SELLING OUT TO REGISTERED RECYCLER.
	CHEMICAL SLUDGE IS SENT TO TSDF.
	DISCARDED CONTAINERS ARE SELLING OUT TO REGISTERED RECYCLER.
	PIG WASTE IS SEND TO CHWF.
	NO SIGNIFICANT IMPACT ON NATURAL RESOURCES.

PART – H

Additional measures /investment proposal for environmental protection including abatement of pollution, prevention of pollution.

Unit is developing the Green belt area within plant premises.

PART – I

Any other particulars for improving the quality of the environment.

ADEQUATE PLANTATION IS CARRIED OUT ALONG THE PERIPHERY OF THE INDUSTRIAL PREMISES.

Prepared By,

For

M/s. Kutch Oil and Soap Industries,

(Authorized Signatory)

Date: 19/07/2022

ANNEXURE – A

LIST OF PRODUCTS

Sr. No.	Product	Quantity
1	Receiving, Storage & Distribution facility for Edible Oil (Total Nos. of Storage tank:15 tank)	33845 KL

Gokul
AGRO RESOURCES LTD.
LIQUID TERMINAL
Plot No. 13, Near IOCL LPG Terminal,
Kandla, Kutch - 370210.
E-mail : terminal@gokulagro.com

Ref. : Gokul/Plot 13/Compliance /2022/066

June 06, 2022

TO: SE(L)
The Environment Cell
Deendayal Port Trust
Gandhidham - 370201

Sub. : Submission of Six Monthly Compliance Report of Environmental/CRZ Clearance, CRZ Recommendation and NOC/ CTE granted by GPCB.(Compliance Report for the Period of **December-21 to May-22**).

Ref.: EC/CRZ issued vide letter No.: **F. No. 10-36/2008-IA-III** dated **02/02/2010.**

Dear Sir,

We are pleased to submit herewith the required Six Monthly Compliance Report for the period from December 2021 to May 2022 for LST Plot NO. 13.
Kindly acknowledge receipt of the same.

Thanking you.

Yours sincerely,

M/s. GOKUL AGRO RESOURCES LTD.

956
16/06/22

GOKUL AGRO RESOURCES LTD. GOKUL MEGHPAR BORICHI

Authorized Signatory
Encls. : As above

SD
16/6

ANNEXURE - A

COMPLIANCE STATUS REPORT OF EC

EC issued vide letter No. F. No. 10-36/2008 – IA-III dated 2nd February 2010

Extension of validity of EC issued Vide Letter No. F. No. 10-36/2008- IA-III dated 18th August, 2015

NO.	BRIEF DESCRIPTION	COMPLIENCE
6.	**SPECIFIC CONDITION**	
A.	**Construction Phase**	
I	All the conditions stipulated by the Govt. of Gujarat vide letter No. ENV -10-2008-366-E, dated 09.03.2009 and Gujarat Pollution Control Board vide letter No. PC/NOC/CCA-Kutch-78(2) GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 09/03/2009 is enclosed as **Annexure B.** Further, Compliance report of NOC/CTE granted by GPCB (Valid up to 05/08/2020) is enclosed as **Annexure C.**
II	The entire water supply shall be managed by the Port. Waste water will be treated and utilized.	Commercial operations have already begun. We get our water from a local supplier, and the waste water we generate is treated and used for green belt development within the plant premises.
III	Provision shall be made for parking of heavy vehicles and sufficient space for loading /unloading of trucks within the Port complex.	We provided parking for large vehicles during the construction phase, as well as ample room for loading and unloading trucks within each individual plot.
IV	The proponent shall put in place the detailed on site and Off site Emergency Management Plan as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also.	We created a complete on-site and off-site emergency management plan in accordance with the Hazardous Chemicals Manufacturing, Storage, and Importation Rules 1989, as revised to date, which may encompass natural disasters as well as the construction period.
V	The proponent shall put in place the Oil Spill Contingency Plan.	We created an Oil Spill Contingency Plan and stick to it to the letter.
VI	The proponent shall strictly comply the measures proposed as per their letter No EG/WK/4684/EC/388, dated 01.12.2009.	Not Applicable as we are only edible storage Terminal.
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991.	Complied and done the FSI on the plots as per CRZ notification 1991.
VIII	There shall be no drawl of ground water. If required, necessary permission shall be obtained from the competent Authority prior to construction /operation of the project.	We have purchased water from local water Supplier and no ground water withdrawal envisaged by us.
IX	Sewage Treatment facilities should be provided in accordance with the CRZ notification.	Domestic Waste water disposed through septic tank /Soak pit system accordance with the CRZ notification.

X	The solid waste shall be properly collected, segregated and disposed as per the provision of solid waste (Management and Handling) Rules, 2000.	According to the provisions of the Solid Garbage (Management and Handling) Rules, 2000 and the Solid Waste Management Rules, 2016, solid waste was appropriately collected, sorted, and disposed of.
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking , mobile toilets, mobile STP, safe drinking water medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the project.	There is no any labor camp required as local public/labor mainly engaged During construction activities.
XII	A first Aid Room will be provided in the project both during construction and operation of the project.	We have provided the first aid room during construction phase as well as during operation phase.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	During construction, we kept all of the topsoil and used it for landscaping and greenbelt development on the site.
XIV	Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval sites with the approval of competent authority.	During the construction phase, Construction wastes were disposed off as per the construction and demolition Rule, 2016. There is no any neighbouring communities are located at project site.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	It shall be ensured that there are no hazards to ground water quality due to leaching of heavy metals and other harmful substances by taking adequate measures for evaluating soil and ground water samples.
XVI	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	We took all necessary precautions to ensure that no construction waste contaminated waterways or leached into ground water. We have now begun our commercial operations.
XVII	Any hazardous waste generated during construction phase, should be disposed of as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	We had disposed the hazardous waste during construction phase as per Hazardous and other wastes (Management and Trans boundary Movement) Rules, 2016.
XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We are operating the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.
XIX	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to Environmental (Protection) Rules prescribed for air and noise emission standards.	During the construction phase, We were operated the DG sets as per the requirement and as per the guidelines of GPCB / CPCB.
XX	The diesel required for operation DG sets shall be stored in underground tanks and if required clearance from Chief Controller of Explosives shall be taken.	Complied. Diesel required for the operation of DG has been stored as per rules.
XXI	Vehicles hired for bringing construction materials to the site should be in good condition and should have a pollution check certificate and should	During the construction phase, We only hired vehicles that had a valid pollution under control license issued by statutory authorities.

	confirm to applicable air and noise emission standards and should be operated only during non-peak hours.	Since the Project area is connected with national highway, transportation activities have been limited to daytime.
XXII	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to confirm to the stipulated standards by CPCB/GPCB.	Complied.
XXIII	Storm water control and its re-use as per CGWB and BIS standards for various applications.	We had constructed the Rain Water Harvesting system as per drawing submitted to DPT.
XXIV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	We minimized the water demand during the construction phase by using pre-mixed concrete, curing agents, preventing losses due to leaks and spills, and other best practises for construction and related operations.
XXV	The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipment's , etc. as per National Building Code including protection measures from lighting etc.	We obtained the necessary clearance from DPT and maintained the same.
XXVI	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Complied.
XXVII	Under the provisions of Environmental (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found the construction of the project has been started without obtaining environmental clearance.	Complied. We had started construction activities after obtained the necessary clearance from statutory authorities i.e. EC/CRZ Clearance from MoEF &CC. New Delhi, CRZ Recommendation from Forest & Environment Department, GOG and NOC/CTE from GPCB, GOG.
II. Operation Phase		
I	The installation of the Sewage Treatment Plant (STP), if any, should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled /reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall confirm to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP	We use a septic tank/soak pit system to dispose of our domestic waste water. We shall only dump unused treated effluent after confirming compliance with GPCB regulations and standards.
II	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and confirm to rules made under the	We've implemented best practises for using diesel power generators, as well as standards established under the 1986 Environment (Protection) Act. We've specified the stack

	Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with Gujarat Pollution Control Board.	height for the DG sets based on the CTE/CCA retrieved from the Board.
Iii	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	The noise level confirming the standards and we have appointed Environmental consultant for carrying out Environmental Monitoring at our own premises as per the norms. We have attached the noise level monitoring Report as **Annexure-F**.
iv	The greenbelt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	We have already earmarked the area for development of Greenbelt at periphery area of plots. We have provided approx. 480 square meter area for greenbelt. Enclosed herewith drawing in **Annexure-E**.
v	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area during the monsoon period.	During the monsoon season, we installed weep holes in the compound walls to ensure natural rainwater drainage in the catchment region.
Vi	Rain water harvesting for roof run –off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts above the highest ground table.	We have constructed the Rain water harvesting for roof run-off at our premises.
Vii	The ground water level and the quality should be monitored regularly in consultation with Central Ground Water Authority.	We are regularly monitored the ground water level and its quality in consultation with Central Ground Water Authority.
Viii	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	To reduce traffic congestion around the entry and exit points, we prepared and placed a Traffic Management Plan for the premises, as well as adequate parking spaces.
Ix	Effort may be made to use solar energy to the maximum extent possible.	We have prepared and submitted the Solar Energy Utilization Plan.
X	Adequate measures should taken to prevent odour problem from solid waste processing plant and STP.	Adequate measure is taken by us to prevent odour problem.
General Conditions		
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously confirming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat.	We have constructed the structures as per the approved plan by Deendayal Port Trust (statutory authority of Deendayal Port Trust, Ministry of Shipping are approving the construction plan) Further, We have constructed the structure as per the Coastal Regulation Zone Recommendation granted by Forest & Environmental Department. GOG on 09/03/2009 with considering CRZ notification, 1991 and subsequently

		amendment from time to time.
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests.	We are agreed with this and complied.
III	This Ministry reserves the right to revoke the clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.	We are agreeing with this condition and assure that we have complied with this.
IV	This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	We are agreeing with ministry and assure that we are complying with the all necessary condition.
V	Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.	We are providing the full support to the officials of Ministry's Regional Office at Bhopal and the offices of the Central and State Pollution Control Board by the project proponents during their inspection at Project site.
VI	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and control of Pollution) Act 1981, the environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000, including the amendments and rules made thereafter.	We are fully complied with this. Monitoring report is attached here as **Annexure-F.**
VII	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department from height point of view, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	When required, we are assured that we should get all necessary clearances and approvals from all relevant responsible authorities, in accordance with all applicable norms and regulations.
VIII	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in.the advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhopal.	Deendayal Port Trust had already advertise in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. Deendayal Port Trust had made advertised in two newspapers i.e Divya Bhasker and Kutch Mitra on 17/02/2010. Further, Deendayal

		Port Trust vide letter dated 17/02/2010 had already been submitted to Regional Office of this Ministry at Bhopal.
IX	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	Point Noted.
X	Any appeal against this clearance shall lie with the National Environmental Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997.	Point Noted.
XI	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	N/A
XII	The Proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	We are regularly submitting the compliances of stipulated conditions made in EC/CRZ Clearance. CRZ Recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on Deendayal Port Trust website. i.e. www.deendayalport.gov.in. We are monitored the pollutants like SPM, RSPM, SO2, NOx and monitoring report is attached here in **Annexure-F**.
XIII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well as by email)to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	We are regularly submitting the six monthly compliance Report to DPT.
XIV	The environmental statement for each financial year ending 31st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of MoEF by e – Mail.	The Environmental Statement for each financial year ending 31st march in Form –V is submitted to the Honorable State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986.

ANNEXURE –B

Name of Work: Development of plots for construction of liquid storage tank farms at Kandla, District Kachchh.

CRZ Recommendations: Letter No. ENV-10-2008-366-E March 9th, 2009 of Director (Environment), Forest & Environment Department, GOG.

STATUS OF COMPLIENCE OF THE CONDITIONS STIPULATED BY GUJARAT STATE COASTAL ZONE MANAGEMENT AUTHORITY, GANDHINAGAR IN CRZ RECOMMENDATIONS LETTER.

Sr. No.	Conditions in CRZ Recommendation Letter	Compliances
	Specific Conditions	
1	The project proponents shall strictly adhere to the provisions of the CRZ notification of 1991 and its amendments issued by the Ministry of Environment and Forest, GOI, from time to time.	We are strictly adhere to the provisions of the 1991 CRZ notification, as well as any subsequent changes issued by the MoEF, GOI from time to time.
2	The project proponents shall obtain all necessary permissions from different Government Departments/agencies shall be obtained by the KPT before commencing the expansion activities.	We had obtained the EC/CRZ Clearance from the MoEF, GOI on 02/02/2010 and MOEF &CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020. Further, Deendayal Port Trust had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 /dated 28/8/2016 had extended the validity period of NOC up to 05/08/2020, and we have also obtained the Valid NOC or CCA separately for the Plot No. 13. (Copy placed at **Annexure-G)**
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and as permissible in the CRZ notification, 1991, and its amendments issued	We are handling only permissible cargo as per the CRZ Notification, 1991 and its amendments issued from time to time.

	from time to time.	
4	No ground water shall be tapped to meet the water requirements during the construction and /or operation phases.	We have purchased water from local water Supplier and no ground water withdrawal envisaged by us.
5	The Kandla Port Trust shall undertake roof – top water harvesting in areas wherever it is feasible.	We have made necessary arrangement for the roof top water harvesting at our premises.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We have provided the assurance that we will contribute towards the cost of any common study that may be carried out for DPT region for environmental protection and management issues.
7	The Kandla Port Trust shall duly incorporate the above-mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department.	We have already prepared the detailed Disaster Management Plan and also submitted it to DPT.
8	The project proponents shall implement all the suggestion/ recommendations given by the NIOT in their Rapid EIA report.	Suggestion / recommendation given by the NIOT in their Rapid EIA report is being will be strictly followed by us.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly comply with the conditions stipulated by GPCB in Consent to Establish (NOC) and in CCA.
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	We have dedicated Environmental Consultant for compliance of Environmental Conditions Including Monitoring.
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department.	We have already been earmarked the area for development of greenbelt along the periphery area.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection / management purpose.	We have started commercial operation after obtaining statutory clearances as applicable.
General Conditions		
1	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply	No any construction camps had required at Project site because only local peoples /labours involved for the construction activities. Now, we have started the

<table>
<tr><td></td><td>and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.</td><td>commercial operation.</td></tr>
<tr><td>2</td><td>The KPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the District Collector / District Development Officer.</td><td>DPT is already engaged in numbers of CSR activities in the area. Also, we are carried out CSR at our own level in addition to the CSR by DPT.Fund Planned for CSR in F.Y. 2021-2022: 5.0 Lakh
Actual Fund provided for CSR in F.Y. 2021-2022: 3.0 Lakh</td></tr>
<tr><td>3</td><td>A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.</td><td>We have earmark separate budget for environmental protection& Socio economic activity. Please refer below table:
<table><tr><th>Budget for</th><th>Planned cost for F.Y. 2021-2022</th><th>Actual Cost for F.Y. 2021-2022</th></tr><tr><td>EMP</td><td>5.0 Lakh</td><td>3.0 Lakh</td></tr><tr><td>CSR</td><td>5.0 Lakh</td><td>3.0 Lakh</td></tr></table></td></tr>
<tr><td>4</td><td>A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.</td><td>We have appointed GPCB approved Environmental Consultant for compliance of Environmental Condition including Monitoring.</td></tr>
<tr><td>5</td><td>An Environmental reports indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, GOI.</td><td>If there is any change in the baseline environmental quality in the coastal and marine environment, we shall submit reports to the appropriate authority every year.</td></tr>
<tr><td>6</td><td>Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/MoEF, GOI.</td><td>Six Monthly reports on Compliance report condition mentioned in EC/CRZ Clearance will be furnished by us on regular basis to this department / MoEF, GOI through KPT.</td></tr>
<tr><td>7</td><td>Any other condition that may be stipulated by this department from time to time for environmental protection/management purpose shall also have to be complied with by the KPT.</td><td>We will comply with any other condition that may be stipulated by statutory authorities from time to time for environmental protection /management purpose.</td></tr>
</table>

ANNEXURE – C

COMPLIANCE REPORT OF CONSENT TO ESTABLISH (NOC)

(CTE NO: 72308 ON DATED 28/08/2015 is valid up to 05/08/2020)

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
1.	**SPECIFIC CONDITIONS:**	
1.	Unit shall not start any construction activities till extending the validity of EC& CRZ from Competent Authority.	We are complied with this. We had started the construction activity after extending the validity of EC and CRZ Clearance from MoEF& CC, New Delhi.(MoEF&CC, New Delhi vide letter no. F. No. 10 – 36/ 2008 – IA.III dated 18/08/2015, extended the validity period for Environmental and CRZ Clearance up to 01.02.2020. .(Enclosed as **Annexure B.**)
2.	No ground water shall be used for the project coming under Dark zone without permission of competent authority.	We are purchase water from local water Supplier and no ground water withdrawal envisaged by us.
3.	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 lakh Kilo liters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and PO land Acid of 472 tanks with 12,08,369 Kl. The tentative tankage capacity works out for the proposed tank farm is @ 9 lakhs Kilo Liter.	We do meet the condition. We have stored only permissible cargo as per EC & CRZ Clearance accorded by the MoEF, GoI.
4.	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10~ 36/200B-IA-III dated 02/02/2010 for old Kandla.	We have started the commercial operation and strictly complied with the condition of EC & CRZ issued by MoEF.
5.	You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing	We have obtained the valid CTE and CCA from bard and strictly

<table>
<tr><th>SR. NO.</th><th>CONSENT CONDITION POINTS</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>any activities.</td><td>complied with this.</td></tr>
<tr><td>6.</td><td>Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.</td><td>We are strictly complied with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986 wherever applicable.</td></tr>
<tr><td><u>2</u></td><td colspan="2"><u>CONDITIONS UNDER THE WATER ACT 1974:</u></td></tr>
<tr><td>2.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.</td><td>We are only Edible oil Storage terminal and we are not doing any manufacturing activity.</td></tr>
<tr><td>2.2</td><td>The quantity of domestic waste water (Sewage) shall not exceed 0.5 KL/Day</td><td>We do meet the condition. Our Domestic Wastewater generation will never exceed the limit.</td></tr>
<tr><td>2.3</td><td>Sewage shall be disposed of through septic tank/soak pit system.</td><td>We do meet the condition. We have provided the septic tank/soak pit for disposal of sewage.</td></tr>
<tr><td>2.4</td><td>The unit shall install flow meters for measuring category wise (Category as given in Water Cess 1977 Schedule II) consumption of water.</td><td>We have purchased water from local water Supplier.</td></tr>
<tr><td>2.5</td><td>Domestic effluent shall be disposed off through septic tank/soak pit system confirm to the following standards.
<table>
<tr><th>Parameter</th><th>Permissible Limit</th></tr>
<tr><td>BOD (5 days at 20° C)</td><td>30 mg/Liter</td></tr>
<tr><td>Suspended Solid</td><td>20 mg/Liter</td></tr>
<tr><td>Residual Chlorine</td><td>Minimum 0.5 mg/Liter</td></tr>
</table></td><td>We have provided the septic tank/soak pit for disposal of sewage.</td></tr>
<tr><td><u>3.</u></td><td colspan="2"><u>CONDITIONS UNDER THE AIR ACT 1981:</u></td></tr>
<tr><td>3.1</td><td>There shall be no use of fuel; hence there is no flue gas emission from manufacturing activities and other ancillary operations.</td><td rowspan="2">We won't use any fuel because this project is solely for the storage of edible oil. As a result, manufacturing and other ancillary industries produce no flue gas emissions. We will also not be carrying out the production procedure. As a</td></tr>
<tr><td>3.2</td><td>There shall be no process emission from the manufacturing and other ancillary activities</td></tr>
</table>

<table>
<tr><th>SR. NO.</th><th>CONSENT CONDITION POINTS</th><th>COMPLIANCE</th></tr>
<tr><td></td><td></td><td>result, no process gas emissions from manufacturing and other ancillary processes are produced.</td></tr>
<tr><td>3.3</td><td>The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November-2009.
<table>
<tr><th>Pollutant</th><th>Time weighted average</th><th>Concentration in ambient air in µg/M3</th></tr>
<tr><td>SO2</td><td>Annual
24 hours</td><td>50
80</td></tr>
<tr><td>NO2</td><td>Annual
24 hours</td><td>40
80</td></tr>
<tr><td>Particulate Matter (Size less than 10 µm) OR PM10</td><td>Annual
24 hours</td><td>60
100</td></tr>
<tr><td>Particulate Matter (Size less than 2.5 mm) OR PM 2.5</td><td>Annual
24 hours</td><td>40
60</td></tr>
</table></td><td>Ambient Air quality within plant premises will be confirmed to the prescribed norms. Refer Annexure-F.</td></tr>
<tr><td>4.4</td><td>The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:
Between 6 A.M. and 10 P.M.: 75 dB (A)
Between 10 P.M. and 6 A.M.: 70 dB (A).</td><td>We do meet the condition. Refer Annexure-F.</td></tr>
<tr><td><u>4.</u></td><td><u>CONDITIONS UNDER HAZARDOUS WASTE:</u></td><td></td></tr>
<tr><td>4.1</td><td>The applicant shall provide temporary storage facilities and maintain the record for each type of Hazardous Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.</td><td>We have provided the storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time wherever applicable.</td></tr>
<tr><td><u>5.</u></td><td><u>GENERAL CONDITIONS :</u></td><td></td></tr>
<tr><td>5.1</td><td>Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.</td><td>We will intimate to GPCB, GoG, if there are any change in personnel, equipment or</td></tr>
</table>

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
		working condition as mentioned in the consents form / order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipment's, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.	We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in excess of standards at their premises and we will take necessary actions / measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.	We have appointed GPCB approved environmental consultant to carry out environmental monitoring at our own premises.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	We complied with this. We have dedicated team/ Environmental Consultant for compliance of Environmental conditions including monitoring.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.	Environmental Statement will be submitted by us within stipulated time period.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Agreed with the condition.

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
5.7	In case of change of ownership/management the name and address of the new owners /partners /directors /proprietor should immediately be intimated to the board.	Agreed with the condition.
5.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal} of the wastes generated.	We have obtain TSDF membership certificate for collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal of waste generated at our own premises whenever applicable.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31stJanuary of every year	We are maintaining the records for waste generation and its management. We have submitted the Annual returns to GPCB in prescribed form within stipulated time period.
5.10	As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.	We have all the necessary insurance policy including the "Public Liability Insurance Act – 91.
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Forrn-4.	We had adopted best practices during the construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form-4.
5.12	Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We are strictly complied with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986 wherever applicable.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.6S7 of 199s-dated 14th October-2003.	We are complied with this condition.

SR. NO.	CONSENT CONDITION POINTS	COMPLIANCE
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	We are monitored the pollutants like SPM, RSPM, SO2, NOx and displayed at a convenient location near the main gate of the company in the public domain.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We have previously prepared a complete On-Site and Off-Site Emergency Management Plan in accordance with the MSIHC Rules, 1989, as updated to date, which may also cover natural calamities.

ANNEXURE –D

Monitoring the implementation of environmental Safeguards
Ministry of Environment, Forest and Climate Change
Western Region, Regional Office, Bhopal.
MONITORING REPORT
Part – 1
DATA SHEET

1. Project type : River valley/ Mining/ Industry/ thermal/nuclear/Other (specify)	**Liquid Storage Terminal**
2. Name of the project	**M/s GOKUL AGRO RESOURCES LTD.**
3. Clearance Letter (s). OM no and date	MoEF , New Delhi vide File No.10-36/2008-IA-III dated 2/02/2010 had granted Environmental /CRZ Clearance to Kandla Port Trust for the subject project. Further, MoEF & CC, New Delhi vide File No.10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 1/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	Dist.: Kutch State : Gujarat Location : Kandla Port Trust ,23° 1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address of Concerned Project Chief Engineer(with pin code & telephone/telex/fax numbers b) Address of Executive project Engineer/manager/(with pin code fax numbers)	Plot No. 13, Liquid Storage Tank Farm, Nr. Jawaharlal Road, Kandla-Khari-rohar road, Gandhidham-Kutch, Gujarat, Pin-370210
6. Salient features of the project b) Salient features of the Environmental management plan	1. Plot no. 13 have been developed for the Liquid storage Tank farm. 2. The Tentative capacity works out for the proposed tank farm is 53169.32 Kiloliters. 3. This Plot is mainly used for storage of liquid cargo as permitted in CRZ Notification from time to time. 1. Provision of parking of heavy vehicles and sufficient space for loading /unloading of trucks within individual

	plot limit have been made by us. 2. We had already placed the detailed on site and Off site Emergency management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules,1989, as amended to date. 3. The solid waste have been properly collected, segregated and disposed of as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by us. 4. A first Aid Room had already been provided by successful plot allottee during the construction activities. 5. We have only hired those Vehicles having valid pollution under control license granted by statutory authorities. 6. We have already earmarked the area for storage of storm water and same will be re-using for green belt development at the premises of the each plots.
7. Break up of the project area a) Submergence area : forest & non-forest b) Others	 Nil Nil
8. Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land & landless labourers/artisen. a) SC. ST/Adivasis b) Others (Please indicate whether these figures arebased on any scientific and systematic survey carried out of only provisional figures, if a survey is carried out give details and years of survey).	Nil Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference	Planned Project Cost: 25 crore

b) Allocation made for environmental management plans with item wise and year wise break-up	Planned EMP Cost: 10.0 Lakh
c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) includes the cost of environmental management plans so far.	FIRR EIRR
d) Actual expenditure incurred on the project	Actual Project Cost: 22.8 crore
e) Actual expenditure incurred on the Environmental management plans so far.	Actual provided fund for EMP:7.9 Lakh
10. Forest land requirement	Nil
a) The status of approval for diversion of forest land for non-forestry use	Nil-Not related
b) The status of clear felling	Nil
c) The status of compensatory a forestation, if any	Nil
d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	Nil
11. The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	Nil
12. Status of construction a) Date of commencement (Actual and/or planned) b) Date of completion (Actual and/or planned)	a. 22/08/2016 b. 24/03/2021
13. Reasons for the delay if the Project is yet to start	---
Date of site visited	
a) The dates on which the project was monitored by the regional office on pervious occasion. if any	---
b) The date site visit for this monitoring report	---

ANNEXURE - E

Approved Competition Drawing along with Greenbelt area measurement and Drawing

PIPE LINE CORRIDOR

97.00

ADJOINING TANKER PARKING AREA

50.00

ADJOINING PLOT NO - 12

150.00

PHASE-II

PUMP HOUSE

F.S.W.T
100,000 ltr cap

U.G.W.T
25,000 ltr cap

O.H.W.T
25,000 ltr cap

WEIGH BRIDGE

ADMIN OFFICE

ENTRY
MAIN GATE

WATER SUPPLY LINE

24.40 MT. WIDE ROAD

BLOCK PLAN
(SCALE :- 1:300)

NOTE:-

Completed Construction Is Denoted By

KEY PLAN
(SCALE :- N.T.S.)

PLAN SHOWING PHASE-1 COMPLETION LIQUID STORAGE TANK FINAVAIL (FOR EDIBLE OIL) ON PLOT NO. 13 ALLOTTED TO M/s. BOKIL AGRO RESOURCES LTD. AT BOKIL-LAKHIRKHAR ROAD, KANOLA, TA. GANDHIDHAM, DIST. KACHCHH

LIQUID STORAGE FOR EDIBLE OIL

Sr No	TANK Nos	DIA X HEIGHT	CAPACITY
01	TANK NO. 1	12.00M Ø X 12.00MT	1357.56 M.T.
02	TANK NO. 2	12.00M Ø X 12.00MT	1357.56 M.T.
03	TANK NO. 3	12.00M Ø X 12.00MT	1357.56 M.T.
04	TANK NO. 4	9.00M Ø X 12.00MT	763.00 M.T.
05	TANK NO. 5	9.00M Ø X 12.00MT	763.00 M.T.
06	TANK NO. 6	12.00M Ø X 12.00MT	1357.56 M.T.
07	TANK NO. 7	12.00M Ø X 12.00MT	1357.56 M.T.
08	TANK NO. 8	12.00M Ø X 12.00MT	1357.56 M.T.
09	TANK NO. 9	12.00M Ø X 12.00MT	1357.56 M.T.
10	TANK NO. 10	12.00M Ø X 12.00MT	1357.56 M.T.
11	TANK NO. 11	12.00M Ø X 12.00MT	1357.56 M.T.
12	TANK NO. 12	12.00M Ø X 12.00MT	1357.56 M.T.
13	TANK NO. 13	12.00M Ø X 12.00MT	1357.56 M.T.
14	TANK NO. 14	12.00M Ø X 12.00MT	1357.56 M.T.
15	TANK NO. 15	12.00M Ø X 12.00MT	1357.56 M.T.
16	TANK NO. 16	12.00M Ø X 12.00MT	1357.56 M.T.
17	TANK NO. 17	12.00M Ø X 12.00MT	1357.56 M.T.
18	TANK NO. 18	12.00M Ø X 12.00MT	1357.56 M.T.
19	TANK NO. 19	12.00M Ø X 12.00MT	1357.56 M.T.
20	TANK NO. 20	12.00M Ø X 12.00MT	1357.56 M.T.
21	TANK NO. 21	14.00M Ø X 16.00MT	2481.76 M.T.
22	TANK NO. 22	14.00M Ø X 16.00MT	2481.76 M.T.
23	TANK NO. 23	14.00M Ø X 16.00MT	2481.76 M.T.
24	TANK NO. 24	14.00M Ø X 16.00MT	2481.76 M.T.
25	TANK NO. 25	14.00M Ø X 16.00MT	2481.76 M.T.
26	TANK NO. 26	14.00M Ø X 16.00MT	2481.76 M.T.
27	TANK NO. 27	14.00M Ø X 16.00MT	2481.76 M.T.
28	TANK NO. 28	14.00M Ø X 16.00MT	2481.76 M.T.
29	TANK NO. 29	14.00M Ø X 16.00MT	2481.76 M.T.
30	TANK NO. 30	14.00M Ø X 16.00MT	2481.76 M.T.
	TOTAL CAPACITY		43322.56 M.T.

AREA TABLE

Sr No	DESCRIPTION	SIZE	AREA
01	ADMIN OFFICE	11.00 X 7.50 MT	82.50 Sq.M.
02	PUMP HOUSE	30.00 X 10.00 And 9.00 X 9.00 MT	381.00 Sq.M.
03	LOADING BAY	12.00 X 30.00 MT	360.00 Sq.M.
04	WEIGH BRIDGE	11.00 X 3.00 MT	33.00 Sq.M.
05	WEIGH BRIDGE OFFICE	3.00 X 3.00 MT	9.00 Sq.M.
06	TIME OFFICE SECURITY OFFICE	3.00 X 4.00 MT	12.00 Sq.M.
07	TRANSFORMER, MT ELECTRIC SWGEAR ROOM	4.50 X 7.00 MT	29.00 Sq.M.
08	TOILET BLOCK	6.00 X 3.00 MT	18.00 Sq.M.
09	CON. AREA OF TANK NO. 1	13.00M Ø	132.66 Sq.M.
10	CON. AREA OF TANK NO. 2	13.00M Ø	132.66 Sq.M.
11	CON. AREA OF TANK NO. 3	13.00M Ø	132.66 Sq.M.
12	CON. AREA OF TANK NO. 4	9.00M Ø	63.24 Sq.M.
13	CON. AREA OF TANK NO. 5	9.00M Ø	63.24 Sq.M.
14	CON. AREA OF TANK NO. 6	13.00M Ø	132.66 Sq.M.
15	CON. AREA OF TANK NO. 7	13.00M Ø	132.66 Sq.M.
16	CON. AREA OF TANK NO. 8	13.00M Ø	132.66 Sq.M.
17	CON. AREA OF TANK NO. 9	13.00M Ø	132.66 Sq.M.
18	CON. AREA OF TANK NO. 10	13.00M Ø	132.66 Sq.M.
19	CON. AREA OF TANK NO. 11	13.00M Ø	132.66 Sq.M.
20	CON. AREA OF TANK NO. 12	14.00M Ø	153.86 Sq.M.
21	CON. AREA OF TANK NO. 13	14.00M Ø	153.86 Sq.M.
22	CON. AREA OF TANK NO. 14	14.00M Ø	153.86 Sq.M.
23	CON. AREA OF TANK NO. 15	14.00M Ø	153.86 Sq.M.
24	CON. AREA OF TANK NO. 16	14.00M Ø	153.86 Sq.M.
25	CON. AREA OF TANK NO. 17	14.00M Ø	153.86 Sq.M.
26	CON. AREA OF TANK NO. 18	14.00M Ø	153.86 Sq.M.
27	CON. AREA OF TANK NO. 19	14.00M Ø	153.86 Sq.M.
28	CON. AREA OF TANK NO. 20	14.00M Ø	153.86 Sq.M.
29	CON. AREA OF TANK NO. 21	14.00M Ø	153.86 Sq.M.
30	CON. AREA OF TANK NO. 22	14.00M Ø	153.86 Sq.M.
	TOTAL CON. AREA		3947.50 Sq.M.

Er. K. L. BHAWNANI

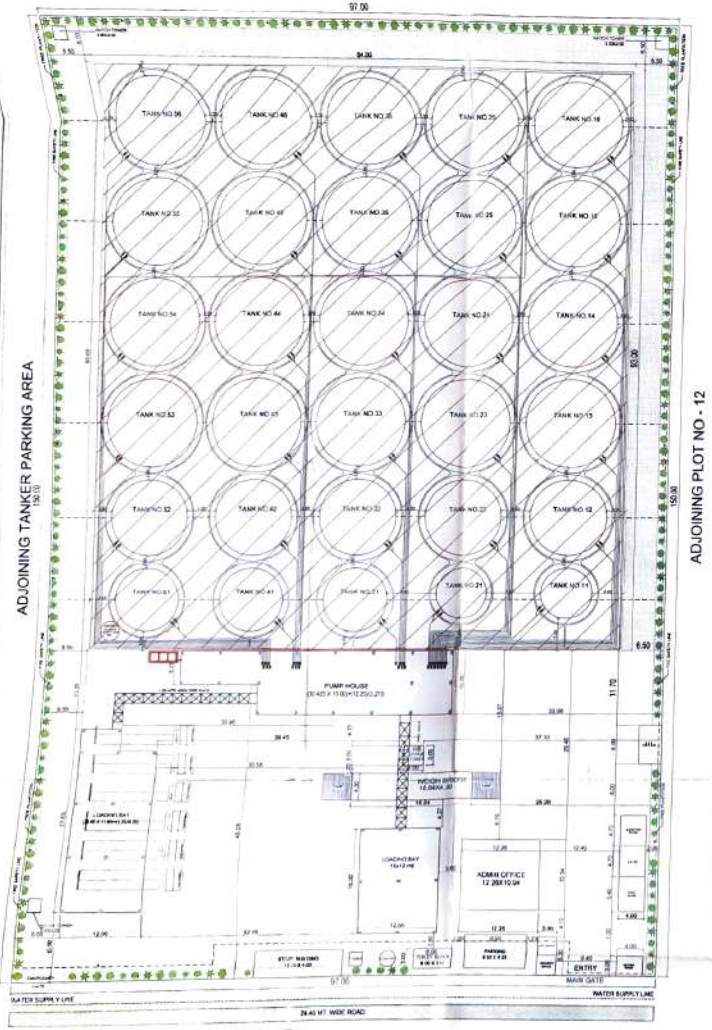
1/2

NIRMAN

PIPE LINE CORRIDOR

ADJOINING TANKER PARKING AREA

ADJOINING PLOT NO - 12



BLOCK PLAN
(SCALE - 1:900)

NOTE:-

Completed Construction Is Denoted By

Proposed Completion Is Denoted By

Chief Engineer
Deendayal Port Trust

KEY PLAN
(SCALE - N.T.S.)

LIQUID STORAGE FOR EDIBLE OIL

Sr. No.	TANK Nos.	DIA X HEIGHT	CAPACITY
01	TANK NO.01	15.00M Ø X 10.00 MT	1766.81
02	TANK NO.02	15.00M Ø X 10.00 MT	1766.81
03	TANK NO.03	12.00M Ø X 12.00 MT	1357.04
04	TANK NO.04	9.00M Ø X 12.00 MT	763.92
05	TANK NO.05	9.00M Ø X 12.00 MT	763.92
06	TANK NO.06	12.00M Ø X 16.50 MT	1867.43
07	TANK NO.07	15.00M Ø X 16.50 MT	2916.09
08	TANK NO.08	15.00M Ø X 16.50 MT	2916.09
09	TANK NO.09	12.00M Ø X 16.50 MT	2099.34
10	TANK NO.10	12.00M Ø X 16.50 MT	1616.08
11	TANK NO.11	14.00M Ø X 16.50 MT	2537.77
12	TANK NO.12	14.00M Ø X 16.50 MT	2537.77
13	TANK NO.13	14.00M Ø X 16.50 MT	2537.77
14	TANK NO.14	14.00M Ø X 16.50 MT	2537.77
15	TANK NO.15	14.00M Ø X 16.50 MT	2537.77
16	TANK NO.16	14.00M Ø X 16.50 MT	2537.77
17	TANK NO.17	14.00M Ø X 16.50 MT	2537.77
18	TANK NO.18	14.00M Ø X 16.50 MT	2537.77
19	TANK NO.19	14.00M Ø X 16.50 MT	2537.77
20	TANK NO.20	14.00M Ø X 16.50 MT	2537.77
21	TANK NO.21	14.00M Ø X 16.50 MT	2537.77
22	TANK NO.22	14.00M Ø X 16.50 MT	2537.77
23	TANK NO.23	14.00M Ø X 16.50 MT	2537.77
24	TANK NO.24	14.00M Ø X 16.50 MT	2537.77
25	TANK NO.25	14.00M Ø X 16.50 MT	2537.77
26	TANK NO.26	14.00M Ø X 16.50 MT	2537.77
27	TANK NO.27	14.00M Ø X 16.50 MT	2537.77
28	TANK NO.28	14.00M Ø X 16.50 MT	2537.77
29	TANK NO.29	14.00M Ø X 16.50 MT	2537.77
30	TANK NO.30	14.00M Ø X 16.50 MT	2537.77
31	SLOP TANK	9.00M Ø X 8.00 MT	423.64
		TOTAL CAPACITY	84603.82

AREA TABLE

Sr. No.	DESCRIPTION	SIZE	AREA
01	ADMIN OFFICE	12.20 X 12.04 MT	146.89 Sq.Mt.
02	PUMP HOUSE	(30.425 X 15.00)+(12.25X2.27)MT	484.8600 Sq.Mt.
03	LOADING BAY	(30.45 X 11.95)+(9.20 X 6.25)=Sq.Mt.	420.800 Sq.Mt.
04	WEIGH BRIDGE	18.96 X 4.30 MT	80.153 Sq.Mt.
05	WEIGH BRIDGE OFFICE	5.00 X 5.00 MT	9.00 Sq.Mt.
06	FIRE OFFICE / SECURITY OFFICE	3.00 X 5.00 MT	15.00 Sq.Mt.
07	H.T.ELECTRIC BREAKER ROOM	4.00 X 5.00 MT	21.00 Sq.Mt.
08	TRANSFORMER	4.00 X 4.00 MT	16.00 Sq.Mt.
09	D.G. SET	4.00 X 10.30 MT	41.20 Sq.Mt.
10	PUMP No.	6.00 X 6.00 MT	40.970 Sq.Mt.
11	TOILET BLOCK	5.00 X 3.20 MT	16.00 Sq.Mt.
12	CON. AREA OF TANK NO.01	15.00M Ø	75.00 Sq.Mt.
13	CON. AREA OF TANK NO.02	15.00M Ø	75.00 Sq.Mt.
14	CON. AREA OF TANK NO.03	12.00M Ø	52.34 Sq.Mt.
15	CON. AREA OF TANK NO.04	9.00M Ø	52.34 Sq.Mt.
16	CON. AREA OF TANK NO.05	9.00M Ø	52.34 Sq.Mt.
17	CON. AREA OF TANK NO.06	12.00M Ø	113.04 Sq.Mt.
18	CON. AREA OF TANK NO.07	15.00M Ø	113.04 Sq.Mt.
19	CON. AREA OF TANK NO.08	15.00M Ø	113.04 Sq.Mt.
20	CON. AREA OF TANK NO.09	12.00M Ø	113.04 Sq.Mt.
21	CON. AREA OF TANK NO.10	12.00M Ø	113.04 Sq.Mt.
22	CON. AREA OF TANK NO.11	14.00M Ø	153.86 Sq.Mt.
23	CON. AREA OF TANK NO.12	14.00M Ø	153.86 Sq.Mt.
24	CON. AREA OF TANK NO.13	14.00M Ø	153.86 Sq.Mt.
25	CON. AREA OF TANK NO.14	14.00M Ø	153.86 Sq.Mt.
26	CON. AREA OF TANK NO.15	14.00M Ø	153.86 Sq.Mt.
27	CON. AREA OF TANK NO.16	14.00M Ø	153.86 Sq.Mt.
28	CON. AREA OF TANK NO.17	14.00M Ø	153.86 Sq.Mt.
29	CON. AREA OF TANK NO.18	14.00M Ø	153.86 Sq.Mt.
30	CON. AREA OF TANK NO.19	14.00M Ø	153.86 Sq.Mt.
31	CON. AREA OF TANK NO.20	14.00M Ø	153.86 Sq.Mt.
32	CON. AREA OF TANK NO.21	14.00M Ø	153.86 Sq.Mt.
33	CON. AREA OF TANK NO.22	14.00M Ø	153.86 Sq.Mt.
34	CON. AREA OF TANK NO.23	14.00M Ø	153.86 Sq.Mt.
35	CON. AREA OF TANK NO.24	14.00M Ø	153.86 Sq.Mt.
36	CON. AREA OF TANK NO.25	14.00M Ø	153.86 Sq.Mt.
37	CON. AREA OF TANK NO.26	14.00M Ø	153.86 Sq.Mt.
38	CON. AREA OF TANK NO.27	14.00M Ø	153.86 Sq.Mt.
39	CON. AREA OF TANK NO.28	14.00M Ø	153.86 Sq.Mt.
40	CON. AREA OF TANK NO.29	14.00M Ø	153.86 Sq.Mt.
41	CON. AREA OF TANK NO.30	14.00M Ø	153.86 Sq.Mt.
42	CON. AREA OF SLOP TANK	3.00M Ø	11.504 Sq.Mt.
		TOTAL CON. AREA	3,301.800 Sq.Mt.

PLAN SHOWING EDIBLE LIQUID STORAGE TANK TANKS FOR EDIBLE OIL ON PLOT NO. ALLOTTED TO M/s. GOKUL AGRO RESOURCES LTD. AT. KANDLA ANJAR ROAD, KANDLA TA. GANDHIDHAM DIST. KACHCHH

TYPICAL CROSS SECTION

REFERENCES

NOTES

FIRE FIGHTING WATER RESERVOIR

AREA STATEMENT

CLIENT / APPLICANTS

For GOKUL AGRO RESOURCES LTD.

Authorised Signatory

ER. K. L. BHAWNANI
Regd. Lic. No. 59,
108, 1st Floor, Plot No. 64,
Sec.-8, Mahe Complex,
Gandhidham (Kutch)
Ph. (0) 236470

ER. K. L. BHAWNANI

1/2

ARCHITECTS

ANNEXURE – F

Environmental Monitoring report

Report No: - EE/ENV/2022/05/047

Date: 31/05/2022

ANALYSIS REPORT

(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Gokul Agro Resources. Ltd.	Sample Code	GARL(T)/AA1
Address	Plot No. 13Near Jawarlal Road at Kandla Khari Rohar , Kandla – 370210 Dist Kutch , Tal. – Gandhidham , SIDC Gandhidham	Location	Near Main Gate
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	22/05/2022
Analysis Starts on	23/05/2022	Sampling Method	IS 5182: Part – 5: 2014
Analysis Completion On	27/05/2022	Sample Received Date	22/05/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	µg/m³	67.15	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	µg/m³	29.74	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	µg/m³	16.49	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	µg/m³	19.02	80	IS 5182 Part 6 : 2017

Checked By:

Authorized Signatory

- Analysis is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2022/05/048

Date: 31/05/2022

ANALYSIS REPORT

(For the Month of May - 2022)

Client Details			Sample Details	
Name	M/s. Gokul Agro Resources. Ltd.		Sample Code	GARL(T)/AA2
Address	Plot No. 13 Near Jawartal Road at Kandla Khari Rohar , Kandla – 370210 Dist Kutch , Tal. – Gandhidham , SIDC Gandhidham		Location	Near Tank Farm
			Quantity	N/A
Sampling Done By		Earth Envirotech Team	Date of Sampling	22/05/2022
Analysis Starts on		23/05/2022	Sampling Method	IS 5182: Part – 5: 2014
Analysis Completion On		27/05/2022	Sample Received Date	22/05/2022

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter PM_{10}	µg/m³	70.32	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	µg/m³	31.97	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	µg/m³	14.52	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	µg/m³	16.33	80	IS 5182 Part 6 : 2017

Checked By:

EARTH ENVIROTECH (ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY) GUJARAT

Authorized Signatory

- Analysis is subject to the condition In Which the Sample Is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2022/05/049 **Date: 31/05/2022**

ANALYSIS REPORT
(For the Month of May - 2022)

Client Details		**Sample Details**	
Name	M/s. Gokul Agro Resources. Ltd.	**Sample Code**	GARL(T)/ST1
Address	Plot No. 13 Near Jawarlal Road at Kandla Khari Rohar , Kandla – 370210 Dist Kutch , Tal. – Gandhidham , SIDC Gandhidham	**Location**	D.G.Set (125 KVA)
		Sampling equipment	Yash stack monitoring kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	**Date of Sampling**	22/05/2022
Analysis Starts on	23/05/2022	**Sampling Method**	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	27/05/2022	**Sample Received Date**	22/05/2022

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Limit as per GPCB Norms	Reference Method
			DG Set (125 KVA)		
1.	Particulate Matter (PM)	mg/Nm^3	79.55	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO_2)	ppm	35.10	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (Nox)	ppm	19.89	50	IS 11255 : Part 7

Checked By:

EARTH ENVIROTECH (ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY) GUJARAT

Authorized Signatory

- Analysis is subject to the condition In Which the Sample Is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2022/05/050

Date: 31/05/2022

ANALYSIS REPORT
(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Gokul Agro Resources. Ltd.	Sample Code	GARL(T)/N1-N5
Address	Plot No. 13, Near Jawarlal Road at Kandla Khari Rohar , Kandla – 370210 Dist. Kutch , Tal. – Gandhidham, SIDC Gandhidham	Location	As per table
		Quantity	NA
		Date of Measurement	22/05/2022
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Sound Level Meter (HTC/SL-1350)
Measurement Completion Date	22/05/2022	Sampling Method	IS 9876 and IS 9989:1981

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time	
			Observed Value	StandardLimit
1.	Near Main Gate	dB (A)	69.4	75.0
2.	Near Office	dB (A)	65.1	75.0
3.	Near Tank Farm Area	dB (A)	71.9	75.0
4.	Near Tanker Loading / Unloading Shed	dB (A)	66.8	75.0
5.	Near Weigh Bridge Platform	dB (A)	70.3	75.0

Checked By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No. - EE/ENV/2022/05/051

Date: 31/05/2022

ANALYSIS REPORT
(For the Month of May - 2022)

Client Details		Sample Details	
Name	M/s. Gokul Agro Resources Ltd.	Sample Code	GARL(T) /SA1
Address	Plot No. 13 Near Jawahar Road at Kandla Khari Rohar , Kandla - 370210 Dist Kutch , Tal. - Gandhidham , SIDC Gandhidham	Location	Composite Sample
		Nature of Sample	Soil Sample
		Quantity	1 Kg
Sampling Done By	Earth Envirotech Team	Date of Sampling	22/05/2022
Analysis Starts on	23/05/2022	Sampling Method	--
Analysis Completion On	30/05/2022	Sample Received Date	22/05/2022

SOIL ANALYSIS REPORT

Sr.No	Parameter	Unit	Result	Test Method
1.	Texture	---	Sandy Loam	Methods manual of Soil testing in India (March 2011)
1.a	Sand	%	69	Methods manual of Soil testing in India (March 2011)
1.b	Silt	%	13	Methods manual of Soil testing in India (March 2011)
1.c	Clay	%	18	Methods manual of Soil testing in India (March 2011)
2.	pH	--	8.39	IS 2720 (P-26)
3.	Moisture Content	%	0.63	IS 2720 (P-2)
4.	Organic Matter	%	0.25	Methods manual of Soil testing in India (March 2011)
5.	Conductivity	µS/cm	3684	IS 14767:2021
6.	Available Nitrogen as N	mg/100 gm	4816	Methods manual Soil testing in India (January 2011)
7.	Available Phosphorus as P	mg/Kg	17.6	P.K. Gupta soil ,Plant, water and Fertilizer Analysis (Second Edition)
8.	Potassium as K	mg/Kg	53	Methods manual of Soil testing in India (March 2011)
9.	Cation Exchange Capacity	Meq/100gm	6.25	IS 2720 (P-24)
10.	Magnesium as Mg	Meq/100gm	6.4	Methods manual of Soil testing in India (March 2011)
11	Calcium as Ca	Meq/100gm	5.87	Methods manual of Soil testing in India (March 2011)
12.	Bulk Density	gm/cc	0.84	IS 2720 (P-7)

Checked By:

Authorized Signatory

- Analysis is subject to the condition in Which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

ANNEXURE – G

(Copy of CTE/CCA Order obtained from board)

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016, framed under the Environmental (Protection) Act-1986.

And whereas Board has received application inward No.**122246** dated **12/06/2017** for the **Consolidated Consent and Authorization** (CC&A) of the Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To
Gokul Agro Resources Ltd,
Plot No- 13,
Near Jawaharlal Road, At kandla-Kharirohar Road,
Tal-Gandhidham,
Dist: Kutch– 370210

1. **Consent Order No. AWH- 88530 Date of Issue: 27/09/2017**

2. The consent shall be valid up to 11/06/2022 for manufacturing of the following product:

Sr. No.	PRODUCT	QUANTITY MT
1.	Receiving, Storage & Distribution for Edible Oils (Edible Oils Storage Terminal) (15 No of tanks)	30,000

3. **SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:**

3.1 You shall not carry out any activities which may attract the applicability of EIA notification-2006 & store only Edible oil.

3.2 No ground water shall be withdrawal without obtaining prior permission from competent authority.

4. **CONDITIONS UNDER WATER ACT 1974:**

4.1 The quantity of industrial effluent generation from manufacturing process and other ancillary operations shall not exceed **0.5 KL/Day.**

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

4.2 The quantity of Domestic waste water (Sewage) shall not exceed **2 KL/Day**.

4.3 The quallty of the industrial effluent shall conform to the following standards.

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C
Colour (Pt. Co. scale units)	100 units
Suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Phenolic Compound	01 mg/L
Amonical Nitrogen	50 mg/L
BOD (3 Days at 27°C)	30 mg/L
COD	100 mg/L
Total Dissolved Solids	2100 mg/L

All efforts shall be made to remove colour & unpleasant odour as far as practicable

4.4 The treated effluent conforming to above standards shall be utilized for gardening and plantation within premises.

4.5 The unit shall install meters at utilities for measuring category wise (Category as given in Schedule II of "Water (Prevention & Control of Pollution) Cess Act-1977") consumption of water.

4.6 The quality of the sewage shall conform to the following standards:

PARAMETERS	GPCB NORMS
BOD (5 days at 20^0 C)	10 mg/L
Suspended solids	20 mg/L
Residual Chlorine	Minimum 0.5 mg/L

4.7 Sewage shall be disposed off through septic tank / soak pit system.

4.8 The unit shall install meters at utilities for measuring category wise (Category as given in Schedule II of "Water (Prevention & Control of Pollution) Cess Act-1977") consumption of water.

5. <u>CONDITIONS UNDER AIR ACT 1981:</u>

5.1 The following shall be used as fuel in Boiler respectively.

Sr. No.	Fuel	Quantity
1.	Diesel	15 Ltr

5.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below;

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1	D. G. sets (125 KVA)	11	PM SO_2 NOx	150 mg/Nm^3 100 ppm 50 ppm

5.3 There shall be no process gas emission from manufacturing process and other ancillary operations.

5.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per

Online Copy No: 252[illegible] 11/10/2021

National Ambient Air Quality Standards issued by MOEF & CC dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air In µg/M³
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

5.5 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

5.6 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. to 10 P.M.: 75 dB (A)
Between 10 P.M. to 6 A.M.: 70 dB (A)

6. Authorization under Hazardous and other waste [Management, Transboundary Movement] Rules, 2016 & amended.

6.1 **Authorization Number: AWH – 88530 and shall valid up to 11/06/2022.**

6.2 **Gokul Agro Resources Ltd,** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at, **Plot No- 13, Near Jawaharlal Road, At kandla-Kharirohar Road, Tal-Gandhidham, Dist: Kutch– 370210**

Sr. No.	Waste	Quantity per Month	Category	Mode of Disposal
1.	Discarded Container/ Barrel/ Liner	0.010 MT	33.1	Collection, storage, Transportation, Disposal either reuse after treatment in plant premises or sell it to register recycler
2.	Pig waste	1 MT	3.1	Collection, storage, transportation & sent to SEPPL for Incineration.
2.	Used Oil	0.025 MT	5.1	Collection, storage and reuse as a lubricant within a unit premises and / or sold out to registered recyclers.

6.3 The authorization is granted to operate a facility for collection, storage, within factory premises, transportation, and ultimate disposal of Hazardous wastes at TSDF.

6.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6. **GENERAL CONDITIONS OF AUTHORIZATION:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. Hazardous Waste generated shall be disposed off in accordance with the Hazardous Waste & other waste (Management & Transboundary Movement) Rules, 2016 as amended and unit shall have to obtain authorization of the Board for all applicable categories of Hazardous wastes.
   (a) Used oil / spent oil shall be disposed off by selling it to registered re- refiner units only.
   (b) Oily sludge from separators shall be dispose or of selling it to registered re-refiners unit only.
   (c) ETP sludge shall be disposed of at TSDF approved by the Board.
   (d) Used batteries shall be sold to the GPCB authorized dealers.
6. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption of hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. An application for the renewal of an authorization shall be made as laid down under these Rules.
12. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

7. GENERAL CONDITIONS

7.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

7.2 The waste generator shall be totally responsible for (i.e. Collection, storage, transportation and ultimate disposal) of the wastes generated.

7.3 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

7.4 In case of any accident, details of the same shall be submitted in Form – 5 to Gujarat Pollution Control Board.

7.5 Applicant shall comply relevant provision of "Public Liability Insurance Act – 91".

7.6 Empty drums and containers of toxic and hazards material shall be treated as per guideline published for "management & handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.

7.7 Adequate plantation shall be carried out all along the periphery of the industrial premises and a green belt of 10 meters width is developed.

7.8 The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the Water Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986.

7.9 The over all noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act, 1986 & Rules.

7.10 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. and 10 P.M.: 75 dB (A)
Between 10 P.M. and 6 A.M.: 70 dB (A)

7.11 In case of transport of hazardous waste to a facility for (i.e. Treatment, Storage and disposal) existing in a state other than the state where hazardous waste are generated, the occupier shall obtain "No Objection certificate" from the state pollution Control Board, the Committee of the concerned state or Union territory Administration where the facility exists.

7.12 Unit shall take all concrete measures to show tangible results in waste generation reduction, voidance, reuse and recycle. Action taken in this regards shall be submitted within 03 months and also along with Form 4.

7.13 You shall have to display the relevant information with regard to hazardous waste as indicated in the Hon. Supreme Court's order in W.P. No.657 of 1995 dated 14th October 2003.

7.14 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

For and on behalf of
Gujarat Pollution Control Board

(P.J. Vachhani)
Senior Environmental Engineer

NO: PC/ CCA- KUTCH- 1381/GPCB ID: 51973/ **Date:**

ISSUED TO:
Gokul Agro Resources Ltd,
PLOT NO- 13, Near Jawaharlal Road,
At kandla-Kharirohar Road,
Tal-Gandhidham, Dist: Kutch– 370210

Outward No: 12263, 11/10/2017

Signature Not Verified

Digitally signed by VACHHANI PRAFUL JAMNADAS
Date: 2017.10.16 11:07:36 IST
Reason: Secure Document
Location: India

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

GPCB

By R.P.A.D.

AMENDMENT TO CONSOLIDATED CONSENT AND AUTHORIZATION (CC&A)

No. PC/CCA-KUTCH-1381/GPCB ID-51973/ Date:

To,
Gokul Agro Resources Ltd,
Plot No- 13,
Near Jawaharlal Road, At kandla-Kharirohar Road,
Tal-Gandhidham,
Dist: Kutch– 370210

Subject : Amendment to Consolidated Consent and Authorisation (CC&A).

Reference :

1 CCA of the Board issued to your unit vide order No AWH-88530 dated 27/09/2017vide letter no: PC/ CCA- KUTCH- 1381/GPCB ID: 51973/425263 Date:11/10/2017
2. Yur CCA Amendment Application Inward ID No 138395, dated 29/05/2018.

Sir,

In exercise of the power conferred under section-27 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016 & as amended framed under the Environmental (Protection) Act-1986 and without reducing your responsibility under the said Acts/Rules in anyway; this Board is empowered to amend consent order conditions. Accordingly, the Consolidated Consent and Authorisation (CC&A) issued vide letter no. Consent order no. No AWH-88530 dated 27/09/2017vide letter no: PC/ CCA- KUTCH- 1381/GPCB ID 51973/425263 Date. 11/10/2017. Which is valid up to 11/06/2022 under reference (1) stands amended in respect of the following conditions;

1. **Consent Order No.: H-94669 Date of issue: 19/07/2018.**
2. The consent order shall be valid up to **11/06/2022** for manufacturing of the following product:

Sr.	Products	Existing	Proposed	Total
1	Receiving, Storage & Distribution for Edible Oils (Edible Oils Storage Terminal) (26 No of tanks)	30,000 MT (15 Tanks)	23,169.32 MT (11 Tanks)	53169.32 MT (26 Tanks)

3 **CONDITIONS OF AUTHORIZATION UNDER HAZARDOUS AND OTHER WASTE (M & TM) RULES – 2016 AMENDED AS FOLLOWS:**

- The conditions no 6.2 shall be read as:

6.2 **Gokul Agro Resources Ltd** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at **Plot No- 13,Near Jawaharlal Road, At kandla-Kharirohar Road,Tal-Gandhidham, Dist: Kutch.**

Outward No: 461193 Dt: 29/05/2018

Clean Gujarat Green Gujarat
ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

Sr. No.	Waste	Quantity			Cat.	Mode of Disposal
		Existing	Proposed	Total		
1	Pig waste	1 MT/year	0.5 MT/year	1.5 MT/year	3.1	Collection, storage, transportation & sent to SEPPL for incineration
2.	Used Oil	0.025 MT/year	--	0.025 MT/year	5.1	Collection, storage, Transportation, Disposal by Selling to registered recycler/re-processer or Reuse as lubricant within plant premises.
3.	Discarded barrels/containers/ liner contaminated with hazardous chemical/wastes	0.01 MT/year	--	0.01 MT/year	33.3	Collection, storage, decontamination Transportation and Disposal by Selling to registered recyclers

3. All other terms and conditions of Consolidated Consent (CC&A) order No. AWH-88530 dated 27/09/2017vide letter no: PC/ CCA- KUTCH- 1381/GPCB ID: 51973/425263 Date: 11/10/2017 shall remains unchanged.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)
Senior Environmental Engineer

Outward No: 464195, 02/08/2018

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone : (079) 23226295
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Website : www.gpcb.gov.in

CCA-Amendment
(AWH- 113183)

No. PC/CCA-KUTCH- 1381/ GPCB ID-51973 / 59140 **Date:** 8/7/21

To,
M/s. Gokul Agro Resources Ltd.,
Plot No. 13, Nr Jawaharlal Road,
At. Kandla- Kharirohar Road, Kandla,
Tal: Gandhidham,
Dist: Kutch - 370 210

SUB: Amendment in the consolidated consent & Authorization of the Board.

REF: 1) CTE is issued by this office vide letter No. PC/CCA-Kutch-1381/GPCB ID 51973/371782 dated 01/10/2016.
2) CCA issued by this office vide order no- **AWH- 88530** dated 11/10/2017 valid up to 11/06/2022.
3) This office CCA amendment vide order No H-94669 dated 02/08/2018.
4) Your CCA Amendment Application Inward ID No. **192913** dated **24/03/2021.**

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous And Other Waste (Management and Transboundary) Rules, 2016 & framed under the Environment (Protection) Act-1986, The Board has granted CCA vide order No. **AWH- 88530** issued vide this office order no. **PC/CCA-KUTCH-1381/ GPCB ID- 51973/ 425263** dated 11/10/2017, valid up to 11/06/2022.

The said order is further amended vide this office issued CCA amendment order No AWH-88530 dated 02/08/2018.

The Board has right to review and amend the conditions of the said CCA orders. Now, considering your application for CCA-amendment inward ID No. **192913 dated 24/03/2021, for increase in storage capacity as per CTE dated 01/10/2016 the said CCA order is amended as below:**

1. **The order shall be read as CCA amendment Order No.: AWH- 113183 Date of Issue: 08/06/2021, valid up to 11/06/2022.**
2. **The condition no. 2 of the said CCA is amended as below:**
   2. The consent order shall be valid up to **11/06/2022** for the use of outlet for discharge of treated effluent and emission due to operation of industrial plant for storage of edible oil following items/ products:

Sr. No.	Product	Existing Quantity		
		As per CCA-Amendment dated 02/08/2018	As per CTE-Amendment Dated 01/10/2016	Total after CCA-Amendment
1	Receiving, Storage & Distribution facility for Edible oils	53169.32 MT (26 Tanks)	8669.84 MT (4 Tanks)	61839.16 MT (30 Tanks)

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

1. There shall be no change in existing water consumption waste water generation, flue gas emission & hazardous waste due to CCA-Amendment.
2. Industry shall not withdrawal ground water without prior NOC from CGWA as per order of Hon. National Green.
3. Industry shall renew Public Liability Insurance (PLI) Policy time to time & submit a copy of the same to this office.
4. Industry shall comply with MSIHC rules, if applicable.

3. Other conditions of the above referred CCA order no. AWH- 88530 dated 11/10/2017 & CCA-Amendment order no. H-94669 dated 02/08/2018 shall remain unchanged. You are directed to comply with these conditions judiciously.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Smt. U.K. Upadhyay)
Environment Engineer

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

BY R.P.A.D

CONSENT TO ESTABLISH
CTE-81650

No.PC/CCA-KUTCH-1381/GPCB ID 51973/ Date:

TO,
M/S. Gokul Agro Resources Limited,
Plot No. 13,
Near Jawaharlal Road, At Kandla-Kharirohar Road,
Kandla,
Tal: Gandhidham,
Dist: Kutch– 370210.

Subject : **Consent to Establish (NOC)** under Section 25 of Water (Prevention and Control of Pollution) Act 1974 and Section 21 of Air (Prevention and Control of Pollution) Act 1981.

Reference : Your CTE Application **Inward ID No.11555 dated 22/08/2016**

Sir,

Without prejudice to the powers of the Board under the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that the Board grants **Consent to Establish (NOC)** of industrial activity at **Plot No. 13,Near Jawaharlal Road, At Kandla-Kharirohar Road, Kandla, Tal: Gandhidham, Dist: Kutch– 370210.**

1. The validity period of the order shall be up to **21/08/2023**.
2. The list of the products to be manufacture is as below from timber logs:

Sr. No.	PRODUCT	QUANTITY PER MONTH
1.	Receiving, Storage & Distribution facility for Edible Oils (Edible Oils Storage Terminal)(total 30Nos of tank)	61839.160 KL

SUBJECT TO FOLLOWING SPECIFIC CONDITIONS:

1. You shall not carry out any activity which may attract the applicability of EIA notification-2006 & store only Edible oil products.
2. No ground water shall be withdrawal without obtaining prior permission from competent authority.

Online Ref. No. : 2017021710/2016

A. Previous Consent-Reject / CCA Order / NOC Order (C&A) Uploaded in XGN
B. 51973-Gokul Agro Resources Ltd accepts the LEGAL responsibility and undertakes that the furnished information is CORRECT & ACCURATE.

3. CONDITIONS UNDER WATER ACT 1974:

3.1 There shall be no industrial effluent generation from manufacturing process and other ancillary operations as generated washing effluent shall be treated in oil water separator & shall be reused in gardening and plantation purpose in premises.

3.2 The quantity of Domestic waste water (Sewage) shall not exceed **2 KL/Day.**

3.3 The quality of the sewage shall conform to the following standards:

PARAMETERS	GPCB NORMS
BOD (5 days at 20^0 C)	20 mg/L
Suspended solids	30 mg/L
Residual Chlorine	Minimum 0.5 mg/L

3.4 Sewage shall be disposed off through septic tank / soak pit system.

3.5 The unit shall install meters at utilities for measuring category wise (Category as given in Schedule II of "Water (Prevention & Control of Pollution) Cess Act-1977") consumption of water.

4. CONDITIONS UNDER AIR ACT 1981:

4.1 The following shall be used as fuel in D.G. set respectively.

Sr. No.	Fuel	Quantity
1.	Diesel	15 Lts

4.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below;

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1.	D.G. Sets (125 KVA) (stand by)	11	PM SO_2 NO_X	150 mg/Nm^3 100ppm 50ppm

4.3 There shall be no process gas emission from the manufacturing activities and other ancillary operations due to proposed expansion.

4.4 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions, and the same shall be open for inspection. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

Outward No. 371782-01/10/2016

A. Previous Consent-Reject / CCA Order / NOC Order (C&A) Uploaded in XGN
B. 51973-Gokul Agro Resources Ltd accepts the LEGAL responsibility and undertakes that the furnished information is CORRECT & ACCURATE.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector 10-A, **Gandhinagar** 382 010
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Website : www.gpcb.gov.in

4.5 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MoEF&CC dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in $\mu g/m^3$
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

4.6 The level of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. to 10 P.M. : 75 dB(A)
Between 10 P.M. to 6 A.M. 70 dB(A)

5. **CONDITIONS UNDER HAZARDOUS WASTE:**

5.1 The applicant shall provide temporary storage facilities for each type of Hazardous Waste as per Hazardous & Other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time.

5.2 The applicant shall obtain membership of common TSDF site for disposal Hazardous. Waste as categorized in Hazardous & other Waste (Management & Transboundary Movement) Rules, 2016 as amended from time to time.

6. **GENERAL CONDITIONS**

6.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

6.2 The waste generator shall be totally responsible for (i.e. Collection, storage, transportation and ultimate disposal) of the wastes generated.

6.3 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

6.4 In case of any accident, details of the same shall be submitted in Form – 5 to Gujarat Pollution Control Board.

6.5 Applicant shall comply relevant provision of "Public Liability Insurance Act-91".

6.6 Unit shall take all concrete measures to show tangible results in waste generation reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within 03 months and also along with Form 4.

Gujarat Ro 371732/01/10/2016

A. Previous Consent Reject / CCA Order / NOC Order (C&A) Uploaded in XGN
B. 51973-Gokul Agro Resources Ltd accepts the LEGAL responsibility and undertakes that the furnished information is CORRECT & ACCURATE.

6.7 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

6.8 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of 10 meters width shall be developed.

6.9 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)
Senior Environment Engineer

Outward No:371782,01/10/2016

A. Previous Consent-Reject / CCA Order / NOC Order (C&A) Uploaded in XGN
B. 51973-Gokul Agro Resources Ltd accepts the LEGAL responsibility and undertakes that the furnished information is CORRECT & ACCURATE.

AEGIS LOGISTICS LIMITED

Liquid Terminal Division: Plot No.3, 4, 5 & 6, Jawahar Nehru Road, Near BPCL Booster,Kandla, Dist. Bhuj, Gujarat - 370 210, India. Tel: +91 2836 25680 ♦ Email: ltdmktg@aegisindia.com ♦ Website: www.aegisindia.com

Date: 02.06.2022

To,

SE(D) Environment

DPT Gandhidham (Kutch)

Gujarat-370201

Subject: Environment Compliance Report for the Period December 2021 to May 2022

Dear Sir,

This is about the submitting half yearly environmental compliance report We are M/ S Aegis Logistics Ltd, Liquid Storage Terminal, Plot no. 3, 4, 5 & 6, Jawahar Road, ear BPCL Booster Station, Kandla.

Here we are submitting Environmental compliance report for the period of December 2021 to May 2022, in this connection.

Thanking You,

Sincerely Yours,

For Aegis Logistic Limited

Dinesh Singhania

(Sr. Vice President)

Enclosure above

i. Annexure-I CRZ Recommendation and Compliance Report

ii. Annexure-II to X Compliance Documents.

AEGIS	ANNEXURE CHECKLIST AEGIS LOGISTICS LTD-KANDLA	December-2021 to May-2022

Sr.No		Annexure Description
1	Annexure-I Copy Enclosed	Compliance Report of CRZ Recommendation granted by forest & Environment Department of Gujarat on 09/03/2009 is enclosed as
2	Annexure-II Copy Enclosed	Compliance Report of NOC/CTE granted by GPCB (Valid up to 22/08/2022) is.
3	Annexure-III Copy Enclosed	Oil Spill Response Plan Rev-3 Feb-2021
4	Annexure-VI Copy Enclosed	Hired Vehicles Valid PUC Certificates
5	Annexure-V Copy Enclosed	Noise Monitoring Report
6	Annexure-VI Copy Enclosed	Environment monitoring Test Report
7	Annexure-VII Copy Enclosed	Traffic Management Plan Rev-01 Oct 2021
8	Annexure-VIII Copy Enclosed	Environmental monitoring reports
9	Annexure-A Copy Enclosed	Environmental and CRZ clearance-MoEF & CC
10	Annexure-B Copy Enclosed	CRZ Clearance for Development of Plots
11	Annexure-C Copy Enclosed	GPCB CC & A
12	Annexure- D Copy Enclosed	Approved Key Plan Layout
13	Annexure-E Copy Enclosed	Layout Plan for Liquid and Gas Storage Terminal

AEGIS LOGISTICS LTD. KANDLA

Subject: Collective submission of Point wise compliance report of stipulated conditions mentioned in the EC & CRZ Clearance for the development of plots for construction of Liquid Storage tank Farm at Kandla, Gujarat.

02/02/2010 - The MoEF &CC, GOI granted Environmental & CRZ Clearance.

18/08/2015 - The MoEF &CC, GOI extended the validity period of Environmental & CRZ clearance for a further period of 5 years i.e., up to 01/02/2020

Plot No.	Name of Plot Allotee	Allotment Letter Issued Date	Present Status
3,4, 5 & 6	AEGIS LOGISTICS LTD, LIQUID STORAGE TERMINAL, Plot No. 3,4,5 & 6. Opp. to BPCL Booster station, Jawahar Road, Kandla-370210 (Kutch Dist.) Gujarat	07.04.2015 15.10.2015 06.06.2016	Commercial Operation started (GPCB has Granted CTO 11/10/2017)

Sr. No	EC Conditions	Compliance Status
Specific Condition		
Construction Phase		
I	All the conditions stipulated by Govt. of Gujarat vide letter no. ENV-110-2008-366-E dated 09.03.2009 and Gujarat Pollution Control Board vide letter No. PC/NOC/CCA- Kutch-78 (2)/ GPCB ID 17832/14401, dated 13.07.2009.	Compliance report of CRZ Recommendation granted by Forest & Environment Department, Government of Gujarat on 9/03/2009 is enclosed as **Annexure-I.** Further, Compliance Report of NOC/CTE granted by GPCB (Valid up to 22/08/2022) is enclosed as **Annexure - II.**
II	The entire water supply shall be managed by the Port. Wastewater will be treated and utilized.	We have sourced the water for our entire water requirement during Construction phase from local water supplier. Wastewater is being treated in ETP and utilized for green belt development
III	Provision shall be made for parking of heavy vehicles and sufficient	Provision of Parking of heavy vehicles and sufficient space for loading/

AEGIS LOGISTICS LTD. KANDLA

	space for loading/ unloading of trucks within the Port complex.	unloading of trucks within our premises have already been made. Further we are utilizing and ensuring that empty TT tankers, LMVs are parking at DPTvehicles parking zone.
IV	The proponent shall put in place the detailed-on site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also.	The detailed-on site & off-site emergency management plan as per the manufacture, storage and import of Hazardous chemical rules 1989 as amended to date prepared and put into place as per requirement
V	The proponent shall put in place the OIL Spill Contingency Plan	Oil Spill response plan Rev-1 copy attached **(Copy enclosed as Annexure - III)**
VI	The proponent shall strictly comply the measures proposed as per their letter No EG/WK/4684/EC/388, dated 01.12.2009	We obtained permission from CC&A from GPCB and PESO for commercial operations for chemical phase. **Refer: Annexure-II**
VII	The FSI on the plots shall be as per CRZ, Notification 1991 as was prevailing on 19.02.1991	The FSI of the plots are done as per CRZ notification 1991 as amended from time to time and as per DPT approval.
VIII	There shall be no drawl of ground water. If required necessary permission shall be obtained from the competent Authority prior to construction/operation of the project	No ground water is being drawn. Ensuring water supply from authorized water supplier for our requirements.
IX	Sewage treatment Facilities should be provided in accordance with the CRZ notification	We have provided soak pit/septic tank for sewage accordance with the CRZ notification
X	The solid water shall be properly collected, segregated, and disposed as per the provision of solid water (Management and Handling) rules,2000	The wastewater is considering into ETP for proper treatment as per (Management and Handling) rules,2000, and Solid Waste Management Rules, 2016
XI	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking mobile toilets, mobile STP, safe drinking water medical health care, creche etc. The housing	We don't have any Labour camps as local public/labor have been hiring. However as per requirement necessary infrastructure and facilities such as toilets, safe drinking water, Occupational health centre (OHC) have been established and maintain.

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	may be in the form of temporary structure to be removed after completion of the Project	
XII	A first Aid room will be provided in the project both during construction and operation of the project	A common first Aid center/Occupational Health Centre (OHC) have been established and maintaining well both for construction and Operations.
XIII	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site	No excavation is done. Piles are driven into the ground using a pile driver in construction activities. If any excavation is done the soil is again using for backfilling, site grading and developments
XIV	Disposal of muck during construction phase should not create any advance effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval sites with the approval of competent authority.	No muck is being excavating, if at all generated it is again using for backfilling the low ground areas.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants	No toxic contaminants being generating in our construction and Operational activities. Outmost precautions are being ensuring for contaminating the soil and water.
XVI	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	No bituminous material is storing in our premises.
XVII	Any hazardous waste generated during construction phase, should be disposed-off as per applicable rules and norms with necessary approvals of Gujarat Pollution Control Board.	foam pig waste being generating at our premises which is storing and disposing as per (Management and Handling) rules,2000, and Solid Waste Management Rules, 2016. We are tie-up with M/S Detox, an approved waste recycler for disposing the same.

AEGIS LOGISTICS LTD. KANDLA

XVIII	Installation and operation of DG set if any shall comply with the guidelines of CPCB.	We are operating the DG sets as per the requirement and as per the CPCB guideline.
XIX	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should confirm to Environmental (Protection) Rules prescribed for air and noise emission standards.	We are using low Sulphur diesel BSVI for DG set conforming Environmental protection Rule, 1986 prescribed for air and noise emission standard.
XX	The Diesel required for operation of DG sets shall be stored in underground tanks and if required clearance from Chief controller of Explosives shall be taken.	We are not storing diesel in bulk quantity, purchasing utilizing as per the requirement.
XXI	Vehicles hired for bringing construction materials to the site should be in good condition and should have a pollution check certificate and should confirm to applicable air and noise emission standards and should be operated only during non-peak hours.	PUC certificates of own and hired vehicles enclosed, conforming applicable air and noise emission standards. **Annexure IV**
XXII	Ambient noise levels should confirm to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to rescue ambient air and noise level during construction phase, so as to confirm to the stipulated standards by CPCB/GPCB.	Ambient Air and noise monitoring have been tested with GPCB approved lab. May 2022, a latest ambient air and noise quality monitoring reports enclosed for reference. **Annexure-V**
XXIII	Storm water control and its reuse as per CGWB and BIS standards for various applications.	We have already earmarked the area for storage of Storm Water and treating of water with ETP as per GPCB Norms.
XXIV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and	No concrete batching plant set-up in our premises.

AEGIS LOGISTICS LTD. KANDLA

	other best practices referred	
XXV	The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of firefighting equipment's, etc. as per National Building Code including protection measures from lighting etc.	We have already obtained the necessary clearance from DPT and maintained the same as per the norms
XXVI	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase to avoid disturbance to the surroundings.	We have dedicated team/environmental consultant for compliance of environmental conditions including monitoring
XXVII	Underthe provision of Environmental (Protectisegregated,86, legal action shall be initiated against the project proponent if it was found construction of the project has been started without obtaining environmental clearance.	All necessary clearance from statutory authorities i.e., EC/CRZ clearance from MOEF &CC, New Delhi, and CRZ recommendation from Forest and Environment Department, GOG and NOC/CTE from GPCB and GOG has been obtained for the project.
II Operational Phase		CCA/CTO
I	The installation of the sewage treatment plan (STP), if any should be certified by an independent expert and a report in this regard should be submitted to the ministry before the project is commissioned for operation treated effluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall confirm to the norms and standards of the Gujarat pollution Control Board. Necessary measures should be made to mitigate the odor problem from STP	Designed, build, and maintain soak pits for collection of sewage and utility water. Aegis Logistics Ltd, Liquid storage terminal Kandla design, set up and maintained 30 KLD ETP for treatment and disposal of sewage and utility effluent water and disposing effluent as per GPCB standards.
II	Diesel power generating sets proposed as source of backup power for elevators and common	Diesel generators are available for power back-up for common area during the operation time. Height of stack will be

AEGIS LOGISTICS LTD. KANDLA

	area illumination during operation phase should be of enclosed type and confirm to rules made under the environmental {Protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low Sulphur DG sets may be decided with in consultation with Gujarat Pollution Control Board.	provided as per the consultation of GPCB norms.
III	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	May 2022, a latest environment monitoring Test report Measured noise levels found within the permissible levels Latest test reports enclosed as **Annexure - VI**
IV	The greenbelt of the adequate width and density preferably with local spices along the periphery of the plot shall be raised so as to provide protection against particulates and noise	We have already earmarked the area for development of Greenbelt at periphery area of plot s. We have provided approx. 2397 Sq meters area for greenbelt.
V	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment during the monsoon period.	Weep holes provided in the compound wall side for water draining purpose from inside premises.
VI	Rainwater harvesting for roof run off, as plan submitted should be implemented, before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil, and grease. The bore well for rainwater recharging should be kept at least 5 meter above the highest ground level.	Aegis Logistics Ltd-Kandla, a rainwater harvesting pit approximately 500 sq. mts. area have been developed and maintained
VII	The ground water level and its quality should be monitored regularly in construction with Central Ground Water Authority.	No ground water withdrawal envisaged by us.

AEGIS LOGISTICS LTD. KANDLA

VIII	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized ed and no public space should be utilized.	We have prepared and placed Traffic Management Plan - copy attached as per **Annexure - VII**
IX	Effort may be made to use solar energy to the maximum extent possible.	Will consider, design, built, and utilize the solar energy in future.
X	Adequate measures should take to prevent odour problem from solid waste processing plant and STP.	We have already made necessary arrangement facilities for domestic wastewater collection and treatment, disposal, soak pit/septic tank
General conditions		
I	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously confirming to the existing local and central rules and regulations including the provisions of Coast al Regulation Zone notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Gujarat.	The infrastructure facilities are constructed as per the plans approved by the local authorities drawing are consider as per the provisions of Coastal Regulation Zone notification dated 19.02.1991
II	In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests	Agreed.
III	This ministry reserves the right to revoke the clearance, if any of the conditions stipulated are not compiled with to the satisfaction of this ministry	Agreed.
IV	This ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary for environmental protection which shall be complied with.	Agreed.
V	Full support should be extended to the officers of this ministry's regional office at Bhopal and the offices of the central	We are submitting reports in respect of action taken and mitigating measures and other environmental activities in our

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	and state pollution control board by the project proponents during their inspection for monitoring purpose by furnishing full details and action plans including the action taken reports in respect of mitigate measures and other environmental activities	terminal premises. We also extended full support to the officers of Ministry's regional office at Bhopal, and the offices of the central and state pollution control board by the project proponents during their inspection.
VI	These stipulations would be enforced among others under the provisions of water (prevention and control of pollution) act 1974, the air (prevention and control of pollution} act 1981, the environment (protection) act 1986, the public liability (insurance) act 1991 and municipal solid wastes (management and handling) rules 2000 including amendments and rules made thereafter	Latest Environmental monitoring Test report May 2022enclosed as per **Annexure - VIII**
VII	All other statutory clearance such as the approvals for storage of diesel from chief control of explosives, fire department, civil aviation department from height point of view, forest conservation act, 1980 and wildlife (protection) act, 1972 etc. shall be obtained as applicable by project proponents from the respective Component Authorities	No bulk storage of diesel at our premises. If necessary statutory clearance will be ensured.
VIII	The project proponents shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language Informing that the project has been accorded Environmental and CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the ministry of Environment and Forest at	DPT had already advertised in two local newspapers widely circulated in the region one of which shall be in the vernacular language informing that the project has been accorded environmental and CRZ clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in

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	http://www.envfor.nic.in The advertisement should be within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to the regional office of this ministry Bhopal	
IX	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in writ Petition (Civil) No.460 of 2004 as be applicable to this project.	We honour order of the Hon'ble Supreme court.
X	Any appeal against this clearance shall lie with the national environmental appellate authority, if preferred within a period of 30 days as prescribed under section 11 of the national environmental appellate act, 1997	Agreed.
XI	A copy of the clearance letter shall be sent by the proponent to be concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any from whom suggestions/representations, if any were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent	N/A, DPT had already given advertisement
XII	The proponent shall upload status of compliance of the stipulated clearance conditions including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of MoEF, the respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely, SPM,	DPT has regularly submitting the compliances of stipulated conditions made in EC & CRZ recommendation and NOC/CTE to the statutory authorities and same have been uploaded regularly on DPT website i.e., www.deenda al ort.gov.in We have monitored the pollutants like 5PM, RSPM, SO2, NOx and displayed at a convenient location near the main

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	RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectorial parameters indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	gate of the company in the public domain (Copy of monitoring report placed at **Annexure -VI**)
XIII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well as by email), to the respective regional office of MoEF, the respective Zonal office of CPCB and the SPCB	Submitting Half yearly EC compliance report to DPT.
XIV	The environmental statement for each financial year ending 3pt March in Form-Vas is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the environment (protection) rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective regional office of MoEF by email	We are providing and updating necessary forms to DPT time to time. form Annex.
Plot No	**Name of Plot Allottee**	**Stamp & Signature**
3,4,5 & 6	**AEGIS LOGISTICS LTD, LIQUID STORAGE TERMINAL, Plot No. 3,4,5 & 6. Opp. to BPCL Booster station, Jawahar Road, Kandla-370210 (Kutch Dist.) Gujarat**	

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Subject: Collective submission of point wise compliance report of stipulated conditions mentioned in the CRZ Recommendation for the development of plots for construction of Liquid storage tank farm at Kandla, Gujarat

CRZ Recommendations: Letter No. ENV – 10-2008-366-E March 9, 2009, of Director (Environment), Forest & Environment Department. GoG, Further, MOEF & CC, New Delhi vide File No. 10-36/2008-1A.III dated 18/08/2015 had extended the validity period of Environmental and CRZ Clearance up to 1/02/2020.

Plot No	Name of Plot Allotee	Allotment Letter Issued date	Present Status
3,4,5&6.	AEGIS LOGISTICS LTD, LIQUID STORAGE TERMINAL, Plot No. 3,4,5 & 6. Opp. To BPCL Booster Station, Jawahar Road, Kandla-370210(Kutch Dist.) Gujarat.	07.04.2015 15.10.2015 06.06.2016	Commercial Operation started (GPCB has granted CTO 11/10/2017)

Sr. No	CRZ Recommendation	Compliances
	Specific Conditions	
1	The project proponents strictly adhere to provisions of the CRZ notification of 1991, and its amendments issued by the Ministry of Environment and Forest, GOI from time to time	We are strictly following the provisions of CRZ notification of 1991 and subsequent issued by MOEF, GOI from time to time
2	The project proponent shall obtain all necessary permissions from different government departments/ Agencies shall be obtained by KPT before commissioning the expansion activities	We had obtained the EC/CRZ Clearance from the MOEF, GOI on 02/02/2010 and MOEF & CC, New Delhi vide File No. 10-36/2008-1a. 111 dated 18/08/2015 had extended the validity period of EC/CRZ clearance up to 01/02/2020, (**Copy placed at Annexure – A**) Further we had obtained NOC/CTE from GPCB on 13/07/2009 and GPCB vide letter no GPCB/CCA-Kutch-1285/GPCB ID 46364 dated 28/8/2016 had extended the validity period of NOC up to 22/08/2022. (Copy placed at **Annexure-B**)
3	The project proponent shall not handle any hazardous cargo or any classified chemicals at the site in question and this permission is valid only for the petroleum products and edible oils having no hazardous characteristics and its permissible in the CRZ	We have stored only permissible cargo as per EC & CRZ clearance accorded by MoEF, GOI.

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	notification, 1991 and its amendment issued from time to time.	
4	No ground water shall be tapped to meet the water requirements during the construction and for operation phases.	No ground water has been tapped to meet the water requirements during the construction phase as we have appointed local authority water supplier.
5	The Kandla Port Trust shall be undertaken roof ater harvesting in area where it is feasible.	Aegis Logistics Ltd-Kandla, an open pit rainwater harvesting pond ap proximately 500 sq mts area have been developed and maintained.
6	The project proponents shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	We will contribute towards the cost of any common study that may be carried out for KPT region for environmental protection and management issues.
7	The Kandla Port Trust shall duly incorporate the above- mentioned activities and update its Disaster Management Plan at the earliest and submit a copy to this Department.	DPT already having updated Disaster Management Plan
8	The project proponents shall implement all the suggestion recommendations given by the NIOT in their Rapid EIA report.	Suggestion / recommendations given by the NIOT in their Rapid EIA report are being followed by us.
9	The project proponents shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its Consent to Establish (NOC) and the CCA.	We are strictly complying the conditions stipulated by GPCB in Consent to Establish (CTE) (NOC)/ CCA and condition mentioned in NOC/CTE. **(Copy placed at Annexure - C)**
10	The project proponents shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities and the environmental impacts of the proposed activities.	Agreed
11	The project proponents shall take up mangrove plantation in an area of 50 ha. As well as green belt development activities in consultation with the Gujarat Institute of Desert Ecology/ Forest Department.	Aegis Logistics Ltd, Liquid storage terminal Kandla, developed and maintaining green belt programme. A more than 500 plants have been planted in and around the terminal premises.
12	Any other condition that may be stipulated by this Department from time to time for environmental protection/ management purpose.	Agreed
	General Conditions	
1	The construction caps shall be located outside the CRZ area, and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.	No labour camp located outside CRZ area. The entire thing is defined contractor scope and outside the coastal zone.

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2	The DPT shall have to contribute financially for talking up the socio-economic upliftment activities in this region in construction with the Forest and Environment Department and the District Collector/ District Development Officer.	We have provided CSR work activities in DPT area.
3	A separate budget shall be earmarked for environmental management and socioeconomic activities and details there of shall be furnished to this Department as well as the MOEF, GOI.The details with respect to the expenditure from this budget had shall also be furnished.	Separate budget is allocated for environmental management & socioeconomic activities. → ? ?
4	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	We have appointed a Dy. Manager-EHS to lead the environmental team, and Tie-up GPCB approved Environmental Consultant to carry out the Environmental Monitoring, on AC during our construction and operational phase.
5	An Environmental report indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MOEF, GOI.	we will submit reports every year if any changes with respect to the baseline environmental quality in the coastal and marine environment reports will be submitted to the respective authority.
6	Six monthly reports on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on regular basis to this department/ MOEF, GOI.	Six Monthly reports on Compliance report conditions mentioned in EC/CRZ Clearance will be furnished by us on regular basis to this department/ MOEF, GOI through DPT.
7	Any other condition that may be stipulated by this department from time to time for environmental protection/ management purpose shall also have to be complied with by the DPT.	We will also comply any other condition that may be stipulated by statutory authorities from time to time for environmental protection / management purpose.
Plot No	**Name of Plot Allottee**	**Stamp & Signature**
3,4, 5 & 6	**AEGIS LOGISTICS LTD,** **LIQUID STORAGE TERMINAL,** **Plot No. 3,4,5 & 6. Opp. to BPCL** **Booster station, Jawahar Road, Kandla-370210 (Kutch Dist.) Gujarat.**	

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Subject: Collective submission of point wise compliance report of stipulated conditions mention in the NOC/CTE for the development of plots for construction of Liquid Storage Tank Farm at Kandla Gujarat

Gujarat Pollution Control Board vide Letter No. PC/NOC/CCA-Kutch-78(2)/GPCB ID 17832/14401 dated 13/07/2009 had granted NOC/CTE to DPT for the subject project. Further, GPCB vide letter No. GPCB/ CCA/ Kutch-12BS/ GPCB10 46364 dated 28/08/2015 had extended the validity period of NOC/CTE up to 05/08/2020

Plot No	Name of Plot Allotee	Allotment Letter Issued dates	Present Status
3,4, 5&6.	AEGIS LOGISTICS LTD, LIQUID STORAGE TERMINAL, Plot No. 3,4,5 & 6, Opp, to BPCL Booster station, Jawahar Road, Kandla-370210 (Kutch Dist.) Gujarat	07.04.2015 15.10.2015 06.06.2016	Commercial Operation started (GPCB has granted CTO 11/10/2017)

Sr.No.	Specific Conditions	Compliance Status
1	**Special Conditions**	
1	Unit shall not start any construction activities still extending the validity of EC& CRZ from competent Authority	Construct ion activities have been started only after extending the validity of EC and CRZ clearance for MoEF&CC, New Delhi vide letter no. F.No. 10-36/ 2008-IA.III dated 18/08/2015 had already extended the validity period for Environment and CRZ Clearance up to 01.02.2020 (Copy attached at **Annexure -1**)
2	No Ground water shall be used for the project coming under dark zone without permission of competent authority.	Now We Have Narmada Water Line
3	Unit shall strictly adhere to CRZ, and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 M ill ion Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of@ 21.26 lakh Ki lo litters. Available liquid Cargo	We have stored only permissible cargo as per EC & CRZ clearance accorded by the MoEF, GoI

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	Storage facilities are Edible Oil-89 tanks with 9,17,739 Kl, Chemical and POL and Acid of 472 tanks with 12,08,369 Kl. The tentative tankage capacity works out for the Proposed tank farm is @ 9 lakhs Kilo litre.	
4	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10~ 36/200B- IA-III dated 02/02/2010 for Old Kandla.	We have started commercial operation after obtaining necessary permissions and comply with condition of EC & CRZ issued by MoEF, GoI
5	You shall have to obtain consent to Operate from Gujarat Pollution Control Board before commissioning any activities.	We obtained the CCA from Gujarat Pollution Control Board for the operation phase. **(Copy placed at Annexure - II)**
6	Applicant is required to comply with provision of Manufacturing, Storage and Import of Handling Chemical rules-1989 framed under the Environment(protection) Act-1986	We will strictly comply with provision of Manufacturing, Storage and Import of Hazardous chemicals Rules-1989 framed under the Environment (protection)Act-1986
2	**Condition Under Water Act 1974**	
2.1	There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations	No industrial effluent generation with our operations. Except domestic ETP.
2.2	The quantity of domestic wastewater(storage) shall not exceed as 4.5 Kl/Day	We are strictly maintaining that our domestic water generation not exceeding the limit as per CC&A-GPCB
2.3	Sewage shall be disposed of through septic tank/soak pit system	The sewage water is taking into the Effluent treatment plant through pipeline followed by treatment and disposal as per GPCB norms.
2.4	The unit shall install flow meters at utilities for measuring category wise (category as given in water- cessact-1977(schedule !!) consumption of water	Water flow meters have been installed where necessary.
2.5	Domestic effluent shall be disposed of through septic tank/ soak pit system confirm to the following standards. Parameters: Permissible Limits BOD (5 Days as20C): 30 mg/lit	We have given annual contract to the GPCB approved Environmental consultant agency for testing, monitoring of Effluent treatment plant.

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	Suspended Solid	20 mg/lit	
	Residual Chlorine	Minimum 0.5 mg/lit	
3	**Conditions under air act 1981**		
3.1	There shall be no use of fuel, hence there is no flue gas emission from manufacturing activities another ancillary operations		No continuous Flue gas emission in another ancillary operations, Aegis Logistics Ltd, Liquid storage Terminal-Kandla.
3.2	There shall be no process gas emission from manufacturing and other ancillary activities.		NO
3.3	The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified here under as per National Ambient Air Quality Emission standards issued by Ministry of Environment Forest and climate change dated 16th November-2009 Change dated 16th November-2009		May 2022 a Latest Environment monitoring Test reports attached. **(Annexure II)** All parameters are complying and within the GPCB, CPCB norms.
	Parameters	**Time Weighted Average**	**Concentration in Ambient air µ g/ M 3**
	Sulphur Dioxide (SO2)	Annual 24 Hours	50 80
	Nitrogen Dioxide (NO2)	Annual 24 Hours	40 80
	Particulate Matter (Size less than 2.5 µm)or PM1.5	Annual 24 Hours	60 100
3.4	The Concentration of Noise in ambient air within the premises of industrial unit shall not exceed the following levels Between 6 A.M and 10 P.M: 75 dB(A) Between 10 P.M and 6 A.M: 70 dB(A)		May 2022 a latest Environment monitoring Test reports attached **(Annexure II)** All Parameters are complying and within the GPCB, CPCB Norms
4	**Condition under Hazardous Waste**		

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4.1	The applicant shall provide temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Managing, Handling &Trans boundary Movement) rules, 2008 as attended from time to time	We already identified facility and storing the generated hazardous waste as per Management, Handling &Trans boundary Movement) Ru les 2008 as amended from time to time. We integrated common hazardous waste treatment and management facility of M/S Bhachau Saurasthra Enviro Project Pvt Ltd, Bhachau.
5	**General Condition**	
5.1	Any change in personal, Equipment or working conditions as mentioned in the consent form/order should immediately be intimated to this Board.	We will intimate to GPCB, GoG if there are any change in personnel, equipment or working condition as mentioned in the consent form/ order.
5.2	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board concerned Police station. Office of direct orate of health service, Department of Explosives, Inspectorate of factories and local body. In case of failure of Pollution Control equipment, the production process connected to it shall be stopped. Remedial action/ measures shall be implemented immediately to bring entire situation normal.	We will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in excess of standards at their premises. In case of failure of pollution control equipment, we will stop the storage activities connected with the pollution control equipment. We will take necessary action/measures immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analysed by one of the laboratories recognized by the state Board.	We have given annual contract to the GPCB approved Environmental consultant agency M/S Earth Envirotech, Gandhidham for testing, monitoring of Effluent treatment plant and other GPCB environmental norms.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other condition stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief	We have appointed GPCB approved environmental consultant to carry out the Environmental Monitoring during construction and operational phase at our own

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	Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	premises. GPCB approved Environmental Consultant will directly report to the head of our organization for internalizing environmental issues. GPCB approved environmental Consultant will also coordinate the exercise of environmental audit and preparation of environmental statements.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this state Board latest by 30th September every year	Environment statement for the previous year will be submitted by us to GPCB within stipulated time.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the board deems, fit in accordance with Section 27 of the Act.	Agree with the Gujarat Pollution Control board, GOG for review and/ or revoke the consent and/or make variation in the conditions, which the Board deems, fit in accordance with the section 27 of the Act.
5.7	In case of change of ownership/management the name and address of new owners/partners/directors/proprietor should immediately be intimated to the Board	We will intimate to GPCB, GOG immediately in case of change of ownership/management the name and address of new owners/partners/directors/proprietor
5.8	The waste generator shall be totally responsible for (i.e., Collection, storage as per statutory requirement Encapsulation, incineration, treatment, transportation, and ultimate disposal) of the wastes generated.	We integrated common hazardous waste treatment and management facility of M/S Bhachau Saurasthra Enviro Project Pvt Ltd, Bhachau. We have obtained TSDF membership for collection, storage as per statutory requirement. Validity up to 2023.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31st January of every year.	We will maintain online manifest & the records for waste generation and disposal. We are submitting the annual returns to GPCB in prescribed form within stipulated time.
5.10	As per "Public Liability Insurance Act -91 "company shall get Insurance Policy, if	We will keep all the necessary insurance policy including the "Public

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	applicable.	Liability Insurance Act -91".
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this. regards shall be submitted within three months and along with Form-4.	We will adopt best practice, the operation & construction activities to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form 4.
5.12	Applicant is required to comply with the manufacturing, Storage, and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.	We will strictly be complying with provision of Manufacturing, Storage, and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1989.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No 657 of 199s- dated 14th October-2003.	We have displayed the relevant information about hazardous waste as indicated in the Courts Order in W.P. No. 657 of 199s- dated 14thOctober-2003.
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within the factory premise.	We will display on-line data outside the main gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous wastes generated within our premises.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage, and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.	We have already prepared detailed onsite and Off-Site Emergency plan as per the manufacture, storage and import of hazardous chemical rules 1989 as amended to date which may cover the natural disasters also wherever applicable
Plot No	**Name of Plot Allottee**	**Stamp & Signature**
3,4,5 & 6	**AEGIS LOGISTICS LTD, LIQUID STORAGE TERMINAL, Plot No. 3,4,5 & 6. Opp. to BPCL Booster station, Jawahar Road, Kandla-370210 (Kutch Dist.) Gujarat**	

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Monitoring the implemental Safeguards Ministry of Environment & Forests Regional office (W), Bhopal.

Monitoring Report (Up to March 2017)

Part-1

DATA SHEET

1. Project type: River valley/ Mining/ Industry/ thermal / nuclear/ Other(specify)	Infrastructure and Miscellaneous Projects CRZ
2. Name of the project	Development of plots for construction of liquid Storage Tank Farm at Kandla, Gujarat by M/5 Deendayal (Kandia) Port Trust.
3. Clearance Letter (s). OM no and date	MOEF, New Delhi vide File No. 10-36/ 2008 – IA-III dated 2/02/2010 had granted Environmental/ CRZ Clearance to Kandla Port Trust for subject project. Further, MOEF & CC, New Delhi vide File No. 10-36/2008-IA. III dated 18/08/2015 had extended the validity period of EC/CRZ clearance up to 1/02/2020.
4. Location a) District (s) b) State(s) c) Location/latitude/longitude	 Dist.: Kutch State: Gujarat Location: Kandla Port Trust, 23 ° 0'29.3076" N and 70° 11'14.118° E
5. Address for Correspondence a) address of Concerned Project Chief Engineer (with pin Code & telephone/ telex/ fax numbers b) Address of Executive project Engineer/ manager/ (with pin code fax numbers)	HEAD OFFICE 1202, Tower B. Peninsula Business Park, G.K. Marg, Lower Parel (W), Mumbai-400 013. ..... Plot No. 3,4,5 & 6 Jawahar Road, New Kandla Gandhidham- 370201
6. Salient features of the project	1.Total 04 no. of plots are being developed for the for liquid storage Tank farm. 2.The tentative capacity works out for the proposed tank farm is 260000 Kilolitres. 3.This liquid storage mainly used for storage of liquid cargo as permitted in CRZ Notification, 2011 and amendment from time to time.

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b) Salient features of the Environmental management plan	1.Provision of Parking of heavy vehicles and sufficient space for loading unloading of tankers within individual plot limit have been made by all successful plot allottees. 2.Successful plot allottees had already placed the detailed-on site and Off-site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date. 3.The solid waste have been properly collected, segregated and disposed of as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by successful plot allottees. 4.A first Aid Room had already been provided by successful plot allottees during the construction activities. 5.Secure construction practices have been adopted by successful plot allottees in which no construction spoils take placed. 6.Successful plot allottees have only hired those Vehicles having valid pollution under control license granted by statutory authorities. 7.Successful plot allottees have already earmarked the area for storage of storm water and same will be re-use for green belt development at the premises of each plot. 8.DPT has already formed EMC for environmental activities including direct/indirect environmental monitoring each plot by using ETP.
7. Breakup of the project area a) Submergence area: forest & non- forest b) Others	Nil Nil
8. Breakup of the project affected population with enumeration of those losing houses / dwelling units only agricultural land & landless laborer/ arisena) SC, ST/Adivasi's	

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a) SC. ST/Adivasis b) Others (Please indicate whether the figures are based on any scientific and systematic survey carried out of only provisional figures if a survey is carried out give details and years of survey.	Nil Nil
Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference.	Out of total 17 plots, DPT allotted 13 plots {3,4,5,6,7,10,12,13,14,15,17,18&19) to various plot allottees. Further, Commercial operation started for 12 plots {3,4,5,6,7,10,12, 13,15,17,18 &19) and obtained CTO from GPCB and plot no.14 construction activity is in progress. Plot no. 11 & 16 has surrendered the Plots to DPT. Therefore, the Plots no. 8, 9, 11 & 16 will be auctioned by DPT in due course. Plot No. 10: Rs. 45 Corer {Total Project Cost submitted by M/ s. Friends Bulk Handlers Ltd.) Plot No. 3, 4, S &6: 42 Corer Approx. (submitted by M/s. Aegis Logistics Ltd. for first phase.} Plot No. 7: Rs. 79.98 Corer Approx. (submitted by M/ s. Shreeji liquid Storage Terminals Pvt. Ltd.) Plot No. 14: Rs. 25 Corer Approx. (submitted by M/s.Kutch Oil and Soap Industry).
b) Allocation made for environmental management plans with item wise and year wise break-up.	Out of total 17 plots, DPT allotted 13 plots (3,4,5,6,7,10,12,13,14,15,17,18&19) to various plot allottees. Further, Commercial operation started for 12 plots (3,4,5,6,7,10,12, 13,15,17,18 &19) and obtained CTO from GPCB and plot no.14 construction activity is in progress. Plot no. 11 & 16 has surrendered the Plots to DPT. Therefore, the Plots no. 8, 9, 11 & 16 will be auctioned by DPT in due course. 12 Plot allottees (3,4,5,6,7, 10,12,13,1 5,17,18 &19) started commercial operation (GPCB granted on CCA).
c) Benefit cost ratio/ internal rate of Return and the year of assessment whether (c) includes the cost of environmental management plans so far.	-----

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d)Actual expenditure incurred on the project. e) Actual expenditure incurred on the environmental managements plans so far.	12 Plot allottees (3,4,5,6,7,10,12,13,15,17,I8 &19) started commercial operation (GPCB granted on CCA).
9. The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	NA, no felling is required
10. Status of construction a) Date of commencement (Actual and / or planned) b) Date of completion (Actual and / or planned)	Out of total 17 plots, DPT allotted 13 plots (3,4.5,6,7,10,12,13,14,15, I 7,I 8&19) to various plot allottees. Furth er, Commercial operation started for 12 plots (3,4 5 6 7 10 12 13 15 17 18 &19) and obtained CTO from GPCB and plot no.14 construct ion activity is in progress. Plot no. 11 & 16 has surrendered the Plots to DPT. Therefore, the Plots no. 8, 9, 11 & 16 will be auctioned by DPT in due course. 12 Plot allottees 3,4,5,6,7,10,12,13, I S,17, I 8 &19) started commercial operation (GPCB granted on CCA).
11. Reasons for the delay if the Project is yet to start	NA,
12.Date of the site visited a) The dates on which the project was monitored by the regional office on previous occasion if any b) The date site visit for this monitoring report	NA,

AEGIS LOGISTICS LTD. KANDLA

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016, framed under the Environmental (Protection) Act-1986.

And whereas Board has received application inward No.**124202** dated **23/08/2017** for the **Consolidated Consent and Authorization** (CC&A) of the Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To
Aegis Logistics Ltd,
Plot No- 3,4,5,
Near Jawaharlal Road, kandla Port,
Tal-Gandhidham, Dist: Kutch– 370201

1. **Consent Order No. AWH- 88714 Date of Issue: 11/10/2017**

2. The consent shall be valid up to 22/08/2022 for storage of the following products :

Sr. No.	PRODUCT	QUANTITY (MT)
1.	**Petroleum product under class A,B,C and chemicals--- 35,800 Kls (Total No of Tank=13)**	
	2-Ethyl Hexanol (2EH)	n-Butanol
	2-Ethyl Hexyl Acrylate	n-Butyl Acrylate
	Acetic Acid	Ortho Xylene
	Acetic Anhydride	Para Xylene
	Acetone	Phenol
	Acrylic Acid	Polyols
	Acrylo Nitrile	Propane and Derivatives
	Alpha Olefins (C10)	Py-Gas
	Aniline	Rafinate
	Aviation Turbine Fuel	Solvent C9
	Benzene	Styrene Monomer
	Butane and Derivatives	Superior Kerosene Oil
	Butyl Acetate	Toluene

	Butyl Acrylate Monomer	Vaccum Gas Oil
	CBFS	Vinyl Acetate Monomer
	Crude Oil	Mix Xylene
	Cyclo Hexane	Motor Spirit
	Di Methyl Formamide	Naphtha
	Dicyclopentadiene	Iso Propyl Alcohol
	Diesel	LDO
	Ethane and Derivatives	LSHS
	Ethyl Acetate	Meta Xylene
	Ethyl Alcohol	Methane and Derivatives
	Ethylene Di Amine	Methanol
	Ethylene Di Chloride (EDC)	Methyl Ethyl Ketone (MEK)
	Furnace Oil	Methyl Iso Butyl ketone (MIBK)
	Heavy Aromatics	Methyl Methacrylate
	Hexane	Methyl Tertiary Butyl Ether (MTBE)
	Iso Butanol	
2	**NON-PPETROLEUM PRODUCT (INC Edible oils & Fertilizers and Its raw materials) ----10,800 KLs (Total Nos of Tank-4)**	
	2-Methyl 1.3 Propandiol (MPDIOL)	Linear Alkyl Benzene
	2-Propyl Heptanol (2PH)	Methyl Dipheyl Diisocyanat
	Base oil	Methylene Di Chloride (MDC)
	Bitumen	Mono Ethylene Glycol
	CARODOLS	Mono Propylene Glycol
	Caustic Soda Lye	Nitric acid
	Crude Glycol	Ortho Nitro Toluene
	Di Ethylene Glycol	Paraffin
	EXXSOL	Phosphoric Acid
	Fatty Acids	Propylene Glycol
	Fatty Alcohol	Sulphuric Acid
	Glycerine	Texanol
	Iso Nonyl Alcohol (INA)	Veg. Oils

3. **SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:**

3.1 You shall adhere to all EC conditions issued to KPT vide order NO F-NO 10-36/2008-IA-III dated 2.2.2010. .

3.2 No ground water shall be withdrawal without obtaining prior permission from competent authority.

4. **CONDITIONS UNDER WATER ACT 1974:**

5.1 The quantity of industrial effluent generation from manufacturing process and other ancillary operations shall not exceed **200 ltr/ Day**

5.2 The quantity of Domestic waste water (Sewage) shall not exceed **10 KL/Day**.

5.3 The quality of the industrial effluent shall conform to the following standards.

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C

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Colour (Pt. Co. scale units)	100 units
Suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Phenolic Compound	01 mg/L
Ammonical Nitrogen	50 mg/L
BOD (3 Days at 27°C)	30 mg/L
COD	100 mg/L
Total Dissolved Solids	2100 mg/L
Hexavalent chromium	0.1 mg/ ltr
Copper	1 mg/ ltr
Iron	1.0 mg/ ltr

All efforts shall be made to remove colour & unpleasant odour as far as practicable

5.4 The treated effluent conforming to above standards shall be utilized for gardening and plantation within premises.

5.5 The unit shall install meters at utilities for measuring category wise (Category as given in Schedule II of "Water (Prevention & Control of Pollution) Cess Act-1977") consumption of water.

5.6 The quality of the sewage shall conform to the following standards:

PARAMETERS	GPCB NORMS
BOD (5 days at 20° C)	10 mg/L
Suspended solids	20 mg/L
Residual Chlorine	Minimum 0.5 mg/L

5.7 Sewage shall be disposed off through septic tank / soak pit system.

5.8 The unit shall install meters at utilities for measuring category wise (Category as given in Schedule II of "Water (Prevention & Control of Pollution) Cess Act-1977") consumption of water.

6 CONDITIONS UNDER AIR ACT 1981:

6.1 The following shall be used as fuel in Boiler respectively.

Sr. No.	Fuel	Quantity
1.	Diesel	70 Kg/hr
2.	Furnace Oil	150 Kg/hr

6.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below:

Sr. No.	Stack attached to	Stack height in Meter	Parameter	Permissible Limit
1	D. G. sets	20	PM	150 mg/Nm^3
2.	Boiler+T.F.H	27	SO_2	100 ppm
			NOx	50 ppm

6.3 There shall be no process gas emission from manufacturing process and other ancillary operations.

6.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MOEF & CC dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/M^3
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80

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2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

6.5 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

6.6 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. to 10 P.M.: 75 dB (A)
Between 10 P.M. to 6 A.M.: 70 dB (A)

7 Authorization under Hazardous and other waste [Management, Transboundary Movement] Rules, 2016 & amended.

7.1 Authorization Number: AWH – 88714 and shall valid up to 22/08/2022.

7.2 Aegis Logistics Ltd, is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at, **Plot No- 3,4,5, Near Jawaharlal Road, kandla Port, Tal-Gandhidham, Dist: Kutch– 370201**

Sr. No.	Waste	Quantity per Year	Category	Mode of Disposal
1.	Discarded Container/ Barrel/ Liner	0.500 MT	33.1	Collection, storage, Transportation, Disposal either reuse after treatment in plant premises or sell it to register recycler
2.	Any process or distillation residue	10 MT	36.1	Collection, storage, Transportation, Disposal at SEPPL
3.	Used Oil	10 MT	5.1	Collection, storage and reuse as a lubricant within a unit premises and / or sold out to registered recyclers.

6.3 The authorization is granted to operate a facility for collection, storage, within factory premises, transportation, and ultimate disposal of Hazardous wastes at TSDF.

6.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6. GENERAL CONDITIONS OF AUTHORIZATION:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. Hazardous Waste generated shall be disposed off in accordance with the Hazardous Waste & other waste (Management & Transboundary Movement) Rules, 2016 as amended and unit shall have to obtain authorization of the Board for all applicable categories of Hazardous wastes.
   (a) Used oil / spent oil shall be disposed off by selling it to registered re- refiner units only.
   (b) Oily sludge from separators shall be dispose or of selling it to registered re- refiners unit only.

(c) ETP sludge shall be disposed of at TSDF approved by the Board.
(d) Used batteries shall be sold to the GPCB authorized dealers.

6. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption of hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. An application for the renewal of an authorization shall be made as laid down under these Rules.
12. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

7. GENERAL CONDITIONS

7.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

7.2 The waste generator shall be totally responsible for (i.e. Collection, storage, transportation and ultimate disposal) of the wastes generated.

7.3 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

7.4 In case of any accident, details of the same shall be submitted in Form – 5 to Gujarat Pollution Control Board.

7.5 Applicant shall comply relevant provision of "Public Liability Insurance Act – 91".

7.6 Empty drums and containers of toxic and hazards material shall be treated as per guideline published for "management & handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.

7.7 Adequate plantation shall be carried out all along the periphery of the industrial premises and a green belt of 10 meters width is developed.

7.8 The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the Water Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986.

7.9 The over all noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act, 1986 & Rules.

7.10 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. and 10 P.M.: 75 dB (A)
Between 10 P.M. and 6 A.M.: 70 dB (A)

7.11 In case of transport of hazardous waste to a facility for (i.e. Treatment, Storage and disposal) existing in a state other than the state where hazardous waste are generated, the occupier shall obtain "No Objection certificate" from the state pollution Control Board, the Committee of the concerned state or Union territory Administration where the facility exists.

7.12 Unit shall take all concrete measures to show tangible results in waste generation reduction, voidance, reuse and recycle. Action taken in this regards shall be submitted within 03 months and also along with Form 4.

7.13 You shall have to display the relevant information with regard to hazardous waste as indicated in the Hon. Supreme Court's order in W.P. No.657 of 1995 dated 14th October 2003.

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7.14 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

For and on behalf of
Gujarat Pollution Control Board

(P.J. Vachhani)
Senior Environmental Engineer

NO: PC/ CCA- KUTCH- 1362/GPCB ID: 49986/ **Date:**

ISSUED TO:
Aegis Logistics Ltd,
Plot No- 3,4, 5,
Near Jawaharlal Road, kandla Port,
Tal-Gandhidham,
Dist: Kutch– 370201

Outward No: 425778, 17/10/2017

AEGIS LOGISTICS KANDLA

OIL SPILL RESPONSE PLAN

AEGIS

AEGIS LOGISTICS LTD.
Plot Nos. 3 to 6, Opp: BPCL Booster Station,
Jawahar Road, Kandla – 370210

Date	Revision	Prepared by	Reviewed by	Approved by
15.02.2021	3	Jigar Gadhvi	Prasanna Patil	Venkat Butchaiah
01.10.2020	2	Shaik Imtiyaz	Prasanna Patil	Venkat Butchaiah
02.06.2020	1	Brijesh Yadav	Prasanna Patil	Venkat Butchaiah
01.02.2019	0	Prasanna Patil (Sr Manager)		

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04	On-site Resources	04
05	Remediation Plan	04
06	Spill incident response Organisation	05
07	Roles & Responsibilities	05-08
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9	Annex – 1 (Spill containment Equipment's)	12

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1. INTRODUCTION:

Spills of petroleum products and other hazardous materials cannot be entirely prevented, however, the impacts of spills can be minimized by establishing a predetermined line of response and action plan.

2. SPILL RESPONSE ACTIONS:

- Ensure safety of all personnel by providing proper Personal Protective Equipment's (PPE) to be able to control the spill.
- Assess spill hazards and risks.
- Remove all sources of ignition if any eg electrical supply, any open flame works nearby, vehicle movement etc.
- Stop the spill if safely possible e.g. shut of pump, close the valve, replace cap, tip drum upward, patch leaking hole.
- Use the spill kits to aid in stopping the spill if it is safe to do so. Use suits and chemical gloves available in PPE boxes if there is any risk of being in contact with chemicals.
- No matter what the volume is, notify about event to terminal control room and/or Incident Controller (IC) and call for help if required.
- Contain the spill – use sorbent materials like adsorbent pads, adsorbent booms or spill berms to contain the spill. In case the spill is spreading in the nearby drains and channels, prevent the spread by making temporary bunds. The bunds can be made by using sandbags, use of shovel to dig dike to contain spill. Methods will vary depending on the nature of the products and spill.

3. Specific spill containment methods:

a) Containment of Spills on Land

Spills on land include spills on rock, gravel, soil and/or vegetation. It is important to note that soil is a natural sorbent, thus spills on soil are generally less serious then spills on water as contaminated soil can be more easily recovered. It is important that all measures be undertaken to avoid spills reaching open water bodies.

Dykes - Dykes can be created using soil surrounding a spill on land. These dykes are constructed around the perimeter or down slope of the spilled fuel. A dyke needs to be built up to a size that will ensure containment of the maximum quantity of fuel that may reach it. A plastic tarp can be placed on and at the base of the dyke such that fuel can pool up and subsequently be removed with sorbent materials or by pump into barrels or bags. If the spill is migrating very slowly a dyke may not be necessary and sorbents can be used to soak up fuels before they migrate away from the source of the spill.

Trenches - Trenches can be dug out to contain spills as long as the top layer of soil is thawed. Shovels pickaxes or a loader can be used depending on the size of trench required. It is recommended that the trench be dug to the bedrock or permafrost, which will then provide containment layer for the spilled fuel. Fuel can then be recovered using a pump or sorbent materials.

b) Containment of Spills on Water

Spills on water such as rivers, streams or lakes are the most serious types of spills as they can negatively impact water quality and aquatic life. All measures need to be undertaken to contain spills on open water.

Booms- Booms are commonly used to recover fuel floating on the surface of lakes or slow-moving streams. They are released from the shore of a water body to create a circle around the spill. If the spill is away from the shoreline a boat will need to be used to reach the spill, then the boom can be set out. More than one boom may be used at once. Booms may also be used in streams and should be set out at an angle to the current. Booms are designed to float and have sorbent materials built into them to absorb fuels at the edge of the boom. Fuel contained within the circle of the boom will need to be recovered using sorbent materials or pumps and placed into barrels or bags for disposal.

Weirs - Weirs can be used to contain spills in streams and to prevent further migration downstream. Plywood or other materials found on site can be placed into and across the width of the stream, such that water can still flow under the weir. Spilled fuel will float on the water surface and be contained at the foot of

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the weir. It can then be removed using sorbents, booms or pumps and placed into barrels or plastic bags.

Barriers - In some situations barriers made of netting or fence material can be installed across a stream, and sorbent materials placed at the base to absorb spilled fuel. Sorbents will need to be replaced as soon as they are saturated. Water will be allowed to flow through. This is very similar to the weir option discussed above.

Note that in some cases, it may be appropriate to burn fuel or to let volatile fuels such as gasoline evaporate after containment on the water surface. This should only be undertaken in consultation with, and/or after approval.

4. On-site resources:

a) PPE Kits:

- Hand gloves (PVC & cotton)
- PVC / Chemical suit
- Half Face Mask with canister
- Full face mask with canister
- Splash proof goggles
- Ear plugs
- Face shield

b) Spill containment Equipment (Ref Annexure 1)

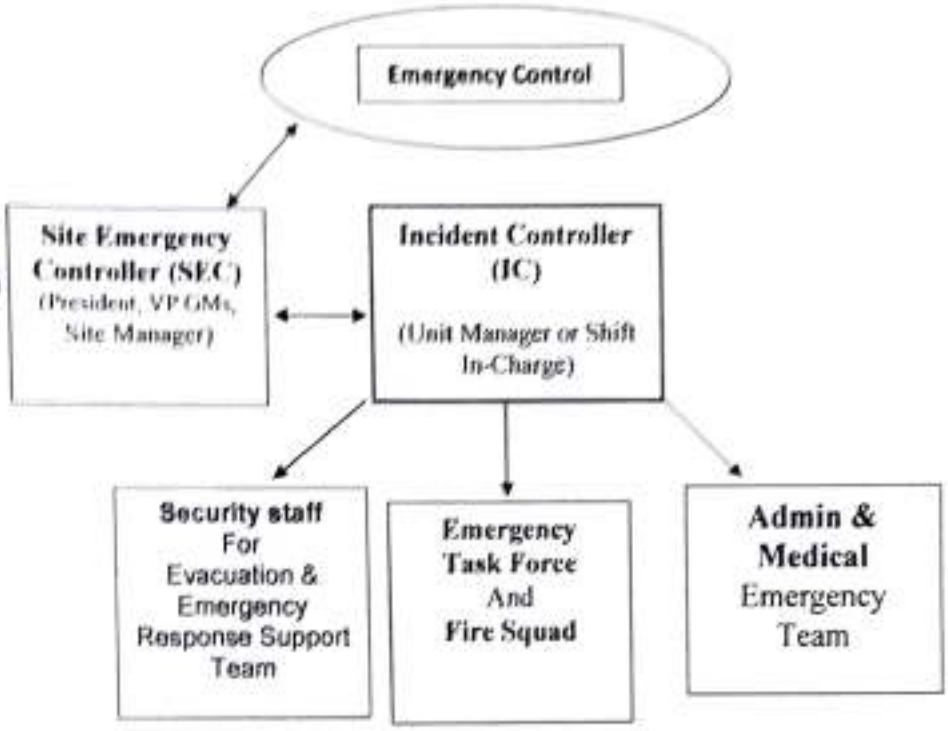
- Spill containment trays
- Adsorbent Pads/Pillows
- Dispersant chemicals

5. Remedial Action Plan:

- Clean the spill affected area with adsorbent and wash with sufficient water.

- The contaminated water is collected and sent to Oil Catcher pit where water and oil is separated. The separated water will be sent to ETP and oil will be disposed of through authorised disposal agency.

6. Spill Incident Response Organisation with roles & responsibility



7. Roles & Responsibility:

CIC-CHIEF INCIDENT CONTROLLER

- Communication to Directors
- Monitor status by continuous communication with IC
- Control emergency situation- and take lead in level 3.
- Coordinate with external medical facility
- Provide resources- men, money etc.
- Inform MbPT for the support
- Inform Statutory authority as per requirement
- Communicate MARG for Help
- Handle Community issues

- Management of Media
- Ensure communication (need based) to stake holders

DIC- Dy.INCIDENT CONTROLLER

- Update SEC about Emergency
- Isolate / arrest source of leak / Isolate Equipment.
- Operate ESD / Stop all operations in safe manner.
- Activate Emergency Siren. Announce Wind direction and communication.
- Stop all Maintenance work / Stop Tanker filling.
- Operate deluge sprinklers.
- Direct ERST, Security, ETF for evacuation and Direct people to Assembly area
- Call Fire Tender/ additional Fire Tender
- Fire Water tank level augment
- Direct security to keep passage clear vehicle moving
- Direct to the use of special PPE's.
- Arrange transfer of product from spill area
- Arrest Flow of Spills outside the premises
- Instruct to start DG set if required, isolate Power
- Coordinate with external medical facility
- Inform MbPT for support if required.
- Declaring "All Clear" after checking with ER Teams

ERST- EMERGENCY RESPONSE SUPPORT TEAM

- Isolate source of leak if possible.
- Activate MCP / Inform Control Room.
- Open Hose Box / Lay & Connect Hoses.
- Fetch Portable Foam Trolley / Operate Foam trolley.
- Start Fire Water Pump.
- Start Fire Water through fire hose.
- Open and direct Fire Water Monitor.
- Use Local Extinguisher.
- Bring PPEs / Use of Special PPEs.

- Operate Sprinklers Operate Deluge Valve
- Use Fire Tender - direct foam & Water
- Cordon of area and assist in evacuation
- Wind direction and communication thereof
- First Aid action / rescue action
-

AUXILIARY TEAM

- Isolate source of leak if possible/ Isolate Equipment.
- Activate MCP / Inform Control Room.
- Open Hose Box / Lay & Connect Hoses.
- Fetch Portable Foam Trolley / Operate Foam trolley.
- Start Fire Water Pump/ Water tank level augment
- Start Fire Water through fire hose.
- Open and direct Fire Water Monitor.
- Operate ESD, DG sets if required
- Use of Local Extinguisher.
- Bring PPEs / Use of Special PPEs.
- Operate Deluge & Sprinklers.
- Stop all Maintenance Work / Stop all operations in safe manner.
- Cordon of area / direct people to Assembly area.
- Isolate Local Power.
- Stop Tanker filling.
- Keep passage clear for emergency vehicle movement
- Provide bunds to block Spills outside premises
- Arrange transfer of product from spill area.
- Assist in use of fire tender equipment's

SECURITY

- Activate MCP / Inform Control Room.
- Activate Emergency siren.
- Fetch Portable Foam Trolley.
- Open Hose Box / Lay & Connect Hoses.
- Open and direct Fire Water Monitor.

- Use Local Extinguisher.
- Cordon of area /direct people to Assembly area
- Head Count.
- Bring Special PPEs.
- Keep passage clear for emergency vehicle
- Assist in use of Fire Tender equipment.
- Close main gate.
- Help in rescuing Injured.
- Coordinate for Ambulance, emergency vehicles for shifting Injured.

MEDICAL TEAM/ FIRST AIDER

- Take First Aid action.
- Coordinate with external medical facility
- Help in rescuing Injured./Help in shifting Injured.
- Contact company doctor for help
- Arrange for Ambulance for hospitalisation

8. Oil Spill Scenarios and Action Plan:

i) Spill unto 5 Litres

- Suspend all related operations and isolate the source of leak.
- Contain the spill using drip trays, adsorbents, adsorbent pads and Socs.
- Attend the leak.
- Adsorb the spilled liquid completely, collect in a bag and send to disposable section.
- Clean the area with sufficient amount of water.
- Send contaminated water through oil skimmer pit for separation.
- Separated water will be sent to ETP and oil will be disposed off through authorised disposal agency.

ii) Spill from 5 – 200 Litres

- Suspend all related operations and isolate the source of leak.

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- Collect the spilled liquid in drip trays and/or containers.
- Attend the leak
- Contain the spilled liquid using adsorbents, adsorbent pads and Socs.
- Transfer collected liquid into slop tank and/or containers.
- Adsorb the spilled liquid completely, collect in a bag and send to disposable section.
- Clean the area with sufficient amount of water.
- Send contaminated water through oil skimmer pit for separation.
- Separated water will be sent to ETP and oil will be disposed off through authorised disposal agency.

iii) **Spill above 200 Litres in Filling bays/Pump House and Manifold**

- Suspend all related operations and isolate the source of leak.
- Attend the leak
- Contain the spilled liquid using adsorbents, adsorbent pads and Socs and Booms.
- Allow the spill to collect in a drain pit and transfer collected liquid into slop tank and/or containers.
- Adsorb the spilled liquid completely, collect in a bag and send to disposable section.
- Clean the area with enough water.
- Send contaminated water through oil skimmer pit for separation.
- Separated water will be sent to ETP and oil will be disposed off through authorised disposal agency.

iv) **Spill above 200 Litres in Tank farm area.**

- Suspend all related operations and isolate the source of leak.
- Attend the leak
- Contain the spilled liquid using adsorbents, adsorbent pads and Socs and Booms.
- Allow the spill to collect in a drain pit and transfer collected liquid into slop tank and/or containers.

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- Adsorb the spilled liquid completely, collect in a bag and send to disposable section.
- Clean the area with enough water.
- Send contaminated water through oil skimmer pit for separation.
- Separated water will be sent to ETP and oil will be disposed off through authorised disposal agency.

v) Spill resulting in fire

- Suspend all related operations.
- Immediately break the glass of nearest MCP (Manual Call Point). Inform Terminal control room/ Incident Controller
- Isolate the source of leak if possible, using water curtain, Chemical / Fire suit, SCBA to approach isolation valve.
- Cut off open flame / heat source / ignition source if any. Cut off local electrical power supply.
- Absorb or cover spilled product with adsorbents, dry sand etc.
- Call in house Fire fighting team for tackling the emergency.
- Activate "On-site Emergency Plan"
- Close bund / gate valves for arresting spread of liquid chemicals into other critical areas.
- Unless leak source can be effectively closed / isolated do not extinguish fire nor direct water at source of leak and fire.
- Cordon of up to 100 meter in all directions and evacuate the area. Direct peoples towards Assembly Point. For large releases initial evacuation 800 meters or more in all directions.
- If required call Mutual Aid Members for help.

vi) <u>Oil spill at Jetty</u>

Two types of spills which can take place at jetty are,

<u>Level I:</u> Minor oil spillage, which does not affect the surrounding area and limited within the port premises and can be managed by the available resources. It calls for following actions.

- Suspend all operations and Isolate leak source.

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- Contain the spilled liquid using adsorbents, adsorbent pads and Socs and Booms.
- Transfer collected liquid into slop tank and/or containers.
- Adsorb the spilled liquid completely, collect in a bag and send to disposable section.
- Clean the area with sufficient amount of water.
- Send contaminated water through oil skimmer pit for separation.
- Separated water will be sent to ETP and oil will be disposed of through authorised disposal agency.

Level II: Major oil spillage, where surrounding area get affected and extensive District, State, and other Neighbouring Industries' assistance / Coast Guard assistance is required. In this case Off-Site Emergency Plan and Tier – I oil spill response facility is to be activated

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ANNEXURE - I

Spill Containment Equipment's

Spill kit are kept at easy access and quick response areas to clean **Oil** on Land & Water for spill control of Petroleum, Non Petroleum products.

The following area are

S.no	Location
1	ABC gantry area
2	NPP Ganry area
3	ABC pig trolly area

Spill Containment drip trays	
Absorbent Pads	
Dispersant Chemicals	

AEGIS LOGISTICS KANDLA

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By

Gujarat Motor Vehicle Department

Date	:	**25/01/2022**
Time	:	**15:30:11 PM**
Validity upto	:	**24/01/2023**

Certificate SL. No.	:	GJ01200630002405
Registration No.	:	GJ12BV8011
Date of Registration	:	01/Dec/2017
Month & Year of Manufacturing	:	October-2017
Valid Mobile Number	:	******4521
Emission Norms	:	BHARAT STAGE IV
Fuel	:	DIESEL
PUC Code	:	GJ0120063
GSTIN	:	
Fees	:	Rs.100.00(GST as applicable)
MIL observation	:	No

Vehicle Photo with Registration plate
60 mm x 30 mm

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon, (THC/HC)	ppm		
High idling emissions	CO	percentage (%)		
	RPM	RPM	2500 ± 200	
	Lambda	-	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	1.62	1.31

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to https://vahan.parivahan.gov.in

Authorised Signature with stamp of PUC operator
60mm x 20 mm

Shree Krishna Automobile

POLLUTION UNDER CONTROL CERTIFICATE

Authorised By [illegible]

Transport Commissioner, Gujarat

Certificate No.	[illegible]
Registration No.	GJ1AA8181
Chassis No.	[illegible]
Engine No.	[illegible]
Date of Issue	[illegible]
Upto	[illegible]
Model	[illegible]
Vehicle Category	[illegible]
Type of Registration	[illegible]
Emission Norms	[illegible]
Fuel	[illegible]
Type of Testing	[illegible]
P.U. Equipment Manufacturer Name	[illegible]
P.U. Equipment Model No.	[illegible]
Name	
P.U. Equipment Serial No.	[illegible]

S.N.	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

Date of Testing	[illegible]
Test Charges	Rs. [illegible]
	(Rupees [illegible] Only)

In case of any complaint please write to Transport Commissioner, Gujarat

[illegible]
[illegible]
Testing Centre Name: [illegible]
[illegible]
Centre Address: [illegible]
[illegible]
[illegible]
Test Conducted by: [illegible]

TEST RESULT FOR DIESEL VEHICLE

	RPM	HSU	K VALUE	OIL TEMP
TEST 1	[illegible]	[illegible]	[illegible]	[illegible]
TEST 2	[illegible]	[illegible]	[illegible]	[illegible]
TEST 3	[illegible]	[illegible]	[illegible]	[illegible]
AVG	[illegible]	[illegible]	[illegible]	[illegible]

This is a computer generated certificate and does not require signature

A 2 Z ENVIROTECH LAB PVT. LTD.

ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/03

Description of Sample:					
Date of Sampling	:	06/05/2022	Type of Sampling	:	Isokinetic
Date of Sample Received	:	06/05/2022	Sample ID	:	SE/052022/03
Sampling Location of Sampling Point	:	D.G. Set – 01 (900 KVA)- GTD Area	Sample Particular	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	Date of Analysis Start	:	06/05/2022
Details of Packing/Label/Seal	:	Satisfactory	Date of Analysis Completion	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	Instrument calibration status	:	Ok
Instrument code	:	A2ZELPL/WSS/01	Type of Fuel used	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	65.4	mg/Nm³	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	26.1	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	19.7	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

This Report is issued under the following terms & Condition:

1. The results relate only to the items testedand for applicable parameter
2. This Test report shall not to be reproduced in full or part for any promotional or publicity and can't be used as evidence in court of law without the written consent of A 2 Z Envirotech Lab Private Limited
3. Reanalysis of the sample will be done if requested Within 15 days from the date of reporting of sample if the samples are still consumed during analysis.

---------- End of Report ----------

A2Z Envirotech Lab Pvt. Ltd.
Plot No. 340, Sector 1A, 2nd Floor,
Shiv House, Near Dada Circle,
Gandhidham - Kachchh, Gujarat - 370201

Branch:
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A 2 Z ENVIROTECH LAB PVT. LTD.

ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED. ,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/04

Description of Sample:					
Date of Sampling	:	06/05/2022	**Type of Sampling**	:	Isokinetic
Date of Sample Received	:	06/05/2022	**Sample ID**	:	SE/052022/04
Sampling Location of Sampling Point	:	D.G. Set – 02 (900 KVA)- GTD Area	**Sample Particular**	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	**Reference Method for Sampling**	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	**Date of Analysis Start**	:	06/05/2022
Details of Packing/Label/Seal	:	Satisfactory	**Date of Analysis Completion**	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	**Instrument calibration status**	:	Ok
Instrument code	:	A2ZELPL/WSS/01	**Type of Fuel used**	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	63.4	mg/Nm³	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	24.2	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	19.5	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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---------- End of Report ----------

AEGIS LOGISTICS LTD. KANDLA

A2Z Envirotech Lab Pvt. Ltd.
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Shiv House, Near Civic Circle,
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TC-10331

TEST REPORT

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AEGIS LOGISTICS LIMITED. ,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/02

Description of Sample:					
Date of Sampling	:	05/05/2022	Type of Sampling	:	Isokinetic
Date of Sample Received	:	05/05/2022	Sample ID	:	SE/052022/02
Sampling Location of Sampling Point	:	D.G. Set – 02 (40 KVA)- LTD Area	Sample Particular	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	Date of Analysis Start	:	05/05/2022
Details of Packing/Label/Seal	:	Satisfactory	Date of Analysis Completion	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	Instrument calibration status	:	Ok
Instrument code	:	A2ZELPL/WSS/01	Type of Fuel used	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	62.7	mg/Nm^3	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	19.4	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	16.1	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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AEGIS LOGISTICS KANDLA

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TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED. ,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/01

Description of Sample:					
Date of Sampling	:	05/05/2022	**Type of Sampling**	:	Isokinetic
Date of Sample Received	:	05/05/2022	**Sample ID**	:	SE/052022/01
Sampling Location of Sampling Point	:	D.G. Set – 01 (250 KVA)- LTD Area	**Sample Particular**	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	**Reference Method for Sampling**	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	**Date of Analysis Start**	:	05/05/2022
Details of Packing/Label/Seal	:	Satisfactory	**Date of Analysis Completion**	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	**Instrument calibration status**	:	Ok
Instrument code	:	A2ZELPL/WSS/01	**Type of Fuel used**	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	77.4	mg/Nm³	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	21.4	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	16.5	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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---------- End of Report ----------

AEGIS LOGISTICS LTD.

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TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED. ,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201.

Format No. : 7.8 F-07
Date of Report : 14/05/2022
Report No : A2ZELPL/AN/052022/04

Description of Sample:					
Date of Sampling	:	12/05/2022	Type of Sampling	:	Ambient Noise
Date of Sample Received	:	12/05/2022	Sample ID	:	AN/052022/04
Sampling Location of Sampling Point	:	Nr. LPG Mounded Buliet Pump House - GTD area	Sample Particular	:	Noise Monitoring
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 9989-1991
Instrument code	:	A2ZELPL/SLM/01	Sampling Duration (Minute)	:	30 min
Instrument calibration status	:	Ok	Date of Analysis Start	:	--
Meteorological condition during monitoring	:	Clear Sky	Date of Analysis Completion	:	--

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	64	dB	75	IS 9989-1991

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTIC KANDLA

A2Z Envirotech Lab Pvt. Ltd.
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A 2 Z ENVIROTECH LAB PVT. LTD.

A2Z

ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201.

Format No. : 7.8 F-07
Date of Report : 14/05/2022
Report No : A2ZELPL/AN/052022/03

Description of Sample:					
Date of Sampling	:	12/05/2022	Type of Sampling	:	Ambient Noise
Date of Sample Received	:	12/05/2022	Sample ID	:	AN/052022/03
Sampling Location of Sampling Point	:	Utility building ground floor (Compressor & Pumps) - GTD area	Sample Particular	:	Noise Monitoring
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 9989-1991
Instrument code	:	A2ZELPL/SLM/01	Sampling Duration (Minute)	:	30 min
Instrument calibration status	:	Ok	Date of Analysis Start	:	--
Meteorological condition during monitoring	:	Clear Sky	Date of Analysis Completion	:	--

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	68	dB	75	IS 9989-1991

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTICS KANDLA

A2Z Envirotech Lab Pvt. Ltd.
Plot No. 340, Sector 1A, 2nd Floor,
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ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Format No. : 7.8 F-07
Date of Report : 14/05/2022
Report No : A2ZELPL/AN/052022/02

Customer's Name and Address
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201.

Description of Sample:					
Date of Sampling	:	12/05/2022	**Type of Sampling**	:	Ambient Noise
Date of Sample Received	:	12/05/2022	**Sample ID**	:	AN/052022/02
Sampling Location of Sampling Point	:	ABC Pump house -LTD area	**Sample Particular**	:	Noise Monitoring
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	**Reference Method for Sampling**	:	IS 9989-1991
Instrument code	:	A2ZELPL/SLM/01	**Sampling Duration (Minute)**	:	30 min
Instrument calibration status	:	Ok	**Date of Analysis Start**	:	--
Meteorological condition during monitoring	:	Clear Sky	**Date of Analysis Completion**	:	--

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	62	dB	75	IS 9989-1991

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTICS KANDLA

A2Z Envirotech Lab Pvt. Ltd.
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Gandhidham - Kachchh, Gujarat - 370201

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Akbarkhan Jalori
+91 98987 11906

A 2 Z ENVIROTECH LAB PVT. LTD.

ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED. ,
PLOT NO: 3,,
KANDLA PORT TRUST, - 370201.

Format No. : 7.8 F-07
Date of Report : 14/05/2022
Report No : A2ZELPL/AN/052022/01

Description of Sample:					
Date of Sampling	:	12/05/2022	Type of Sampling	:	Ambient Noise
Date of Sample Received	:	12/05/2022	Sample ID	:	AN/052022/01
Sampling Location of Sampling Point	:	NPP Pump house -LTD area	Sample Particular	:	Noise Monitoring
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 9989-1991
Instrument code	:	A2ZELPL/SLM/01	Sampling Duration (Minute)	:	30 min
Instrument calibration status	:	Ok	Date of Analysis Start	:	-
Meteorological condition during monitoring	:	Clear Sky	Date of Analysis Completion	:	-

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	65	dB	75	IS 9989-1991

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTICS LTD. KANDLA

A2Z Envirotech Lab Pvt. Ltd.
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+91 98987 11906

A2Z ENVIROTECH LAB PVT. LTD.

TC-10331

Test Results

Customer's Name and Address:
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-05
Date of Report : 09/05/2022
Report No : A2ZELPL/AA/052022/03

Description of Sample:					
Date of Sampling	:	07/05/2022	**Sample Particular**	:	Ambient Air
Date of Sample Received	:	07/05/2022	**Sample ID**	:	AA/052022/03
Sampling Location of Sampling Point	:	Between Sec. Gate no. 6 & TLF-01-GTD	**Instrument calibration status**	:	Ok
Sample Collected / Submitted by	:	A2ZELPL Team Member	**Reference Method for Sampling**	:	IS 5182
Sample Quantity /Total No.	:	2 Filter paper, 1 SO_2×35 mL, 1 NO_2×35 mL	**Date of Analysis Start**	:	07/05/2022
Details of Packing/Label/Seal	:	Satisfactory	**Date of Analysis Completion**	:	09/05/2022
Environment condition during the test	:	25 ± 3 °C	**Meteorological condition during monitoring**	:	Clear Sky
Instrument code	:	A2ZELPL/RDS/01 A2ZELPL/FDS/01	**Actual duration of Monitoring, (Hours)**	:	24

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Particulate Matter PM_{10}	71.4	µg/m³	100	IS 5182 (Part 23) 2006/Reaffirmed 2017
2.	Particulate Matter $PM_{2.5}$	24.2	µg/m³	60	IS 5182 (Part 24) 2019
3.	Sulfur Dioxide SO_2	17.4	µg/m³	80	IS 5182 (Part 2) 2001/Reaffirmed 2017
4.	Nitrogen Dioxide NO_2	21.9	µg/m³	80	IS 5182 (Part 6) 2006/Reaffirmed 2017

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTICS LTD. KANDLA

A2Z Envirotech Lab Pvt. Ltd.
Plot No. 340, Sector 1A, 2nd Floor,
Shiv House, Near Civil Circle,
Gandhidham - Kachchh, Gujarat - 370201

Branch:
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Akbarkhan Jalori
+ 91 98987 11906

A 2 Z ENVIROTECH LAB PVT. LTD.

ENVIROTECH LAB PVT . LTD .

TC-10331

Test Results

Customer's Name and Address:
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-05
Date of Report : 09/05/2022
Report No : A2ZELPL/AA/052022/02

Description of Sample:					
Date of Sampling	:	06/05/2022	Sample Particular	:	Ambient Air
Date of Sample Received	:	06/05/2022	Sample ID	:	AA/052022/02
Sampling Location of Sampling Point	:	Between Sec. Gate no. 2 & ABC Gantry area - LTD	Instrument calibration status	:	Ok
Sample Collected / Submitted by	:	A2ZELPL Team Member	Reference Method for Sampling	:	IS 5182
Sample Quantity /Total No.	:	2 Filter paper, 1 SO_2×35 mL, 1 NO_2×35 mL	Date of Analysis Start	:	06/05/2022
Details of Packing/Label/Seal	:	Satisfactory	Date of Analysis Completion	:	09/05/2022
Environment condition during the test	:	25 ± 3 °C	Meteorological condition during monitoring	:	Clear Sky
Instrument code	:	A2ZELPL/RDS/01 A2ZELPL/FDS/01	Actual duration of Monitoring, (Hours)	:	24

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Particulate Matter PM_{10}	69.7	µg/m³	100	IS 5182 (Part 23) 2006/Reaffirmed 2017
2.	Particulate Matter $PM_{2.5}$	28.2	µg/m³	60	IS 5182 (Part 24) 2019
3.	Sulfur Dioxide SO_2	17.2	µg/m³	80	IS 5182 (Part 2) 2001/Reaffirmed 2017
4.	Nitrogen Dioxide NO_2	22.5	µg/m³	80	IS 5182 (Part 6) 2006/Reaffirmed 2017

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTICS LTD. KANDLA

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TC-10331

Test Results

Customer's Name and Address:
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-05
Date of Report : 09/05/2022
Report No : A2ZELPL/AA/052022/01

Description of Sample:					
Date of Sampling	: 05/05/2022		Sample Particular	:	Ambient Air
Date of Sample Received	: 05/05/2022		Sample ID	:	AA/052022/01
Sampling Location of Sampling Point	: Between Sec. Gate no. 1 & NPP Gantry area - LTD		Instrument calibration status	:	Ok
Sample Collected / Submitted by	: A2ZELPL Team Member		Reference Method for Sampling	:	IS 5182
Sample Quantity /Total No.	: 2 Filter paper, 1 SO_2×35 mL, 1 NO_2×35 mL		Date of Analysis Start	:	05/05/2022
Details of Packing/Label/Seal	: Satisfactory		Date of Analysis Completion	:	09/05/2022
Environment condition during the test	: 25 ± 3 °C		Meteorological condition during monitoring	:	Clear Sky
Instrument code	: A2ZELPL/RDS/01 A2ZELPL/FDS/01		Actual duration of Monitoring, (Hours)	:	24

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Particulate Matter PM_{10}	73.4	µg/m³	100	IS 5182 (Part 23) 2006/Reaffirmed 2017
2.	Particulate Matter $PM_{2.5}$	35.1	µg/m³	60	IS 5182 (Part 24) 2019
3.	Sulfur Dioxide SO_2	25.3	µg/m³	80	IS 5182 (Part 2) 2001/Reaffirmed 2017
4.	Nitrogen Dioxide NO_2	30.8	µg/m³	80	IS 5182 (Part 6) 2006/Reaffirmed 2017

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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AEGIS LOGISTICS LTD. KANDLA

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A 2 Z ENVIROTECH LAB PVT. LTD.

A2Z ENVIROTECH LAB PVT . LTD .

FORM NO. 37
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7 - A (a) (c).

Name of the Company/ Plant: Ageis Logistics Ltd.
Plot No. 3, Kandla Port Trust – 370201

1. Raw materials, by-products and finished products involving in the process.
2. Particulars of sampling:

Date of sampling: 10/05/2022

ISSUE DATE	15/05/2022
REF. NO	A2ZELPL/WM/052022/01

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling Instrument Used	Airborne Contamination			TWA Concentration (As given in second Schedule	Reference Method	Number Of workers Exposed At the Location Being Monitored	Remarks	Signature of Person Taking samples	Name
				Number Of sample	Range (Result)	Average	µg/m³					
1	Nr.ABC Gantry Are	Styrene monomer	Handy sampler	01	205	205	435	GC Method	6	--		Mr. Ashif Khan Jalori
2	Nr. NPP Gantry Are	Acetic acid.		01	148	148	205	GC Method	4	--		

For, A 2 Z ENVIROTECH LAB PVT. LTD

Authorised Signature

AEGIS LOGISTICS LTD. KANDLA

TRAFFICE MANAGEMENT PLAN

AEGIS

AEGIS LOGISTICS LTD.
Plot Nos. 3 to 6, Opp: BPCL Booster Station,
Jawahar Road, Kandla – 370210

AEGIS LOGISTICS LTD. KANDLA

AEGIS	TRAFFICE MANAGEMENT PLAN	JUNE 2020
	AEGIS LOGISTICS LTD-KANDLA	

M/s Aegis Logistics Limited is situated at Plot No.3,4,5&6, J.N. Road, Near railway crossing, Kandla. Main activity of installation is to receive, store and dispatch of edible oils to meet the requirement of customers as transits storage facility. Installation provides all the facilities to the customers on hire basis. No any chemical reaction, mixing, stirring, dissolution process on stored product is carried out.

Traffic Management System:

- Security shall maintain a log of all personnel vehicle within the depot premises at any point of time
- All the vehicles are thoroughly checked before entry as per checklist at the security gate
- Security staff is present for controlling of traffic around the terminal
- Roads inside the hazardous area of installation shall be restricted
- Vehicles required for operational, maintenance and safety/security reasons are allowed only with proper safety fittings and authorized from in charge/designated safety officer
- The emergency gate is away from the main gate for evacuation of vehicles and personnel
- Emergency gate is always be kept free from obstruction in emergency
- Congestion of parking is avoided with effective planning
- Proper ground surface is available
- Proper illumination is ensured at all places
- Speed is limited to 10 km in the terminal
- Proper training and awareness to the truck drivers time to time.
- Yellow floor marking lines are provided at tanker loading unloading area (gantry)
- Proper safe distance maintained between the adjoining vehicles at parking
- In case of fire/emergency siren the loading will be stopped and Tankers at the parking are routed to emergency gates
- Tanker lorry loading at loading point following action will be taken

AEGIS LOGISTICS LTD KANDLA

- Loading hose, wheel chocks and earthling clamp will be routed to emergency gate
- In case of blockage of one route all the vehicles are evacuated to other route
- In case of emergency well trained and proper evacuation procedure adopted
- All tankers and LMV vehicles are parking at DPT parking yard.

AEGIS LOGISTICS LTD. KANDLA

AEGIS LOGISTICS LTD. KANDLA

ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED.
PLOT NO: 3
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/03

Description of Sample:					
Date of Sampling	:	06/05/2022	Type of Sampling	:	Isokinetic
Date of Sample Received	:	06/05/2022	Sample ID	:	SE/052022/03
Sampling Location of Sampling Point	:	D.G. Set – 01 (900 KVA)- GTD Area	Sample Particular	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	Date of Analysis Start	:	06/05/2022
Details of Packing/Label/Seal	:	Satisfactory	Date of Analysis Completion	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	Instrument calibration status	:	Ok
Instrument code	:	A2ZELPL/WSS/01	Type of Fuel used	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	65.4	mg/Nm³	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	26.1	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	19.7	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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3. Reanalysis of the sample will be done if requested Within 15 days from the date of reporting of sample, if the samples are not consumed during analysis.

---------- End of Report ----------

AEGIS LOGISTICS LTD. KANDLA

A2Z Envirotech Lab Pvt. Ltd.
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ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/04

Description of Sample:					
Date of Sampling	:	06/05/2022	**Type of Sampling**	:	Isokinetic
Date of Sample Received	:	06/05/2022	**Sample ID**	:	SE/052022/04
Sampling Location of Sampling Point	:	D.G. Set – 02 (900 KVA)- GTD Area	**Sample Particular**	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	**Reference Method for Sampling**	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	**Date of Analysis Start**	:	06/05/2022
Details of Packing/Label/Seal	:	Satisfactory	**Date of Analysis Completion**	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	**Instrument calibration status**	:	Ok
Instrument code	:	A2ZELPL/WSS/01	**Type of Fuel used**	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	63.4	mg/Nm³	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	24.2	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	19.5	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
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(Quality Manager)

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AEGIS LOGISTICS LTD. KANDLA

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Shiv House, Near Oslo Circle,
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TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED. ,
PLOT NO. 3,
KANDLA PORT TRUST. - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/02

Description of Sample:					
Date of Sampling	:	05/05/2022	Type of Sampling	:	Isokinetic
Date of Sample Received	:	05/05/2022	Sample ID	:	SE/052022/02
Sampling Location of Sampling Point	:	D.G. Set – 02 (40 KVA)- LTD Area	Sample Particular	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	Date of Analysis Start	:	05/05/2022
Details of Packing/Label/Seal	:	Satisfactory	Date of Analysis Completion	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	Instrument calibration status	:	Ok
Instrument code	:	A2ZELPL/WSS/01	Type of Fuel used	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	62.7	mg/Nm³	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	19.4	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	16.1	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED. ,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-06
Date of Report : 10/05/2022
Report No : A2ZELPL/SE/052022/01

Description of Sample:					
Date of Sampling	:	05/05/2022	Type of Sampling	:	Isokinetic
Date of Sample Received	:	05/05/2022	Sample ID	:	SE/052022/01
Sampling Location of Sampling Point	:	D.G. Set – 01 (250 KVA)- LTD Area	Sample Particular	:	Stack Emission
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 11255
Sample Quantity /Total No.	:	1 Thimble, 1 SO_2×50 mL, 1 NO_x×50 mL	Date of Analysis Start	:	05/05/2022
Details of Packing/Label/Seal	:	Satisfactory	Date of Analysis Completion	:	10/05/2022
Environment condition during the test	:	25 ± 3 °C	Instrument calibration status	:	Ok
Instrument code	:	A2ZELPL/WSS/01	Type of Fuel used	:	HSD

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Protocol
1.	Particulate Matter as PM	77.4	mg/Nm³	150	IS 11255 (Part 01): 1985
2.	Sulphur Dioxide as SO_2	21.4	ppm	100	IS 11255 (Part 02): 1985
3.	Oxides of Nitrogen as NO_x	16.5	ppm	50	IS 11255 (Part 07): 2005

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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---------- End of Report ----------

AEGIS LOGISTICS LTD. KANDLA

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TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201.

Format No. : 7.8 F-07
Date of Report : 14/05/2022
Report No : A2ZELPL/AN/052022/04

Description of Sample:					
Date of Sampling	:	12/05/2022	Type of Sampling	:	Ambient Noise
Date of Sample Received	:	12/05/2022	Sample ID	:	AN/052022/04
Sampling Location of Sampling Point	:	Nr. LPG Mounded Bullet Pump House – GTD area	Sample Particular	:	Noise Monitoring
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 9989-1991
Instrument code	:	A2ZELPL/SLM/01	Sampling Duration (Minute)	:	30 min
Instrument calibration status	:	Ok	Date of Analysis Start	:	--
Meteorological condition during monitoring	:	Clear Sky	Date of Analysis Completion	:	--

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	64	dB	75	IS 9989-1991

Tested By
(Sr. Analyst/Analyst)

Checked By /Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTICS LTD. KANDLA

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TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED.,
PLOT NO. 3,
KANDLA PORT TRUST, - 370201.

Format No. : ZBF/07
Date of Report : 14/05/2022
Report No : AZZELPL/AH/05/2022/03

Description of Sample:					
Date of Sampling	:	12/05/2022	**Type of Sampling**	:	Ambient Noise
Date of Sample Received	:	12/05/2022	**Sample ID**	:	AH/05/2022/03
Sampling Location of Sampling Point	:	Utility building ground floor (Compressor & Pumps) – GTD area	**Sample Particular**	:	Noise Monitoring
Sample Collected / Submitted by	:	AZZELPL TEAM MEMBER	**Reference Method for Sampling**	:	IS 9989-1991
Instrument code	:	AZZELPL/SLM/01	**Sampling Duration (Minute)**	:	30 min
Instrument calibration status	:	Ok	**Date of Analysis Start**	:	--
Meteorological condition during monitoring	:	Clear Sky	**Date of Analysis Completion**	:	--

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	68	dB	75	IS 9989-1991

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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End of Report

AEGIS LOGISTICS KANDLA

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Shiv House, Near Dalo Circle,
Gandhidham - Kachchh, Gujarat - 370201

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+ 91 98987 11906

A2Z ENVIROTECH LAB PVT. LTD.

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED
PLOT NO: 3,
KANDLA PORT TRUST, - 370201.

Format No. : TR/5-07
Date of Report : 14/05/2022
Report No : A2ZEL/P/... /AK/05/2022/02

Description of Sample:					
Date of Sampling	:	12/05/2022	Type of Sampling	:	Ambient Noise
Date of Sample Received	:	12/05/2022	Sample ID	:	AK/05/2022/02
Sampling Location of Sampling Point	:	ASC Pump house +LTD area	Sample Particular	:	Noise Monitoring
Sample Collected / Submitted by	:	A2ZEL/P/ TEAM MEMBER	Reference Method for Sampling	:	IS 9989-1981
Instrument code	:	A2ZEL/P/SLM/01	Sampling Duration (Minute)	:	30 min
Instrument calibration status	:	Ok	Date of Analysis Start	:	–
Meteorological condition during monitoring	:	Clear Sky	Date of Analysis Completion	:	–

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	62	dB	75	IS 9989-1981

Tested By
(Sr. Analyst/Analyst)

Checked By, Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan F. Jalori
(Quality Manager)

This Report is issued under the following terms & Conditions:

1. The results relate only to the items tested and for applicable parameter.
2. This Test report shall not to be reproduced in full or part for any promotional or publicity and can't be used as evidence in court of law without the written consent of A 2 Z Envirotech Lab Private Limited.
3. Reanalysis of the sample will be done if requested within 15 days from the date of receiving of sample if the samples are not consumed during analysis.

End of Report

AEGIS LOG... KANDLA

A2Z Envirotech Lab Pvt. Ltd.
Plot No. 340, Sector 1A, 2nd Floor,
Shiv House, Near Dsic Circle,
Gandhidham - Kachchh, Gujarat - 370201

Branch:
147, Time Square Empire
Mirjapar Road, Bhuj - Kachchh
Gujarat - 370001

NABL / TC-10831
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info@a2zenvirotechlab.com
www.a2zenvirotechlab.com

Akbarkhan Jalori
+91 98987 11906

ENVIROTECH LAB PVT . LTD .

TC-10331

TEST REPORT

Customer's Name and Address
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,,
KANDLA PORT TRUST, - 370201.

Format No. : 7.8 F-07
Date of Report : 14/05/2022
Report No : A2ZELPL/AN/052022/01

Description of Sample:					
Date of Sampling	:	12/05/2022	Type of Sampling	:	Ambient Noise
Date of Sample Received	:	12/05/2022	Sample ID	:	AN/052022/01
Sampling Location of Sampling Point	:	NPP Pump house -LTD area	Sample Particular	:	Noise Monitoring
Sample Collected / Submitted by	:	A2ZELPL TEAM MEMBER	Reference Method for Sampling	:	IS 9989-1991
Instrument code	:	A2ZELPL/SLM/01	Sampling Duration (Minute)	:	30 min
Instrument calibration status	:	Ok	Date of Analysis Start	:	-
Meteorological condition during monitoring	:	Clear Sky	Date of Analysis Completion	:	-

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Noise Monitoring	65	dB	75	IS 9989-1991

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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3. Reanalysis of the sample will be done if requested Within 15 days from the date of reporting of sample if the samples are not consumed during analysis.

End of Report

AEGIS LOGISTICS LTD KANDLA

A2Z Envirotech Lab Pvt. Ltd
Plot No. 340, Sector 3A, 2nd Floor,
Shiv House, Near Gate Circle,
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Akbarkhan Jalori
+ 91 96987 11906

A 2 Z ENVIROTECH LAB PVT.LTD.

A2Z ENVIROTECH LAB PVT . LTD .

TC-10331

Test Results

Customer's Name and Address:
AEGIS LOGISTICS LIMITED. ,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-05
Date of Report : 09/05/2022
Report No : A2ZELPL/AA/052022/03

Description of Sample:					
Date of Sampling	:	07/05/2022	Sample Particular	:	Ambient Air
Date of Sample Received	:	07/05/2022	Sample ID	:	AA/052022/03
Sampling Location of Sampling Point	:	Between Sec. Gate no. 6 & TLF-01-GTD	Instrument calibration status	:	Ok
Sample Collected / Submitted by	:	A2ZELPL Team Member	Reference Method for Sampling	:	IS 5182
Sample Quantity /Total No.	:	2 Filter paper, 1 SO_2×35 mL, 1 NO_2×35 mL	Date of Analysis Start	:	07/05/2022
Details of Packing/Label/Seal	:	Satisfactory	Date of Analysis Completion	:	09/05/2022
Environment condition during the test	:	25 ± 3 °C	Meteorological condition during monitoring	:	Clear Sky
Instrument code	:	A2ZELPL/RDS/01 A2ZELPL/FDS/01	Actual duration of Monitoring, (Hours)	:	24

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Particulate Matter PM_{10}	71.4	µg/m³	100	IS 5182 (Part 23) 2006/Reaffirmed 2017
2.	Particulate Matter $PM_{2.5}$	24.2	µg/m³	60	IS 5182 (Part 24) 2019
3.	Sulfur Dioxide SO_2	17.4	µg/m³	80	IS 5182 (Part 2) 2001/Reaffirmed 2017
4.	Nitrogen Dioxide NO_2	21.9	µg/m³	80	IS 5182 (Part 6) 2006/Reaffirmed 2017

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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2. This Test report shall not to be reproduced in full or part for any promotional or publicity and can't be used as evidence in court of law without the written consent of A 2 Z Envirotech Lab Private Limited
3. Reanalysis of the sample will be done if requested Within 15 days from the date of reporting of sample. The samples are not consumed during analysis

End of Report

AEGIS LOGISTICS LTD. KANDLA

A2Z Envirotech Lab Pvt. Ltd
Plot No. 340, Sector 1A, 2nd Floor,
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AZO ENVIROTECH LAB PVT. LTD.

Test Results

Customer's Name and Address		Format No.	
		Date of Report	
		Report No.	

Description of Sample			
Date of Sampling		Sample Particulars	Enclosed As
Date of Sample Received		Sample ID	
Sampling Location or Sampling Point		Instrument calibration status	OK
Sample Collected/ Submitted By	AZO Envi Tech Members	Reference Method for Sampling	
Sample Quantity / Total No.	2 Filter paper	Date of Analysis Start	
Details of Packing, Label, Seal		Date of Analysis Completion	
Environment condition during the test		Meteorological condition during monitoring	
Instrument code		Actual duration of Monitoring (Hours)	24

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1	Particulate Matter (PM$_{10}$)		µg/m³	100	IS 5182 (Part 23) 2006, Reaffirmed 2017
2	Particulate Matter (PM$_{2.5}$)		µg/m³	60	IS 5182 (Part 24) 2019
3	Sulfur Dioxide (SO_2)		µg/m³	80	IS 5182 (Part 2) 2001, Reaffirmed 2017
4	Nitrogen Dioxide (NO_2)		µg/m³	80	IS 5182 (Part 6) 2006, Reaffirmed 2017

Tested By
(Sr. Analyst/ Analyst)

Checked By / Prepared By
Dr. Jignesh P. Maisuria
(Technical Manager)

Authorized Signatory
Akbarkhan A. Jalori
(Quality Manager)

This Report is issued under the following terms & Conditions

1. The results relate only to the items tested/ for the applicable parameters.
2. This Test report shall not be reproduced in full or part for any promotional purpose without written approval of AZO Envirotech Lab Private Limited.
3. Remainder of the sample will be stored / disposed Within 15 days From the date of issue of this report unless otherwise instructed during analysis.

End of Report

AZO Envirotech Lab Pvt. Ltd.
Plot No. 346, Sector 13, 2nd Floor,
Opp. Hospital, Near Dhiri Circle,
Gandhidham, Kachchh, Gujarat - 370201

Branch
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A 2 Z ENVIROTECH LAB PVT. LTD.

A2Z

ENVIROTECH LAB PVT . LTD .

TC-10331

Test Results

Customer's Name and Address:
AEGIS LOGISTICS LIMITED.,
PLOT NO: 3,
KANDLA PORT TRUST, - 370201

Format No. : 7.8 F-05
Date of Report : 09/05/2022
Report No : A2ZELPL/AA/052022/01

Description of Sample:					
Date of Sampling	:	05/05/2022	**Sample Particular**	:	Ambient Air
Date of Sample Received	:	05/05/2022	**Sample ID**	:	AA/052022/01
Sampling Location of Sampling Point	:	Between Sec. Gate no. 1 & NPP Gantry area - LTD	**Instrument calibration status**	:	Ok
Sample Collected / Submitted by	:	A2ZELPL Team Member	**Reference Method for Sampling**	:	IS 5182
Sample Quantity /Total No.	:	2 Filter paper, 1 SO_2×35 mL, 1 NO_2×35 mL	**Date of Analysis Start**	:	05/05/2022
Details of Packing/Label/Seal	:	Satisfactory	**Date of Analysis Completion**	:	09/05/2022
Environment condition during the test	:	25 ± 3 °C	**Meteorological condition during monitoring**	:	Clear Sky
Instrument code	:	A2ZELPL/RDS/01 A2ZELPL/FDS/01	**Actual duration of Monitoring. (Hours)**	:	24

Test Results

Sr. No.	Parameter	Result	Unit	GPCB Limit	Test Method
1.	Particulate Matter PM_{10}	73.4	µg/m³	100	IS 5182 (Part 23) 2006/Reaffirmed 2017
2.	Particulate Matter $PM_{2.5}$	35.1	µg/m³	60	IS 5182 (Part 24) 2019
3.	Sulfur Dioxide SO_2	25.3	µg/m³	80	IS 5182 (Part 2) 2001/Reaffirmed 2017
4.	Nitrogen Dioxide NO_2	30.8	µg/m³	80	IS 5182 (Part 6) 2006/Reaffirmed 2017

Tested By
(Sr. Analyst/Analyst)

Checked By/Prepared By
Dr. Jagruti P. Matang
(Technical Manager)

Authorized Signatory
Akbarkhan P. Jalori
(Quality Manager)

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3. Reanalysis of the sample will be done if requested Within 15 days from the date of reporting of sample if the samples are not consumed during analysis.

End of Report

AEGIS LOGISTICS KANDLA

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A2Z ENVIROTECH LAB PVT. LTD

FORM NO. 37
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7 - 6 (a) (e)

Name of the Company / Plant Ageis Logistics Ltd
Plot No. 3 Kandla Port Trust 370201

1. Raw materials, by-products and finished products involving in the process
2. Particulars of sampling

Date of sampling 10/05/2022

ISSUE DATE	15/05/2022
REF. NO	AZZEL/PL/WM/05/2022/91

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling Instrument Used	Airborne Contamination			TWA Concentration (As given in second Schedule	Reference Method	Number Of workers Exposed At the Location Being Monitored	Remarks	Signature of Person Taking sampiers	Name
				Number Of sample	Range (Result)	Average	µg/m³					
1	Nr.ABC Gantry Are	Styrene monomer	Handy sampler	01	205	205	435	GC Method	4			Mr Ashif Khan Jalori
2	Nr. NPP Gantry Are	Acetic acid.		01	148	148	205	GC Method	4			

For, A 2 Z ENVIROTECH LAB PVT. LTD

Authorized Signature

AEGIS LOGISTICS KANDLA

Annexure-A

AEGIS LOGISTICS LTD. KANDLA

Secretary
Kandla Port Trust

ecological balance of the area as well as the ongoing activities of M/s Kandla Port Trust. It is stated in its report that the impacts on air quality during the construction phase are short term, existing only for the period of the activity and within acceptable limits. However, the proposed project does not involve any dispersion system and thus, no significant impact on air quality is envisaged. It is also mentioned that the adverse impacts on water quality, mainly on account of suspended load of tidal waters in the other areas of the creeks.

The Chief Engineer of M/s Kandla Port Trust, (KPT) has undertaken the following undertakings :

1. To implement all the suggestions and recommendations given in the EIA report of M/s Nandini Institute Of Ocean Technology in their Environmental Impact Assessment report.
2. To bear the cost of the external agency to be appointed by Forest and Environment Department, Government of Gujarat, for supervision/ monitoring of the activities.
3. To carry out a Comprehensive Environmental Impact Assessment and Risk Assessment reports and submit the same to the Forest and Environment Department.
4. The greenbelt development should be raised to meet the water requirements during construction and operational stages.
5. The construction labour shall be provided with adequate sanitation facilities and the water supply, sanitation and fuel shall be provided for by the contractor according environmental conditions.
6. The dumps for the construction labour shall be kept away from the [illegible] including the construction debris shall be disposed of in the area identified by [illegible]
7. The environment monitoring programme shall be implemented in consultation with the District Collector / District Development Officer.
8. The greenbelt development programme shall be implemented in consultation with the Forest Department.

As per G.O.R. publication S. O. 114 (E), dated 19-2-1991, issued by the Ministry of [illegible] Government of India, [illegible] the area of any storage [illegible] the said [illegible] During the presentation on 20-10-93 to JCE, it is represented that the proposed terminal will only for storage of liquid petroleum products as per Schedule III of S.O.

AEGIS LOGISTICS LTD KANDLA

Secretary
Kandla Port Trust

...dated 23rd, 2006 and also for storage of [illegible] cargo such as LPG/Naphtha for ... port users.

...EPR has applied u/s 3(3) of the CRZ, 19 for the present activities.

...the MoEF has requested a copy of the map indicating the Low Tide Line, High Tide ... the demarcation by the Space Application Centre, Ahmedabad, which is yet awaited. ... the Kandla CRZ and various other reports of Kandla. This map indicates the ... proposed location falls in the intertidal area already reclaimed by the KPT for ... development of port and related activities. However, as per the information received from the KPT, the land is never reverted to the proposed site.

... proposed activity of handling of Petroleum products and Crude, use and laying of ... pipelines proposed within the KPT area and it being area already of existing ... activity carried out inside the KPT areas, could be considered as the natural part of ... port activities. Moreover, the report prepared by the NIOT indicates that the proposed site ... ecologically sensitive. Hence, as per the provisions of the CRZ notification, 1991, ... construction carried from time to time, it may be observed that the proposed activities ... prohibited in the project location, and does not fall in the CRZ restrictions.

... of the above, the State Government hereby recommends for the grant of the ... clearance under the CRZ notification, 1991, for the proposed installation of ... for storage &handling of the Petroleum products and Crude oil and laying of inter ... pipelines by the KPT in Kandla Port Trust, by the MoEF, GOI with the ... conditions of the following specific and general conditions:

Specific conditions

1. The project proponents shall strictly adhere to the provisions of the CRZ Notification, ..., and the other norms followed by the Ministry of Environment and Forest, GOI, from ... to time.
2. The project proponents shall obtain all necessary permissions from different Government ... Departments / agencies before commencing the activities.
3. The project proponents shall not handle any hazardous cargo or any chemicals except that ... are mentioned and this permission is valid only for the petroleum products and ... in the CRZ.
4. ...

...

AEGIS LOGISTICS LTD. KANDLA

Secretary
Kandla Port Trust, KANDLA

AEGIS LOGISTICS LTD. KANDLA

AEGIS LOGISTICS LTD. KANDLA

3. An environmental report indicating the following activities with respect to the pipeline environmental facility in the coastal and marine environment shall be submitted every year by the KPT in this Department as well as to the MoEF, GOI.

4. A six monthly report on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT to a regular basis to this Department / MoEF, GOI.

5. Any other conditions that may be stipulated by this Department from time to time for the overall protection of the marine environment shall also have to be complied with by the KPT.

Yours faithfully,

(P. Das)
Director

Shri P.H.V. Gopala Rao
Chairman,
Kandla Port Trust,
Post Box No.50, Gandhidham,
Dist. Kutch.

AEGIS LOGISTICS LTD. KANDLA

AEGIS LOGISTICS LTD. KANDLA

Secretary
Kandla Port Trust

AEGIS LOGISTICS LTD. KANDLA

F. No. 10-38/2008-IA-III
Government of India
Ministry of Environment, Forest & Climate Change
(IA-III Section)

Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi

Dated the [illegible]

To

The Chief Engineer
Kandla Port Trust
Administrative Office Building
Post Box No. 50, Gandhidham (Kutch)
Gujarat - 01

Sub: **'Development of plots for construction of liquid storage tank farm' at Kandla (Gujarat) by Kandla Port Trust – Extension of validity of Environmental and CRZ Clearance - Reg.**

Sir,

[illegible]

[illegible] **'Development of plots for construction of liquid storage tank farm' at Kandla (Gujarat) by Kandla Port Trust** [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

GCM 27 3 2016

KANDLA

O.S.D. (Estate)
Kandla Port Trust

A. Executive Summary Statement (EAI) Uploaded to MON on 28/04/2016 12:46:19 from IP No. 10.10.70.11
B. ABAN-Aegis Logistics Limited accepts the LEGAL responsibility
and undertakes that the furnished information is CORRECT & ACCURATE

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has since been disposed of vide order dated 14.05.2014 and 21.04.2014. There is no court case pending.

(b) Re tendering of allotment of plots & subsequent clearance from local bodies and Govt. concerned etc. Hence, requested extension of validity of time for five years.

4. The EAC in its 34th meeting held on 23rd - 24th April 2015 recommended the project for the grant of extension of validity of the Environmental and CRZ Clearance dated 02.02.2010 for a period of five years. Based on recommendations of EAC, the Ministry of Environment, Forest & Climate Change hereby extends the validity of the Environmental and CRZ Clearance up to 01.02.2020.

5. All other conditions in the Environmental and CRZ Clearance vide No. 10-208/08-IA III dated 02.02.2010 shall remain unchanged.

(S.K. Srivastava)
Scientist F

Copy to:-

1) The Principal Secretary, Department of Forests & Environment and Chairman, GCZMA, Govt. of Gujarat, Sachivalaya, Gandhinagar
2) The Director, Forests & Environment Department, Govt. of Gujarat, Block No.14, 8th Floor, Sachivalaya, Gandhinagar – 382
3) The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32
4) The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhavan, Sector 10 A, Gandhinagar-10
5) Additional Principal Chief Conservator of Forests (C), Western Regional Office, Ministry of Environment, Forests and Climate Change, Regional Office (WZ), Kendriya Paryavaran Bhawan, Arera Centre, Link Road No.3, Ravishankar Nagar, Bhopal – 39
6) Guard File
7) Monitoring Cell, MoEF&CC

(S.K. Srivastava)
Scientist F

GDN
№00513 | 39 | 47
2016

Secretary
Kandla Port Trust

(I.S.S. (Estate)
Kandla Port Trust

A Executive Summary Statement (ESA) Uploaded in XGN on 28/04/2016 12:40:55 from IP No: 59.185.253.237.
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GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

CCA-Amendment
(AWH- 114844)

PC/CCA-KUTCH- 1362/ GPCB ID 49986/ 67016 Date: 21/09/2021

To,
M/s. **Aegis Logistics Limited,**
Plot No. 3, 4, 5, 6,
Nr Jawaharlal road,
Kandla Port,
Tal: Gandhidham,
Dist: Kutch – 370 201

SUB : Amendment in the consolidated consent & Authorization of the Board.

REF : 1) CTE-Fresh issued by this office vide order no. 80369 dated 30/07/2018 valid upto 19/05/2023.
2) CCA issued by this office vide order no. **AWH- 88714** dated 17/10/2017 valid up to 22/08/2022
3) CCA-Amendment issued by this office vide order no. AWH - 103770 dated 30/09/2019 valid up to 22/08/2022
4) CTE Amendment issued by this office vide order no. 80369 dated 27/09/2019 valid upto 19/05/2023
5) Your CCA Amendment Application Inward ID No. **196463** dated **28/06/2021.**
6) Deendayal Port Trust revised vide letter no. MW/WK/8431/713 dated 02/08/2021

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous And Other Waste (Management and Transboundary) Rules, 2016 & framed under the Environment (Protection) Act-1986 The Board has granted CCA vide order No. **AWH- 88714** issued vide this office order no. **PC/CCA-KUTCH-1362/GPCB ID: 49986/425778 dated** 17/10/2017 valid up to 22/08/2022 & CCA-Amendment order no. AWH - 103770 dated 30/09/2019.

The Board has right to review and amend the conditions of the said CCA orders. Now considering your application for CCA amendment inward ID No **196463** dated **28/06/2021,** the said **CCA order is amended as below.**

1. **The order shall be read as CCA amendment Order No.: AWH- 114844 Date of Issue: 21/09/2021, valid up to 22/08/2022.**

3. The condition no. 2 of the said CCA is amended as below:

The consent order shall be valid up to 22/08/2022 for the use of outlet for the purpose of treated effluent and emission due to operation of industrial plant for manufacturing of

	Quantity as per CTE Fresh dated 30/07/2016	Quantity per Month As per CCA-Fresh dated 17/10/2017 & CCA-Amendment dated 30/09/2019	Total quantity after CCA Amendment
Product Code Class A, B	1,87,000 (23 Nos. of tanks)	75,800 Kls (21 nos. of tanks)	75,800 Kls (21 nos. of tanks)
Product Code Class C, D, E	82,100 Kls (23 nos. of tanks)	82,100 Kls (23 nos. of tanks)	82,100 Kls (23 nos. of tanks)
Product Code Class F Solvents	84,210 KLs (4 nos. of tanks)	--	84,210 KLs (4 nos. of tanks)

4. The condition no. 3 of the said CCA is amended as below:

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

3.1 The unit shall not carry out any activities which attract provision of EIA notification 1994 & its amendment.

3.2 The unit shall obtain consent of the Board prior to installation/ commission D.G. Set and shall obtain necessary operation

3.3 The unit shall strictly adhere to Deendayal Port Trust permission letter dated 30.06.2016 regarding mode of pipeline in DPT area as well as earlier DPT permission dated 30.06.2021.

3.4 The unit shall obtain Public Liability Insurance Policy time to time & submit a copy to this office.

3.5 The unit shall renew Petroleum and Explosives Safety Organization permission time to time & submit a copy of the same to this office.

3.6 The industry shall submit compliance of Manufacturing, storage and import of Hazardous Chemicals Rules – 1989 framed under the Environment (Protection) Act 1986 including site notification, onsite emergency plan & safety Audit report within a month.

4. Conditions no. 4 of the said CCA order is amended as below:

4.1 Water Source - GWSSB/ DPT

4.2 The quantity of the fresh water consumption for industrial purpose shall not exceed 50 KL/Day due to CCA-Amendment.

4.3 The quantity of the fresh water consumption for domestic purpose shall not exceed 30 KL/Day due to CCA-Amendment.

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

4.4 The quantity of industrial effluent to be generated from manufacturing process and other ancillary operation shall be increase from 0.2 KL/Day to 12 KL/Day due to CCA-Amendment.

4.5 The quantity of the domestic waste water (Sewage) generation shall be increased from 10 KL/Day to 18 KL/Day due to CCA-Amendment.

4.6 Industry shall operate Effluent Treatment Plant (ETP) adequately so that treated industrial effluent shall comply with following norms.

PARAMETERS	PRESCRIBED LIMITS
pH	6.5 to 8.5
Temperature	40°C
Colour (Pt Co. scale) in units	100 units
Total Suspended Solids	100 mg/L
Oil and Grease	10 mg/L
Ammonical Nitrogen	50 mg/L
BOD (3 days at 27° C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/L
Total dissolved solids	2100 mg/L
Percent Sodium	60 %
Sulphides	5.0 mg/L
Sodium Absorption Ratio	26

4.7 Treated Effluent confirming to above standards shall be discharged on land for gardening and plantation purpose within premises only.

4.8 Industry shall provide fixed pipeline network with flow meter for even distribution of treated effluent & domestic effluent and maintain its record.

4.9 Unit shall provide flow meter at inlet & outlet of ETP & maintain its records.

4.10 Domestic effluent shall be disposed off through septic tank-soak pit system.

4.11 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.

5. **Conditions no. 6 of the said CCA order is amended as below:**

6.1 The following shall be used as a fuel in D.G. Set.

Sr. No.	Utility	Fuel	Total Quantity
1)	D.G. Set	Diesel	70 Kg/Hr

6.2 The applicant shall install & operate air pollution control system efficiently to achieve prescribed norms.

6.3 The flue gas emission through stack attached to D.G. Set shall conform to the following standards

Sr. No	Stack attached to	Stack height in Meter	APCM	Parameter	Permissible Limit
1	D.G. Set (250 KVA) (existing)	20	Adequate Stack Height	PM SO_2 NO_x	150 mg/Nm³ 100 ppm 50 ppm

6.4 There shall be no process gas emission from manufacturing process and other ancillary operations

6.5 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limit specified hereunder as per National Ambient Air Quality Standards issued by MoEF & CC dated 16th Nov. 2009

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/m³
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 hours	40 80
3.	Particulate Matter (Size less than 10 µm) or PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) or $PM_{2.5}$	Annual 24 Hours	40 60

6.6 The applicant shall provide portholes, ladder, platform etc. at chimney(s) for monitoring the air emissions and the same shall be open for inspection to and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2 etc. and these shall be painted / displayed to facilitate identification.

6.7 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB (a) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

6.8 D.G. Sets Conditions

The D.G. Set shall have acoustic enclosure and shall comply with the standards specified at Sr. no. 95 of Schedule-I of the rule-3 of E.P. Rules -1986 and Noise pollution level as per the Air Act-1981.

D.G. Sets standards: -

The flue gas emission through stack attached to D.G. Sets shall conform to following standards

a) The minimum height of stack to be provided with each of the generator sets shall be H=h + 0.2 (KVA)^1/2, where H= Total stack height in meter, h= height of the building in meters where or by the side of which the Generator set is installed

AEGIS LOGISTIC KANDLA

GPCB

PARYAVARAN BHAVAN
Sector 10 A, Gandhinagar-382 010
Phone : (079) 23226256
Fax : (079) 23232156
Website : www.gpcb.gov.in

vi) Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically at the users cost.

vii) The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Under circumstances the performance may be checked for noise reduction up to actual ambient noise level preferably in the night time. The measurement for insertion loss may be taken at different points at 0.5 m from the acoustic enclosure/room, and the average)

viii) The DG Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).

ix) All efforts shall be made to bring down the noise level due to the DG Set outside the premises within the ambient noise requirements by proper siting and control measures. Installation of a DG Set shall be strictly in compliance with the recommendations of the D.G. Set manufacturer.

x) A proper routine and preventive maintenance procedure for the DG Set should be set and followed in consultation with the DG Set manufacturer which would help prevent noise levels of the DG Set from deteriorating with use.

6. **Condition no. 7.2 of the said CCA order** is amended as below

7.2 **M/s. Aegis Logistics Limited** is hereby granted to collect/store/ transport facility for following hazardous wastes at the premises situated at Plot no. 5, 6, 8, Nr Jawaharlal road, Kandla Port, Tal. Gandhidham, Dist. Kutch.

Sr. no	Waste	Quantity per Annum			Sch. Cat	Facility
		Existing	Proposed	Total		
1	Used or Spent oil	10 MT		10 MT	5.1	Collection, storage, transportation, reuse as a lubricant within plant premises and sale to registered recycler
2	Discarded Containers/ Barrels/ Liner	0.5 MT	–	0.5 MT	33.1	Collection, storage, transportation and disposal by selling to authorized dismantlers/ recyclers
3	Any pericross or distillation residue	10 MT	30 MT	40 MT	3.3/1.1	Collection, storage, transportation & disposal at CHWTSF, Kutch by selling to authorized recyclers
4	Sludge & fibers contaminated with oil	–	0.25 MT	0.25 MT	–	Collection, storage, transportation & disposal at CHWTSF, Kutch by selling to authorized recyclers

AEGIS LOGISTICS KANDLA

5	Contaminated cotton rags or other cleaning materials, foam pigs etc.	--	7 MT	7 MT	33.2	Collection, storage, Transportation & disposal at SEPPL & selling to authorized recyclers
6	ETP Sludge	--	5 MT	5 MT	35.3	Collection, storage, Transportation & disposal at SEPPL & selling to authorized recyclers
7	Spent Carbon	--	0.25 MT	0.25 MT	36.2	Collection, storage, Transportation & disposal at SEPPL & selling to authorized recyclers

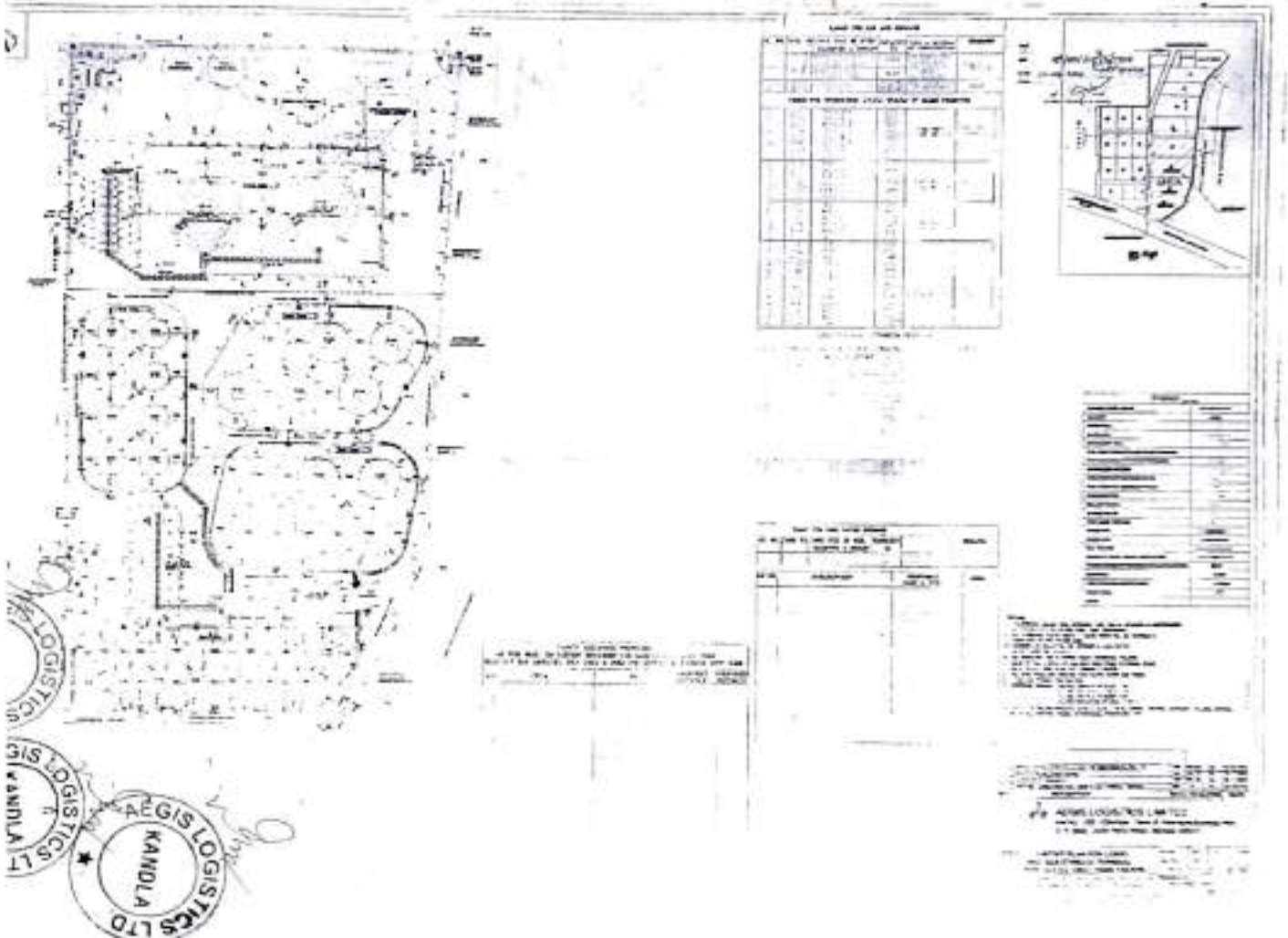
The rest of the conditions of the above referred CCA order no. AWH- [illegible] vide no. PCI/CCA-KUTCH-1362/GPCB ID: 49986/425778 dated 17/10/2017 & CCA-Amendment order no. AWH-103770 vide no. PCI/CCA-KUTCH-1362/GPCB ID: 49986/523032 dated 30/09/2019 shall remain unchanged and valuably complied with the same judicially.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Smt. M. K. [illegible])
Senior Environmental Engineer

AEGIS LOGISTICS LTD
KANDLA

KHARIROHAR ROAD
N
B.P.C.L
M/s. F.O.C.T
I.O.C.L.P.G. PLANT
AEGIS LOGISTICS LIMITED
RAILWAY SIDING TO IFFCO PLANT
I. O. C. NAPHTHA TERMINAL
TO GANDHIDHAM JUNCTION 10.0 KM
RESERVED
HIGH TENSION ELECTRIC LINE
JAWAHAR LAL NEHRU ROAD
AEGIS LOGISTICS LTD. KANDLA
AEGIS LOGISTICS LIMITED


AEGIS LOGISTICS LTD
KANDLA

Annexure -II

F. No. 10-36/2008-IA.III
Government of India
Ministry of Environment, Forest & Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi - 3

Dated: 18th August, 2015

To

The Chief Engineer,
Kandla Port Trust,
Administrative Office Building,
Post Box No. 50, Gandhidham (Kutch)
Gujarat – 01

Sub: 'Development of plots for construction of liquid storage tank farm' at Kandla (Gujarat) by Kandla Port Trust – Extension of validity of Environmental and CRZ Clearance - Reg.

Sir,

This has reference to your letter No. G/WK/4604(EC)/Part V dated 01.10.2014 and subsequent letters dated 16.12.2014 and 10.04.2015, submitting the above-mentioned proposal to this Ministry for grant of extension of validity of Environmental and CRZ Clearance granted vide letter dated 02.02.2010 awarded to Kandla Port Trust, in term of the provisions of the Coastal Regulation Zone (CRZ) Notification, 2011 and Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection), Act, 1986.

2. The proposal for extension of validity of Environmental and CRZ Clearance granted for **'Development of plots for construction of liquid storage tank farm' at Kandla (Gujarat) by Kandla Port Trust,** was considered by the Expert Appraisal Committee (EAC) in the Ministry for Infrastructure Development, Coastal Regulation Zone, Building/ Construction and Miscellaneous projects, in its 147th meeting held on 23rd – 24th April, 2015.

3. The details of the proposal, as per the documents submitted by the project proponents (PP), and also as informed during the above said EAC meeting, are reported to be as under:-

(i) The Ministry had granted Environmental and CRZ Clearance for development of Plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat vide letter No. 10–36/2008–IA–III dated on 02.02.2010 with validity of five years i.e. 02.02.2010 to 01.02.2015. The Project Proponent submitted application to MoEFCC for validity extension of EC/CRZ Clearance on 07.10.2014.

(ii) There was delay in deciding the market price of the plot and connected court matters.

(iii) As of now, all the litigation in the matter of SLP No. 5346/2011, 7301/2011, 8378/2011 and 8379/2011 at Hon'ble Supreme Court of India

has since been disposed of vide order dated 14.03.2014 and 21.04.2014. There is no court case pending.

(iv) Re-tendering of allotment of plots & subsequent allotment to successful bidders will take considerable time. Hence, requested extension of validation of time for five years.

4. The EAC in its 147th meeting held on 23rd – 24th April, 2015 recommended the project for the grant of extension of validity of the Environmental and CRZ Clearance dated 02.02.2010 for a period of five years. Based on recommendations of EAC, the Ministry of Environment, Forest & Climate Change hereby extends the validity of the Environmental and CRZ Clearance up to 01.02.2020.

5. All other conditions in the Environmental and CRZ Clearance no. 10-36/2008-IA-III dated 02.02.2010 shall remain unchanged.

18/8/2015

(S.K. Srivastava)
Scientist E

Copy to:

1) The Principal Secretary, Department of Forests & Environment and Chairman, GCZMA, Govt. of Gujarat, Sachivalaya, Gandhinagar
2) The Director, Forests & Environment Department, Govt. of Gujarat, Block No.14, 8th Floor, Sachivalaya, Gandhinagar – 10
3) The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32
4) The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhinagar-10
5) Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal – 16
6) Guard File
7) Monitoring Cell, MoEFCC

18/8/2015

(S.K. Srivastava)
Scientist E

Annexure -III

GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

R.P.A.D

Consent to Establish (NOC)

CTE – 72308

NO: GPCB/CCA-KUTCH-1285/ GPCB ID 46364/ **Date:-**

To,
M/s. KANDLA PORT TRUST (LIQUID STORAGE TANK FARM)
ADMINISTRATIVE BUILDING –POST BOX NO-50,
TAL- GANDHIDHAM,
DIST- KUTCH

SUB: **Consent to Establish (NOC)** under Section 25 of Water Act 1974 and Section 21 of Air Act 1981.

REF: (1) CTE issued by Board vide order No-PC/CCA-KUTCH-78(2)/GPCB-17832/14401 dated 13/07/2009.
(2) Your CTE Amendment Application Inward **ID No. 91230 dated 10/03/2015**

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board extend the validity of **Consent to Establish (NOC)** for setting up of an industrial plant at **ADMINISTRATIVE BUILDING –POST BOX NO-50, TAL- GANDHIDHAM, DIST- KUTCH for development of plot for construction of liquid storage tank farm for handling edible & non-edible oil & petroleum products for 4,38,92 sq meter (108.46 acres) area for storage of liquid hazardous chemicals (A,B,C,D) for liquid storage (21.26 Lakh kilo liters) in phase wise upto 2025 as per EC order dated 2.2.2010.**

1. **The validity period of the CTE order shall be up to 05/08/2020.**

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

1. Unit shall not start any construction activities till extending the validity of EC & CRZ from Competent Authority.
2. No ground water shall be used for project coming under Dark zone without permission of competent authority.
3. Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2015, 12.79 MMT by 2020 and 17.11 MMT by 2025. The tank farm at Kandla for Liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @ 21.26 Lakh Kilo Liters. Available Liquid Cargo Storage facilities are Edible Oil -89 tanks with 9,17,739 KL , Chemical and POL and Acid of 472 tanks with 12,08,369 KL. The tentative tankage capacity works out for the proposed tank farm is @ 9 Lakhs Kilo Liters.
4. Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F. No. 10-36/2008-IA-III dated 02/02/2010 for old Kandla.
5. You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities.

Online No. 2565832/2015

6. Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

2. CONDITIONS UNDER WATER ACT 1974:

2.1 There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.

2.2 The quantity of domestic waste water (Sewage) shall not exceed **4.5 KL/Day**.

2.3 Sewage shall be disposed of through septic tank/soak pit system.

2.4 The unit shall install flow meters at utilities for measuring category wise (Category as given in Water – Cess Act-1977 schedule II) consumption of water.

2.5 Domestic effluent shall be disposed off through septic tank / soak pit system confirm to the following standards.

PARAMETER	PERMISSIBLE LIMIT
BOD (5 days at 20^0 C)	30 mg/liter
Suspended Solid	20 mg/liter
Residual Chlorine	Minimum 0.5 mg/liter

3. CONDITIONS UNDER AIR ACT 1981:

3.1 There shall be no use of fuel; hence there is no flue gas emission from manufacturing activities and other ancillary operations.

3.2 There shall be no process gas emission from manufacturing and other ancillary activities.

3.3 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission Standards issued by Ministry of Environment , Forest and Climate Change dated 16th November-2009.

No.	Pollutant	Time Weighted Average	Concentration in Ambient air in $\mu g/M^3$
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 mm) OR $PM_{2.5}$	Annual 24 Hours	40 60

3.4 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. and 10 P.M.: 75 dB (A)
Between 10 P.M. and 6 A.M.: 70 dB (A)

Outward No: 3105683/2/2018/2015

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar**-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

4. CONDITIONS UNDER HAZARDOUS WASTE:

4.1 The applicant shall provide temporary storage facilities and maintain the record for each type of Hazardous Waste as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.

5. GENERAL CONDITION:

5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

5.2 Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipments, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.

5.3 In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.

5.4 The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.

5.5 The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.

5.6 The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems fit in accordance with Section 27 of the Act.

5.7 In Case of change of ownership/management the name and address of new owners/partners/directors/proprietor should immediately be intimated to the Board.

5.8 The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.

5.9 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

5.10 As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.

5.11 Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.

Order No. GUJ/RO(S)/23/05/2015

5.12 Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

5.13 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.657 of 1995-dated 14th October-2003.

5.14 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.

5.15 A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.

For and on behalf of
Gujarat Pollution Control Board

(Sushil Vegda)
Senior Environment Engineer

Outward No:325683, 28/08/2015

Annexure –C

[Compliance report of NOC/CTE granted by GPCB]

DEENDAYAL PORT AUTHORITY
(Erstwhile: DEENDAYAL PORT TRUST)

दीनदयाल पत्तन प्राधिकरण
DEENDAYAL PORT AUTHORITY

Administrative Office Building
Post Box NO. 50
GANDHIDHAM (Kutch).
Gujarat: 370 201.
Fax: (02836) 220050
Ph.: (02836) 220038

www.deendayalport.gov.in

EG/WK/4684/(EC)/Part VII/)<9

Dated :10/08/2022

To,
Smt. Urvashi Upadhyay,
Environment Engineer,
Kutch Unit Head,
Gujarat Pollution Control Board,
Paryavaran Bhavan,Sector 10A, Gandhinagar-382 010
Email-kut-uh-gpcb@gujarat.gov.in

Sub: Development of Plots for Construction of Liquid Storage Tank Farm at Kandla, Gujarat by Deendayal Port Authority (Erstwhile: Deendayal Port Trust) – **Compliance report of NoC/CTE (Period up to May, 2022) reg.**

Ref.:
1) GPCB letter No. GPCB/CCA-Kutch-1285/GPCB ID: 46364 dated 28.08.2015.
2) DPT Letter No. EG/WK/4684 (EC) Part V/15 dated 03.03.2016.
3) DPT letter No. EG/WK/4684 (EC) Part V/dated 04.02.2017.
4) DPT letter No. EG/WK/4751 (EC) Part compliance/125 05.04.2019.
5) DPT letter No. EG/WK/4684 (EC)/Part VII/69 dated 18.08.2021

Sir,

It is requested to kindly refer above cited references for the said subject.

In this connection, it is to state that, vide above referred letter No. GPCB/CCA-Kutch-1285/GPCB ID: 46364, dated 28.08.2015 had granted NoC/CTE with validity up to 05.08.2020.

Now, please find enclosed herewith, compliance report of conditions stipulated in CTE order (period up to **May 2022**) along with necessary enclosures as **Annexure I,** for kind perusal & record please.

Further, as per the MoEF&CC, Notification S.O.5845 (E) dated 26.11.2018, stated that ***"In the said notification, in paragraph 10, in sub-paragraph (ii), for the words "hard and soft copies" the words "soft copy" shall be substituted".*** Accordingly, we are submitting herewith soft copy of the same via e-mail ID kut-uh-gpcb@gujarat.gov.in.

This has the approval of the Chief Engineer, Deendayal Port Authority.

Yours faithfully,

(Manager (Environment)
Deendayal Port Authority

Encl.: As above

Copy to: Regional Officer,
Gujarat Pollution Control Board,
Regional office, East Kutch, Gandhidham-370201.
Email Id. ro-gpcb-kute@gujarat.gov.in

Annexure - I

Compliance Report Up to May, 2022

Subject: Point wise compliance report of stipulated conditions mention in the NOC/CTE for the development of plots for construction of Liquid Storage Tank Farm at Kandla, Gujarat.

- **Gujarat Pollution Control Board, Vide Letter No. PC/NOC/CCA-Kutch-78(2)/GPCB ID 17832/14401 Dated 13/07/2009 had granted NOC/CTE to KPT for the subject project. Further, GPCB vide letter No. GPCB/CCA-KUTCH-1285/GPCB ID 46364 dated 28/08/2015 had extended the validity period of NOC/CTE up to 05/08/2020.**

- **The necessary provisions/conditions had already been incorporated in the Lease Deed (para 10(d) of lease deed document) for the compliance of the stipulated conditions of Environment & CRZ Clearance, CRZ Recommendation and NOC(CTE). Further, all the conditions of Environment & CRZ Clearance are part of lease deed and all the plot allottee has to comply all the conditions of Environment & CRZ Clearance.**

- **Out of total 17 plots, DPA allotted 13 plots (3,4,5,6,7,10,12,13,14,15,17,18&19) to various plot allottees. Further, Commercial operation started for 13 plots (3,4,5,6,7,10,12,13,14,15,17,18 & 19) and also obtained CTO from GPCB. The Plots no. 8, 9, 11 & 16 will be auctioned again in due course.**

- **Present Status:**

Plot. No.	Name of Plot Allottee	Allotment letter Issued on	Present Status
3	M/s. Aegis Logistics	17.04.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
4	M/s. Aegis Logistics	26.10.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016)
5	M/s. Aegis Logistics	26.10.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
6	M/s. Aegis Logistics	06.04.2015	Commercial operation started (GPCB has granted CTO on 27/09/2016).
7	M/s. Shreeji Liquid Storage Pvt. Ltd.	09.11.2015	Commercial operation started (GPCB has granted CTO on 08/01/2019)
8	Not allotted	-	-
9	Not allotted	-	-
10	M/s. Friends Bulk Handlers Ltd.	16.04.2015	Commercial operation started (GPCB has granted CTO on 09/03/2016)
11	M/s. Friends Oil & Chemicals Terminals Pvt. Ltd., Gandhidham	06.06.2016	DPA has allotted plot on 06/06/2016. However, Allottee has surrendered the plot to DPA on 18/08/2017 & will be auctioned again in due course.
12	M/s. Viking Lighatrage and cargo handlers Pvt. Ltd.	06.06.2016	Commercial operation started (GPCB has granted CTO on 12/04/2018).
13	M/s. Gokul Agro Resources Limited	03.05.2016	Commercial operation started (GPCB has granted CTO on 02/08/2018).
14	M/s. Kutch Oil and Soap Industry	30.08.2016	Commercial operation started (GPCB has granted CTO on 16/06/2019).
15	M/s. Seabridge	03.05.2016	Commercial operation started (GPCB has

	Terminal Pvt. Ltd.		granted CTO on 11/12/2017)
16	M/s. B.L Agro Oils Limited.	03.05.2016	DPT has allotted plot on 03/05/2016. However, Allottee has surrendered the plot to DPT on 26/10/2017 & will be auctioned again in due course.
17	M/s. Emperors Infralogistic Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 27/02/2018)
18	M/s. Sunshine Liquid Storage Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 14/04/2018).
19	M/s. Ambaji Import Pvt. Ltd.	03.05.2016	Commercial operation started (GPCB has granted CTO on 13/03/2018).

- The copy of Collective point wise Compliance report of stipulated conditions mentioned in NOC/CTE order submitted by the plot allottees of 13 plots (Plot Nos.3,4,5,6,7,10,12,13,14,15,17,18 & 19) are placed as **Annexure-A.**

Sr. No	Conditions	Compliance Status
1	**Specific Conditions**	
1	Unit shall not start any construction activities till extending the validity of EC & CRZ from competent Authority	Construction activities have been started only after extending the validity of EC and CRZ Clearance from MoEF& CC, New Delhi(MoEF&CC, New Delhi vide letter no. F. No. 10 – 36/ 2008 – IA.III dated 18/08/2015 had already extended the validity period for Environmental and CRZ Clearance up to 01.02.2020. (Copy attached at **Annexure B)**.
2	No ground water shall be used for the project coming under dark zone without permission of competent authority.	The plot allottees have submitted that they have purchased water for their requirement from local water Supplier and no ground water withdrawal envisaged by any of the plot allottee.
3	Unit shall strictly adhere to CRZ and EC condition no 2 that "Expected liquid cargo traffic projection is of @ 5.9 Million Metric Ton (MMT) by 2010, 9.55 MMT by 2020 and 17.11 MMT by 2025, The tank farm at Kandla for liquid Bulk Cargo (Chemical, Edible Oil, POL products, Acids) storage has a total combined capacity of @21.26 Lakh Kilo Liters. Available liquid Cargo Storage facilities are Edible Oil-89 tanks with 9,17,739 KI, Chemical and POL and Acid of 472 tanks with 12,08,369 KI. The tentative tankage capacity works out for the proposed tank farm is @9 lakhs Kilo Liter.	The plot allottees have submitted that they have stored only permissible cargo as per EC & CRZ Clearance accorded by the MoEF, GoI.
4	Unit shall strictly adhere to all condition of EC & CRZ issued by MoEF vide letter No-F, No. 10-36/200B-IA-III Dated 02/02/2010 for old Kandla	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that they have started commercial operation and assurance for comply the condition of EC & CRZ issued by MoEF.
5	You shall have to obtain Consent to Operate from Gujarat Pollution Control Board before commencing any activities	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that they have started commercial operation and assurance for comply the condition of CCA.
6	Applicant is required to comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (protection) Act -1986	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that they are strictly comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act- 1986 wherever applicable.

<table>
<tr><td>2</td><td colspan="2">Conditions Under Water Act</td></tr>
<tr><td>2.1</td><td>There shall be no generation of industrial effluent from manufacturing process and other ancillary industrial operations.</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12,13,14,15,17,18&19) have submitted that they have operated only for storage of liquid cargo and we are not doing any manufacturing activity.</td></tr>
<tr><td>2.2</td><td>The quantity of domestic waste water (Sewage) shall not exceed 4.5 KL/Day</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they ensure that their domestic wastewater generation will not exceed the limit</td></tr>
<tr><td>2.3</td><td>Sewage shall be disposed of through septic tank/soak pit system.</td><td>All the allottees have submitted that, Septic tank/Soak pit were provided for sewage treatment.</td></tr>
<tr><td>2.4</td><td>The unit shall install flow meters at utilities for measuring category wise (category as given in water-cess act-1977 Schedule II) consumption of water.</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they have purchased water for own requirement from local water Supplier.</td></tr>
<tr><td>2.5</td><td>Domestic effluent shall be disposed off through septic tank/soak pit system confirm to the following standards.<table><tr><td>Parameters</td><td>Permissible Limit</td></tr><tr><td>BOD(5 days at 20 ^{0} C)</td><td>30 mg/lit</td></tr><tr><td>Suspended Solid</td><td>20 mg/lit</td></tr><tr><td>Residual Chlorine</td><td>Minimum 0.5 mg/lit</td></tr></table></td><td>Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation.

The allottees have submitted that, Septic tank/Soak pit were provided for sewage treatment.</td></tr>
<tr><td>3</td><td colspan="2">Conditions under air act 1981:</td></tr>
<tr><td>3.1</td><td>There shall be no use of fuel; hence there is no flue gas emission from manufacturing activities and other ancillary operations.</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they are not going to use any fuel as this project is only for storage of Liquid cargo. Hence, there is no flue gas emission generation from manufacturing & other ancillary operations.</td></tr>
<tr><td>3.2</td><td>There shall be no process gas emission from manufacturing and other ancillary activities.</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they are not using any fuel as this project is only for storage of Liquid cargo. Hence, there is no process gas emission generation from manufacturing & other ancillary activities</td></tr>
<tr><td>3.3</td><td>The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Emission</td><td>Environmental monitoring report submitted by all the plot allottees. (Refer Annexure: A)</td></tr>
</table>

<table>
<tr><td></td><td>Standards issued by Ministry of Environment, Forest and Climate Change dated 16th November 2009.

<table><tr><td>Parameters</td><td>Time Weighted Average</td><td>Concentratio in Ambier air in µg/m^3</td></tr><tr><td>Sulphur Dioxide (SO_2)</td><td>Annual
24 Hours</td><td>50
80</td></tr><tr><td>Nitrogen Dioxide (NO_2)</td><td>Annual
24 Hours</td><td>40
80</td></tr><tr><td>Particulate Matter (Size less than 10µm)</td><td>Annual

24 Hours</td><td>60

100</td></tr><tr><td>Particulate Matter (Size less than 2.5µm) or $PM_{2.5}$</td><td>Annual

24 Hours</td><td>40

60</td></tr></table></td><td></td></tr>
<tr><td>3.4</td><td>The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:;
Between 6 A.M and 10 P.M : 75 dB(A)
Between 10 A.M and 6 P.M : 70 dB(A)</td><td>Environmental monitoring report submitted by all the plot allottees. (Refer Annexure: A)</td></tr>
<tr><td>4</td><td colspan="2">Conditions under Hazardous waste:</td></tr>
<tr><td>4.1</td><td>The applicant shall provide temporary storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time.</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they have provided the storage facilities for each type of Hazardous waste as per Hazardous waste (Management, Handling & Transboundary Movement) Rules, 2008 as amended from time to time wherever applicable.</td></tr>
<tr><td>5</td><td colspan="2">General Conditions</td></tr>
<tr><td>5.1</td><td>Any change in the personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they will intimate to GPCB, GoG, if there are any changes in personnel, equipment or working condition as mentioned in the consents form / order.</td></tr>
<tr><td>5.2</td><td>Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board concerned Police Station, Office of Directorate of Health Service, Department of Explosives, inspectorate of Factories and local body. In case of failure of pollution control equipments, the production process</td><td>13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) have submitted that, they will report to statutory authorities immediately if any accident or other unforeseen act or ever, such emissions occur or is apprehended to occurring in excess of standards at their premises and will take necessary actions / measures</td></tr>
</table>

	connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.	immediately to bring entire situation normal.
5.3	In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they have appointed GPCB approved environmental consultant to carry out environmental monitoring at our own premises.
5.4	The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Unit/Cell shall directly report to the Chief executive of the organization and shall work as a focal point for internalizing environmental issues, these cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they are having dedicated team/ Environmental Consultant for compliance of Environmental conditions including monitoring.
5.5	The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.	Environmental statement in Form V for the year has been submitted by the allottees and is attached with their respective compliances.
5.6	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Agreed with the condition.
5.7	In Case of change of ownership/management the name and address of new owners/partners/directors/proprietor should immediately be intimated to the Board.	Agreed with the condition.
5.8	The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) and started commercial operation. 13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they haveobtained TSDF membership certificate for collection, storage, encapsulation, incineration, treatment, transportation and

		ultimate disposal of waste generated at their own premises whenever applicable.
5.9	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form-4 by 31st January of every year.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they are maintaining the records for waste generation and its management. The allottees have submitted the Annual returns to GPCB in prescribed form within stipulated time period.
5.10	As per "Public Liability Insurance Act-91, Company shall get Insurance policy, if applicable.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they having all the necessary insurance policy including the "Public Liability Insurance Act – 91.
5.11	Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they adopted best practices to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Further, action taken in this regard will be submitted to GPCB, GoG in prescribed form-4.
5.12	Applicant is required to comply with the manufacturing, storage and Import of Hazardous Chemicals Rules -1989 framed under the Environment (Protection) Act-1986.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they are strictly comply with provision of Manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act- 1986 wherever applicable.
5.13	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts order in W.P No. 6S7 of 199s-dated 14th October – 2003.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they had displayed the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.6S7 of 199s-dated 14th October-2003 wherever applicable.
5.14	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emissions and solid hazardous wastes generated within the factory premise.	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they had monitored the pollutants like SPM, RSPM, SO2, NOx and displayed at a convenient location near the main gate of the company in the public domain.
5.15	A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules,	13 Plot allottees (Plot No. 3,4,5,6,7,10,12, 13,14,15,17,18 & 19) had submitted that, they have already prepared detailed On site

	1989 should be submitted to the Board.	and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date which may cover the natural disasters also wherever applicable.

Annexure –A

[Compliance reports submitted by allottees is placed at Annexure I of CRZ compliance (Annexure B)]

Annexure –B

[Copy of MoEF&CC, New Delhi vide letter no. F. No. 10 – 36/ 2008 – IA.III dated 18/08/2015 of validity extension for Environmental and CRZ Clearance up to 01.02.2020 is placed at Annexure II of CRZ compliance (Annexure B)]

Annexure –D

[Oil Spill Contingency Plan]

KANDLA PORT TRUST

Conducting Various Studies for Oil Spill Contingency Plan for Kandla

Final Report

August, 2016

Femith's P.B No: 4407,
Puthiiya Road, NH Bypass,
Vennala, Kochi

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ABBREVIATIONS

CCA	Central Coordinating Authority
CIC	Chief Incident Controller
CMG	Crisis Management Groups
COMDIS	District Commander
CoC	Chain of Custody
DCP	Disaster contingency plan
DDMA	District Disaster Management Authority
DGICG	Director General Indian Coast Guard
DOSC	Deputy On-scene Commander
ECC	Emergency Control Centre
EEZ	Exclusive Economic Zone
ELO	Environmental Liaison Officer
ERU	Emergency response units
ESA	Environmental Sensitive Areas
ESC	Environmental and Scientific Coordinator
ESI	Environmental Sensitivity Index
ETV	Emergency Towing Vessel
FPSO	Floating production, storage and offloading
GoK	Gulf of Kachchh
GoKh	Gulf of Khambat
GPS	Global Positioning System
GSDMA	Gujarat State Disaster Management Authority
GSPCB	Gujarat State Pollution Control Board
HOD	Head of the Department
IAP	Incident Action Plans
IBA	Important Bird and Biodiversity Areas
ICG	Indian Coast Guard
ICMBA	Important Coastal and Marine Biodiversity Areas
IMO	International Maritime Organization
IMT	Incident Management Team
INCOIS	Indian National Centre for Ocean Information Services
IOCL	Indian Oil Corporation Limited
IPIECA	The International Petroleum Industry Environmental Conservation Association
ITOPF	The International Tanker Owners Pollution Federation Limited
KPT	Kandla Port Trust
LAG	Local Action Group
LOSCP	Local Oil Spill Contingency Plan
LRK	Little Rann of Kachchh

LST	Local Action Group Support Team
MMD	Mercantile Marine Department
MNPS	Marine National Park and Sanctury
MoD	Ministry of Defence
MoPNG	Ministry of Petroleum & Natural Gas
MoS	Ministry of Shipping
MRCC	Maritime Response Control Centre
MRC	Marine Response Centre
MRU	Marine Response Unit
NCMC	National Crisis Management Committee
NEBA	Net Environmental Benefit Analysis
NEC	National Executive Committee
NOAA	National Oceanic and Atmospheric Administration
NOS-DCP	National Oil Spill Disaster Contingency Plan
NOS	National oil spill
OCU	Offshore Control Unit
OGP	International Association of Oil & Gas Producers
OIM	Offshore Installation Manager
OOSA	Online Oil Spill Advisory
OOT	Offshore Oil Terminal
OPRC	Oil Pollution Preparedness, Response and Cooperation
OSC	On-Scene Commander
OSCP	Oil Spill Contingency Plan
OSRL	Oil Spill Response Limited
OSR	Oil Spill Response
OSRRI	Oil Spill Response Resource Inventory
PAH	Poly Aromatic Hydrocarbons
P&I	Protection and Indemnity
PPE	Personal Protection Equipment
POR	Place Of Refuge
ROS-DCP	Regional Oil Spill Contingency Plan
SCAT	Shoreline Cleanup Assesment Technique
SIC	Site Incident Controller
SEZ	Special Economic Zone
SLCP	State Level Oil Spill Disaster Contingency Plan
SMCU	Salvage Monitoring and Control Unit
SOPEP	Ship Oil Pollution Emergency Plan
SOP	Standard Operating Practices
SPM	Single Point Mooring
SRC	Shoreline Response Centre
SRU	Shoreline Response Unit
STS	Ship to Ship

TEZ	Temporary Exclusion Zone
UNEP	United Nation Environment Programme
VHF	Very High Frequency
VLCC	Very Large Crude Oil Vessels
VOC	Volatile Organic Carbon
WLS	Wild Life Sanctuary

EXECUTIVE SUMMARY

Major Port Kandla *is the northwest gateway of lndia, located strategically on western coast of the India, inside natural harbor at the head of Gulf of Kachchh. The all-weather port lying close to the important international trade routes is facilitating easy trade with various countries all over the world. Vadinar Terminal located within Kandla Port Trust limit is an integral part of it.*

Being a major port with oil handling facilities belonging to a unique ecological area in the Gulf of Kachchh region, it has to give highest priority on the environmental protection aspects including combating of adverse effects from it.

At present, Indian Coast Guard is the Central Coordinating Agency for any oil spill events in sea including the territorial water limit of the country. In this context, they have published National Oil Spill Disaster Contingency Plan (NOS-DCP). The Ministry of Shipping, the Department of Ocean Development, the Ministry of Petroleum and Natural Gas, Oil companies, Port authorities and Maritime States are the important stakeholders in the plan. In line with this, the Ports and the Oil Handling agencies have to develop local oil spill disaster contingency plan and Tier-1 pollution response capacity to address oil spills up to 700 tonnes in their respective area of jurisdictions.

Accordingly, the Kandla Port Trust (KPT) at Gandhidham, Gujarat proposes to develop "Oil Spill Disaster Contingency Plan for Kandla Port" and studies to supplement the same have been entrusted to M/s KITCO Ltd. Kochi, Kerala.

This Final Report presents the studies made in this regard in the sections such as Review of Indian Coast Guard Documents, Resources Assessment & Sensitivity Mapping Development of Response Strategy, Incident Management Mechanism, Operations Planning, Mutual Aid and Waste Disposal Plan. Summary of the study are as follows:

- *Port handles ships with a capacity above 50,000 Dead Weight Tonnage (DWT) while Single Point Moorings (SPMs) handle Very Large Crude Carriers (VLCC) having capacities ranging from 87,000 to 3,25,000 DWT. Important types of oil handled includes Crude Oil, Petroleum Oil and Lubricants (POL) products, Edible Oil and Bunker Fuel Oil. Hence, KPT*

limit is unreasonably under the oil spill threat. Vadinar being the hub, extreme caution is required for this area.

- *Majority areas towards the coast within port limit are essentially the part of the protected areas such as Marine National Park & Sanctuary (MNPS) and Important Bird and Biodiversity Areas (IBAs). Hence, the risk of oil spill here is determined to be very high.*
- *Corals and Mangroves should be given the highest priority, followed by mudflats, fishing grounds and intake locations while responding to oil spill. Rocky Coast is having the lowest priority and can be used as sacrificial areas.*
- *From the present Oil Spill Response Resource inventory available, it can be seen that, sufficient shoreline protection and clean-up resources are not available at KPT. Hence additional resources have been proposed.*
- *Dy. Conservator, KPT have been proposed as the Chief Incident Controller who will be coordinating the response activities through Emergency Control Centre will be established at KPT office with 24 hr control room at the Port office under the supervision Crisis Management Group headed by Chairman.*
- *Circumstances of the possible spill and the surrounding environment within KPT limit calls for an early declaration of Tier-2 even in case of a smaller spill. Hence actual level of response should be fixed based on realistic observation and projections from spill scene. MoUs should be executed and maintained in such a way that optimization of resources and minimization of response time can be achieved.*
- *Temporary storage of oil waste shall be done at suitable location close to the staging area after ensuring that there is no threat for ground water utilized for domestic and industrial purpose. Later the same can be transported to KPT and can be handed over to approved oil waste dealer or recyclers.*

1

INTRODUCTION

Oil spill is one of the major threats for marine environment for the consequences from an oil spill is profound and can adversely affect harbors, beach, wild life, fisheries, human health, tourism and industrial plants that located far away from the original spill location. When these resources are affected, there may be a serious impact to the local economy of the affected coastal area.

Continuously increasing maritime activities, like oil tanker transportation and exploration-cum-exploitation of oil from the sea bed have focused attention on the need for an adequate system to monitor, legislate and ensure quick response to an eventuality of oil spill disaster that may take place due to an accident, releases of crude oil from tankers, accidental release of heavier fuels used by large ships such as bunker fuel or the spill of any oily refuse or waste oil.

The Oil Pollution Preparedness, Response and Cooperation (OPRC) Convention, 1990 established by the International Maritime Organisation (IMO) provides all states to establish measures for dealing with pollution incidents either nationally or in cooperation with other countries in which India is a signed party. In India, Indian Coast Guard (ICG) is the Central Coordinating Agency (CCA). As per National Oil Spill Disaster Contingency Plan (NOS-DCP) promugulated by ICG the emergency response operations with in the port limit is the resposiblity of the port authority.

Kandla port is one among the thirteen major ports of India located in Gulf of Kachchh (GoK) which hosts one of the world's splendid ecosystems and its rich & highly bio-diversified intertidal flora and fauna. During the financial year 2014-15 the port handled 92.50 MMT cargo. Kandla & Vadinar terminals were visited by 1724 & 530 ships respectively during the same period including Very Large Crude Carriers (VLCC). Also the coast is active and occupied with human settlements and other socio-economic resources, co-existing with the nature, its treasures and threats. Being situated in coastline which has ecological, biodiversity, historical and economic significance at the same time oil spill can cause long term impacts, including threatening the life of these distinguished resources. Also high tidal ranges and strong tidal streams of the area escalate the impacts of oil spill. Hence oil spill events in the region of Kandla Port will turn out to be sensitive. In this context the protection of coastline with distinct & highly productive ecosystems is a responsible task. Therefore preparedness or contingency planning for adressing oil spills is highly required for KPT.

In view of the above, the KPT, Gandhidham, Gujarat proposes to develop "Oil Spill Disaster Contingency Plan for Kandla Port " and studies related with the same has been entrusted to M/s KITCO Ltd. Kochi, Kerala.

Since Kandla port and its surroundings have been extensively studied, primary data collection is not generally anticipated and included in the present proposal. From the various published reports and research papers and through reconnaissance surveys, the sensitivity of the shoreline will be documented which will form the basis of the study. Site visit was conducted by KITCO, detailed discussion was held with Marine Department and also interactions were done with various other departments for the collection of relevant detail for supporting oil spill contingency planning studies, based on the above and the comments received from time to time this Final Report was presented herewith.

2

PROJECT BACKGROUND

In India, the responsibility for coordination of oil spill emergency response was transferred from Director General of Shipping to Indian Coast Guard (ICG), Ministry of Defense, Govt. of India on 7th March, 1986 by an Office Memorandum of the Ministry of Defence dated 07 March 1986 and further, by amendment to the Government of India (Allocation of Business) Rules, 1961 vide Gazette notification dated 12 December 2002. The Indian Coast Guard has been designated as the Central Coordinating Authority (CCA) for combating oil spills in Indian waters and undertaking oil spill prevention and control. Maintaining of pollution response resources by a singular government agency like Indian Coast Guard for a developing country such as India is not cost effective. The most economical solution is achieved through pooling of resources and integrating the capability available with other agencies for national cause. Pollution response unlike other crisis management, is a specialized subject and requires elaborate preparatory measures and availability of skilled manpower. In this context in order to delineate entire national preparedness and response system including both public and private resources for responding to an oil spill emergency, ICG had prepared a NOS-DCP which describes the basic framework and guidelines for a national response to a significant spill at sea.

NOS DCP is the apex guidance document for acting on emergencies within the geographical profile of coastal water in India. This plan is intended to delineate functions of various concerned departments and agencies for the operational responsibility to marine incidents which could result due to spillage of oil into water. The plan also provides the frame work of co-ordination of integrated response by various government departments and agencies to protect the environment from the deleterious effects of pollution by oil. It is intended to promote the development of regional and local contingency plans in the three coast guard regions, various ports, offshore petroleum exploration and production agencies, and coastal state pollution control boards for prevention and response of water pollution and other authorities to be able to respond to any further national oil spill disaster contingency. The NOS-DCP has been in operation since July 1996 and brings together the combined resources of:

- The Government of India including that of the Indian Coast Guard;
- The State Governments including emergency services; and

- Ship, ports, and oil industries.

Since 1993 the year when the NOS-DCP was formalized, the Indian Coast Guard has been very persistent in endorsing two preventive measures, the first one establishing a "Contingency Plan" and the second "Maintenance of Tier – 1 pollution response capability" by the ports, oil handling companies and the State Government. The latest NOS-DCP has been published in 2015. Further, NOS-DCP circulars on oil spill response preparedness has been published time to time which gives guidance on the preparation of oil spill contingency plan at various levels. In order to plan for the range of potential spill sizes, from small operational spills to worst-case scenarios, local authorities need to develop their plan based on the internationally recognised tiered response that classifies oil spills into three categories by IMO as follows:

(a) Tier-1 is concerned with preparedness and response to a small spill within the capabilities of an individual facility or harbour authority. 700 tonnes is often cited as the upper limit of 'Tier-1'. However, the circumstances of the spill and the surrounding environment will determine the actual level of response.

(b) Tier–2 is concerned with preparedness and response to a spill that requires the co-ordination of more than one source of equipments and personnel. For a Tier-2 response, assistance can come from a number of entities within a port area or from sources outside the immediate geographic area. Tier-2 describes a wide range potential spill scenarios and deals with operational spills upto 10,000 tons.

(c) Tier-3 is concerned with a major spill requiring the mobilization of all available national resources and depending upon the circumstances will likely involve mobilization of regional and international systems. It deals with the spills of more than 10,000 tonnes.

As per the directives of the Ministry of Shipping (MoS) and Department of Oil Industry Safety Directorate (Ministry of Petroleum and Natural Gas), the Ports and the Oil Handling agencies are to establish oil pollution contingency plan and Tier-1 pollution response capacity to address oil spills upto 700 Tonnes in their respective area of jurisdictions. With the initiative made by the Indian Coast Guard, a major step has been instituted since the 9th NOS-DCP meeting to conduct audit of Tier –1 facilities of Port and Oil handling agencies. Regional co-orperation is required to combat Tier 2 & 3 spills. ICG recommends the maritime facilities and the coastal states to undertake mutual aid agreements for the same and present escalations of resources considering potential pooling in the regional scale.

This report have been prepared in this context to support the oil spill contingency planning studies of Kandla Port Trust for catering Tier-1 spill. The port belong to the Risk Category –A for an oil handling port with SPMs & STSs.

Located in the Kandla Creek, in the western most part of Little Rann of Kachchh (LRK) at the mouth of GoK, the port area is immedately surrounded by high density of creeks, mangrove swamps, mud, patches of dry salt waste Rann, vast salt pan and aquaculture ponds. However the port limit extends to Vadinar in the southern arm which is located admist of the extremely sensitive coastline with rich corals and islands, where the SPMs and other oil handling facilities are operating for various petroleum companies, which are essentially part of the protected areas Marine National Park & Sanctuary (MNPS) and Important Bird and Biodiversity Areas (IBAs). Flora constitutes the alage, sea grass, herbs, shrubs and trees is dominated by mangroves and fauna constitutes the mammals, birds, reptiles, arthropods, amphibians, fishes etc. Eventhough less productive segment compared to the southern arm of GoK, area between Mundra and Kandla is having comparitively higher sensitivity than the rest of northern coastline of Gujarat with exception to the Kori creek area (Vijayalakshmi Nair, NIO).

The area is located close to the international shipping line and is an aproach for another 5 ports. Presently there are oil handling facilities of Reliance, IOCL, BORL including SPMs within the Kandla port limit near Kandla, Oil berths at Kandla creek and another SPM is to be operational off Veera, also being located close to the busy international shipping routes, the area is unreasonably under the oil spill threat. Hence the risk of oil spill in this area is determined to be very high (Sensitive Coastal Marine Areas of India, Oil Spills and their Impacts, Indian Coast Guard). The port is already having an Oil Spill Contingency Plan in place and Oil Spill Response (OSR) resources are inplace. In this context supplementing studies for the contingency planning for Kandla Port Trust was conducted covering the following aspects.

- Review of Indian Coast Guard Documents including NOS-DCP 2015 and relevant circulars.
- Environmental Resources Assessment, Identification of Coastal and Shoreline Zones and Sensitivity Mapping
- Development of Response Strategy including- selection of response resources and infrastructure facilities to be in place.
- Detailing of Incident Management Mechanism
- Operations Planning
- Oil Waste Disposal Plan
- Mutual Aid Provisions available

3

SCOPE & OBJECTIVE

3.1 Scope

To support the preparation of Oil Spill Contingency Planning for Kandla Port Trust which will be base document for the emregency preoardness, response and mitigation during an oil spill in accordance with NOS-DCP 2015 and is to comply with its ammendment issued from time to time.

3.2 Objective

- To ensure the protection of marine as well as coastal environment including its dependents within its jurisdictional limit
- To assist the national cause by supporting distressed group affected by oil spill through Mutual Aid outside its jurisdictional limit

3.3 Responsibility

The details of responsible combat agaency during various spill scenarios are given as **Table 3.1** below.

Table 3.1. Responsible Combat Agencies

Sl. No	Jurisdictional Limit	Type of Spill	Responsible Combat Agency	
1	Within Port Limit	Tier-1	KPT based on NOS-DCP,2015	ICG may assist if requested by Port Authority
		Tier-2/3	ICG	
2	Outside Port Limit Marine	Tier-1/2/3	ICG	
3	Outside Port Limit Shoreline	Tier-1	Gujarat State Government	ICG may assist if requested by Port Authority
		Tier-2/3	ICG	

This document is to support the Local Oil Spill Contingency Plan (LOSCP) of Kandla port and is a property of Kandla Port Trust which is to be maintained, reviewed and updated as per ICG guidelines For executing the responsibility assigned in NOS-DCP 2015 as the Responsible Combat Agency within their Port Limit.

3.4 Statutory Requirements

As per NOS- DCP, Kandla Port is to maintain Risk Category-A. The details are already given as **Annexure.**

3.5 Geographical Limit

This facility level plan applies to the port limit of Kandla Port Trust which includes the Vadinar Terminal within the limits of Tier -1 response level.

3.6 Mutual Aid

Mutual Aid is applicable to the stakeholders of the area including ESSAR, RELIANCE, Bharat Oman Refineries Limited (BORL) & IndianOil Corporation Ltd (IOCL) terminals & operators which are operating within the port limit and also having individual facility level contingency plan and also for the ports located in the locality Navlakhi under taken by Gujarat Maritime Board and Adani Port & Special Economic Zone, Mundra for combating Tier-2 spills upto 10,000 Tonnes under the coordination of Onscene Command of Regional Commander ICG.

3.7 Interface with ROSDCP & NOSDCP

The plan provides the structure for an effective oil spill disaster contingency for Kandla Port Trust inline with the objectives of the NOS-DCP, 2015 and Regional Oil Spill Contingency Plan (ROS-DCP) & District Oil Spill Contingency Plan (DOS-DCP) prepared under North-West Region (NW) CGRHQ Gandhinagar & DHQ-1 Porbandar through the Indian Coast Guard Station (ICGS) Gandhinagar, Pipavav, Jakhau, Mundra, Veraval, Vadinar & Okha also the Coast Guard Air Enclave (CGAE) Porbandar.

During a severe spill event due to its nature, extent or both, ICG through its predesignated On-scene Commander. As already discussed in the previous section, The Regional Pollution Response Officer will be the On-Scene Commander (OSC) and act as the representative of the Regional Commander to co-ordinate all activities at the scene of pollution through the relevant District Commander (COMDIS) in the vicinity of the region/area. The Coast Guard District Commander (COMDIS) will designate an officer as Pollution Response Officer for the district who will act as the Deputy On-scene Commander (DOSC) and lead the initial response team to the scene of incidence within his area of jurisdiction under the overall guidance of the Regional Pollution Response Officer. He will be responsible for the following:

- Directing the employment of needed resources for prevention of pollution, containment, cleanup, and disposal of any pollutants, and restoration of the site
- Providing a focal point of information for all agencies concerned

- Preparing cost analysis and detailed report covering all aspects of the spill
- Collecting samples for possible analysis.

The OSC will pass on regular reports to the Regional Headquarters and the Coast Guard Headquarters, of his assessment, and of resources and assistance required. Incase if situation further worses, Tier -3 will be declared and the National On-Scene Commander will take over the authority.

4

REVIEW ON NATIONAL OIL SPILL DISASTER CONTINGENCY PLAN (NOS-DCP)

NOS-DCP published by ICG is the apex mannual for the response towards any oil spil event. In NOS-DCP efforts are taken in the direction for preparing a basic frame work towards an oil spill emergency prepardness & response towards the preparation of response plan for state/regional/port/oil installation. Inspite of its exhaustive nature NOS-DCP provides enough flexibility in the preparation of response plan for state/regional/port/oil installation.

4.1. Scope of NOS-DCP

- The plan is action oriented and covers aspects such as reporting, communication, alerting, assessment, operations, administration, finances, public relations and arrangements with other contiguous states. The plan assigns responsibility for various tasks to relevant government departments and agencies, identifies trained personnel, equipment, and surface craft, and aircraft and means of access to these resources.
- It delineates functions of various departments and agencies for the operational responsibility for marine incidents that could result due to spillage of oil into water.
- The plan also provides the framework for co-ordination of integrated response by various government departments and agencies to protect the environment from the deleterious effects of pollution by oil.
- The plan outlines combined stakeholder arrangements designed to allow a rapid and cooperative response to marine oil spills within the defined area. This plan also coordinates the provision of national and international support.
- This plan parallels similar documents dealing with the Government of India's responsibility for saving life at sea, for search and rescue and for caring for survivors brought ashore.
- The plan co-exists with incident and security plans operated by ships, ports and offshore installations. Mutual respect between those in command and control of this

plan and those in charge of all other relevant plans is imperative to ensure that all of the plans can continue to function efficiently, whatever the circumstances.

4.2. Objectives of the Plan

The objectives of the plan are:-

- To establish an effective system for detection and reporting of spills;
- To establish adequate measures for preparedness for oil and chemical pollution;
- To facilitate rapid and effective response to oil pollution;
- To establish adequate measures for crew, responders, and public health and safety, and protection of the marine environment;
- To establish appropriate response techniques to prevent, control, and combat oil and chemical pollution, and dispose-off recovered material in an environmentally sound manner
- To establish record-keeping procedures to facilitate recovery of costs.
- To maintain the evidences for the purpose of identifying the polluter and taking suitable administrative, civil or criminal action against the polluter.

4.3. National Pollution Response Areas of NOS-DCP

NOS-DCP applies to all incidents of marine casualty or acts relating to such casualty occurring with grave and imminent danger to Indian coast line or related interests from pollution or threat of pollution in the sea by deliberate, negligent or accidental release of oil, ballast water, noxious liquid and other harmful substances into the sea including such incidents occurring on the high seas.

The plan also covers all incidents in any part of the sea, or inland, that are likely to affect the maritime zones of India, that includes all the Territorial Waters and the Exclusive Economic Zone (EEZ) of India, as detailed in **Figure 4.1** , and the High Seas where an oil or chemical spill has the potential to impact on Indian interests in the maritime zones of India.

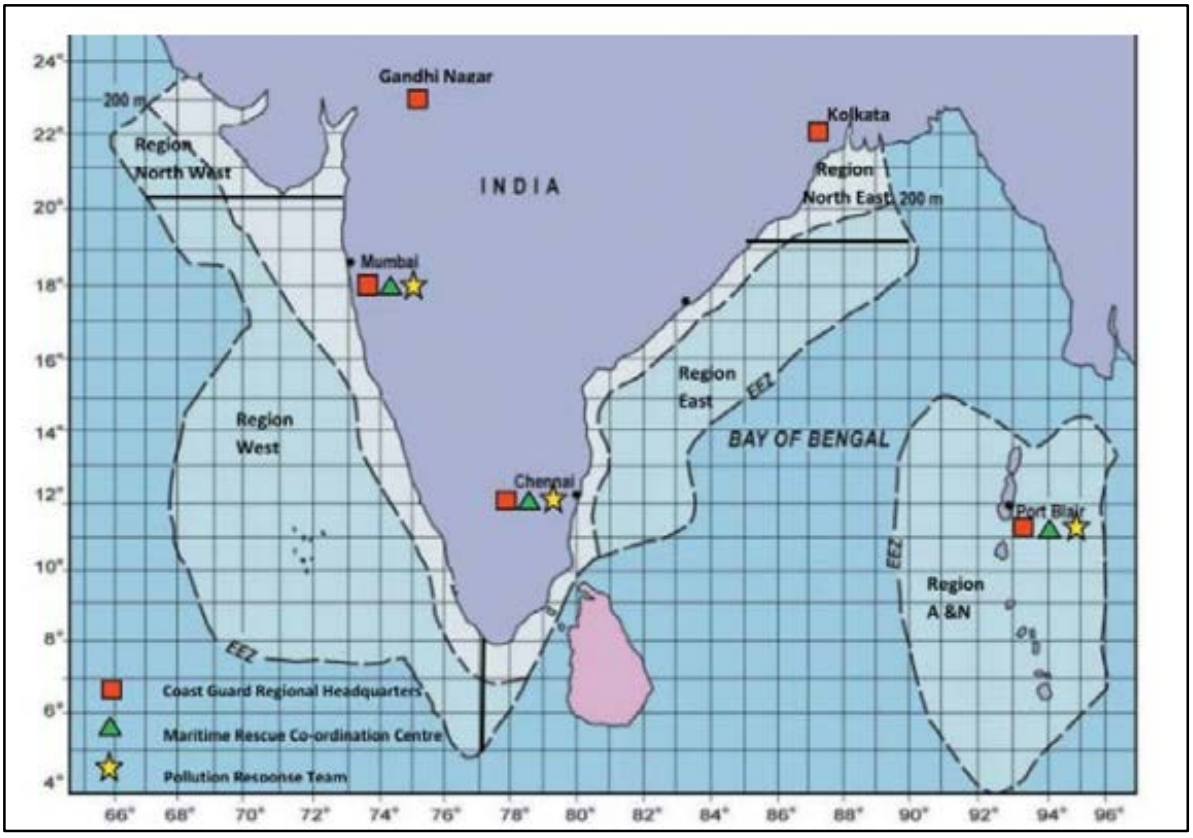


Figure 4.1. National pollution response areas

4.4. Designed spill size

The designed spill size for planning and operational reasons is 10,000 tonnes. This spill size was decided at the meeting with national plan stakeholders as the appropriate level for which to plan national equipment inventory and other resource requirements. Additionally, the oil exploration and production industries hold membership with private international oil spill response organisations for access to their equipment stockpiles.

4.5. Concept of tiered response

The size, location and timing of an oil spill are unpredictable. Spills can arise from oil loading, unloading or pipeline operations, and from a collision or grounding of vessels carrying crude oil and products in local ports or coastal waters. They can also arise from tankers or barges operating on inland waterways, or from exploration and production operations and tankers operating in international waters. Oil spill risks and the responses they require should be classified according to the size of spill and its proximity. This leads to the concept of 'Tiered Response' to oil spills. International Maritime Organization (IMO) classifies oil spills into three categories as follows.

(a) ***Tier-1*** is concerned with preparedness and response to a small spill within the capabilities of an individual facility or harbour authority. 700 tonnes is often cited as the upper limit of 'Tier-1'.

However, the circumstances of the spill and the surrounding environment will determine the actual level of response.

(b) ***Tier–2*** is concerned with preparedness and response to a spill that requires the co-ordination of more than one source of equipment and personnel. For a Tier-2 response, assistance can come from a number of entities within a port area or from sources outside the immediate geographic area. Tier-2 describes a wide range potential spill scenarios and deals with operational spills up to 10,000 tons.

(c) ***Tier-3*** is concerned with a major spill requiring the mobilization of all available national resources and depending upon the circumstances will likely involve mobilization of regional and international systems. It deals with the spills of more than 10,000 Tonnes.

4.6. Emergency Organizational Structure for Oil Spill Disasters

NOS-DCP delineated the organization structure for handling the oil spill disasters and is presented in **Figure 4.2**. In the oil spill response profile, the emergency organisation has responsibilities allocated within various groups dealing with Management Support, Coordination of Activities, Emergency Response Units and Incident Management team in place. The details of the above groups are presented below:

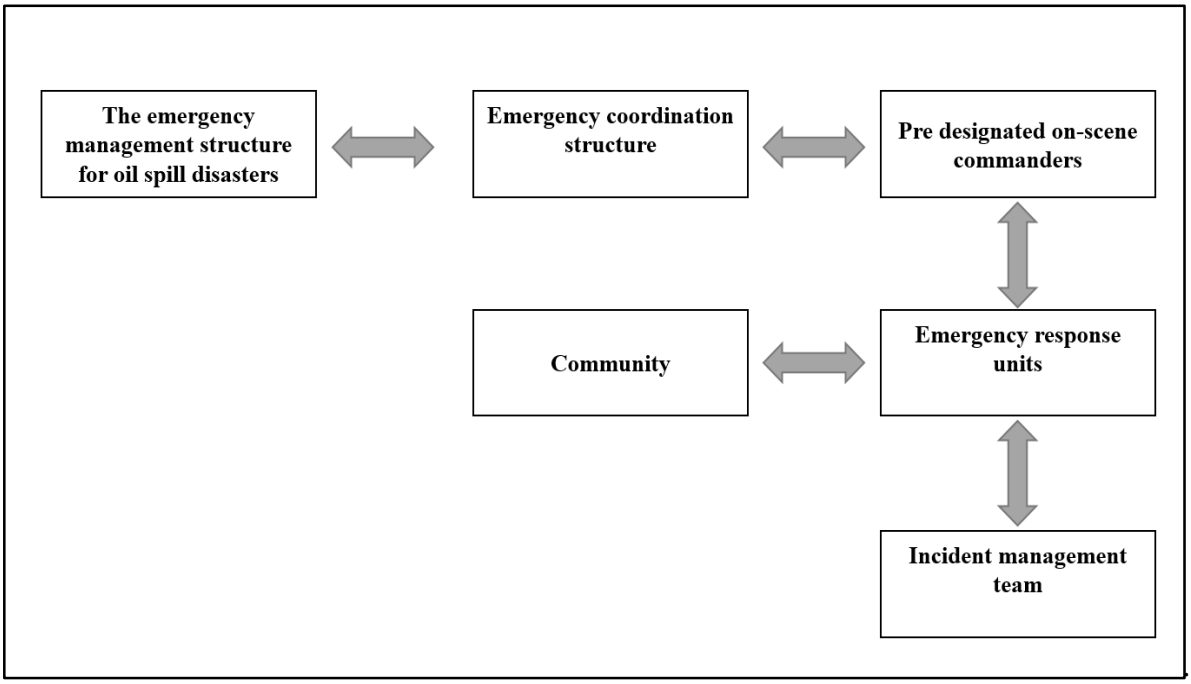


Figure 4.2. Organization structure for handling the oil spill disasters in India

4.6.1. The Emergency Management Structure for Oil Spill Disasters

Emergency management structure take the managerial responsibility at the apex operational level, in the event of an oil spill. TheNational Crisis Management Committee (NCMC) headed by the Cabinet

Secretary constitutes institutional framework of emergency management structure for the oil spill disasters. NCMC is supported by the Crisis Management Groups (CMGs) of the various central nodal ministries .

The NCMC supported by Crisis Managemnet Group will provide management, operational, technical and environmental advice and support to the combat agencies as required inregards of response to a crisis.

The Structure of Disaster Management System in India playing key managerial role in oil spill emergencies is represented in **Figure 34.3**. The composition, functional responsibilities and reporting requirements of CMG is as presented in **Annexure I**.

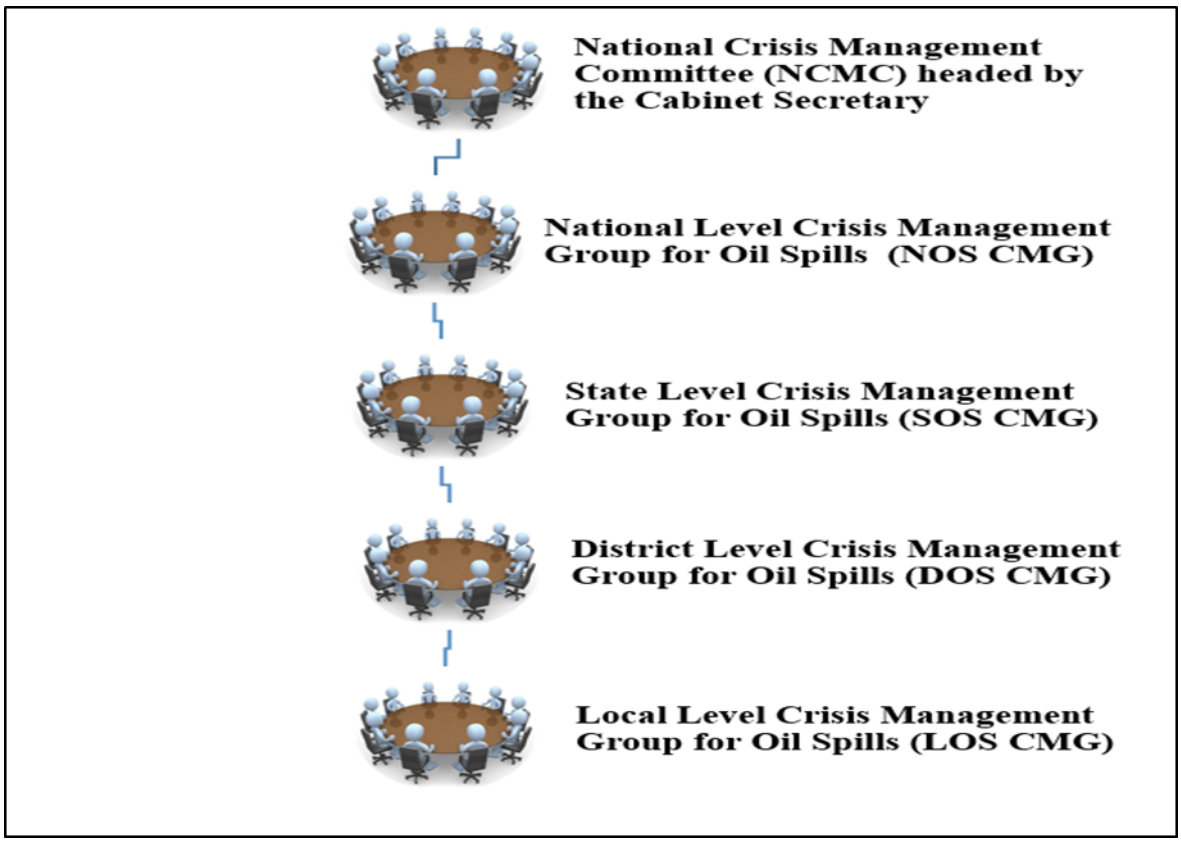


Figure 4.3. The Structure of Disaster Management System in India Playing in the Key Managerial Role in Oil Spill Emergencies

4.6.2. The Emergency Coordination Structure for Oil Spill Disasters

The coordination of an oil spil response action is executed through a well framed emegency coordination structre. The Director General Indian Coast Guard (DGICG) is the Central Coordinating Authority (CCA) and has the overall responsibility to ensure that appropriate response is made to any incidence in the seas around India. He will direct the various aspects of the pollution response

operations and will be assisted by the Commanders, Coast Guard Region North West (NW), West (W), East (E), North East (NE), and Andaman & Nicobar (A&N) as required, depending on the proximity to the scene of contingency. The Regional Commanders will in turn be assisted by the Coast Guard District Commanders in the coordination of response to oil pollution within a coastal State. The emergency coordination structure as presented in NOS DCP is presented in **Figure 4.4** below.

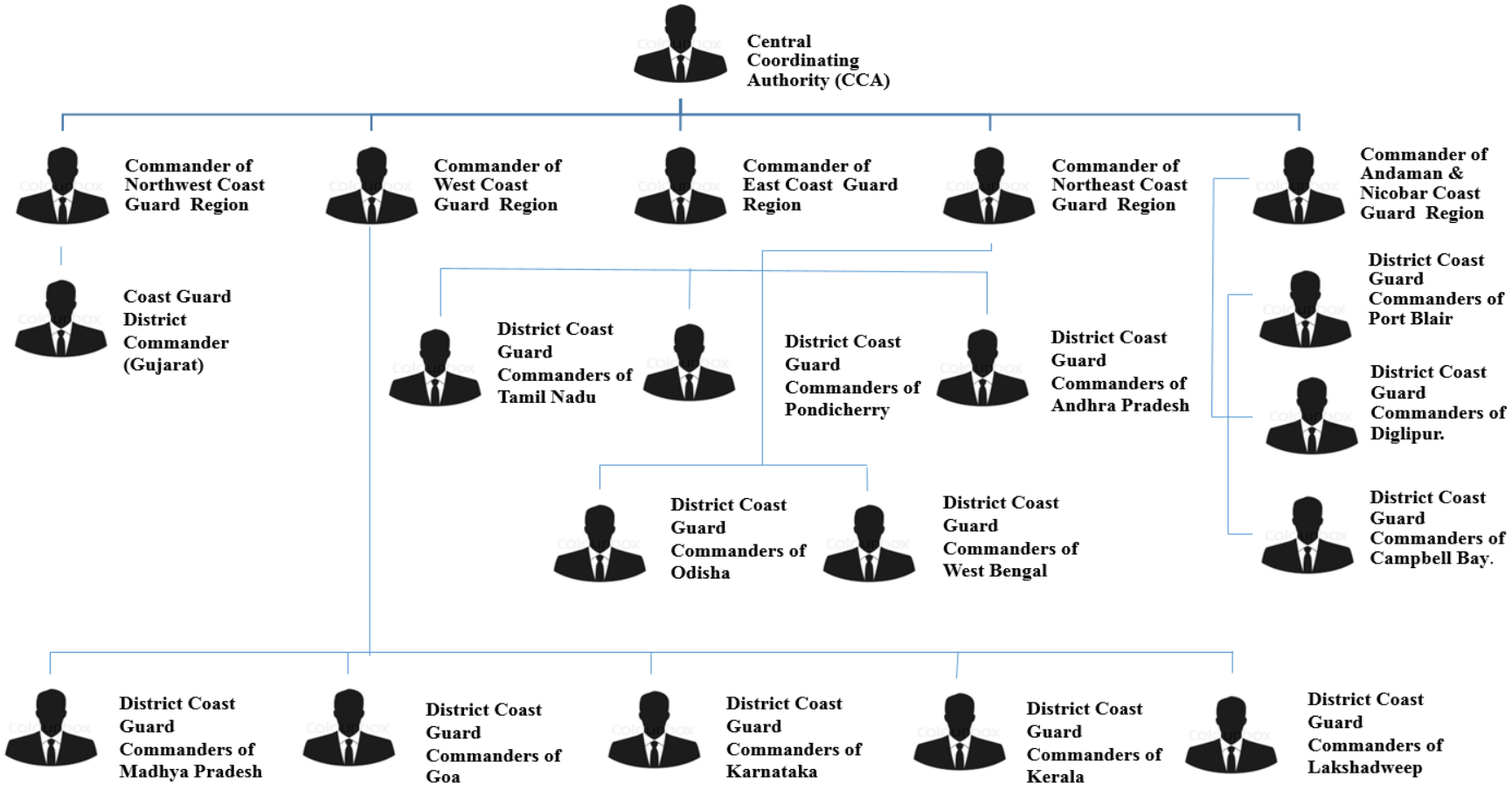


Figure 4.4. The Emergency Coordination Structure

4.6.3. Predestinated On-Scene Commanders

The management of oil spil responseaction is executed through a well structred onscene comanders group under the coordination of emergency coordination structre described above.On scene commander is a person responsible for the control and management of the marine oil spill clean-up.The Director (Environment) at Coast Guard Headquarters serves as the National On scene Commander in the event of a spill of national significance. The Regional Pollution Response Officer will be the On-Scene Commander (OSC) and act as the representative of the Regional Commander to co-ordinate all activities at the scene of pollution through the relevant District Commander (COMDIS) in the vicinity of the region/area. The Coast Guard District Commander (COMDIS) will designate an officer as Pollution Response Officer for the district who will act as the Deputy On-scene Commander (DOSC) and lead the initial response team to the scene of incidence within his area of jurisdiction under the overall guidance of the Regional Pollution Response Officer. He will be responsible for the following:

- Directing the employment of needed resources for prevention of pollution, containment, cleanup, and disposal of any pollutants, and restoration of the site
- Providing a focal point of information for all agencies concerned
- Preparing cost analysis and detailed report covering all aspects of the spill
- Collecting samples for analysis.

The OSC will pass on regular reports to the Regional Headquarters and the Coast Guard Headquarters, of his assessment, and of resources and assistance required. Organogram of predesignated On-scene Commanders is presented in **Figure 4.5**

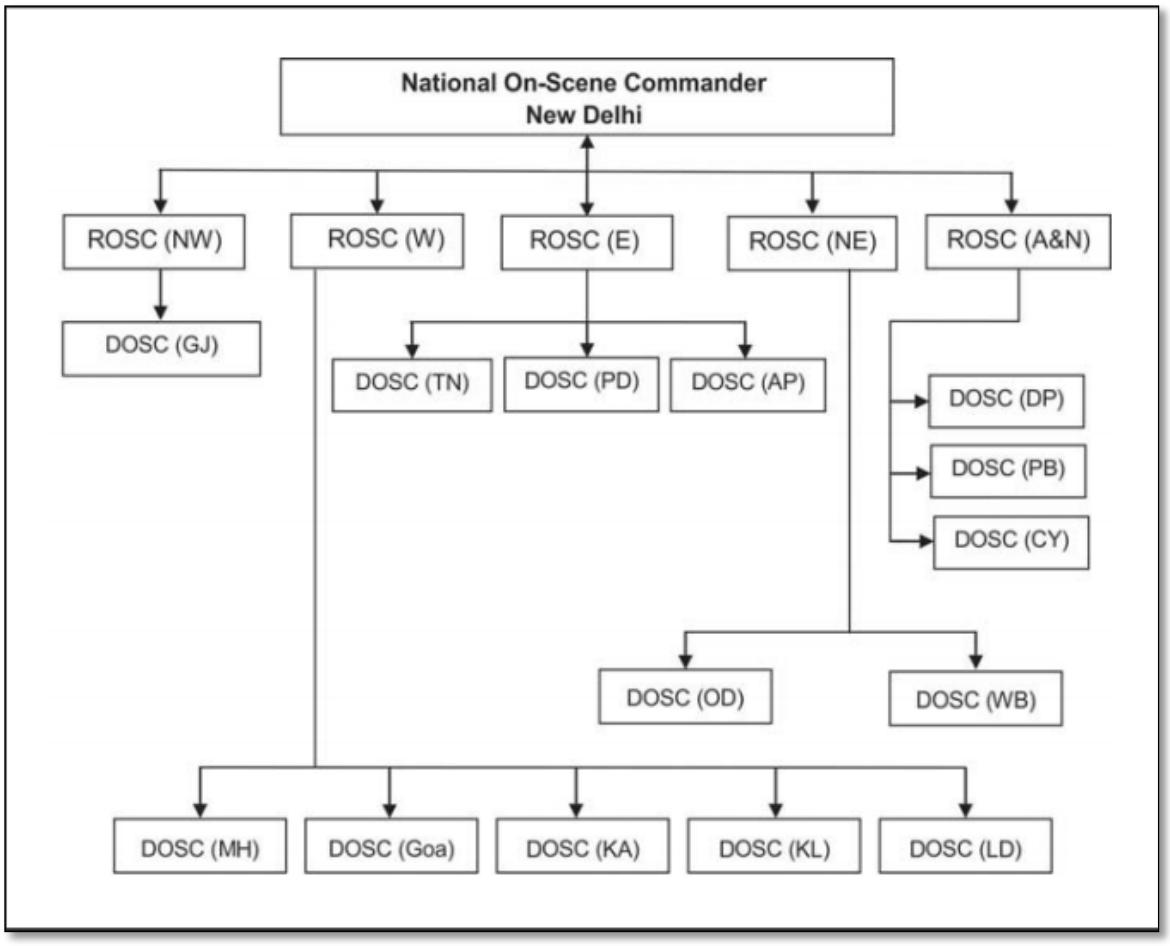


Figure 4.5. Hierarchical arrangement of On Scene Commander

4.6.4. Emergency Response Units (ERU)

The Emergency response units (ERU) may be defined as the place from which the operations to handle an emergency are directed and coordinated. It will be attended by the chief incident controller, key personnel and the senior officers responsible for control of emergency. The Emergency response unit will be equipped to receive and transmit information and directions from all the areas of the marine terminal as well as outside and will be located in an area of minimum risk.

The ERU shall be away from the potential hazards and provide maximum safety to personnel and equipment and should be preferably made of non-combustible building of either steel frame or reinforced concrete with two exists and adequate ventilation.The objective of the ERU is

- First, to prevent pollution from occurring;
- Second, to minimize the extent of any pollution that occurs;
- Third, to mitigate the effects of that pollution

Different modules of emergency units, separate, but linked, were established at fedral level inorder to direct operations in the event of an incident requiring response. These modules are presnted in **Table 4.1**

Table 4.1. Emergency response units

Sl. No	Response Unit	Title	Role
a	Salvage Monitoring and Control Unit	SMCU	To monitor and control salvage operations
b	Marine Response Centre	MRC	To direct response action at sea
c	Shoreline Response Centre	SRC	To direct shoreline response
d	Emergency Control Centre	ECC	To monitor operations to contain any potential pollution within an offshore installation and its reservoir and apart facility jurisdiction
e	Environment Group	EG	To provide environmental and public health advice to all these centers
f	Offshore Control Unit	OCU	To direct response action at offshore Installations

Not all incidents require all these emergency response units. However, the arrangements for managing the incidents must allow for the possibility of salvage operations, action at sea and action or shore taking place simultaneously.

4.6.4.1. Salvage Monitoring and Control Unit (SMCU)

Salvage Monitoring and Control Unit (SMCU) is set up by Indian Coast Guard District or Regional Commander as per the necessasity of the salvage operations involved in an event. The members of the SMCU are :

- The Indian Coast Guard District or Regional Commander;
- The Salvage Manager from the salvage company appointed by the ship owner,
- The harbour master, if the incident involves a harbour or its services;
- A single representative nominated by agreement between the ship owner and insurers (for both the physical property and their liabilities);
- The District or Regional Pollution Response Officer;
- A Surveyor from the Mercantile Marine Department
- A Surveyor from the Indian Register of Shipping, if required; and
- An Environment Liaison Officer, nominated by the Environment Group.

4.6.4.2. Marine Response Centre (MRC)

In almost all cases involving a national response, whether ship or offshore installation related, the Indian Coast Guard establishes a Marine Response Centre (MRC) at the nearest Maritime Response Control Centre (MRCC) which is a communication hub between all response centres. It contains the following persons, although some of the Coast Guard staff may play more than one role.

- An ICG Pollution Response Officer, to manage sea borne and air borne operations;
- Where a ship is involved, an Mercantile Marine Department (MMD) officer to manage cargo transfer operators;
- A Coast Guard Logistics Officer, to organize the deployment of the equipment needed and control all Coast Guard financial commitments;
- If the incident involves a port or its services, a representative of the port authority;
- An officer of the state fisheries department, to advise on the impact on fisheries and to liaise with fishing organization;
- A local administration official to act as liaison officer with the Shoreline Response Centre;
- An Environmental Liaison Officer (ELO) nominated by the Environment Group; and
- Defense Public Relations Officer, to liaison with the media

The SMCU may be co-located with the MRC, if needed and in such case , the membership of the SMCU needs to include the members of the MRC with Indian Coast Guard staff fulfilling more than one role.

4.6.4.3. Shoreline Response Centre (SRC).

When the threat of pollution at the shoreline exceeds the capability of the most affected local authority, the Coast Guard initiates a national response, and that local authority (or authorities) sets up a Shoreline Response Centre (SRC) in order to continue the response action.

Each local authority's own contingency plan details the mechanism for escalating the response in accordance with the tiered response concept and specifies how to set up the SRC in the light of its own practices and organisation. These plans also contain the necessary authorisation to each local authority to enable the designated officer directing the SRC to take decision on behalf of the other local authorities concerned.

An SRC needs to contain representative of all the local authority services that may need to participate in the clean-up operation, and representative of all local and port authorities that may become involved. In addition, it contains an Environment Liaison Officer (ELO) nominated by the Chair of the Environment Group.

4.6.4.4. Emergency Control Centre (ECC)

Emergency Control Center (ECC) provides a centralized location where key staff members can monitor, track and make decisions regarding the oil spil response. Each oil installation and sea-port facility shall have the provision of an Emergency Control Centre (ECC) preferably with a back- up arrangement. The ECC shall be away from potential hazards and provide maximum safety to personnel and equipment. ECC should ba a noncombustible building of either steel frame or reinforced concrete construction and should have at least two exits and adequate ventilation

Each response unit, including the ECC at seaports and oil installations, should be provided with the following basic supplies and dedicated equipment.

- A copy of the Oil Spill Contingency Plan (OSCP).
- Maps and display charts and diagrams showing buildings, roads, underground fire mains, important hazardous material and process lines, drainage trenches, and utilities such as steam, water, natural gas and electricity
- Situation boards (continuously updated to present a summary of the current situation and response actions being taken).
- Aerial photographs, if possible, and maps showing the site, adjacent industries, the surrounding community, high-ways, rivers, etc., help determine how the disaster may affect the community so that the proper people can be notified, adequate roadblocks established, and the civil authorities advised sufficient telephone lines to enable full liaison with outside bodies
- Names, addresses, and telephone numbers of employees, off-site groups and organizations that might have to be contacted; all telephone lists being reviewed for accuracy on a scheduled basis and updated, as necessary
- Dedicated and reliable communication equipment; enough telephones and at least one fax line to serve the organization for calls both on-and off-the-site
- Fixed and portable two-way radio equipment to keep in contact with activities on-scene and to maintain continuity of communications when other means fail

- Plan board, logbook, tape recorder, television, DVD and Video facilities for playing back records from aircraft and helicopters, as well as monitoring media coverage of the incident with a person assigned to record pertinent information and to assist in investigating causes, evaluating performance, and preparing reports
- Emergency lights so that operations can continue in the event of power failure
- Photocopy, fax and e-mail facilities
- Dedicated computers with LAN/ internet facility to access the installation data and the latest and updated soft copies of all standard operating practices (SOP) etc.

Each response unit will be supported by an Administration Team responsible for the general management of the unit and providing personnel for:

- Communication links between the units
- The distribution of messages within the units
- Keeping records of messages and expenditure
- Taking minutes during meetings to record decision
- Typing services
- Updating situation boards and charts
- Providing catering to the units.

4.6.4.5. Environment Group

Response to any maritime incident requiring a regional or national response would involve the establishment of an Environment Group since all those involved in operations at sea (including salvage) and shoreline clean up need timely environment advice. The Coast Guard would initiate the request on the relevant civil administrative authority for the formation of the Environment Group. The core membership of the Group would come from the relevant statutory authorities and include relevant civil administration authorities, forest and wildlife authorities, fisheries authorities, Block Development Officer, local public health officials and relevant non governmental organisations for appropriate expert advice. The Group may also include a Coast Guard representative

Environment Group would perform a purely advisory role and provide advice on environment aspects and public health impacts of the incidents . Being a common facility, they will provide comprehensive advice to all response units and represent all environmental and public health interest considered being at risk. The expert advice based on immediately available and prepared data and

information, may encourage the collection of real time environmental data by the relevant government agencies. Such environment data may provide accurate baseline data of vulnerable environmental features immediately before impact of the pollution plume, so that risk can be identified and the damage can be quantified.

Environment Group will track the success of preventive and counter pollution measures throughout the incident, and begin to assess the overall long term environment impact, dependent on timely provision, from each response unit, of all relevant information on the fate and modeling of pollutants, and each unit's forecasts, plans actions and outcomes. If a marine pollution incident is expected to have a significant impact on the marine environment, or the shoreline, the group may promptly make the arrangements to monitor and assess the impact in the longer term.

During the time of an oil spill event, response units shall make all reasonable efforts to consult the Environment Group, or its chair, about any proposed action that is likely to have lasting impact on the environment. If time does not permit the response unit to consult before acting, it will circulate a written report to the Environment Group and all other response units as soon as after the action (or decision) has been taken.

4.6.4.6. Offshore Control Unit (OCU)

Apart from above described respose units each offshore instalations should identify the location for an Offshore Control Unit (OCU) in close proximity to the operators ECC as part of instalation's oil spil response plan .

The OCU requires the same support and structure as an SCU and similar links to their operations units engaged in other tasks including search and rescue, at sea clean up and shoreline clean up, as appropriate. The administrative support required by the OCU will be provided by Ministry of Petroleum & Natural Gas (MoPNG).

The members of the OCU are:-

- The Coast Guard Commander
- The Emergency Operations Manager, a role defined in the operator's oil spill contingency plan, acts a link between Coast Guard and the Emergency Response Centre where is a line to the Offshore Installation Manager;
- The Operator's Representative, a role defined in the operator's oil spill contingency plan, representative the interests of the owner, operator, contractors, and liability underwriters of the offshore installation,

- An Environmental Liaison Officer, nominated by the Environment Group, advises the Coast Guard on the environmental implications of any proposed actions;
- The DGH provides the Coast Guard with advice on the importance of the installation to strategic supplies and other matters of public interest; and
- A specialist or technical advisor to the Coast Guard, either from the operator, the DGH or an independent source, provides advice as circumstances require

4.6.5. Incident Management Team (IMT)

The Incident Management Team(IMT) is the team who actually takes up the response activities at the time of an event.The IMT is headed by a Chief Incident Controller (CIC) and he will be assisted by a Site Incident Controller (SIC) and other supporting groups, who actually deals with the response activities at field. **Figure 4.6** illustrate composition of a typical Incident Management Team (IMT) for control of an oil spill emergency. Any entity of IMT can merge the functions as per their other statutory requirements and based on level of risk and range of operations.

The number of staff required to fill positions in the IMT of the emergency organisation can be varied according to the size and complexity of the incident and the number of staff available. In a major incident all positions may be filled, but in a lesser incident one person may fill a number of positions. In a very small incident, SIC will be able to carry out all management functions.

Persons in charge of sea ports and oil installations ensure that persons with appropriate experience and skills are identified so that they can be appointed to the various positions in the emergency organisation in the event of a marine pollution incident. If agency input into a response is required the Coast Guard may place its liaison officer/s within the IMT, so as not to burden personnel that will be fully engaged in response activities.

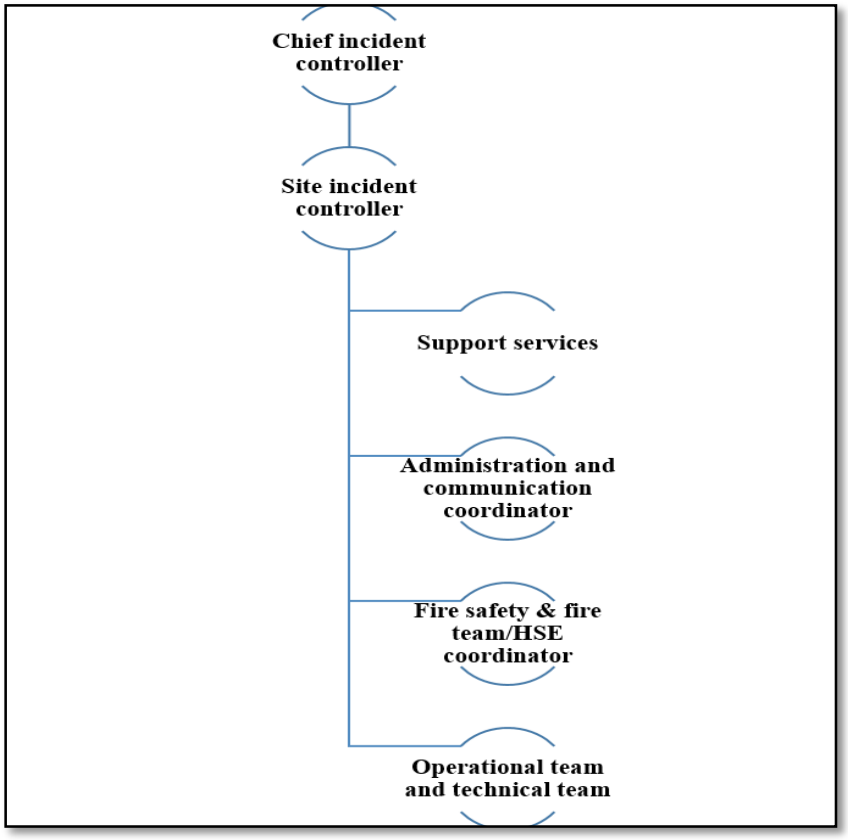


Figure 4.6. Composition of a typical Incident Management Team (IMT)

The section below presents the functional responsibilities and reporting requirements of IMT and facilities established as a part of it..

4.6.5.1. Chief Incident Controller (CIC)

Chief Incident Controller (CIC) is the key responsible officer for the management and coordination of response operations at the scene of a pollution incident to achieve the most cost effective and least environmentally damaging resolution to the problem. Persons in charge of sea ports and oil installations shall identify appropriate individuals to act as a Chief Incident Controller (CIC). CIC shall have overall responsibility to protect personnel, site facilities, and the public before, during, and after an emergency or disaster. The CIC shall be present at the main emergency control centre for counsel and overall guidance. Responsibilities of the Chief Incident Controller shall include the following:-

- Preparation, review and updating of the OSCP
- Assessment of situation and declaration of an oil spill emergency
- Mobilization of main coordinators and key personnel
- Activation of Emergency Control Centre

- Taking decision on seeking assistance from mutual aid members and external agencies
- Continuous review of situation and decide on appropriate response strategy;
- Taking stock of casualties and ensure timely medical attention;
- Ensuring correct accounting and position of personnel after the emergency
- Ordering evacuation of personnel as and when necessary;
- Taking decision in consultation with local Coast Guard and District Authorities when a tier 2 or tier 3 spill is to be declared.

During a major incident the CIC will act under the purview of the relevant Coast Guard Commanders.

4.6.5.2. Site Incident Controller (SIC)

The Site Incident Controller (SIC) shall be identified by the Chief Incident Controller and will report directly to him. During lesser incidents the SIC shall have overall responsibility for managing the response. Persons in charge of sea ports and oil installations should ensure that the SIC is assisted by a response team with appropriate planning, operational, technical, scientific, chemical, environmental, logistical, administrative, financial, and media liaison skills.

Responsibilities of the Site Incident Controller shall include the following:-

- To maintain a workable oil spill emergency control plan, establish emergency control centers, organize and equip the organization with OSCP and train the personnel;
- To make quick decisions and take full charge
- To communicate to the Emergency Control Centre where it can coordinate activities among groups
- To be responsible for ensuring that appropriate local and national government authorities are notified, preparation of media statements, obtaining approval from the CIC and releasing such statements once approval received
- To ensure that the response to the oil pollution emergencies is in line with entity procedures, and to coordinate business continuity or recovery plan from the incident;
- To co-ordinate any specialist support required for the above purpose
- To decide on seeking assistance of mutual aid members and external agencies.

4.6.5.3. Administration and Communication Coordinator

The SIC will be assisted by an administration and communication coordinator whose dutes shall include the following:-

- To coordinate with mutual aid members and other external agencies;
- To direct them on arrival of external agencies to respective coordinators at desired locations;
- To mobilize oil spill responders and resources for facilitating the response measures;
- To monitor mobilization and demobilization of personnel and resources;
- To provide administrative and logistics assistance to various teams.
- To be responsible for all financial, legal, procurement, clerical, accounting and recording
- Activities including the contracting of personnel, equipment and support resources
- To be responsible for the management of the Emergency Control Centre (ECC)

4.6.5.4. Support Services

Along with administration and comunication coordinator following additional coordinators will be nominated at the sea ports and oil installations and delegated the specific responsibilities falling under the basic functions of SIC and/ or CIC for Human Resources Services, Logistics Services, Media and Public Relations Coordinator,Operations and Technical Coordinator, Environmental and Scientific Coordinators and Fire Safety & Fire Team. The important responsibilities of support services that are to be executed through respective coordintors are detailed in the following section:

Human Resources Services Coordinator

Logistics Services Coordinator: In any response there is a vital need to ensure that response personnel are provided with adequate resources to enable an effective response to be mounted. The Logistics Services Coordinator shall ensure that all resources are made available as required. This includes the procurement and provision of personnel, equipment and support services for operations in the field and for the management of resource staging areas.

Media and Public Relations Coordinator: The Media and Public Relations Coordinator shall ensure adequate liaison between the incident management team and the media. All queries received from the media should be directed to this person. Before releasing any information, the Media and Public

Relations Coordinator, action should have the approval of either the relevant Coast Guard Commander or CIC, depending on the size of the spill.

Operations and Technical Coordinator: The Operations and Technical Coordinator is responsible for the provision of scientific and environmental information, maintenance of incident information services and the development of Strategic and Incident Action Plans. He shall ensure the distribution of all information to the Incident Management Team and to all response personnel generally. He is responsible to the CIC for all response operational activities. This includes ensuring that the requirements of Incident Action Plans (IAP) are passed on to operational personnel in the field, and for ensuring that the plans are implemented effectively.

Environmental and Scientific Coordinator: The State Government shall pre-appoint the Environmental and Scientific Coordinator (ESC), either on a State, regional or local area basis. During a spill response the ESC will normally form part of the Operations team. In this role the Operations Team is to provide the CIC with an up-to-date and balanced assessment of the likely environmental effects of an oil spill. The Planning Section will advise on environmental priorities and preferred response options, taking into account the significance, sensitivity and possible recovery of the resources likely to be affected. In major incidents, the ESC may directly advise the relevant Coast Guard Commander.

Fire Safety & Fire Team/HSE Coordinator:Fire and safety officer of Port/ local Fire Station shall be acting as the Fire and Safety Coordinator. Fire and Safety officer will be reporting to the Cheif Incident Controller and responsibilities are as follows

- Development & execution of emergency response plan
- Train all team members for fire response
- Overall responsible for fire prevention
- To ensure that everyone is evacuating and none is entering the restricted area during emergency
- Operation and maintenance fire detection, notification and suppression systems
- Providing first aid to the injured person and transportation of the patient
- Recommend the Site Incident Controller to impose as well as release fire emergency

4.6.6. Community

Support of the local community is essential for the success of any response operation, particularly shoreline response. The community will include volunteers from the National Cadet Corps, National

Disaster Mitigation Resource Centres, National Service Scheme, Nehru Yuva Kendra, and Non Governmental Organisations. The specialized National Disaster Response Force may be called in addition to the community volunteers. Awareness programmes are to be conducted for the local inhabitants and also their resepresentives are to be trained for dealing with the emergencies.

4.7. Local Action Group and Local Action Group Support Team

4.7.1. Local Action Group

Inorder to aid the support to the Union and State Governments in the event of a major oil pollution incident a Local Action Group (LAG) will be formulated in coastal states . LAG provides support managemnet team , specifically in the roles of response managers, and response team leaders. Each coastal State nominates personnel to the LAG as indicated in **Table 4.2** except Goa, Puducherry Daman and Diu, Lakshadweep and Minicoy, and Andaman and Nicobar which will nominate one response team leader instead of five.

Table 4.2. Composition of Local Action Group

Role	Positions per State
Planning Coordinator	1
Operations and Technical Coordinator	1
Logistics and Administration Coordinator	1
Response Team Leader	5

4.7.2. Local Action Group Support Team

The local Action Group (LAG) is supported by a subgroup Local Action Group Support Team (LST) at the time of event. LST will comprises of following componets ,

- Environmental Advisers
- Finance & Administration Officer
- Wildlife Officer
- Equipment Operator
- Offshore Containment/Recovery
- Inshore Containment/Recovery
- Engine driver and Lascar
- Vessel-based dispersant spraying
- Shoreline Assessment
- Shoreline Cleanup

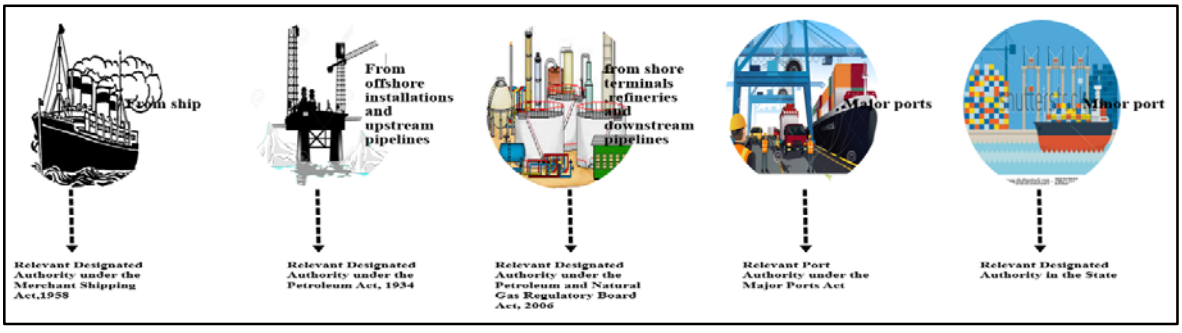
The Equipment Operator role has been broken down into areas of specific expertise. Equipment Operators may be competent in more than one area.

Each coastal State would identify personnel to fulfil these roles, as these personnel would be required when responding to major incidents within their own jurisdictions, and will become part of the LAG when succession planning. Sea ports and oil installations are expected to nominate personnel to these positions. Certified personnel of private oil spill response organisations may also be considered for such roles. Training of LST is the responsibility of the respective coastal States with support of the sea ports, oil agencies, Coast guard and other government agencies, non-governmental organisations, etc.During an oil spill incident ,if required , the relevant combat or statutory agency is responsible for activation of LAG and LST in accordance with applicable contingency plans or State arrangements.

Also during anoil spill incident the Chief Incident Controller or the relevant Coast Guard Commander may requisition for personnel from other coastal States to become part of the Incident Management Team or the incident response team. At that time suitable personnel will be selected by Coast Guard from the LAG or the LST of the coastal State with a maximum release period of ten days (including travel time) unless both Coast Guard and the LAG/ LST member's organisation reach a separate agreement. The selected personnel will remain in the employment of their own agency, and all entitlements in relation to their contract of employment will remain unchanged.

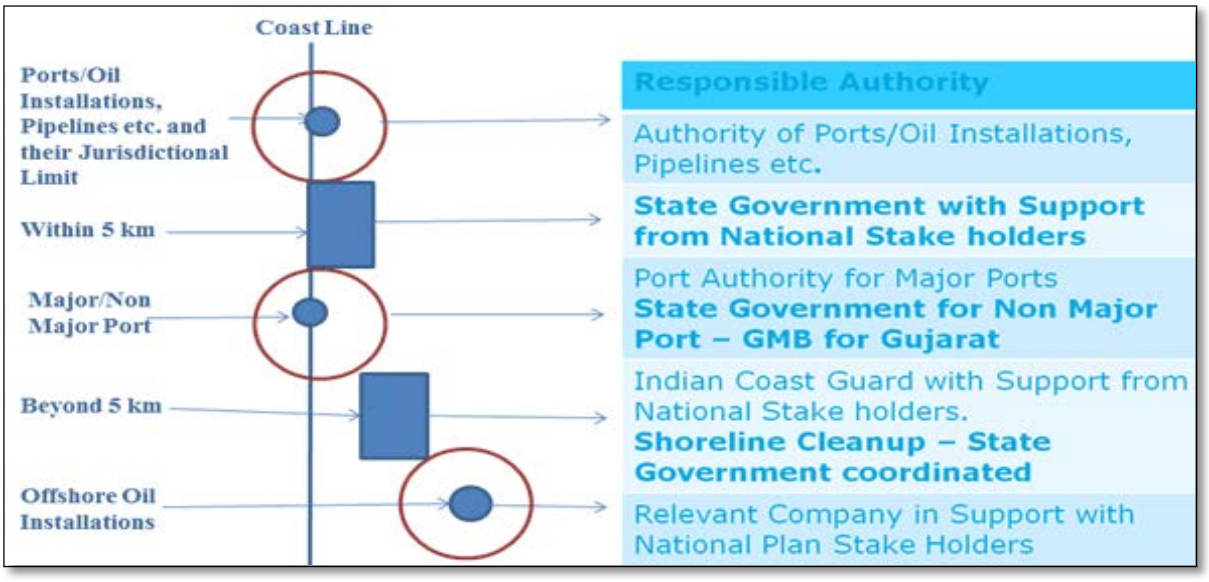
4.8. Responsibility for Responding to Oil Spills

Responsibilities for responding to an oil spills in Indian waters are shared between the Indian Coast Guard, State Governments, Port Authorities and Corporations. Liability for clean-up of both, oil and HNS spills remains with the polluter.The details of the combat agencies and satutary agencies responsible for the oils pill response accoring to the nature of origin of the spill is shown in **Figure 4.7** and **Figure 4.8.** The resources of the Combat Agency will need to be supplemented by other local, regional, and national resources.



Note : The Statutory Agency is responsible for the institution of prosecutions and the recovery of cleanup costs on behalf of all participating agencies.

Figure 4.7. The Statutory Agencies Responsible for Oil Spills



Note: Combat Agencies have the operational responsibility to take action in order to respond to an oil spill in the marine environment in accordance with the relevant contingency plan

Figure 4.8. Combat Agencies Responsible for the Oil Spill Response

Each port facilities, oil terminal and. Installations should have capability to provide first response to oil spill in their areas(ie Tier 1 level pollution). The capability includes trained manpower and equipment in line with NOS-DCP provision for which are given as **Annexure II**. In cases where additional resources are required, these will generally be available from the local port authority, or from adjacent industry operators under mutual aid arrangements or locally from the Indian Coast Guard.

In case of tier 2 event preparedness and response requires the co-ordination of more than one source of equipment and personnel. 'Tier 2' event response requires the assistance from multiple entities within a port area or from national sources outside the immediate geographic area.

Incase of Tier 3 events mobilization of all available regional /national/ international resources are required depending upon the circumstances, will likely involve mobilization of and systems. It is this tier ofresponse where positive advance customs arrangements are critical to facilitate a successful effort. If required, internationalresources can be facilitated by the Statutory Agency through the Ministry of External Affairs.

Incase of oil industry, each company will designate an Industry Adviser. During a tier 2 or tier 3 incident, the Industry Adviser of the affected company will provide a direct high-level linkage to the response organisation. Industry personnel will nominate their personnel to the respective State, District, and Local CMG, Local Action Group, and Local Action Support Team (LST). Each company will designate its CIC and IC. During lesser incidents the CIC shall be

responsible for overall response strategy. The CIC shall keep the Statutory Agency informed of progress with the response. The response actions will be supported by the LAG and LST.

4.9. Discovery and Notification of an Event

Marine pollution needs an immediate response in order to minimize the damage to marine environment. The Indian Coast Guard is the national operational contact point for the receipt and transmission of reports on oil pollution in Indian waters.

4.9.1. Reporting of an Event

Masters or other persons having charge of ships and persons having charge of offshore facilities involved in an incident (any event involving probable discharge of oil, of any quantity,in Indian waters) shall report the particulars of such incidents without delay and to the to the fullest extent possible to the nearest Indian Coast Guard Maritime Rescue Coordination Centre (MRCC).

In the event of the ship or offshore facility involved in an incident being abandoned, or in the event of a report from such a ship or offshore facility being incomplete or unobtainable, the obligations shall, to the fullest extent possible, be assumed by the owner, charterer, manager or operator of the ship, or offshore facility, or the agent in case of a ship.

Masters or other persons having charge of ships and persons having charge of offshore facilities involved in an incident shall report the particulars of such incidents without delay and to the to the fullest possible extent to the nearest Indian Coast Guard MRCC any observed event at sea involving a discharge or probable discharge of oil, of any quantity, or the presence of oil in Indian waters.

Persons having charge of sea ports and oil handling facilities in India shall report without delay to the nearest Indian Coast Guard MRCC any event at their sea port or oil handling facilities involving a discharge or probable discharge of oil, of any quantity, or the presence of oil in Indian waters.

Maritime inspection vessels and aircraft of other services including the Air Force, Navy, Border Security Force, Customs department, Forest department, Police, Marine Police, Fisheries Survey of India and Port Pilots, or officials and civil organisations such as Air India and other private aircraft operators shall report without delay to the nearest Indian Coast Guard MRCC any observed event at sea or at a sea port or oil handling facility involving a discharge of oil, of any quantity, or the presence of oil in Indian waters.

Any other organisation (for example, a local authority, harbour authority or environmental organisation) receiving a report of marine pollution of any quantity, or a threat of marine pollution, whether from a ship, offshore installation or unknown sources, should send that information

immediately to the nearest Indian Coast Guard MRCC. The MRCC contacts the concerned Duty Staff Officer. The format for reporting an event is presented in **Annexure III.**

Oil spil event shall be reported in the following events

- Discharge above the permitted level or probable discharge of oil or of noxious liquid substances for whatever reason including those for the purpose of securing the safety of the ship or for saving life at sea; or
- A discharge or probable discharge of harmful substances in packaged form, including those in freight containers, portable tanks, road and rail vehicles and ship borne barges; or
- Damage, failure or breakdown of a ship of 15 meters in length or above which:
- Affects the safety of the ship; including but not limited to collision, grounding, fire, explosion, structural failure, flooding and cargo shifting
- Results in impairment of the safety of navigation; including but not limited to, electrical generating system, and essential ship borne navigational aids; or failure or breakdown of steering gear, propulsion plant,
- A discharge during the operation of the ship of oil or noxious liquid substances in excess of the quantity or instantaneous rate permitted under the MARPOL Convention.

Organizations sending information should make every practicable effort to identify :

- Identity of ships or offshore facilities involved;
- Time, type and location of incident;
- Quantity and type of harmful substance involved;
- The weather, sea state and tidal conditions in the area;
- Assistance and salvage measures; and
- Events and actions so far

The initial report send to the authority regarding oil spill identification can be supplemented as necessary, and provide information concerning further developments; and comply as fully as possible with requests for additional information. The report on identification of any oil spill can be made by radio or telephone or facsimile.

When an incident ,which could result in marine pollution, is reported to the relevent Indain Coast Guard Maritime Rescue Coordination Centre (MRCC), the details of the event will be recorded and respective agency or departments will be intimated for the necessary action.The flow chart of the information flow from the site of incident to the cabinet secretariant in the event of an oil spill is dipicted in **Figure 4.9.**

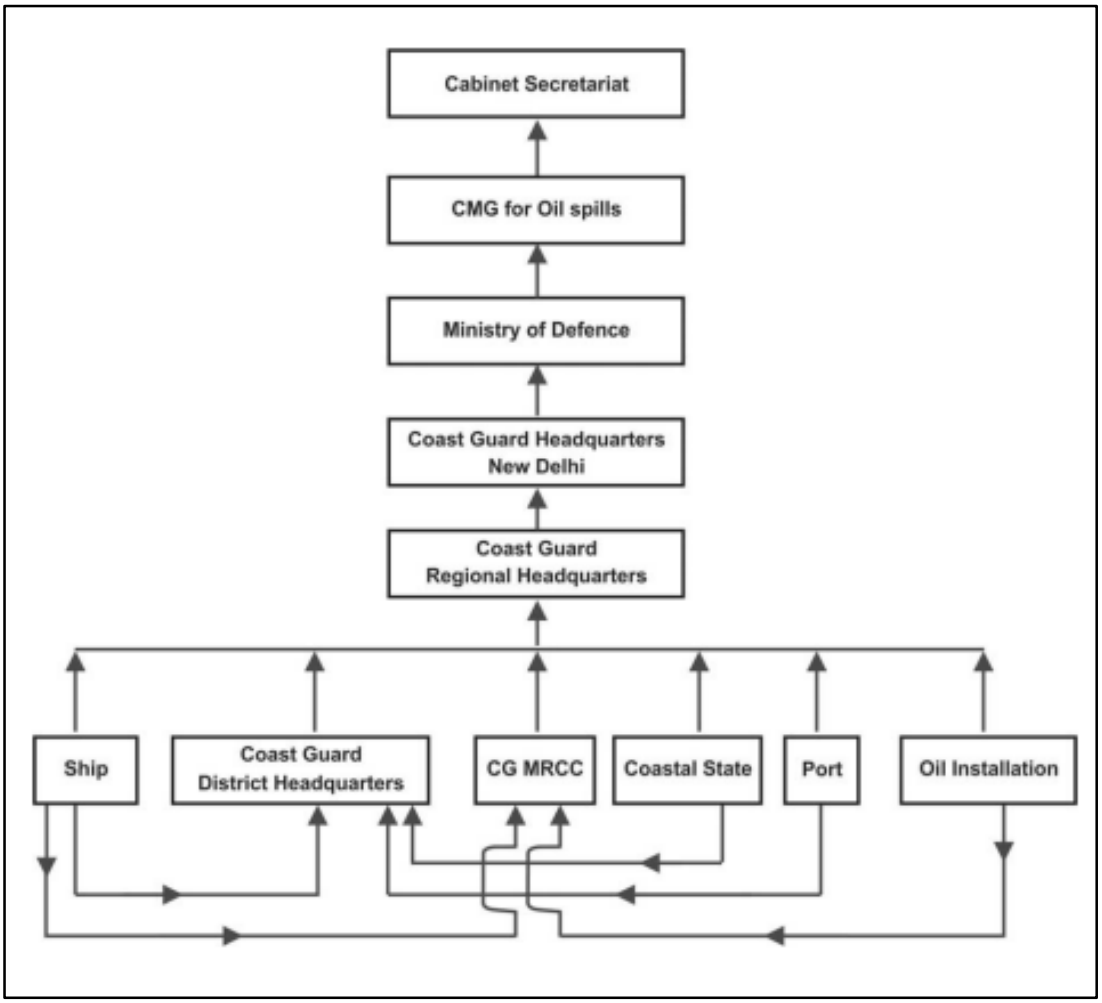


Figure 4.9. Flow Chart of the Information Flow from the Site of Incident to the Cabinet Secretariat

Follow-up on the submitted report regarding the identification of oil spill event wil be monitored by MRCC. The MRCC contacts the ship or offshore installation to ascertain, following :

- The nature of incident (collision, loss of containment, etc.)
- The number of people on board;
- The type, size and name of the ship or installation;
- The precise location, course and speed of the ship, and its proximity to other ships, offshore installations, shallow water and the shore;

- Information on the ship's cargo, stores or bunkers, and whatever any are dangerous;
- The structural and mechanical integrity of the ship or installation;
- The weather, sea state and tidal conditions;
- Any assistance available to the casualty and the intentions of the Master or Offshore Installation Manager (OIM);

When an incident is reported MRCC initiates any search and rescue response required and then reports any pollution incident or a risk of significant pollution (whether or not known to involve oil or any other hazardous substance, and even if of unknown origin) to the concerned Duty Staff Officer for response action.

After reporting of a tier 2 or tier 3 incident to the Coast Guard, the Regional On-Scene Commander or/ and the National On-Scene Commander will have responsibility of informing all concerned authorities and will coordinate with appropriate level in the State or/ and Central Government till termination of response.

4.9.2 Initial Actions Taken

When an incident is reported to Indian Coast Guard MRCC the following actions will be intiated under the purview of Coast Guard District or Regional Commander as appropriate. ordering aerial surveillance of the ship, if possible with an experienced observer;

- Arranging for inspection of the ship by an IRS surveyor or other qualified person;
- Putting on stand-by or deploying:
- Dispersant spraying aircraft and ships,
- Oil recovery equipment,
- Booms
- Emergency Tow Vehicles (ETVs) or other tugs
- Establishing the availability of salvage and lightering ships;
- Moving the ship to shelter;
- Exercising the power of intervention;
- Obtaining specific weather forecasts
- Requesting control of airspace in vicinity of the casualty; and

- Establishing a Temporary Exclusion Zone (TEZ).

4.9.3 Assessment of the Event

The Regional Headquarters of the Coast Guard are to prepare for combating a major oil spill up to 10,000 tonnes. The requirement of combating a major oil spill above 10,000 tonnes will be undertaken by pooling all available resources and equipment in the country. There for in case of major spill a rapid assessment of the threat presented by the marine accident is essential. If an actual spill has occurred, then the designated Regional Commander, On Scene Commander should, if possible, conduct aerial surveillance of the oil slick and from weather and hydrographic data, predict probable trajectory of the oil slick. If the oil slick is moving offshore towards the open sea, then monitoring on a regular basis is the preferred control option. If the oil slick is moving onshore, then the response could be either containment and recovery, chemical dispersion or shoreline cleanup. The On Scene Commander must evaluate whether the required response is within the local resource capability or requires resources/equipment from other agencies and accordingly advise the Director General, Coast Guard

4.9.4 Criteria for Triggering Regional or National Response

When the Indian Coast Guard MRCC is notified of a major incident, the Coast Guard District or Regional Commander will decide if a regional or national response is warranted. In a local response, the Coast Guard has no role other than to maintain records of any pollution for statistical purposes. In a regional response, the Coast Guard Regional Commander may deploy regional Coast Guard equipment and facilities to support the port authorities, contracted responders or local authorities.

In the event of an incident involving an offshore installation the decision on the level of response will be in consultation with the owner or operator of the offshore installation involved in the incident. NOSDCP lays down no rigid criteria for triggering a regional or national response. However, the Coast Guard District or Regional Commander may trigger a regional or national response as appropriate if;

- A shipping casualty gives rises to the risk of significant pollution requiring a salvage operation;
- An oil spill from an offshore installation requires the deployment of vessels and/or aircraft by the Indian Coast Guard to contain, disperse or neutralize it;
- An oil spill within the jurisdiction of a port authority requires the deployment of regional or national resources to contain, disperse or neutralize its, or other action beyond the capacity of the harbour authority with support of mutual aid arrangements; or

- A local authority requests the deployment of shoreline response resources and manpower with other states or under national control because the action is beyond the local capacity with mutual aid arrangements

4.9.5 Action after Initiating a National or Regional Response

When a threat of significant pollution justifies a regional or national response, the Coast Guard District or Regional Commander notifies the CCA of the incident. The CCA may decide to supplement the response or stand down.

4.9.6 Situation Reports

A situation report is exactly what the name implies: a report on a situation containing verified, factual information that gives a clear picture of the "who, what, where, when, why and how" of an incident or situation.

In relation to incidents involving ships, Indian Coast Guard with support of the Directorate General of Shipping takes the lead in providing the Ministry of Defence and other concerned ministries officials of the devolved administration affected or potentially affected by the incident, with situations reports.

In relation to incidents involving offshore installations, the Ministry of Petroleum and Natural Gas takes the lead in providing both operations and policy advice. The Indian Coast Guard also disseminates situation reports to the Ministry of Defence and other concerned ministries and and the coastal state affected or potentially affected by the incident.

4.9.7 Final Report

A final closure report of all major incidents viz., Tier 2 and Tier 3 oil pollution incidents will be submitted post investigations and analysis to the Central Coordinating Authority and other concerned authorities within 45 days of termination of response by the facility or installation where the discharge occurred.

4.10 International Assistance

Generally the oil industry maintains membership with an oil spill response organisation, such as Oil Spill Response Limited (OSRL), Singapore. M/s OSRL holds a Tier 3 stockpile and provides response training, and other services. The oil industry membership provides for access to OSRL equipment and personnel at Singapore and in the United Kingdom. If resources in addition to the national resources are required to respond to an incident in India, then Oil Spill Response Limited (OSRL) will be called out invoking the membership of the concerned oil company. The Global Response Network is a collaboration of seven major oil industry funded spill response organisations whose mission is to harness cooperation and maximise the effectiveness of oil spill response services worldwide.

The Indian Coast Guard, in accordance with current MoU and relevant International Conventions, may also assist neighbouring countries in relation to oil spill incidents in their waters. Also in the event of a major oil spill incident, it is likely that additional overseas assistance may be sought from overseas in accordance with the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC 1990). In such cases, customs and immigration authorities of ports and air ports need to provide immediate facilitation for temporary import of equipment and personnel in order to transfer them in the scene of action expeditiously.

4.11 Cross Border Incidents

In case of incidents close to International Maritime Boundary Line, or incidents which are likely to result in transboundary pollution, high-level consultation and cooperation will be maintained with the Competent National Authority or Authorities of concerned State (s), with due regard to the provisions of any Regional Contingency Plan or Memorandum of Understanding or other arrangement, with an objective to ensure a clear delineation of responsibility for the response. In case of incidents close to State or Union Territory borders, high-level consultation and cooperation will be maintained between the two Statutory Agencies, with an objective to ensure a clear delineation of responsibility for the response.

4.12 Allocation of Responsibilities in the Management of Oil Spills

In the event of a oil spill various responsibilities are allocated to various fedral departments in order to aid the speedy recovery and the same is detailed in **Annexure IV.**

4.13 Specialist Advice and Assistance

Specialist technical advice is available to response team from a variety of sources. Advice can vary from the fate of oil, selection and deployment of pollution control equipment, and dispersant use, to the associated environmental effects of an oil spill. Specialist advice can also be provided in relation to the safety and stability of ships.

The range of specialist environmental and operational technical advice in the event of an oil spill in the marine environment that can be provided by varied departments and organisations of the Government of India and other agencies is enumerated in the **Annexure V.**

4.14 Inventory for the Oil Spill Response

As mentioned in previous sections each port facilities, oil terminal and. Installations should required to maintain the equipments and manpower for the response towards a teir 1 level pollution. The standard inventory required for ports, oil agencies, and coastal states in regards of oil spil response is already presented in **Annexure II.** In addition to this, the Indian Coast Guard maintains stockpiles of

equipment at its pollution response centre at Mumbai, Chennai, Port Blair and at Vadinar. The Indian Coast Guard also operates two dedicated pollution response vessels. The third pollution response vessel in the series is in the final stages of commissioning. Stocks of oil spill dispersant are additionally held at each Coast Guard Station/ Air Station. The current national inventory is at **Annexure VI**. The national oil spill response capability supported by the concerned Ministries is presesnted in **Annexure VII.**

4.15. Provision for Mutual Aid

In case of a major emergencies it is not possible to combat an event by a induvidual unit since it will be beyond its capability. Hence it is essential to have mutual aid arrangements with neighbouring industries. Consideration shall be given to the following while preparing mutual aid arrangements:-

- Written mutual aid arrangements are to be worked out to facilitate additional help in the event of Level-II emergencies by way of rendering manpower, medical aid or firefighting equipments, etc.
- The mutual aid arrangement shall be such that the incident controller of the affected installation shall be supported by neighbouring industries on call basis for the support services materials and equipments already agreed. Further, all such services deputed by member industry shall work under the command of the site incident controller of the affected installation.
- Mutual aid associations shall conduct regular meetings, develop written plans and test the effectiveness of their plans by holding drills. Drills are essential to establish a pattern for operation, detect weaknesses in communications, transportation and training. Periodic drills also develop experience in handling problems and build confidence in the organization.
- To make the emergency plan a success, the following exchange of information amongst the member organizations of mutual aid association is considered essential: -
- The types of hazards in each installation and firefighting measures.
- The type of equipment, that would be deployed and procedure for replenishment.
- Written procedures which spell out the communication system for help and response. This is also required to get acquainted with operation of different firefighting equipment available at mutual aid members and compatibility for connecting at users place.

- Familiarization of topography and drills for access and exit details carried out by mutual aid members.

4.16 Inspections

The preparedness of ports and oil handling agencies will be inspected periodically, by nominated Coast Guard officers, acting on behalf of the Central Coordinating Authority, and if deemed necessary, jointly with the concerned statutory authority. The periodicity and manner of such inspections will be as decided by the Central Coordinating Authority. Report of such inspection will be rendered as per the *pro forma* provided in **Annexure XII.**

4.17 Online Oil Spill Advisory System

The Online Oil Spill Advisory (OOSA) system has been developed by INCOIS for use by the Indian Coast Guard and other statutory authorities and combat agencies involved in oil spill cleanup and control measures in the event of oil spill. OOSA delivers the trajectory of the spilled oil immediately, and enables the combat agency to plan clean up activity. On submission of necessary information like location of the spill, date, time, pollutant type and its quantity, the trajectory prediction set up is triggered in the background, along with the forecasted forcing parameters such as wind and currents. The trajectory prediction for a period of 48 to 90 hrs is generated and disseminated to registered users.

OOSA is launched as an experimental set up, and a full-fledged system will be in place after obtaining the feedback/ suggestions from the user community.

4.18 24-Hour Emergency Advice Center

Ensuring access to the initial risk assessment capability 24-hours a day, 365 days a year should be a central element of the contingency planning to deal with chemical spills on water. At a national level, there should ideally be one contact point for ensuring immediate access to information on chemical hazards. It would be linked to the ICE (International Chemical Environment) scheme - a voluntary programme, co-ordinated through The European Chemical Industry Council (CEFIC), to create an international network for chemical distribution incidents. The aim of ICE is to ensure that information on the chemical hazards posed by an incident, practical help and, if necessary and possible, appropriate equipment is provided to the emergency services to minimise adverse effects.

However, it will take time in India to have a complete database and to establish a monitoring agency for the chemicals of its origin, to its hinterland movements, the destination, the customer, the chemical characteristics, the possible threats, the response to such threats and the likely threat to environment. In the interim, it is necessary as much information available through open sources and from the manufacturers and exporters of the characteristics of the chemical substances that are moved

from the Indian ports is gathered and a database maintained by Indian Ports Association (IPA) for supporting an effective spill response.

4.19. Provision for Salvage

If there is a threat of significant pollution the MRCC contacts the salvor or, if not yet appointed, the master or owner of the ship, and the harbour master, if the incident is in a port or its approaches, and offers assistance. The MRCC states that intervention powers may be exercised and instructs those in command of the vessel to provide the Indian Coast Guard information which must include:

- Whether the owner has appointed a salvor and, if so, its name and contact details;
- The broad nature of the contract between owner and salvor;
- Information on the intentions of the salvor; and
- Any other important information that has not yet been gathered.

Simultaneously, as a pollution prevention tactic, the MRCC may also task the contracted Emergency Towing Vessel (ETV) to proceed to the area. The Indian Coast Guard District or Regional Commander decides whether it is necessary to set up a Salvage Monitoring and Control Unit (SMCU) based on the merits of the incident. The members of the SMCU are;

- The Indian Coast Guard District or Regional Commander;
- The Salvage Manager from the salvage company appointed by the ship owner,
- The harbour master, if the incident involves a harbour or its services;
- A single representative nominated by agreement between the ship owner and insurers (for both the physical property and their liabilities);
- The District or Regional Pollution Response Officer;
- A Surveyor from the Mercantile Marine Department
- A Surveyor from the Indian Register of Shipping, if required; and
- An Environment Liaison Officer, nominated by the Environment Group.

In the event that the SMCU is co-located with an MRC, the membership of the SMCU needs to include the members of the MRC with Indian Coast Guard staff fulfilling more than one role.

If it is necessary for the salvage operation in adition to the SMCU another on board salvage team will be established in consultation with India Coast Guard . This team will comprising a coast guard representative ,salvage master , crew and a special casuality centre (as per the decesion of ship owner).

The Salvage Master will, in consultation with the Coast Guard, strictly monitor and, if necessary, control access to the casualty, establishing any necessary protocols, through the SCR, with the security plan operated by the casualty in compliance with the Interventional Ship and Port Security Code (ISPSC).

Consultation with Coast Guard is essential because every additional body increase he potential problem of rescue, and every additional person increase the risk of confusion as to what the Salvage Master and his crew are doing.

4.20 Requirement of Communication Aids

In a pollution incident it is important that the CIC has access to adequate communication facilities. In addition to the facilities available through the ECC it is envisaged that port and oil installation should have Very High Frequency (VHF) radio facilities, the Coast Guard communications networks would be available to coordinate a response. In a major incident it may be necessary to seek assistance from other Government agencies and utilise the Government Radio Network or the emergency services or Naval radio communications network.

4.21 Training and Exercises

The Indian Coast Guard conducts regular training programs and exercises for personnel likely to be involved in a response to an oil spill in the marine environment. These training programs and exercises are designed to enable India to have sufficient numbers of trained personnel to mount a credible and effective response to an oil spill incident.

Training programs are regularly conducted at two levels, which recognise the overall technical complexity of managing an oil spill response and that the associated knowledge required by personnel varies depending on their level of responsibilities. The two levels of training conducted are:

- Level 2 for middle management personnel responsible for managing the operational response, e.g. incident controllers, their deputies and environment and coordinators, and Fire Brigade (Hazardous Materials) specialists
- Level 1 for operator level personnel, i.e. those undertaking on-site clean-up operations. In a major incident this would also include supervisors appointed as site managers.

A certificate of level 1 course is deemed to be valid for a period of five years from the date of its issue. It is imperative that personnel designated for oil spill response operations undergo periodic training to maintain currency of certification.

The persons qualified in level 2 course will be designated for carrying out duties as Chief Incident Controller and Incident Controller.

Mock drills and exercises will be conducted by every port facility and oil installation at such periodicity and at such scales as required by the Central Coordinating Authority. However, such mock drills and exercises shall in any case be conducted at least once every three months and a record shall be maintained of its conduct including the personnel participated, resources mobilized, etc. Area or regional level exercises will be conducted at least once every six months. National level pollution response exercises will be conducted at least once a year and involve mobilization of stakeholder resources.

4.22 Provision for Place of Refuge

It is generally recognised that when a ship has suffered an incident, the best way of preventing damage or pollution from its progressive deterioration is to transfer its cargo and bunkers, and to repair the damage. Such an operation is best carried out in a Place Of Refuge (POR), that is, a place where a ship in need of assistance can take action to stabilise its condition and reduce the hazards to navigation, and to protect human life and the environment.

It is ideal to pre-designate places of refuge; however, where no pre-designated place exists, it is imperative to have policies in place to enable the selection of a place of refuge.

The State Government is required to adopt specific policies on places of refuge as part of its contingency plan, and these should be followed as appropriate. Regardless of whether places of refuge are pre-designated or not, the following criteria form the basis for their selection:

- Adequate water depth
- Good holding ground
- Shelter from the effect of prevailing wind/swell
- Relatively unobstructed approach from seaward
- Environmental classification of adjacent coastline and fisheries activity
- Access to land/air transport
- Access to loading/unloading facilities for emergency equipment

4.23. Financial Arrangements

Detailed financial records, including all supporting information, are required, and are of particular importance when submitting claims to the Protection and Indemnity (P&I) insurers, as all claims will be assessed to ensure that the costs are reasonable, and are supported by satisfactory documentation.

Agencies should have in place appropriate systems to ensure that these requirements are met and that these are adequately outlined in contingency plans. In general, costs will be considered "reasonable" if they result from actions that:

- were undertaken on the basis of a technical appraisal of the incident
- sought to enhance the natural processes of recovery
- were not undertaken purely for public relations reasons.

4.24 Record Keeping and Preparation of Claims

In order that claims may be processed with minimum delay, it is essential that accurate records are maintained to support claims. It should be noted that claims should be based on expenses actually incurred, that these are made as a direct result of an incident, and that the expenses incurred are reasonable. In the case of economic loss, documentation supporting the claims should demonstrate how the claim has been calculated. The following aspects are to be considered while assessing cost of an oil spill combating and operating, and preparation of claims:-

- Delineation of the area affected describing the extent of pollution and identifying areas most heavily contaminated. This may be best presented as a map or chart accompanied by photographs.
- Summary of events including a description of the work carried out in different areas and of the working methods chosen in relation to the circumstantial evidence linking an oil pollution with the ship involved in the incident (e.g. chemical analysis).
- Labour costs (numbers and categories of labourers, rates of pay days, hours worked, total costs etc).
- Data on which work was carried out (weekly or daily costs).
- Material costs (consumable materials, fuel utilized, food, shelter, etc.).

4.25 Responsibility Allocation for the Preparation of Oils Spill Response Contingency Plan

Statutory Agencies supported by Combat Agencies, are primarily responsible for ensuring that contingency plans are developed at national. state, regional and local levels, and that these plans complement adjacent plans.

Responsibility allocation for maintaining contingency plans is as follows

- The National Oil Spill Disaster Management Plan will be maintained by the Indian Coast Guard Headquarters with inputs from, and in consultation with, stakeholders to the national plan.
- The Regional Oil Spill Disaster Management Plan will be maintained by the Regional Headquarters of the Indian Coast Guard at Gandhinagar, Mumbai, Chennai, Kolkata, and Port Blair with inputs from, and in consultation with, stakeholders to the regional plan.
- The District Oil Spill Disaster Management Plan will be maintained by the District Headquarters of the Indian Coast Guard in each coastal state with inputs from, and in consultation with, stakeholders to the district plan.
- The Local Contingency Plan for shoreline clean-up will be maintained by the Coastal State with inputs from, and in consultation with, stakeholders in the respective coastal state. The local contingency plan should include the following or a cross reference to where such advise can be located:
- The mechanism for escalating the response in accordance with the tiered response concept; guidance on what equipment and personnel is at the disposal of the SRC, including neighbouring local authority resources;
- Arrangements for establishing working accommodation and catering arrangements for members of the SRC and Environment Group and other groups involved in the incident who may need to be in the area away from their own base;
- Arrangements for handing the media, including the logistics of their presence;
- Temporary, intermediate and final sites and routes for the recovery, rescue or final disposal of waste.
- Maps, clearly depicting sensitive sites, access points, terrain types etc;
- Guidance on the health and safety of workers involved in preventing measures and clean-up activities;
- Financial implications of coastal pollution and actions that can be taken for cost recovery.
- Every ship is required by MARPOL regulations to maintain a The Ship Oil Pollution Emergency Plan (SOPEP) approved by the Flag State Administration. The Merchant Shipping (Prevention of Pollution by Oil) Rules, 2010 requires maintenance of a

pollution emergency plan by Indian ships approved by the Administration or Recognized Organisation acting on its behalf.

- Every sea port facility and offshore oil installation and every oil installation on shore with risk of marine oil or chemical pollution is required to maintain a facility contingency plan approved by the Coast Guard.

4.26. Revision of Contingency Plan

The facility contingency plans are to be updated at least annually and revised at least once in every five years or whenever there is a significant change in any of the elements underlying the plan. The occasions for revision could include, but may not be limited to, an addition to capacity, change in traffic density, change in risk, etc. A revision of a facility contingency plan will necessitate fresh approval and the procedure the approval is explained.

The Ministry of Shipping, State Government of the coastal states and Ministry of Petroleum and Natural Gas should have to up date the details of sea port facilities required to maintain a facility oil spill contingency plan, to the Ministry of Defence and the Indian Coast Guard on timely basis.

Also every plan holder should submit an annual return of preparedness to the Central Coordinating Authority viz., the Director General Coast Guard with a copy to the local Coast Guard authority, the District Administration and such other authorities as may be necessary.

4.27. Fishing Restrictions

The State Fisheries Authorities may temporarily prohibit or restrict fishing, on precautionary basis, if resources are, or are likely to become, contaminated to prevent health risk to consumers. A delay in revocation of such prohibition or restrictions must take into consideration the implications for reimbursement of claims for damages from the Protection and indemnity insurance, (P&I) Club (P & I Club is a mutual insurance association that provides risk pooling, information and representation for its members) and The International Oil Pollution Compensation Funds (IOPC) Fund. Guidance on sensory testing of sea food following an oil spill and imposition of fishing restriction is published separately by the Coast Guard.

4.28. Oil Spill Clean up

Procedure for cleaning up of the spilled oil is not an easy task. Various factors need to be considered before carrying out operations. Some of them being amount of oil spilled, temperature of water, type of beaches and many more. When an oil spill occurs, there are very clear rules about who pays for the direct response activities, the cost of assessing environmental damages, and implementing the

necessary restoration.The Oil Pollution Act of 1990, spells out that those responsible for the pollution pay for all costs associated with the cleanup operations.

The responsibility for cleanup of pollution on the water and at jetties wharves/ structure within jurisdiction, and at beach/shoreline owned by the port authority, whatever the source of the pollution, lies with the port authority. Cleanup of shoreline (including land exposed by falling tide) beyond port jurisdiction vests with the local State. In case of major events the Coast Guard District or Regional Commander decides on actions to contain, disperse, or neutralise pollution, and to remove potential pollutants from the scene.

After an oil spill, urgent decisions need to be made about how to minimize environmental and socio-economic impacts. Diffrent response technics are available for claenup process. The advantages and disadvantages of different responses need to be compared with each other and with natural clean-up. This process is called Net Environmental Benefit Analysis (NEBA). Net Environmental Benefit Analysis (NEBA) is a methodology for identifying and comparing net environmental benefits of alternative management options, usually applied to contaminated sites. The use of NEBA should result in better decisions, resulting in greater improvements in environmental quality at lower cost.

From time to time India Coast Guard issues circulars for detailing various clauses of NOSDCP. The relevant circulars published by ICG is detailed in following section

4.29 Over view of Circular No: 02/2012

Subject: Guideline on Elements of Facility Oil Spill Contingency Plan

Over view: Every owner or operator of a port facility, oil installation or offshore installation is required to maintain an oil spill contingency plan duly approved by the India coast guard. This circular set outs the desired elements of a typical facility oil spill contingency plan. As per the circular a typical facility level contingency plan should require following three components

- A strategy section, which describes the scope of the plan, its geographical coverage, perceived risks, roles and responsibilities of those charged with implementing the plan and the proposed response strategy;
- An action and operations section, which specifies the emergency procedures that will allow rapid assessment of the spill and the mobilization of appropriate response resources; and
- A data directory, which should contain all relevant maps, resource lists and data sheets required to support an oil spill response effort and conduct the response according to an agreed strategy.

The guiding template for the preparing of a new facility level contingency plan is as presented in **Annexure VIII.** It should be noted that this is only a guideline for structuring the plan.

4.30 Over view of Circular No: 01/2013

Subject: Annual; Returns on Preparedness for Oil Spill Response

Over view: Apart from an approved facility oil spill contingency plan, an inventory of oil spill response equipment proportional to the estimated risk and adequate pool of trained manpower for operating and maintaining the pollution response equipment is required to be maintained by all ports and oil handling agencies. A combined database of such inventories as part of its preparedness for oil spill contingencies in all facilities is maintained by Indian Coast Guard for the smooth execution of oil spill response. With a view to regularly update the national database of inventory andtrained manpower every contingency plan holder should pass the updated details of their own oil spill response inventor on annual basis and the same is called as Annual Return .

Every plan holder will submit an annual return of preparedness to the Central Coordinating Authority viz., the Director General Coast Guard with a copy to the local Coast Guard authority, the District Administration and such other authorities as may be necessary. This circular details the required informations and format of annual return. The annual return should be submitted to the Coast Guard Headquarters as on 31st December in each year and the same should be submitted by 15th February at dte-fe@indiancoastguard.nic.in. The format of Annual Return is presented in **Annexure IX.**

Further, the preparedness of ports and oil handling agencies is inspected periodically by the Coast Guard jointly with the concerned statutory authority and the report on inspections will be made according to a pre structured *pro forma*.

4.31. Over view of Circular No: 02/2013

Subject: Radar Oil Spill Detection System at sea port and Handling Facilities

Over view: In 16 the NOSDCP meeting held on 19th April 2011, discussions on a fool proof system to monitor and detect the presence or discharge of oil spill in order to intensify the oil spill response was made.The committee of secretaries in its meeting on 2nd December 2011 decided to study the effectiveness of the installations of oil spill detection software in VTMS radars at ports and VATMS radars of oil companies along the coastline. According to the study result it was identified that the radar detection of oil spill may be achieved by way of IMO type approved SOLAS compliant radar or by installing a software patch on existing radar

Through this circular Indian Coast Guard urged to establish radar oil spill detection system in seaports and oil handling facilities.

4.32. Over view of Circular No: 03/2013

Subject: certification of facility oil spill risk assessment and response preparedness

Over view: The facility contingency plans are to be updated at least annually and revised at least once in every five years or whenever there is a significant change in any of the elements underlying the plan. Every new or updated contingency plan should require an approval from the Coast Guard .For the approval from the coast guardevery owner of a port facility, oil installation or offshore installation should submit their contingency plan accompanied with a certificate of endorsement of the facility oil spill risk assessment and response preparedness as per the format prescribed at **Annexure X** ,duly endorsed by an officer not below the post of Deputy Conservator of a port facility or the installation Manager of an oil installation , or offshore installation , or equivalent legally responsible authority.

4.33. Over view of Circular No: 01/2014

Subject: Pre-booming of tankers at alongside berths and SPMs

Over view: Pre-booming is the process of completely surrounding any vessels, facilities, or dock areas that are involved in the process of transferring oil. It is a preventative measure to keep potential spills from spreading beyond reasonable limits and driving up costs and damage to the environment. Pre booming of the oil tankers engaged in discharge of cargo at alongside berths and at SPM was the topic of discussion in 17th NOSDCP meeting held on 12th June 2012 and subsequently coast guard examined the feasibility of implementing pre-booming at each port and SPM. The study by the coast guard reveals following facts;

- Pre-booming is practiced at oil berths at Karaikkal, Tuticorin, Chennai, Ennore and Vishakapatanam port and permanent boom is laid on dockside at Sikka Reliance terminal.
- Pre-booming was reported feasible and recommended for oil berths at Mumbai and Kochi.
- Pre-booming was reported feasible but not recommended for oil berths at Mormugao and New Mangalore view obstruction to adjacent berths and low shoreline sensitivity respectively.
- The study further brought out that pre- booming is also not being practiced at any of the SPMs within the port jurisdiction.
- Reported constraints in pre-booming included strong currents and tidal streams, high tidal ranges, periodic change of direction with flood and eddy stream, as also the swing

of tanker at SPM with tide change and presence of standby tug in vicinity for immediate assistance.

However, ecological sensitivity is of significant concern, particularly in the GoK and at Kochi, Kakinada, and Paradip.

With a view to curtail the risk of oil spill, every deliverer will pre-boom oil transfers as a Standard Operating Procedure (SOP). However, when it is determined that it is not safe and effective to pre-boom the oil transfer, a suitable oil spill response craft will be stationed during cargo discharge, in the vicinity of the tanker for immediate response and backed by capability to track a spill in low visibility conditions. The SOP for pre-booming is placed at **Annexure XI.**

4.34. Over view of Circular No: 03/2014

Subject: Measures for Prevention and Control of Oil Pollution from FPSOS and FSUS Operating in Indian Exclusive Economic Zone

Over view: Floating production, storage and offloading (FPSO) unit used by the offshore oil and gas industry for the production, processing of hydrocarbons and for storage of oil designed to receive hydrocarbons produced by itself or from nearby platforms or subsea template, process them, and store oil until it can be offloaded onto a tanker or, less frequently, transported through a pipeline are preferred in frontier offshore regions. FPSOs can store up to 350,000 m3 of crude oil. Operation of FPSOs, therefore, poses a significant threat of oil pollution in the event of a contingency.

This circular details the guidelines for the Measures for prevention and control of oil pollution from FPSOs and FSUs operating in Indian Exclusive Economic Zone and the same is detailed in following section

4.34.1 Measures for prevention and control of oil pollution from FPSOs and FSUs operating in Indian Exclusive Economic Zone.

The measures for the prevention and control of oil pollution required to be complied by masters, owners, operators, charterers of FPSOs and FSUs operating in the Exclusive Economic Zone of India with a view to protect and preserve the marine environment are appended in the succeeding paragraphs.

Recognizing that the unified interpretation of regulation 37.1 requires that FPSOs and FSUs be provided with an oil pollution emergency plan approved in accordance with the procedures established by the Coastal State, no FPSO or FSU shall be used for the offshore production and storage or for offshore storage of produced oil in the Exclusive Economic Zone of India without a shipboard oil pollution emergency plan conforming to the Guidelines contained in Chairman NOSDCP Circular 02/2012 dated 09 August 2012 as amended, and duly approved by the Indian Coast Guard.

- Prior to positioning of the FPSO or FSU in the Exclusive Economic Zone of India, the owner/operator/Indian agent of FPSO of FSU shall submit the following to the nearest Indian Coast Guard authority:-
- Copy of Issue or endorsement of certificate as per revised MAEPOL Annex I;
- Copy of Shipboard Oil Pollution Emergency Plan as per revised MARPOL Annex I;
- Copy of International Oil Pollution Prevention Certificate as per revised MARPOL Annex I;
- Copy of Record of Construction and Equipment for FPSOs and FSOs as per resolution MEPC.139 (53) adopted on 22 July 2005;
- Copy of International Sewage Pollution Prevention Certificate as per revised MARPOL Annex IV;
- Copy of Record of oil discharge monitoring and control system for the last ballast voyage as per revised MARPOL Annex I;
- Copy of Certificate of insurance or other financial security in respect of civil liability for oil pollution damage as per CLC 1969, article VII;
- Copy of Certificate of insurance or other financial security in respect of civil liability for oil pollution damage as per CLC 1992, article VII;
- Details of intended position and operation; and
- Details and contact particulars of the Designated Person Ashore.
- The FPSO/ FSU or the owner/ operator/ agent acting on behalf is required to provide prior intimation to the Indian Coast Guard of the occurrences of the following:-
- The vessel leaving field for passage to any port outside India;
- On leaving the area of operations for operational turn around;
- As and when any crew change takes place;
- As and when vessel is off hired;
- As and when production stopped for more than 48 hrs; and
- Any discharge of oil, as required by the National Oil Spill Disaster Contingency Plan promulgated by the Indian Coast Guard.

With a view to curtail the risk of oil spill, every FPSO and FSU will pre-boom oil transfers as a Standard Operating Procedure (SOP). If owing to metrological or other factors it is not feasible to safely and effectively implement pre-booming as a SOP. The following alternate measures will be taken by the owner/operator/ agent of the FPSO to address any oil spill:-

- As an alternative to pre-booming, a suitable oil spill response craft will be stationed during offloading, in the vicinity of the FPSO for immediate response;
- On being made aware of a spill, the FPSO will have the ability to safely commence tracking of the spill in low visibility conditions; and
- Within one hour of being made aware of a spill, the FPSO will be able to completely surround the vessel(s) or pre-boom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.
- The FPSOs and FSUs will be inspected for MARPOL compliance and oil spill response preparedness by the Indian Coast Guard, independently or with other concerned authorities.
- The Coast Guard may undertake boarding and surprise inspections. The FPSOs and FSUs are to take all measures to facilities safe boarding and provide full cooperation as required for the inspection of the vessel/ presentation of documents.

4.35 Over view of Circular No: 02/2015

Subject: Net Environmental Benefit Analysis (NEBA)

Over view: After an oil spill, urgent decisions need to be made about how to minimize environmental and socio-economic impacts. The advantages and disadvantages of different responses need to be compared with each other and with natural clean-up. This process is called Net Environmental Benefit Analysis (NEBA). This circular explains how the process takes into account the circumstances of the spill, the practicalities of clean-up response, the relative impacts of oil and clean-up options, and the process by which judgments are made on the relative importance of social, economic and environmental factors.

The NEBA for oil dispersants is an assessment of positive and negative consequences of dispersant use, as compare to the use of other response techniques, taking into consideration the biological resources and socio-economics of the region, such as the season, state of fisheries, economic and social values, and other biological resources.

The following documents are to be prepared before proceeding with the NEBA, in order to determine which resources may be damaged and which ones should be preserved:-

- An inventory of the local sensitive resources;
- The vulnerability of the resources identified; and
- The definition of the importance of the resources identified.

The NEBA may performed as follows:

- As a preliminary measure at the facility oil spill response plan development stage; or
- In a specific situation during an oil spill.

A preliminary NEBA is preferred in order for oil spill scenarios of 10 tons, and its exponential values up to and including the worst-case scenario. Each scenario will be supplemented with recommendations on practicability, from an ecological point of view, of dispersant usage or its prohibition. Each potential oil spill scenario must address the following;-

- Description of assets where oil spills are possible;
- Potential oil spill scenarios and spill volumes including worst case spill, physical and chemical properties of oil;
- Results of mathematical simulation of oil spill behavior on water (spreading, possible drift directions, quantitative changes of oil, when presented on the sea surface, which occur due to evaporation and dispersion under the influence of wave energy and currents; amount of oil stranded onshore, oil remaining on the sea surface and penetrating into water column);
- List of ecosystem components that exist within the action zone of the facility contingency plan, depending on the priority of their protection in time of potential emergency scenarios, from the point of view of preserving natural resources, and taking into account their seasonal changes;
- List of economically and socially valuable assets which require protection;
- Prioritization of the identified environmental and economic resources, decided with the local stakeholders;
- Advantages and disadvantages of various available, in-place oil spill response methods including dispersion and an in-principle, assessment of the expected results of each possible response technique: dispersion, containment and recovery, monitoring for action; and

- Impact of floating and dispersed oil on selected ecosystem components and state of the environment in general.

Both natural and economic resources should considered. In general, endangered species, highly productive areas, sheltered habits with poor flushing rates, and habitats which take a long time to recover should receive top protection priority. The list should take into account factors like possible seasonal variation variations as well as the time needed by each impacted resource to recover (damage on a resource which can regenerate quickly is often more acceptable than damage to one which needs a very long restoration time). These factors will affect priorities.

Habitats and resources should be considered as a whole and not independently, as the decision to apply dispersant may benefit particular habitats or resources and at the same time affect adjacent ecosystems.

In terms of priority, it is better to protect the habitat before the species themselves, as the species are dependent on the preservation of their habitat. In terms of species, the objective must be to protect the reproductive potential.

The NEBA for the use of dispersant in particular, must take the following into consideration:-

- Consider the behavior (drift and weathering) of the treated oil (drift according to the current and speed of dilution of the plume) and of the untreated oil (drift according to the current and wind):
- Identify resources potentially affected by the treated oil or untreated surface oil;
- Assess possible vulnerability of these resources (vulnerability = sensitivity + restoration time);
- Rank these resources according to their vulnerability and/or importance and decide on the priorities (what must be preserved, what could be sacrificed);
- Predict the possible impacts for the different response options 9e.g. chemical dispersion or not and make a decision on the use of dispersants;
- In case of conflicting conclusions,
- Preserve the habitat before the species, and
- Preserve reproductive potential.
- Where local birds are concentrated, accord special concern for application of dispersants to ensure that direct contact between dispersants and feathers of seabirds is absolutely avoided.

The NEBA results must include mapping of areas where dispersants should not be used according to different criteria (e.g. seasonal or at any time of year, tides or current, weather conditions, or the size of the spill – tier 1,2,3).

The plot of valuable ecosystem components on environmental sensitivity maps and mathematical modeling of spilled oil behavior constitutes the basis for a NEBA. The results of preliminary NEBA are to be arranged in the form of a set of oil spill response scenarios. The scenarios are to be supplemented with recommendations on practicability, from an ecological point of view, of dispersant usage or its prohibition. The scenarios are to be then included in the relevant facility oil spill contingency plan.

Consequent to conduct of NEBA, consideration of certain response options may be immediately ruled out because of their ineffectiveness in the given conditions and, others ranked in terms of effectiveness and preference. The use of different techniques may be recommended for different parts of the slick. With respect to chemical dispersion, the recommendations must indicate whether it is possible or impossible to use dispersants in a given situation or which parts of the slick should be treated with dispersants.

At the time of an actual spill, approval for the use of dispersants will be given based on positive results of NEBA. Also, decisions will be made on the basis of NEBA, with adjustment if the real spill situation differs significantly from the pre-studied scenarios.

The NEBA results must be documented in a report approved by the relevant pollution control board, or environment ministry.

NEBA is a time intensive process. It is required to be conducted on scientific basis by a team of stakeholders, which preferably includes specialists in several fields (e.g. ecology; bird, mammal, fish, and benthos biology; mathematical modeling of the behavior of spilled oil). Running the scenarios will require specialized models designed for impact assessment.

4.36 Over view of Circular No: 03/2015

Subject: Online Oil Spill Advisory –Stake holder registration and table top exercise

Over view:The Online Oil Spill Advisory (OOSA) is a system to generate the predicted trajectory of oil spill after submitting the details of the spilled oil.. OOSA has been developed by INCOIS for use by the Indian Coast Guard and other statutory authorities and combat agencies involved in oil spill cleanup and control measures in the event of oil spill. OOSA integrates high resolution current and delivers the trajectory of the spilled oil immediately, and thereby enables planning of clean up activity. On submission of necessary information like location of the spill, date, time, pollutant type and its

quantity, the trajectory prediction set up is triggered in the background, along with the forecasted forcing parameters such as wind and currents. The trajectory prediction for a period of forty eight to ninety hours is generated and disseminated to registered users. The OOSA system providestrajectory prediction for both, continuous and instantaneous spills. All stakeholders to the national plan can register as user and access OOSA under http://www.incois.gov.in/portal/osf/osf.jsp#, or alternately athttp://115.113.76.60/OilSpill/Login.jsp.The step by step procedure for "OOSA" Table top excersice is provided in following section

Step1: Create word document with the name of the Company and date of exercise which will be forwarded to the Coast Guard Headquarters with all the relevant outputs. (e.g. MbPT_12 May 15.docx)

Step2: Log into OOS at http://115.113.76.60/OilSpill/Login.jsp with e-mail ID and password.

Step3:

- After login, select type of spill as appropriate;
- Region of spill as appropriate;
- In type of spill continuous, enter data in Start date and End date; or in type of spill instantaneous, enter data in Start date and run duration (hrs);
- For start position specify latitude and longitude of the jetty, terminal, installation, fairway, outer harbour, SPM as appropriate;
- Mention pollutants;
- Select quantity released;
- Select units as appropriate;

Step4:On submitting, "Oil spill trajectory prediction system" will appear. Before proceeding, take a screen shot and save in word document for onward submission.

Step5:View output in web map. Take screen shots of the spill trajectory, in small scale and medium scale, and save in word document. Download the output as required. Repeat steps for each scenario and log out.

Step6: Forward the soft copy of word document to the Coast Guard Headquarters at dte-fe@indiancoastguard.nic.in.

4.37 Over view of Circular No: 04/2015

Subject: Revised pro forma for annual return on preparedness for oil spill response and joint inspection.

Over view: As per the NOSDCP 2015, every plan holder is required to submit an annual return of preparedness for oil spill response. The pro forma of the annual return is prescribed at at Appendix E7 to NOSDCP 2015. Further, the preparedness of ports and oil handling agencies is inspected periodically by the Coast Guard jointly with the concerned statutory authority and the report on inspections is rendered in the pro forma prescribed in appendix G to NOSDCP 2015.

Through this circular the coast guard had merged the both preformas to a common perfoma which is as shown in **Annexure XII**.

5

PORT PROFILE

Kandla Port establishd under Major Port Act, 1963 is now one of the busiest major multi-product port of India located in the Kachchh district of Gujarat. The port has been achieved the first position among all major ports of India, in most of the years of last decade. Presently the port can handle dry bulk, break bulk, liquid bulk and container cargo.Being located in an arid region, food grains is one among the most important commodity handled by the port. Other important commodities handled at the port is Coal, Petroleum Oil and Lubricants (POL) and Container Cargo.

5.1 Location

Major Port of Kandla, is situated about 90 km off the mouth of Gulf of Kachchh in the Kandla Creek at Latitude 23 degree 1 minute North and Longitude 70 ° 13’ East, is the lone Major Port on the Gujarat coast. Kandla Port has good connectivity by rail and road. It is closest to International Sea Routes. The port has two lane & four lane approaches to NH 8A from the Port Gates. Kandla Port has dual gauge railway system in operation. It is connected by BG link to Mumbai and Delhi via Ahmedabad.The port is well connected with the hinterland by National Highway No. 8-A and broad gauge railway system. The nearest railway station & airport is located at Gandhidham.

Vadinar Oil Terminal is located close to Jamnagar. It is connected by road through SH-25. 12.5km spur line connects the rail gantry of Vadinar Terminal to Modpur railway station. Nearest railway station is Jamnagar.

The location of the Kandla port and Vadinar Terminal is depicted in **Figure 5.1.**

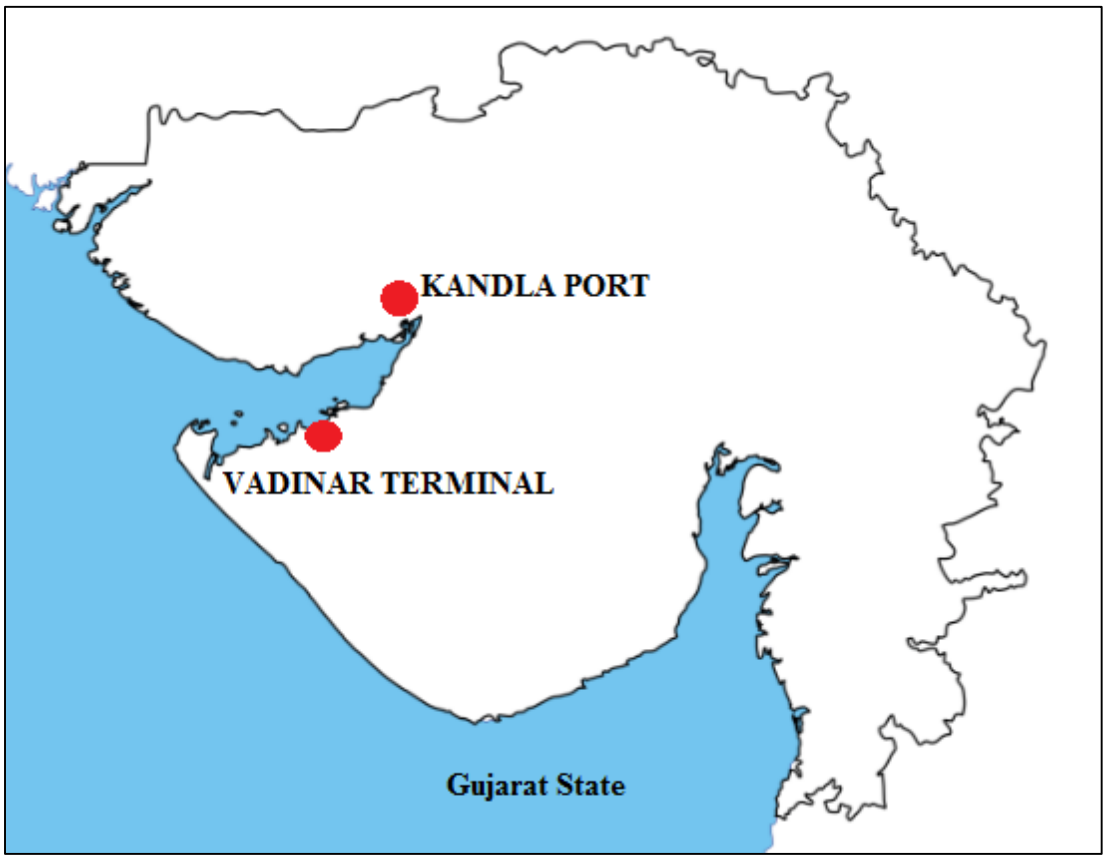


Figure 5.1 Location map of Kandla Port & Vadinar Terminal

5.2. Port Description

It has 12 dry cargo berths with a total of 2.57km in a straightline and 6 dedicated oil berths for handling POL and chemicals.Also there are three Single Point Moorings (SPMs) in Vadinar which can handle Very Large Crude Oil Vessels (VLCC) with a capacity 87,000T to 325,000 Dead Weight Tonnage (DWT) with a maximum pumping capacity of 10000 tonnes per hour. During 2014-15 the port handled 92.5 MT of cargo and thereby retaining number one position for volume of cargo handled among the Major Ports of India.

The total length of the port approach channel is around 26 km. The minimum with is 250 m. The contour depth along the shipping channel is around 10 meters. The KPT & Vadinar Terminal is given in **Figure 5.2**

Being located in the NW Coast of India,Kandla is the closest major port to the Middle East and Europe also it is the en-route port for ships calling at Karachi in Pakistan. Located at the head of Gulf of

Kachchh, it is well protected from strong monsoon winds and high waves of the coast, so is operational throughout the year.

Kandla Port

Vadinar Terminal

Figure 5.2 Layout of Kandla Port & Vadinar Terminal

Source: KPT

5.2.1. Existing Facilities at Kandla Port

5.2.1.1. Terminals

Kandla port has 10 berths, 6 oil jetties, 1 maintenance jetty, 1 dry dock and a few small jetties for small vessels.Adjascent to all these terminals and jetties there are storage facilities for covering cargo received in containers to petroleum products.

5.2.1.2. Steel Floating Dry Dock

The existing steel floating dry dock within the port caters the need of Port crafts as well as outside organizations and has capacity to accommodate vessels of following parameters.

- Length overall (LOA) - maximum up to 95 meters.
- Breadth - maximum up to 20 meters.
- Draft - maximum up to 4.5 meters.
- Lift displacement - maximum up to 2700 tones.

5.2.1.3 Chemical & Liquid Handling Complex

The Port of Kandla's Chemical and Liquid Handling Complex has total storage capacity for 21.9 Lakh kiloliters. Private sector storage terminals have capacity for 9.8 Lakh kiloliters.

5.2.1.4 Storage Facilities

Port consist of 185 hectares of custom bonded port area. Port offers an excellent and vast Dry Cargo Storage Facilities inside the Custom Bonded Area for storage of Import and Export cargoes, on very competitive rates. Also it has the largest capacity in India for storing liquid cargoes, and it is served by a modern pipeline network. The storage facility for liquefied petroleum gas has capacity for 30 thousand cubic meters.The container handling facilities include 545 m of quays equipped with four rail-mounted quay cranes and two harbor mobile cranes. The container facilities include an almost 11-hectare container yard, a 6.5 thousand square meter container freight station, and 90 reefer points for refrigerated containers.

The existing storage facilities at the dry cargo jetty area arepresented in **Table 5.1,** the liquid storage facilities under private sector is presented in **Table 5.2** and other liquid storage facilities is presented in **Table 5.3**

Table 5.1 Existing Storage Facilities at the Dry Cargo Jetty Area

Sl No	Description	No	Area (Sq. M)	Capacity in (Tones)
1	Warehouses	33	1.68 Lakhs	4.47 Lakh
2	Open storage space	67	13.10 Lakhs	32.27 Lakh

Source: http://www.kandlaport.gov.in/

Table 5.2 Private Sector Liquid Storage Facilities

Sl No	Name of the Terminal Operator	No of Tanks	Capacity (KL)
1	CRL (Chemicals & Resins Ltd)	112	247000
2	FSWAI (Friend Salt Works & Allied Industries)	132	271650
3	Kesar Enterprise	44	90081
4	N P Patel Pvt Ltd	09	38497
5	FOCT (Friend Oil & Chemicals Terminal)	21	39263
6	USTTL – Liquid Terminal	22	63038
7	Agencies & Cargo Care Limited	27	50000
8	J K Synthetics	14	25176
9	IMC Limited	04	25288
10	J R Enterprises	15	25320
11	Indo Nippon Chemicals Ltd	10	17200
12	Liberty Investment	06	16016
13	Bayer ABS Ltd	11	13310
14	Deepak Estate Agency	09	13212
15	Tejmalbhai & Company	08	12577
16	Avean International Care Ltd	11	12160
17	USTTL Gas Terminal	04	5720
18	Parker Agrochem Export Ltd	06	15000
Total Capacity		**465**	**980508**

Source: http://www.kandlaport.gov.in/

Table 5.3 Public Sector Liquid Storage Facilities

Sl. No	Name of the Terminal Operator	No.of Tanks	Capacity (KL)
01	Indian Oil Corporation	38	575838
02	Bharat Petroleum Corporation	21	230000
03	Hindustan Petroleum Corporation	28	204000
04	IOC– LPG	02	30000
05	IFFCO	11	110000
06	NDDB	09	58530
Total Capacity		109	1208360

Source: http://www.kandlaport.gov.in/

5.2.1.5. Port Equipments

5.2.1.5.1. Wharf Cranes

Sixteen Wharf cranes are available at the port that include 4 wharf cranes of 3/6 tons capacity and 4 heavy duty, modern, state of the art, having lifting capacity of 12/16 tons.

5.2.1.5.2. Weighbridges

Nine weighbridges are there inside the port, which include four weighbridge of 40 MT capacity, One Weighbridge of 50 MT capacity, One Weighbridge of 60 MT capacity, One Weighbridge of 80 MT capacity, Two Private Weighbridge of 40 MT & 20 MT capacities respectively.

5.2.1.5.3. Other Support Equipments

Port contain loading equipment such as Forklifts, Tractor, Trailers, Pay loaders of various capacities. Also private handling equipment like Mobile cranes, Top lifters, Pay loaders, Forklifts, Heavy duty Trailers, etc. available on hire at competitive rates.

5.2.1.5.4. Various Facilities

Other facilities available within the port area are

- One deep draft mooring and four cargo moorings in the inner harbour area for stream handling.
- Loading/Unloading facilities for barges available for stream handling.
- Seventy licensed private barges available at competitive rates.
- Adequate storage capacity in both dry and liquid areas.
- 66 KV power supply.
- Standby power to the extent of 2000 kV available for emergency operations.
- Well-developed road network directly connecting the national highway.
- Railway network connecting the broad gauge main line, which is being upgraded.

5.2.1.5.5. Navigation Facilities within the Port

Kandla port facilitate round-the-clock navigation. It offers maximum permissible draft of 12 meters, but projects are underway to deepen the port to 14 meters. presently, the Port can accommodate ships up to 240 meters in length and 65 thousand DWT. Also, the Port offers a huge anchorage area for vessels waiting to enter the port and for lighterage services in the outer harbor. Navigation channel of the port is marked with 22 lighted navigational buoys, and a light house also assists navigation.

5.2.1.5.6. Offshore Oil Terminal (OOT), Vadinar

KPT had commissioned offshore oil terminal facilities atVadinar in 1978, jointly with Indian Oil Corporation. It has a capacity of 58 MMTPA and handles crude oil and petroleum products. Vadinar is one of the deepest natural draft terminals in India and it does not require any maintenance dredging. The facilities consist of three offshore Single Point Mooring (SPM)/ Single buoy mooring (SBM), two jetties for handling liquid petroleum products, tanks for storage of crude oil and petroleum products

and rail and road gantries for dispatch of petroleum products.2nd SBM was commissioned in the year 1998.3rd SBM at Vadinar is for importing crude for the oil refinery of Essar Oil.

The features of the OOT Vadinar is as presented below .

- A draft of up to 33 m at SBMs and Lighterage Point Operations (LPO)
- Handling VLCCs of 300000 DWT and more.
- Providing crude oil for the refineries of Koyali (Gujarat), Mathura (Uttar Pradesh), Panipat (Haryana) and Essar Refinery, Jamnagar (Gujarat)
- Simultaneous handling of three VLCCs possible at the SBMs with vast crude tankage facility.
- Two nos. of 50 Tons state-of-art B.R SRP Pull-back tugs are available for smooth and simultaneous shipping operations on the SBMs and product jetty.
- One oil and debris recovery tug for oil pollution control has been acquired and stationed at Vadinar.
- Excellent infrastructure facilitating transshipment operations, even during the monsoon.

5.3 Operational Profile of the Port

Ongoing operational profile of Kandla port is described in following section :

5.3.1 Commodities Handled

Coal is the largest commodity handled by the port with respect to tonnage. The details of commodity handled at the port during 2014-15 and 2013-14 are given as **Table 5.4** below.

Table 5.4. Traffic Handled at Kandla Port during 2013-14

Sl. No.	Commodity	Tonnage Handled (in Lakh Tonne)		% Increase
		2014-15	203-14	
Imports				
1	POL	8.67	7.02	(+) 24
2	Edible Oil	34.58	24.90	(+) 39
3	Phosphoric Acid	10.85	9.91	(+) 09
4	Fertiliser	38.47	26.44	(+) 45
5	Iron & Steel	11.82	8.42	(+) 4
6	Ores	11.96	5.98	(+) 100
7	Thermal Coal	97.25	60.80	(+) 60
8	Sugar	12.67	6.11	(+) 107
9	Timber Logs	28.51	26.52	(+) 08
Exports				

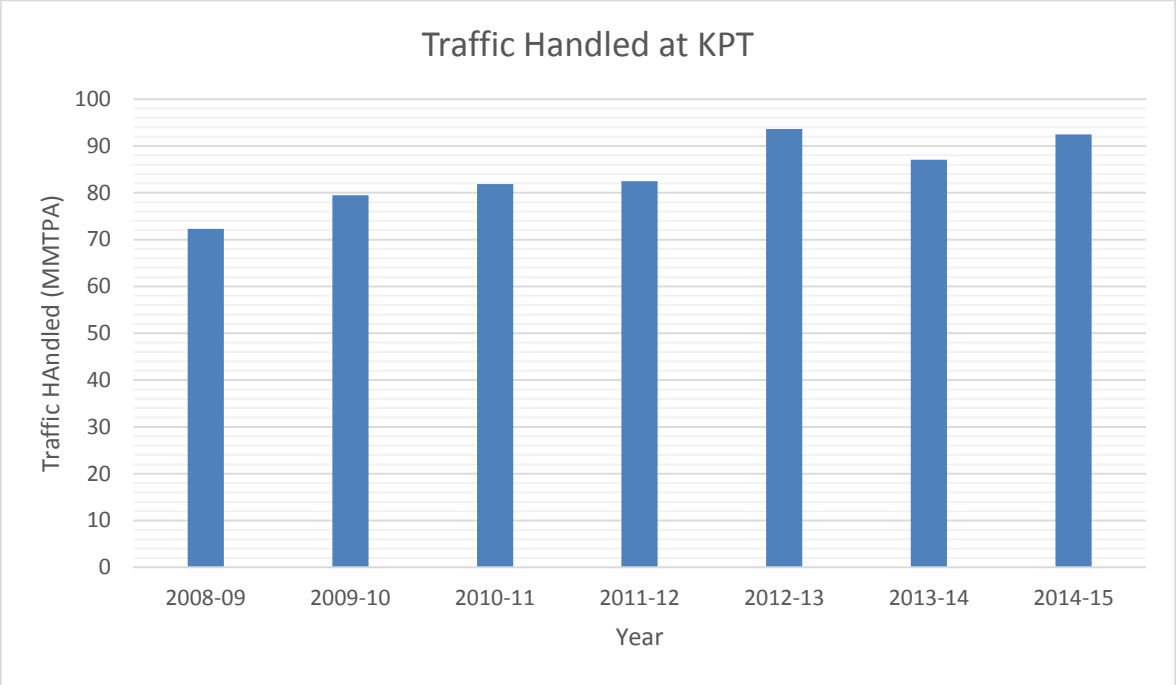
1	Edible Oil	2.10	1.66	(+) 27
2	Bauxite	3.39	0.86	(+) 294
3	Other Food	3.82	3.79	(+) 01

Source: Administrative Report 2014-15

From the above table it may be inferred that 8.67 Lakh Tonne of POL is being handled at Kandla. Also it can be seen that +24 % increase is shown by the POL commodity compared to the previous year.

5.3.2 Traffic Handled at Kandla

Kandla Port has shown buoyant growth in cargo handling in the recent past. The port's share in traffic handled by all major ports has risen steadily over the years. The past traffic profile of the port is shown in **Figure 5.3.** During 2013 -14 & 2014 -15 total traffic handled are 870.05 and 924.97 lakh tones respectively.

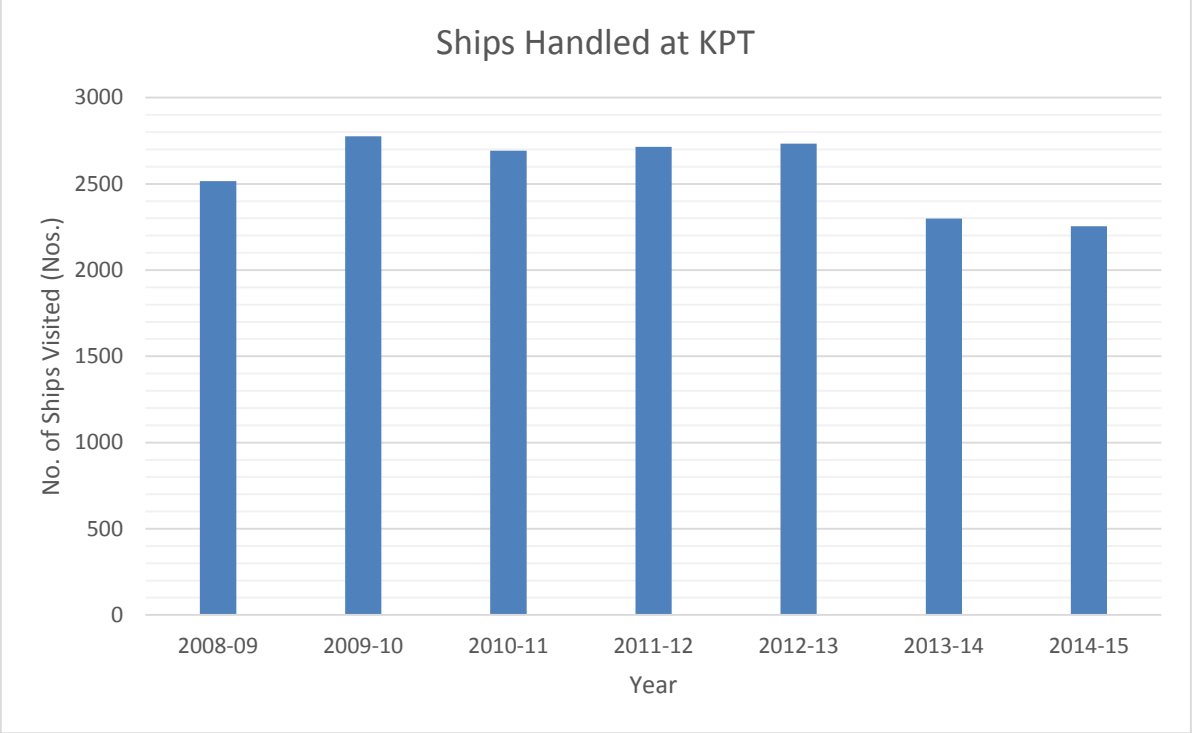


Source: http://www.kandlaport.gov.in/

Figure 5.3 Traffic Profile of Kandla Port

5.3.3 Ships Handled at KPT

Total number of ships visited KPT during the year 2008-2015 are given as shown in **Figure.5.4.** During 2013-14 & 2014-15 a total number of 2299 & 2254 vessels entered the port respectively. Among them more than 75 % visted KPT and remaining 25 % visited Vadinar.



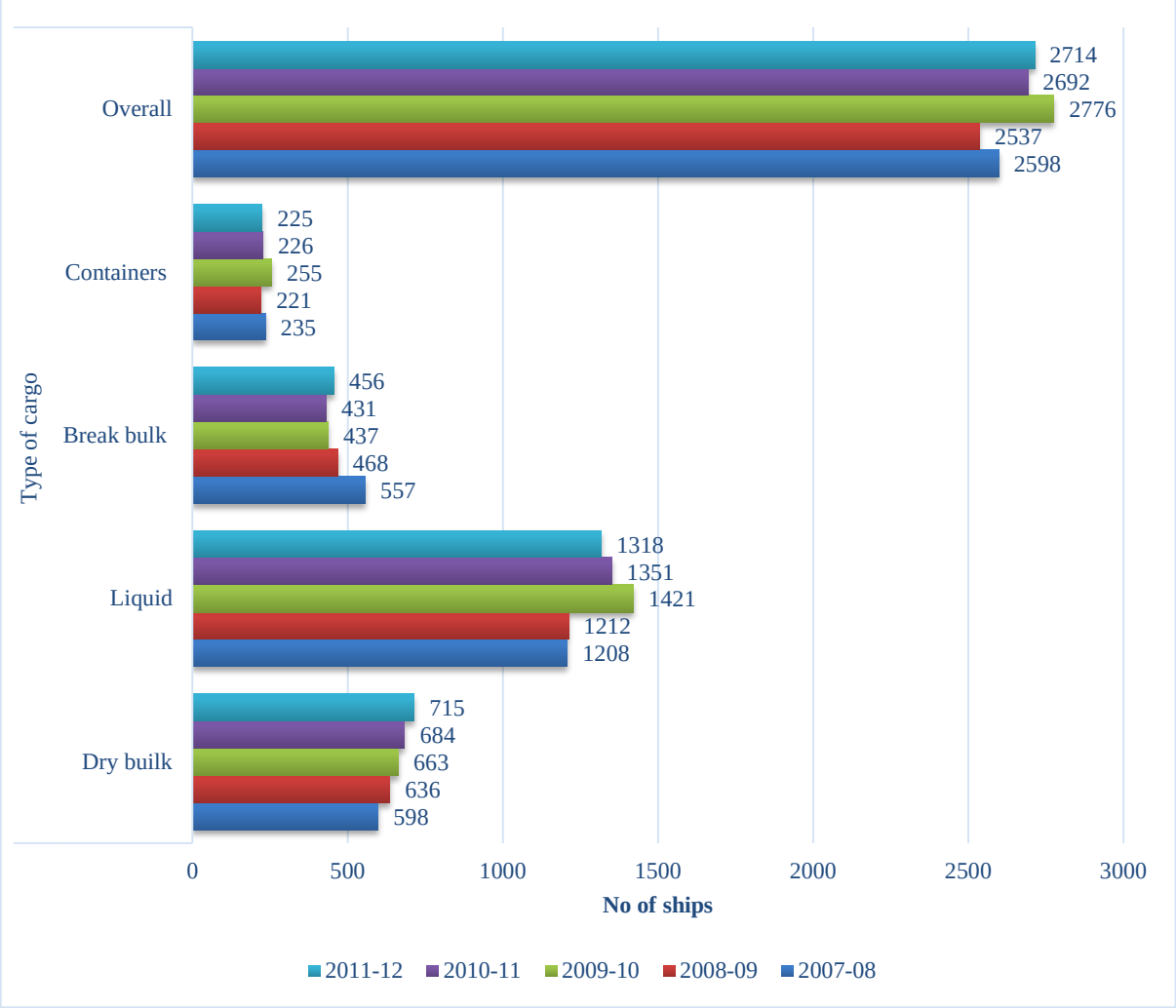
Source: http://www.kandlaport.gov.in/

Figure 5.4 Ships Handled at KPT

Total number of ships handled at KPT commoditywise during the period of 2007 – 2012 is as presented in **Figure 5.5**

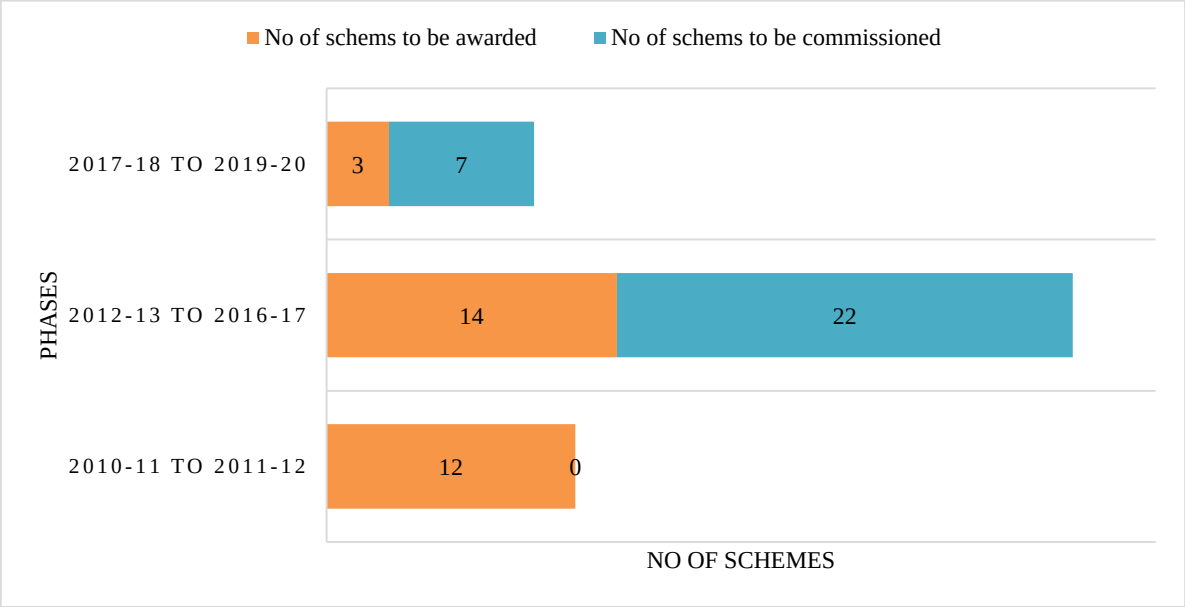
5.4 Future Perspective of Kandla Port

Inorder to increase the productivity and to reduce the turnaround time KPT have a well-defined futre plan. This will inturn demands the capacity addition of the port .The future perspective of Kandla port upto 2020 is shown in **Figure 5.6** and future capacity addition plan up to 2020 is given in **Figure 5.7 .**



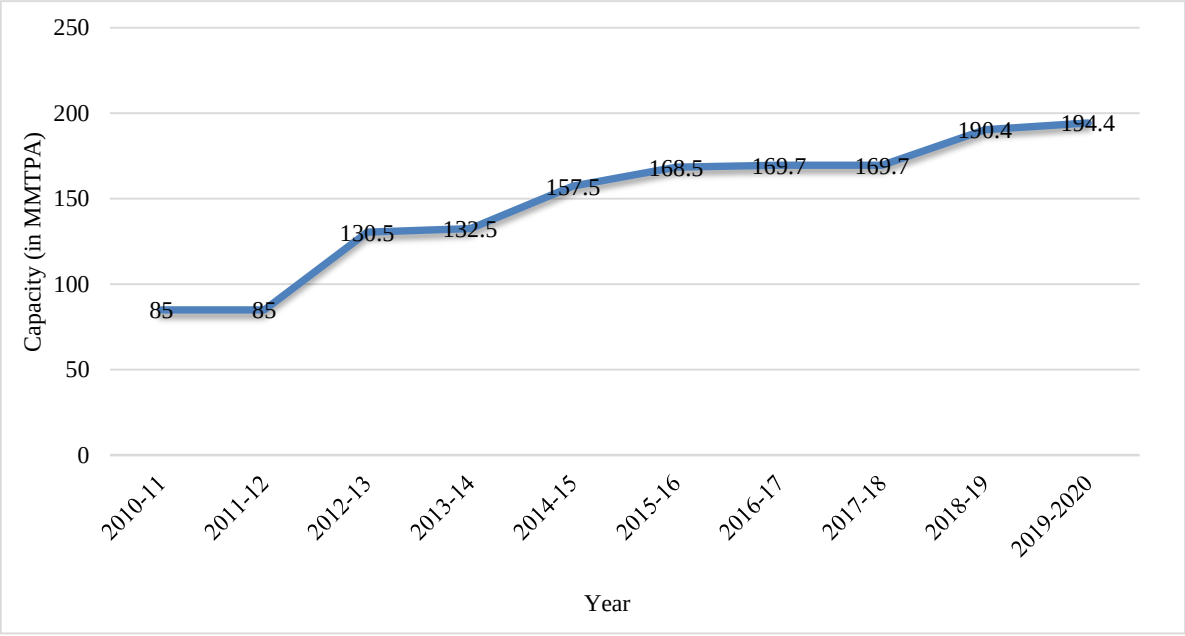
Source: http://www.kandlaport.gov.in/

Figure 5.5 Total number of ships handled at KPT



Source: http://www.kandlaport.gov.in/

Figure 5.6 The future perspective of Kandla port up to 2020



Source: http://www.kandlaport.gov.in/

Figure 5.7 The Future Capacity Addition Plan of Kandla Port upto 2020

Considering the ever increasing traffic at the Port which is also handling the POL, a sound contingency plan should be maintained to cater the threat posed by an uncertain oil spill event.Also it may be noted that Vadinar being the POL hub, extreme caution is required for this area.

6

SENSITIVITY MAPPING

The area within Kandla Port limit as well as its surroundings is rich in both ecological and socioeconomic resources. As per the It is important to identify the areas of highest risk, so that prioritisation of resources is possible. Appendix E3 of NOS-DCP 2015 - Environmental Sensitivity Index Mapping Guidelines, the role of sensitivity mapping is the ” Basis for the definition of priorities for protection, development of response strategy and cleanup operations, considering the oil spill sensitive elements including protected areas, important areas of biodiversity, sensitive ecosystems, critical habitats, endangered resources and key natural resources”. In this context,realising the importance of protection of these resources from the impacts of oil spill, resources within the Kandla Port Limit were assesed, and strategic oil spill sensitivity map was prepared for the port limit. This map provides information on the Shoreline Classification, Biological Resources & Human-use resources as per NOS-DCP guidelines. These three are the most important consideration as, it directly implies to the risk from an oil spill interms of vulnerability, persistance and ease of cleanup. The subsequent sections details are as follows:

- Resources assessment
- Sensitivity Mapping
- Response Considerations

6.1 Resources Assessment

Kandla port located in the northern plank of the GoK, in an area with irregular and dissected configurations, with numerous creeks surrounded by marshy landson the bank of Kandla creek. Located at the juncture of Kathiawar and Saurashtra peninsula, ie., at a transition zone between arid and semi-arid zone having striking characteristics of the arid area.

Figure 6.1. Kandla Port - An Ariel View

At Kandla, the Gulf of Kachchhnarrows down in to a distinct constriction getting itself dividing into a creek system often called the Little Gulf of Kachchh, leading to an an area called Little Rann of Kachchh (LRK) which receives water supply only during the high tide.Hence close to the port area are vast mudflats and many of them are hard flats, which gets submerged only during the spring tide.Among them Sathsaida bet is the largest.Areal view of Kandla port is given as **Figure 6.1**. The top of the picture depicts the Sathsaida bet where as the bottom is the port area with its tank farms and warehouses.

The port limits extends from Navlakhi at the head of GoK to Narara Bet in the southern arm. While from Tuna in the north coast to Kalumbhar Bet in the southern arm. The limit is bounded by Kachchh in the North & North-East, Morbi at East and and Devbhoomi Dwaraka& parts of Jamnagar district towards South & South- East respectively. Along the coast there are numerous coastal villages with people engaded in traditional occupation of fishing hosting large and small fish landing centres. Also being the adjoing land masses of ports, many of them have been developed into port towns and subsequently developed as industrial pockets.

Within the port limit is the most productive and diversified habitats along the West coast of India. The high tidal influx covers vast low lying areas comprising a network of creeks, marshy tidal flats and rocky regions which provide congenial environment to a wide variety of marine biota. The northern shore is predominantly sandy or muddy confronted by numerous shoals and creeks also sustains large stretches of mangroves. There are vast mudflats towards the Mundra coast.There are narrow beaches

along the coast behind the mudflats. Towards the southern limit, shoreline is comprised of numerous islands and inlets which harbour vast areas of mangroves and coral reefs with living corals.

Important organisms includes algae, mangroves, corals, sponges, molluscs, prawns, fishes, reptiles, birds and mammals. In order to protect the rich biodiversity of the Gulf of Kachchh, several intertidal mudflats and coral reefs along its southern shore are declared as Marine National Park and Marine Sanctuary (MNPS). There are also areas decleared as Important Bird and Biodiversity Areas (IBAs) which are large bird flocking areas, Important Coastal and Marine Biodiversity Areas (ICMBAs).

Thus the peculiarities of Kandla Port Area which are to be duly considered with respect to oil spill sensitivity can be briefed as follows:

- An all-weather Major Port with several oil handling facilities including SPMs within port limits
- Dry Weather and Mild Monsoon
- High tidal ranges and strong tidal currents
- Extensive creek system acting as tidal channels
- Valuable ecological resources such as Corals, Mangroves, Mudflats and bird flocking areas around the vast creek system
- Extensive socio-economic activities including Special Economic Zone (SEZ), saltpans, fishing areas and intake points of shore based industries.

Important features of the port area are discussed below which directly has relevance to oil spill sensitivity and its response. Map showing KPT limit with its facilities, adjoining land and marine features of the areas are given as **Figure 6.1** below.

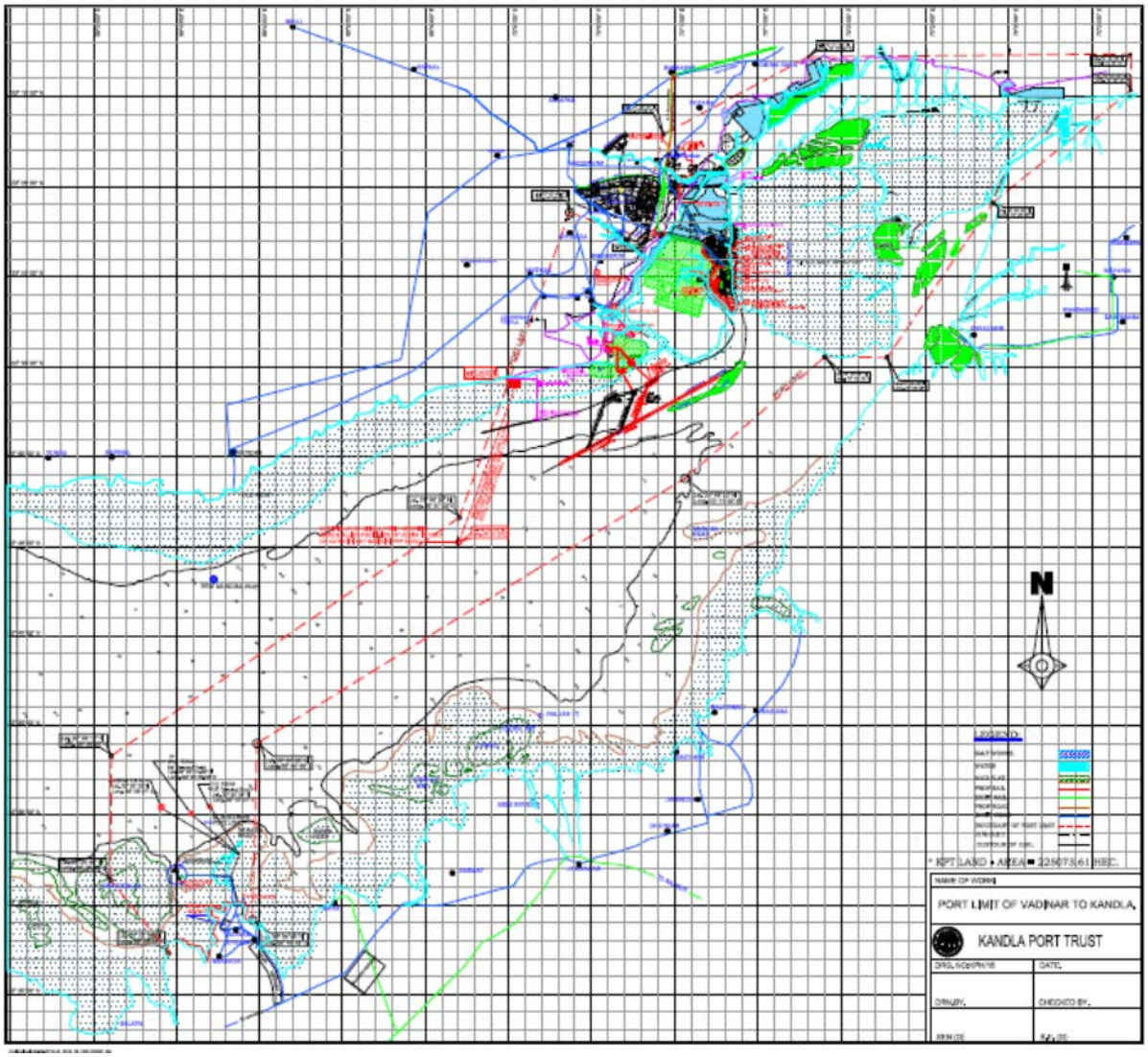


Figure 6.2. KPT Limit

Kandla Port is located inside extensive creek system surrounded by bets including intertidal and high tidal mudflats, while its limit extends to the MNPS where the Vadinar Terminal is located. Because of its geographical extent the area is described as two zones- Kandla Zone for the areas in Northern side of the port limit and Vadinar Zone is located towards the southern side of port limit. The inner portion of Gulf area has more uniform and stabile environmental conditions. Kandla port regionis free from significant wave disturbances while the Vadinar has marine meterological conditions dominated by tides and monsoons. The important features of the port limit is given as **Table 6.1**.

Table 6.1. Important Features of the Port Limit

Sl. No.	Nature of Coast	Coastal Stretch	Length (km)	Major Geomorphic Feature
1	Mix- Wave & Tide dominating Coast	Mundra - Tuna	45	Mudflat, Paleomudflat/ Salt Pan, Ebb Delta/ Sand Ridges
2	Tide Dominating Coast	Tuna - Kandla	15	Mudflat including Hard Mudflats bordering LRK, Paleomudflat/ Salt Pan, Mangrove
3	Tide Dominating Coast	Kandla - Vadinar	60	Islands of southern arm such as Kalumbhar and Narara with Corals, Mangroves & Mudflats.

Source: S.B. Sukla et al, Indian Journal of Geo-sciences, 2010

6.1.1. Kandla Zone

Kandla Zone includes the area near urban settlement Gandhidam towards West abarren land including Sathsaida bet occupying the South-West portion of LRK and adjoining creek system. The areas as a whole have a marshy nature and the high water balance make the area hypersaline. Almost the entireshoreline of Kandla zone is highly corrugated , which are the extension of LRK ie., the fringing Rann with mangroves on banks of the creek. The port area is immedeiately surrounded by barren marshy lands especially in the North & North East. There is growth of mangroves including plantations towards North, North East and South and South West. Also there are extensive salt pans surrounding the port. Settlements are there within the port area as well as towards the West of the port.

Aveage depth of the area at head of Gulf of Kachchh is 20m. Near the Kandla creek the depth reaches 5m or less. The present channel is called the Sogal Channel. And dredging is concentrated for about 2.3km length out of the approach channel 23km. (Coastal Environments- Problems and Perspectives, K.S Jayappa, A.C. Narayana). The width of the channel varies from 200 meters to 1,000 meters. The contour depth along the shipping channel is around 10 meters.

Tides in the Gulf are of mixed, predominantly semidiurnal type with a large diurnal inequality. The high tidal factor can be attributed to the shallow inner regions and narrowing cross-section. Tidal range in the area is around 7m. Tidal expense of along the shores of Kandla increases the Gulf up to 2 km Kandla. There are strong currents up to 3 knots.

Extensive Mudflats

Pagadiyas Fishing

Salt Pans

Figure 6.3. Important Resources of Kandla Zone

6.1.1.1. Creek

The vast creek systems of Kandla functions as tidal channels. The width of the channels are highly variable and there are smaller channels are mud during the low tide and submerges during the high tide. Kandla creek is the major creek of the area. Two large creeks, Sara and Phang creeks join the Kandla creek and act as its tributaries. Besides that, one more creek, Nakti creek also joins the Kandla creek at the confluence of Sara and Phang creeks.

All these creeks bring water from Little Rann into the Kandla creek, which has a fairly good depth and stable banks. The width of the creek channel varies from 200 m in the upstream to 1000 m at the mouth and the depth varies from 8 to 12 m, while the tidal height ranges from 0.83 to 7.2 m, with tidal currents varying from 0.08 to 2 m/s. Kandla and Nakti creeks however retain high salinities (> 35 ppt) even during monsoon.(Vijayalakshmi Nair).Tuna area is having smaller creeks.

6.1.1.2. Mudflats

The port is surrounded by vast mudflats that get inundated during high tide. Sathsaida Bet, Khengriji bet are important of them. They consist of thick deposits of very soft marine clay upto a depth of 12-15m underlain by calcareous sand and highly weathered, weak sedimentary rock formations comprising of compact sand, siltstone, claystone and sandstone (Vijayalakshmi Nair). The mud flats of Kandla port area are important bird flocking sites.

Sat Saida Bet is located opposite to the Kandla Port and falls within the port jurisdiction. It is a vast tidal inundated area mostly made of mudflats and tidal swamps.Small creek systems arising from Kandla creek, Nakti creek and other creek systems brings tidal wate to this Bet and vast area along the fringes gets flushed tidally. Sat Saida has natural but degraded mangroves of around 10sq.km which are mostly present along the banks of the minor tidal creeks and seawater inlets. Sat Saida Bet is surrounded in all the three sides by creek systems creating a conductive environment for the mangrove

plantation. Remoteness of the site and presence of vast mudflats renders Sat Saida Bet an ideal site for mangrove plantation activities. The southwest portion of the Sathsaida bet is known as Flamingo flats which are many times reffered to as shoals. Birds like Pelicans are often found swimming the water near these flats. Tidal Pools are often formed in the mudflats which forms habitat various small marine organisms. Khejranji Bet is another important bets of the area.

6.1.1.3. Salt Marshes

Salt marshes are halophytic areas with grass, shrubs or dwarf wood on alluvial sediments bordering salinewater bodies with tidal fluctuations either tidally. Vast complex of marshland is present lying crisscrossed by innumerous creeks.

6.1.1.4. Salt Pans

Saltpans are unique tide water impounded enclosed system adjacent to creek environment. They are characteristically exposed to a wide range of environmental stress and perturbation which manifest mainly through salinity changes. The distinct feature of the brine ecosystem is its biotic simplicity and stability. saltpans are immature ecosystem as compared with a typical marine system and harbour a high proportion of opportunistic and fugitive species These saltpans serve as feeding grounds for a variety of resident as well as migrant birds. They are small shallow more or less rectanguar man made depressions where saline water accumulated and evaporates leaving salt deposites. There are aquaculture activties occuring in the area were coastal waterbodies used for breeding and rearing of brackish/ saline water in capitivity. Mainly salt pans are used seasonally as aquaculture ponds.

6.1.1.5. Sandy Ridges & Beaches

There are narrow ridges of coarse sand and shell from 0.3m to 1.8m height from the Rann on the Western side of the Nakti Creek. Flamingo flat of dry mud extends up to 4km off the South-Western side of the Sathsaida Bet is an important mudflat of the area. Also the southern side of the Sathsaida bet on the eastern side of the entrance of Kandla creek is fronted by ridges of coarse sand and broken shell. Also between Mundra and Kandla there narrow sandy beaches.

6.1.1.6. Shoals

Sand bars and islands which change their location frequently are present in the area parallel to the entrance of Kandla creek from Jodiya onwards. The important them are as follows:

- Kaladara Shoals - Hard dry sand dries 2.7m south-westward of the Flamingo flat consisting of hard sand
- Kapoor shoal – Parallel to Kaladara with least depth 1.2m consists of ridges and pinnacles of coarse sand , small stones and broken shells

- Mid shoal
- Sangvi Shoals

6.1.2. Vadinar Zone

Vadinar Zone is located in the border of Jamnagar and Devbhoomi Dwaraka Districts. Ecologically important coastal ecosystems or habitats such as corals, mangroves, mudflats, flocking areas of birds are present in the area with peak concentration of including the migrants during the winter season ie., from October to February. The important features in Narara Zone is given as **Figure 6.4**.

Bird flocks near

Mangrove of MNPS Islands

Narara Island

Figure 6.4. Important features in Vadinar Zone

6.1.2.1. Coral Islands

Towards the southern port limit near Vadinar there exists two coral islands Kalumbhar and Narara.

6.1.2.1.1. Kalumbhar Island

Kalumbhar is the largest island in the GoK having some agricultural land, excellent corals and associated reef flora and fauna in North, North-Eastern and Western side of reef. Narara bet also has coral reef associated with it which gets covered at 0.8m fringing Narara Bet and extending about 3.2km North and North East of the island. The seaward edges of all reefs are generally steep (NBDB & MSSRF). They form an integral part of the MNPS. There are mudflats in the centre and sandy beaches towards North and North-West. These mudflats and beaches are intervened by many creeks which supplies tidal water.

6.1.2.1.2. Narara Island

Narara has Hard Coralline Areas, Sandy, Muddy habitats with Mangroves, Sea Weeds and Sea Grass. Northern areas along the reef edge support subtidal corals. Reef flora and fauna in good condition, diversity is good, mangroves in excellent condition. Nesting sites of many birds (NBDB & MSSRF) are present here.The intertidal expanse at Narara Bet varies from 2.5 km to 3.8 km. The main algal zone is however confined to 1.2 to 2.5 km (Vijayalakshimi Nair, 2002).

6.3 Biological Resources

The marine vegetation is highly varied, which includes sand dune vegetation, mangroves, sea grasses, macrophytes and phytoplankton. In general, the northern shore of the Gulf supports very poor algal diversity.

6.3.1. Corals

Most of the Islands in the Souther arm GoK support fringing reefs and the coral patches are also found between Islands. The present day coral growth is patchy rather than reefs as they are supported by intertidal sandstones or wave cut eroded shallow banks. There are also coral pacthes near Off Mundra-Mandvi Coast.

Corals near Vadinar have a moderate live coral population with variety. These corals are already under environmental stress due to heavy sedimentation. The sturdy corals like Goniopora, Porites, Favia and Goniastrea are the common species. Live corals are mainly confined to the lower littoral and shallow subtidal zones (< 8 m). The distribution of live corals along the intertidal reef flat of Kalubhar is closely comparable with that of Narara Bet. Live coral colonies are relatively more especially at the lower reef flat of Kalubhar as compared to Narara Bet. The corals are mainly represented by the genera Favia, Favites, Porites, Goniastrea, Goniopora, Pseudosiderastrea, Cyphastrea, Symphyllia and Turbinaria. The live corals are absent at the reef edge of 50 m width while their coverage increases (90 to 100%) at the reef slope below 1 m depth. These corals are under high environmental stress due to heavy sedimentation which is more prevalent along the eastern side. Hence live corals are mostly confined to the subtidal and the lower reef flat and absent at the upper reef flat.

Figure 6.5. Corals of Narara

Eastern segment of Narara Bet, have as vast mud flat and hence the presence of coral is less. The live corals are restricted to the subtidal regions upto 8 m depth while they are absent beyond 15 m depth due to sandy/ muddy bottom. Kalubhar Island has relatively better live corals diversity as well as density at the lower intertidal and subtidal (< 1 m depth) as compared to Narara Bet in its north and north-west regions. (Vijayalakshmi Nair, 2002).

6.3.2. Mangroves

Kandla zone is dominated by extenssive patches of mangroves predominated by *A. marina* including natural ones and plantation. Other dominant species are A officinalis, Bruguiera parviflora, B gymnorphiza, Rhizophora mucronata, R. apiculata, Ageiceros corniculata and Sonneratia apetata alongwith the associated species of Salicornia brachiata, Sueda fruticosa, Artiplex stocksii and a lichen, Rosella Montana.

A. marina

A officinalis

Bruguiera parviflora

B gymnorphiza

Rhizophora mucronata

Ageiceros corniculata

Figure 6.6. Important Mangrove species within KPT limit

Middle and downstream portions of Kandla Creek was seen with dense patches of mangroves with species of Avicennia marina. The Nakti Creek sustained dense mangrove vegetation at both the banks. The average density of plants was seen between 150-225 plants/100m2 with average height varying 0.5-3.5m in Kandla and Nakti Creek. Also there are natural mangroves in the Tuna region within the jurisdiction. A total plantation of 520 ha has been covered till the end of April 2013 in the Sat Saida Bet, mainly Avicinneia marina and in the Nakti Creek total area of 150 ha. Higher & better vegetation is seen in Tuna mangroves and also they have better regeneration potential.

Narara bet harbours a dense mangrove forest covering an area of 116.57 ha where as sparse mangroves for 135.55 ha along the eastern and western side. Avicennia marina is the dominant species having a height between 0.5 to 2m. About 0.5 km2 area of Narara Bet was afforested with A. marina by the MNPs Authorities. About 6 species of mangroves and 4 associated species are recorded at Narara Bet. Salvadora persica, Salicornia brachiata and Suaeda fruticosa are occasionally seen along high saline zones at the supralittoral and nearby saltpans. (Vijayalakshmi Nair, 2002).

There are natural formation of open scrubby type, with isolated and discontinuous distribution from Kandla- Navlakhi.

6.3.3. Sand dune flora

Seashores of the port limit mainly hosts shrubby and herbaceous vegetation. Most of the plants on the shore are prostrate and xeromorphic in nature, e.g. Euphorbia caudicifolia, E. nerifolia, Aloevera sp, Ephedra foliata, Urochodra setulosa, Sporobolus maderaspatenus, Eragrostis unioloides, Calotropis procera, Fimbristylis sp, Indigofera sp and Ipomoea sp. and Launea sarmentosa. The vegetation becomes gradually stable at a distance away from the tidemark with the stabilization of the soil.

6.3.4. Marine Algae

Marine algal species within the port limit are mainly found in the Narara and Khalumbhar Islands. Most common among them are Ulva fasciata, U. reticulata,Enteromorpha intenstinalis, Dictyota sp, Hypnea

musciformis, Sargassum tennerimum, S. ilicifolium, Gracilaria corticata, Cystocera sp, Padina tetrastomatica,Corallina sp, Laurencia sp, Caulerpa racemosa, C. peltata, Bryopsis sp, Turbinariasp, Ectocarpus sp, Acanthophora sp, Chondria sp, and Codium sp. The Narara reef flat immediately behind the reef ridge upto 1 km from the low tide level supports diverse and abundant algal flora.. Extensive intertidal mudflats at the upper zone are dominated by filamentous algae like Enteromorpha clathrata, L. mujuscula and Polysiphonia platycarpa. Ulva lactuca and E. clathrata are commonly associated with mangroves at the upper intertidal area. The salt pans and water pools in the saline bank regions are also dominated by E. clathrata.The main channel with silt/ clay bottom does not sustain significant populations of marine algae (Vijayalakshmi Nair, 2002).

The open mudflats at Narara Bet are covered with algae like Enteromorpha, Ulva, Lyngbya and Polysiphonia. The upper sandy shore and mangrove areas are associated with Enteromorpha and Ulva. Lyngbya, Caulerpa cladophota, Ulva cystoseira, Dictyota, Hydroclathrus, Padina, Sargassum, Acanthopora, Amphiroa, Champia, Centroceros, Gracilaria, Hypnea and Polysiphonia are common. Padina and Gracilaria are most dominant (50-70%) at the lower reef flat.

The intertidal segments of Kalumbhar harbour 47 species of marine algae and three species of seagrasses. The reef areas are dominated by Digenia, Gracilaria, Padina, Hydroclathrus, Ulva and Hypnea. The open mudflats and sandy regions at the upper intertidal zone are represented by Enteromorpha, Ulva, Lyngbya and Polysiphonia. (Vijayalakshmi Nair, 2002).

6.3.5. Sea Grasses

Seagrasses such as Halophila ovata and Halodule uninervis are common in patches on sandy regions of the reef. Halophila beccarii occasionally occur at the mudflat along the water channels of Narara Reef (Vijayalakshmi Nair, 2002). Seagrass species exist in the subtidal regions. Two Halophila species exist off Kalubhar The sandy region of the reef flat supports the growth of seagrasses like Halophila and Halodule(Vijayalakshmi Nair, 2002).

6.3.6. Terrestrial Mammals

Eleven species of mammals were recorded in the study area of KPT (Integrate EIA, KPT, 2013). But they have no direct relation with water other than frequenting water for water or food. There are namely Pteropus gigantus, Presbytis entellus entellus, Canis pallipes, Canis aures aures, Canis bengalensis, Herpestes auropunctatus, Felis silvestris ornata, Sus scrofa cristatus, Funambulus pennanti, Rattus rattus, Gazella bennetti.

Sus scrofa cristatus(Indian Wild Boar)

Gazalle benetti (Indian Gazalle)

Presbytis entellus entellus (Common Langur)

Indian Flying Fox

Figure 6.7. Some Mammals in the areas adjoining KPT Limit

6.3.7. Reptiles

Six species of reptiles were reported from the area. Out of these two were of under the lizard category and rests 04 were snakes. *Mabuya macularis, Eryx johni, Ptyas mucosus, Sphalerosophis diadema, Cytrodactylus kachhensis, Hemidactylus leschenaulti* are them.

Rana cyanophlyctis

Mabuya macularis

Eryx johni(Indian Sand Boa)

Figure 6.8. Major Amphibians & Reptails of KPT Area

6.3.8. Amphibians

Two species of amphibians were also recorded Rana cyanophlyctis & Bufo melanostictus

6.3.9. Zooplankton

The inner Gulf sustained a higher rate of zooplankton production. The composition was fairly diverse and consisted mainly of cope pods and decapods. (Bio Resource Status of Selected Coastal Regions). As per recent EIA studies including copepoda, Decapoda, Lamellibranchiata, Lucifer, Mysids, Polychaete, Stamatopod larva with an average density of 250 no./l is present in the waters around Kandla Port Area.(Integrated EIA Study, KPT Area, 2013). Fish eggs are rarely represented. Fish larval population have been recorded more during monsoon.

6.3.10. Benthos

Benthic macro fauna includes Amphipodes, Bivalves, Porifers, Gastropoda, Oligochaete. In Kandla the most common groups are polychaetes, amphipods, crabs and mysids while in Nakti Fish larvae, brachyurans, macrurans, insects are commonm. Subtidal macro benthos include Polychaetes, brachyurans & insects. Meio Benthos includes Gastrotrichs, Happacticoidea, Nematoda, Tubellaria havving around 500nos/10cm2.

6.3.11. Mollusca

11 species of mollusca, seven species of shrimps (Prawn) Arthopodes and seven species of annelids were recorded. Larvae of P.merguiensis, M.kutchensis, M.brevicornis and M.monoceros are the penaeid species available in the region. M. affins is dominant during t he monsson.

6.3.12. Turtles

In the Gulf, the reptiles are mainly represented by marine turtles Chelonia mydas and Lepidochelys olivacea. They have been known to breed and spawn on the sandy beaches along the coast as well as on the Islands particularly along the southern Gulf between Okha and Okha Madhi and Vadinar-Sikka coast as well as on the Islands within the MNP and MS (Vijayalakshmi Nair, 2002). Goose reef have sand dunes. But active sites are less in this area which can be attributed to the presence of mudflats. They are not present in the Kalumbhat area, as there are no potential nesting site for their breeding exists here. Sandy beaches here are located close to marshes or mudflats and hence are not so easily approached these species. Hence presently there exist no potential breeding site.

6.3.13. Marine Mammals

Marine mammals are chiefly represented by dolphin (Dolphinusdelphia) and Dugong (Dugong dugon) in the Gulf especially along the Jamnagar coast. Common dolphins, Bottle-nosed dolphins and Pacific hump-back dolphins are the important dolphin species often found in the GoK area. A highly isolated breeding population of Dugongs exists in the Marine National Park, GoK. It is the only population remaining in western India. Whale Sharks and Porpoises also frequent the area.

Dolphin

Dugong

Whale Shark

Porpoise

Figure 6.9. Marine Mammals

Dolphins and Porpoises are found in the shallow water near Narara reefs of the area (H.S Singh, 2003). Balaenoptera borealis was repoted from Salaya by Khacher (1998). Dolphins, Porpoises and Dugongs also exists in the area (H.S Singh, 2003). Rich sea grass beds off Kalubhar islands indicate high prospects of the presence of the rare and endangered species Dugong dugon, the sea cow(Vijayalakshmi Nair, 2002).

6.3.14. Fishes

The common species in Kandla creek are Chiloscyllium arabicum, Lepturacanthus savala, Ilisha metastoma, Otolithoides biauritus, Pampus argenteus, Harpadon nehereus, Parapenaeopsis hardwickii and Exopalaemon styliferus. The common species are Pampus argenteus, Polynemus tetradactylus and Harpodon nehereus. Nakti Creek hosts Lagocephalus sp., Escualosa thoracata, Ilisha sp. Prawns such as Parapenaeopsis stylifera, Exopalaemon styliferus,Metapenaeus sp. Are available in the Nakti creek.

Vadinar- Salaya accounts for about 4-19% of the total landings of Jamnagar district. Fish landings at Salaya indicate a fluctuating trend. Composition of marine fish landing at Salaya during 1990 to 1994 shows the occurrence of 22 groups of fishes. The dominant group found in the area is sciaenids followed by shrimps, mullets, white pomfret, catfish and shark .Total number of fishing crafts at Salaya amounts to 330 and the fishermen population engaged in fishery operations are 1220 (GEC).

6.3.15. Birds

The Gulf area which has many salt pans, Islands and intertidal coastal system with mangroves offers favourable conditions for feeding, breeding and shelter to a variety of birds. Birds find the most congenial environment in the mangrove forests lining the Islands and along the coasts. A large number of migratory species pass through the Gulf and a small population of most species comprising mainly of juveniles and non breeding adults take shelter during summer.

On the whole, 140 species are documented; 85 terrestrial and 55 aquatic. Out of these, 71 are resident species, 44 migrant and another 25 resident migrant. The area is located in the Central Asian Flyway of migratory birds, also a portion of West Asian – East African Flyway.Thousands of waterfowls can

be seen in the salt- pans from October to March. These include flamingos, godwits, sandpipers, plovers, stilts, terns and so forth. Mycteris leucocephala, Sterna acuticauda, Pelecanus crispus, Limnosa limnosa, Numenius arquata are the important birds of the area.

Mycteris leucocephala

Sterna acuticauda

Limnosa limnosa

Numenius arquata

Figure 6.10. Some Birds found in the area within KPT Limit

Though salt pans are the man-made habitats, they are also valuable congregaring for many resident and migratory birds as they provide food such as shrimps for them.

6.4. Human Use Resources

6.4.1. Salt Pan

95% of salt produced in Gujarat State belongs to GoK. The port has allotted approximately 16112 acres of land for manufacture of salt and allied industries connected with the salt manufacturing. There are 16 major lessees having land varying in area from 99 acres to 3890 acres and 25 minor lessees having land admeasuring 10 acres each for the salt works. Near Vadinar there are saltpans of in small area. Salt pans are important bird congregating area as they provide food such as fishes & shrimps. Many times brackish aquaculture ponds are function seasonally associated with salt pans.

Woman at work in the Salt Pan

Birds Congregation in the Salt Pan

Figure 6.11. Salt Pans

6.4.2. Fisheries

No fishing activities are found in the area except using small craft in Kandla Creek area. There is a fishing harbour exists north of the Kandla port. Unlike the other parts of GoK there are no fish ponds functioning in the area. High tidal movements and unusually strong currents make trawling or gill-netting for fish difficult and risky in Kandla creek. Evidently, no large-scale commercial fishing operations are conducted in the area except for minor shore -based hand-net and gill net operations.

The northern areas of Kachchh were found to be the most productive areas and had a dominance of Silver Grunt and Cat Fish species. In Kachchh, the largest fish landings occur at Jakhau (66.2%), while Kandla and Mitha Port account only for 3% of the Kachchh landings.

Figure 6.12. Fishermen

Among the different creeks in the Northern arm, Kandla is the most productive system comparable with Kori , but the production potential decreases interiors. The expansions of Kandla port and increase in saltpans in the mouth of the Gulf of Kachchh have affected the fishery in the region. Thus, negative growth observed in these two talukas (Ecoprofile of Coastal Taluks of Gulf of Kachchh, GEC, 2014). During monsoon period, penaeid larvae are abundant in the inner creeks leading to a flourishing backwater fishery off Surajbari.

Fishery is prawns exists only on the area of 1200sq.km on the southern border ie., in the head of GoK, where the bottom is muddy. The prawn fishery is more seasonal. (Marine Fisheries Research and Management, V.S Pillai and N. G. Menon, CMFRI). The details of prawn fishery in Kandla and Tuna is given as **Table 6.2**.

Table 6.2. Details on Prawn Fishery at Kandla and Tuna

Sl. No:	Location	Season	Nature of Bottom	Prawn Species
1	Kandla	May-February	Muddy	M. monoceros 64.7 % ; P. indicus 20.8 % ; Leander sp. 9.3% ; M. brevicornis 4.2%; P. sculptilis, P. stylifera and Palaeomon sp. 2.0%
2	Tuna-Sangdha	September-February	Muddy	M. monocarps 47.5% ; P. indicus15.6% ; M. brevicornis 15.3% ; Leander sp. 14.5% ; P. sculptilis 5.8% ; P. canalicu-latus, P. stylifera and Palaeomon sp. 1.3%.

Source: http://eprints.cmfri.org.in/1654/1/Ramamurthy_146-148.pdf

The three districts around GoKnamely Rajkot (now Morbi), Jamnagar (now Jamnagar and Devbhoomi Dwararka) and Kachchh have 1, 23 and 51fishing centres respectively. The collective contribution ofGoKis about 22 % to the total production of Gujarat State. The major share is Jamnagar(now Jamnagar and DevbhoomiDwaraka) and Kachchh districts with very low landings from Rajkot (now Morbi). Around 200 species of fish were recorded from the Gulf. Sciaenids predominated the area.

Common fishes in the area were pomfrets, Bombay duck, shrimps, ribbon fish, clupeids, shark and catfish. Details of fishermen population in the three (now four) districts indicate that active fishermen are more in Kachchh as compared to Jamnagar and Rajkot districts. The number of trawlers are more at Jamnagar while the gill netters are more at Kachchh district.

6.4.3. Kandla & Tuna SEZ

Two SEZ have been proposed with in the KPT limit one at Kandla (3600 ha.) and another at Tuna (1400 ha) is to be located southwest of Kandla port at a distance of around 2 km from its periphery.

Land cover in the terrain is mostly sparse halophytic vegetation like scrubby mangroves, creek water and salt encrus ted land mass. Creek water occupies a major area. Also there are mud flats in the south and east. Kandla area is having mangroves such as A. marina, Suaeda, Salicornia And Salvadora. Salt pans and mudflats are more in the Kandla area compared to the Tuna area (Final Environemntal Impact Assesment Report for Port Based Multiproduct SEZ at Kandla Port , Part I Terrestrial EIA & EMP, Gujarat Institute of Desert Ecology March , 2015).

Figure 6.13. Location of Kandla and Tuna SEZs*

Note: Boundaries are indicative only

6.4.4. Intake Points of Industries

Vadinar and Mundra are the important industrial areas within the port limit. There are intake points of ESSAR at Vadinar and CGPL, Mundra.

6.4.5. Protected Ecosystems

Being these areas are of high biodiversity and as well as vulnerability, southern area of GoK have been declared as Ecologically Sensitive Areas (ESA) and categorized as under / as protected areas under Marine National Park and Sanctuary. Marine National Park and Marine Sanctuary (**Figure 7.11**) are situated along the southern shore of the Gulf from Okha (22°30'N, 69°00'E) eastwards to the vicinity of Khijadia (22°30'N, 70°40'E).

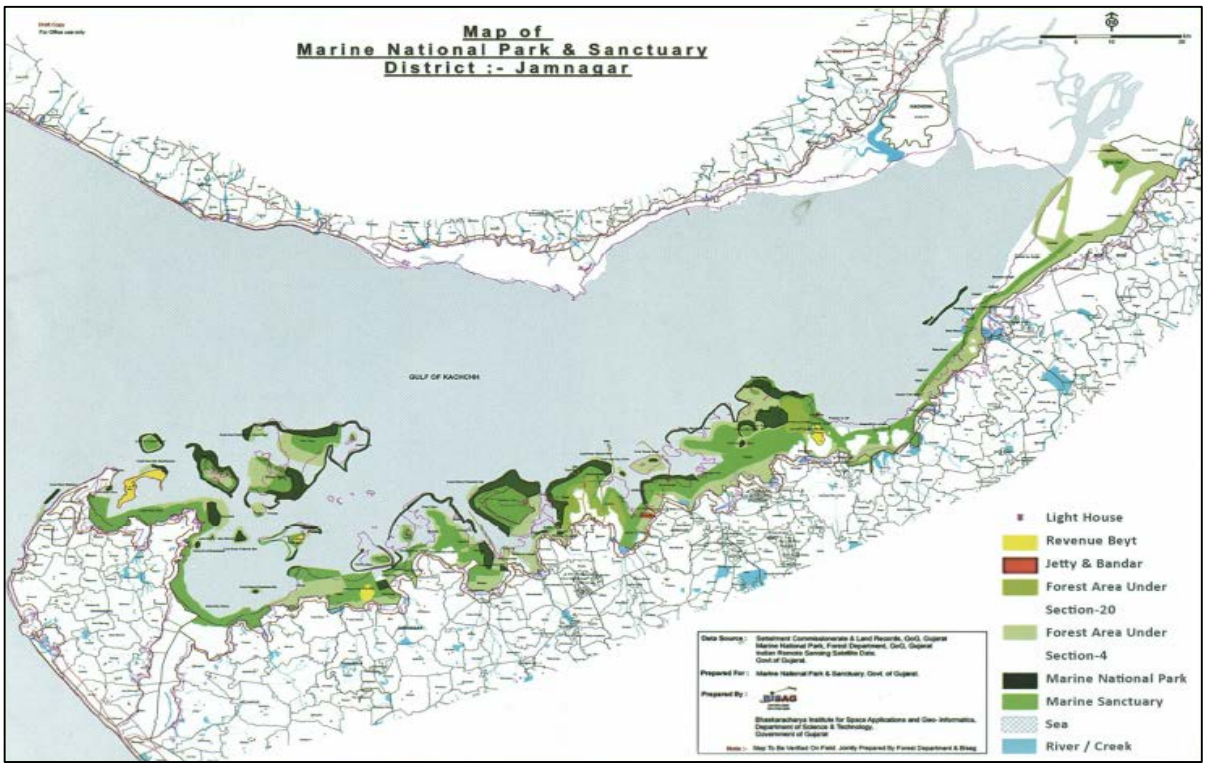


Figure 6.14. Marine National Park and Sanctuary

It is India's first Marine Protected Area declared by Govt. of Gujarat in 1980. This include 42 islands and a complex of fringing reefs backed by mudflats and sand flats, coastal salt marsh and mangrove forests, sand and rocky beaches which support a great diversity of fauna and flora. The area also has many islands fringing with corals and mangroves which provide a disturbance free habitats for many species of nesting birds. Besides these islands there are a number of wavecuts, eroded shallow banks like the Narara & Kalumbhar within the Kandla Port Limit near Vadinar.

6.5. Environmental Sensitivity Mapping

Sensitivity mapping is an essental step of oil spill prepardness. Environmental Sensitivity Index (ESI) map will serve as a basis for combating oil spill and help in the identification of resources at immediate risk and thus end up in prioritization of resources. This colour coded map accommodates the vulnerability of the shoreline to oil spill based on the Environmental Sensitivity Index (ESI) ranging between 1-10, where the each colour stands for a single ESI. In this map the shoreline and intertidal zones are ranked based on their vulnerability to oil spill, which is determined by shoreline type, exposure to wave & tides and its biodiversity. ESI maps gives emphasis to areas of threatened and endangered species, high concentration, sensitive life stages, protected areas and socio-economic resources that may be impacted by oiling, response or clean-up.

While preparation of the sensitivity map vast secondary data was utilised including those on Ecology, Hydrography, Coastal Geomorphology, Wetland, Landuse.

6.5.1. Environmental Sensitivity Index

Environemntal Sensitivity Index (ESI) is an international scheme used for classifying as well as ranking the shoreline based on their sensitivity towards oil spill. This methodology was prepared by NOAA further promugulated jointly by IMO, IPIECA, & OGP. NOS-DCP-2015 put forwards the same scheme for the preparation oil spill contingency plan at various levels in the Indian context.

ESI index is based on three parameters including:

- Shoreline Classification, which takes sensitivity of the shore habitats, natural persistence of oil and ease of cleanup.
- Biological Resources including oil-sensitive animals, rare plants
- Human-Use Resources that have sensitivity because of their typical use, such as beaches, parks and marine sanctuaries, water intakes, and archaeological sites.

While preparing the ESI maps, the sensitivity of the shore is represented by color-codes along the coast while, biological and human-use resources are represented by symbols.

Areas requireing special consideration include,

- Presence of protected areas such as National Park, Sanctuaries
- Threatened species
- Birding Areas and other animal frequenting areas.
- Estuaries, Mangroves & Fish Breeding Areas
- Tourist Areas including Recreational & Heritage Areas
- Industrial Water Intake Points
- Resource Extraction such as Salt Pans and Aquaculture ponds
- Multi-features - especially in the 42 island with variable features within a short distance

6.5.1.1. Shoreline Classification

- Depends on Relative exposure to wave and tidal energy
- Shoreline Slope
- Substrate Type and biological productivity

6.5.1.2. Biological Resources

Marine, coastal, and aquatic/wetlandspecies may be present over a very large geographic area. Maps or data indicating the entire distribution of a large number of species potentially located in an area may not be very helpful to responders setting protection priorities. Therefore, it is important to identify the types of species that tend to be vulnerable to spilled oil,the most sensitive life-stages, and in which habitats these life-stages occur, as habitat type plays an important role in the persistence of oil and species exposure to oil. Biological resources are most at risk when :

- Large numbers of individuals are concentrated in a relatively small area;
- Marine or aquatic species come ashore during special life stages or activities, such as nesting, birthing, resting, or molting;
- Early life stages or important reproductive activities occur in sheltered, near shore environments where oil tends to accumulate;
- Limited suitable habitat exists within an area for specific life stages or along critical
- critical migratory routes;
- Specific areas are known to be vital sources for seed or propagation;
- A species is threatened, endangered, or rare; or
- A significant percentage of the population is likely to be exposed to oil

6.5.1.3. Human- Use Resource

There are mainly four types of four major components.

- High-use recreational areas and shoreline access locations
- Management Areas
- Resource Extraction area Salts and Minerals
- Archeological & historical cultural Resources

The ESI classification which consider the ecological sensitivity alone is given as **Table 6.3.**

Table 6.3. ESI Classification as per NOAA Guidelines

Sl. No	Shoreline Type	Rank	Colour Scheme
1	Exposed, Impermeable Vertical Substrates	1	
2	Exposed, Impermeable Substrates, Non-Vertical	2	
3	Semi-Permeable Substrate, Low Potential for Oil Penetration and Burial; infauna present but not usually abundant	3	
4	Medium Permeability, Moderate Potential for Oil Penetration and Burial; in fauna present but not usually abundant	4	
5	Medium-to-High Permeability, High Potential for Oil Penetration and Burial; infauna present but not usually abundant	5	
6	High Permeability, High Potential for Oil Penetration and Burial	6	
7	Exposed, Flat, Permeable Substrate; in fauna usually abundant	7	
8	Sheltered Impermeable Substrate, Hard; epibiota usually abundant	8	
9	Sheltered, Flat, Semi-Permeable Substrate, Soft; in fauna usually abundant	9	
10	Vegetated Emergent Wetlands	10	

(Source: NOAA)

This ranking of the mapped resources is in order to locate the most sensitive sites and establish priorities for protection and also to work out efficient clean-up strategies. The ESI ranking reflects the general sensitivity of shoreline habitats for ex., all fine-grained sand eaches have an ESI = 3. Tidal flats are ranked high on the ESI scale because of their high benthic productivity and importance as feeding areas for fish and birds. The presence of other sensitive resources on a specific shoreline segment, such as turtle nesting on a fine-grained sand beach, does not affect the ESI ranking. The seasonal presence of other resources on a shoreline segment is addressed by mapping biological and human-use resources.(NOAA). Color scheme are used for representing the shoreline habitats ranking while sensitive biological receptors and human use resources are given as standard symbols and are given as **Figure 6.15.**.

Figure 6.15. ESI symbols for Ecological and Socio-economic Resources

6.6. Environmental Sensitivity of KPT Limit

KPT and its limir are part of the highly sensitive region of Gulf of Kachchh which is a part of Indian coastline already ear marked as Environmental Sensitivity Areas (ESAs) realising the importance of

their protection. ESA are defined as areas of coastal zone which need special protection and play an important role in maintaining the functional integrity of the coastal and marine environment. The following ecosystems were shortlisted as ESAs :

Mangroves, Coral reefs, Mud flats, Lagoons, Beaches, Estuaries, Sea grass beds, Sand dunes , Creeks Sea weed beds, Littoral forests, Salt marshes, Mud banks , Rocky shores by various studies conduted on Coastal Management *(ICMAM).* Also ESAs have been evaluated and risk level against oil spill have been assigned by ICG *(Ecosensitive Areas, ICG).* In the case GoK all these habitats are present on the shoreline and islands blending to one resulting in a highly diverse ecosystem. These areas of extreme ecological significance and declared as Marine National Park and Sanctuary (MNPS). The area within Kandla Port limit have been studied to identify resources at risk were identified after studying the nature of the resources both ecological and socio-economic, shoreline characteristic, ecological interrelationship etc. for determining their sensitivity towards oil spill.

Since the area has almost equal distribution of ecological and socio economic resources, the determination of sensitivity parameters and resource prioritisation is an integral part of sensitivity mapping. The following section describes the sensitivity parameters used for preparation of oil spill sensitivty map,the shoreline characteristics, Marine- Meterological Condition and the sensitivity of receptors.

6.6.1. Sensitivity Parameters

Sensitivity of the shoreline was determined based on the ecological and socio- economic importance vulnerability of the specific geographic region.This result will be useful for oil spill risk assesment, modelling and selection of response and clean up operations. It is assumed that the area is biologically stable at present and the shipping canal which is undergoing periodic dreadging is already having lesser sensitivity for the floating species over the area have been already shifted to better premises.Sensitivity parameters considered for identification of vulnerable sub groups and group features around Kandla are given as **Table 6.4.**

Table 6.4. Sensitivity Parameters for determine ESI

Sl. No	Sensitivity Parameter	Sub Groups	Group Features
1	Shoreline Classification	Land Forms	Creeks, Bays, Estuary, Beaches, Swamps, Tidal Flats.
		Geological	Grain Size, Geomorphology, Slope
		Hydrological	Tides, Waves, Currents
2	Ecological	Sensitive Species	Birds, Corals, Mangrove, Turtles
		Wild Life Areas	High no. of individuals along the area, especially congregation, breeding, nesting, feeding, resting sites.
3	Socio-economic	Commercial	Salt Pans, Fishing Areas, Agriculture
		Recreational	Beaches

		Historical	Onshore, Underwater sites
		Industrial	Intake Points
		Strategic	Restricted Entry Areas, Frontiers

(Source: Data Analysis)

Gulf of Kachchh has a very dynamic ecosystem. They have both abiotic and biotic recepters. Abiotic receptors include the water, soil, air of the area while biotic resources includes all the living components. The abiotic receptors influence to biotic ones through their interaction in food chain , respiratory systems etc. Their sensitivty is described in the sections below. Final aim of oil spill response should be after considering their interreations and solving the issue holistically.

Impacts of oil spill to biotic as well as abiotic environment were identified considering the features of GoK. The effects of oil on Ecological and Socio economic resources are discussed. There are a number of ecological effects from oil spill. These includes physical and chemical changes to habitats as well as organisms. There effects mainly depend on the physical contamination of oil in to water, sea bed and land. The magnitude and persistence of oil contamination in the intertidal area depends greatly on the energy of waves, shoreline/ sediment characteristics (IMO).

Oil spill into an aquatic environment including tidally influenced adjoining land, will harm organisms that live on or around the water surface and those that live under water. Spilled oil can also damage parts of the food chain, including human food resources. Oil spills will affect, contaminate and may even kill the organisms like algae, plants, invertebrates, fish, amphibians and reptiles, birds, and mammals. These species and communities are at risk of smothering, hydrocarbon toxicity, hypothermia, and chronic long-term effects that may result from the physical and chemical properties of the spilled oil. Severity of the impact depends on a variety of factors such characteristics of oil, natural conditions, such as water temperature, weather etc., and sensitivity of aquatic habitats to oil spills.

Both petroleum and non-petroleum oil can affect the environment surrounding during an oil spill. All types of oils have chemical and physical properties that produce similar adverse effects on the environment. In some cases, non-petroleum oil spills can produce more harmful effects than petroleum oil spills. Some toxic substances in an oil spill may evaporate quickly and hence plants, animal and human exposure to the most toxic substances are reduced with time. It is usually limited to the initial spill area. Although some organisms may be seriously injured or killed very soon after contact with the oil in a spill, non-lethal toxic effects can be often long lasting. The area where an organism spends most of its time in open water, near coastal areas or on the shoreline will determine the effects an oil spill is likely to have on that organism. Hence aquatic life on reefs and shorelines is at higher risk of being

smothered by oil that washes ashore. It can also be poisoned slowly by long-term exposure to oil trapped in shallow water or on beaches.

For higher organsims the primary effects of oil contamination include loss of the insulative capability of feathers or fur which can lead to hypothermia, dehydration resulting from lack of uncontaminated water, stomach and intestinal disorders and destruction of red blood cells resulting from ingestion of oil, pneumonia resulting from inhalation of oil vapors, skin and eye irritation from direct contact with oil and impaired reproduction. Fauna can also suffer during capture and rehabilitation operations, potential ailments include infectious diseases, skin problems, joint swellings, and lesions. In addition, eggs and juveniles are particularly susceptible to contamination from oil. Even a very small quantity of oil on bird eggs may result in the death of embryos. From a purely economic perspective, the economic loss to the tourism and fishing industries alone from a major oil spill within GoK would be massive. The loss can be divided into on three broad areas like Loss of jobs and wages, Loss of fishing & allied activities in the closure period of ports, Loss on tourism.

Considering the case of Kandla- Vadianr Zones, high tidal ranges and strong tidal streams escalate the impacts of oil spill. Extreme tidal ranges and extensive creek system will guide oil landward during high tide while there a few outflows at its mouth will expel oil offshore. These creeks accomplish the connection during the monsson with Little Ran of Kachch through epherimal rivers emtying in to GoK during rain. Hence there is also a chance that they get trapped into the high tidal flats during this time.Thus making the escape of difficult.

6.6.1.1. Shoreline Characteristics

The geomorphology of Kandla Port Limit, suggest the area with in and adjoining the KPT limit can be divided in to three. They are the portions of the Western flank between Kori Creek to Mundra with extensive mudflats, they are highly disected and the important resource are the mangroves. The coast is tide dominated having a mximum width of 2km. Eastern Flank between Mundra to Kandla is having narrow beaches, wide mudflats and salt marshes. They are having narrow littoral zone. This area is characterised by very low wave energy but high currents inside the channel.

The presence of bars cause later high tides and longer low tides. Between Hansthal and Kandla creek there lies the vast sathsaida bet. Kandla creek futher bifrucates into branches, Sara & Phang. The flood streams in the Kandla creek are 3 to 5 knots. In the Western approach to the Kandla and Hansthal creeks the tidal streams in general are extremely irregular and appear to be gently influenced by a strong wind from any quarter. They gradually increase from outer to inner areas from 2.5 knots up to 4 -7 knots. (Source:Comprehensive Environmental Impact Assesment Report for Port Based MultiProduct Based SEZ at Kandla by Kandla Port Trust). Vadinar area, which is a part of the Navlakhi - Dwaraka

segment of the Saurashtra Coast. They are having numerous offshore islands which are having corals both reef and live. The shoreline is having a very low gradient resulting wider impact of oil during a spill. Wave energy is slightly higher compared to that of Kandla Port Area. The details on the same are given as **Table 6.5**.

Table 6.5. Geomorphology of Kandla Port Area

Sl. No.	Segments	Alignment	Feature	Sediment	Substrate	Intertidal Zone	Processes
Gulf of Kachchh							
1	Western Flank-Kori Creek to Mundra	NW-SE	Dissected, facing Arabian sea, Extensive mud flats known as Thars, Mangroves, Small sluggish seasonal streams, creeks	Muddy	Muddy Alluvium and Soft Rocks	Maximum width 2km	Tides dominant shoreline currents, moderate wave energy, low currents.
2	Eastern Flank from Mundra to Kandla	E-W	Comparatively less dissected with narrow beaches and wide mudflats & salt wastes	Sand, Silty		Narrow littoral zone	Tide dominant shoreline currents, low wave energy, high tides, turbid and saline to hypo saline water
Saurashtra Coast							
1	Navlakhi - Dwaraka	E-W	Highly crenulated coastline with extensive mudflats, offshore islands, rocky platform ,narrow beaches, coral reefs etc.,prominent drainage	Sandy, Silty as well as Muddy	Coralline, limestone and Deccan trap basalt	Width of 5-10km, low gradient with calcareous sediment	Long shore currents low wave energy, high tidal energy moderate tides 3 to 5m water turbid and hypo saline

Source: Gujarat Ecology Society

6.6.1.2. Marine- Meteorological Condition

The port is located in the tropical dry climate. The winter temperatures vary between 10 to 25 deg C and between 25 to 44 deg C during winter. Dry weather, short spell and scanty monsoon is the most important feature of the area. Tides are highly irregular and is influenced by strong winds. Mean spring tide is 6.66m. Thus the port has high tidal impact, low water depth and high rate of evaporation. Water

tempaerature varies between 20 to 28 deg C and surface tidal pools may reach a temperature of 32 deg C.

6.6.1.3. Sensitivity of Ecological and Socio-economic Receptors

6.6.1.3.1. Abiotic Receptors

Aquatic environments are made up of complex interrelations between plant and animal species and their physical environment.. The nature, extent, depth and mobility of the water body determine the sensitivity of aquatic habitats. GoK and the adjoining coastal area where different types of aquatic habitats such as creek, bays, beaches, reefs and mudflats coexist, show sensitivities to the harmful effects of oil contamination and varied abilities to recuperate from oil spills. Harm to the physical environment will often lead to harm for one or more species in a food chain, which may lead to damage for other species further up the chain through bioaccumulation and biomagnification

Spilled oil immediately begins to move, weather and breaking down, changing its physical and chemical properties. As these processes occur, the oil threatens surface resources as well as a wide range of subsurface aquatic organisms linked in a complex food chain.

In some areas, habitats and populations can recover quickly while in others the recovery from persistent or stranded oil may take years. These detrimental effects are caused by both petroleum and non-petroleum oil.

In the case of open water, fishes have the ability to swim away from a spill by going deeper in the water or further out to sea. Thus they have reduced susceptibility that they get harmed by even a major spill. Other aquatic animals that spent more time closer to shore, such as turtles, seals, and dolphins are at the risk of contamination by oil that washes onto beaches or by consuming oil-contaminated prey. In shallow waters, oil may harm sea grasses and kelp beds, which are either food, shelter or nesting sites by many species. Along with spilled oil, cleanup operations can also threaten different types of aquatic habitats. The sensitivity of different aquatic habitats of the Kandla Port area are enumerated as follows:

Tidal Creeks: A number of tidal creek is the portion of a stream that is affected by ebb and flow of ocean tides, in the case that the subject stream discharges to an ocean, sea or strait. There are unique biota associated with tidal creeks which are specialised to such zones. Creeks may often dry to a muddy channel with little or no flow at low tide.They often have significant depth of water at high tide.

Tidal flats: They are broad, low-tide zones, usually containing rich plant, animal, and bird communities. Deposited oil may seep into the muddy bottoms of these flats, creating potentially harmful effects on the ecology of the area. Vast mudflats infringes the entire coastline of GoK.

Mudflats: Mudflats spreading all along the Gulf, which are very sensitive to oil in comparison to sandy coast, due to their geographical locations. They are found in the areas of high tidal amplitude. Hence an oil spill during high tide can leave serious traces. (Kankra et al)

Marshes and swamp: These two habitats have little water movement and are likely to incur more severe impacts oil spill. In such calm water conditions, the affected habitat will take years to restore.

Other standing water bodies: Salt pans and aquaculture ponds are coastal standing water bodies of GoK, support a variety of fishes and birds. The food chain can be affected by spills in these environments and can reach up to the highest order of ecological pyramid the humans.

Coral reefs: The reefs in and around the islands of MNPS. They are important nurseries for shrimp, fish, and other animals and have ecological value. Coral reefs and the aquatic organisms that live within and around them are at risk from exposure to the toxic substances within oil as well as smothering.

Important Manmade abiotic resources are:

Fishing Industry: Fishing may not be feasible due to oil slick or imposition of fishing bans. Aquaculture facilities may be severely affected by direct oiling or loss of market confidence.

Harbour and Marinas: Functioning of commercial ports and harbours can be disrupted by oil slicks and subsequent cleaning activities. Boats in marinas are also have to be cleaned.

Industrial Sea Water Intakes: Sea water intakes may be at risk from floating and/ or dispersed oil leading need for protection or even shutting down activities.

6.6.1.3.2. Bio receptors

Sensitivity of biodiversity varies from species to species. Rare animals or Plants or those with limited geographic distribution may be particularly vulnerable to oil impacts and raise specific concerns.An oil spill can harm animals especially birds and mammals in several ways. Direct physical contact, toxic contamination, destruction of food sources and habitats, and reproductive problems. When fur or feathers come into contact with oil, they get matted down. This matting causes fur and feathers to lose their insulating properties, placing animals at risk of freezing to death. For birds, the risk of drowning increases, as the complex structure of their feathers that allows them to float or to fly becomes damaged. Some species are susceptible to the toxic effects of inhaled oil vapors. Oil vapors can cause damage to the animal's central nervous system, liver and lungs. Animals are also at risk from ingesting oil, which can reduce the animal's ability to eat or digest its food by damaging cells in the intestinal tract.

Even species which are not directly in contact with oil can be harmed by a spill due to destruction of food resources and habitats. Predators that consume contaminated prey can be exposed to oil through ingestion. Since oil contamination gives fish and other animals unpleasant tastes and smells. Predators

will sometimes refuse to eat their prey. They will begin to starve especially when a local population of prey organisms gets destroyed completely. In some environments, the spilled oil may linger in the environment for long periods of time, adding to the detrimental effects where as in calm water conditions, oil that interacts with rocks or sediments can remain in the environment indefinitely. Oil can be transferred from birds' plumage to the eggs they are hatching. Oil can smother eggs by sealing pores in the eggs and preventing gas exchange. Developmental deffects in bird embryos that were exposed to oil have been also observed. The number of breeding animals and of nesting habitats can be considerably reduced by the spill. Long-term reproductive problems have also been shown in some studies in animals that have been exposed to oil. Sensitivity of various bioreceptors are described below:

Fishes: Fishes may be exposed to spilled oil in different ways. They may come into direct contact and contaminate their gill, the water column may contain toxic and volatile components of oil that may be absorbed by their eggs, larvae, and juvenile stages and they may eat contaminated food. Fish that are exposed to oil may suffer from changes in heart and respiratory rate, enlarged livers, reduced growth, fin erosion, a variety of biochemical and cellular changes, and reproductive and behavioral responses. Chronic exposure to some chemicals found in oil may cause genetic abnormalities or cancer in sensitive species. If chemicals such as dispersants are used to respond to a spill, there may be an increased potential for tainting of fish and shellfish by increasing the concentration of oil in the water column. This can affect humans in areas that have commercial and recreational fisheries.

Eggs and Larvae : In shallow bays may suffer heavy mortalities under slicks, particularly when dispersants are used. Adult fishes tend to swim away from oil. No evidences to date exist for an oil spill that has significantly affected adult population in open sea. But adult fish in aquaculture cages may be killed or lose their market value at least because of training. Adult population survive even when many fish larvae have been killed possibly beca Fish eggs and larvae: They are sensitive to oil, may experience mortality,which may affect the fish production, even though the extent of damage is insignificant and to a greater extent for short term.use they have a competitive advantages such as ,ore food and lower vulnerability to predators. (Kankra et al)

Invertebrates: Invertebrates such as shellfish –molluscs and crustaceans, worms, sea urchin and corals suffer heavy casualities when directly exposed to fresh oil. Barnacles, winkles and limpets living on rocks can been seen surviving in the presence of residual weathered oil.

Birds: Birds are very susceptible to oil spills. Seabirds, for example, spend a lot of time on the ocean's surface, dive when disturbed, and have low reproductive rates, making them particularly vulnerable to oil spills. In addition, the populations of species with small numbers of individuals, a restricted

geographic range, or threatened and endangered species may be very adversely affected by oil spill contamination. A bird's feathers overlap to trap air and provide the bird with warmth and buoyancy. Birds that contact an oil slick may get oil on their feathers and lose their ability to stay waterproof, they may ingest oil while trying to clean their feathers or when they try to eat contaminated food, and they may suffer long-term reproductive effects.

Heaviliy oiled birds usually die. Their treatment requires specialised expertise and appropriate facilities. Recovery of local population mainly depends on existence of reservoir of young non-breeding adults from which breeding colonies can be replenished or high reproductive rate. No evidences to date exist for an oil spill that has permanently damaged any sea bird population. But species with very local distribution could be at risk in exceptional circumstances.

Also there is every possibility that the reduced wave action dur to surface oil will attract the birds to coastal waters. Hence they get trapped in the sticky emulsified layer of oil. A 0.1 mm thick oil layer is assumed to cause high risk to sea birds (Kankra et al., 2008). Thus oil spill is fatal to birds and its eggs. (Kankra et al)

Mammals: Mammals that may be affected include whales, porpoises, dugongs, dolphins and other land mamals occupying the intertidal area. The sensitivity of mammals to spilled oil is highly variable. The amount of damage appears to be most directly related to how important the fur and blubber are to staying warm, which is called thermoregulation. Land mammals need clean fur to remain warm. Hence they are more vulnerable while whales, dolphins etc., are rarely affected by oil spill. Direct exposure to oil can result in temporary eye problems. Ingestion of oil can result in digestive tract bleeding and in liver and kidney damage. Ingestion of oil is of greater concern for species that groom themselves with their mouth, such as sea otters and polar bears. Breathing hydrocarbon vapors can result in nerve damage and behavioral abnormalities to all mammals. Capturing and cleaning oiled marine mammals generally is not feasible. While procedures for dealing with oiled birds have been developed, no such procedures have been developed for most of the marine mammals. Procedures for capturing, treating, and releasing animals may hurt them more than the oil does.

The cetaceans such as porpoises, dolphins, and whales have not been reported in the area. Their Blubber for insulation and do not depend on fur to stay warm. This characteristic makes them less susceptible to oil spills than other mammals. When they come to the surface to breathe they may inhale hydrocarbon vapors that may result in lung injuries, oil that comes in contact with the animals' sensitive mucous membranes and eyes may produce irritations. Young cetaceans may be injured due to ingestion of oil from contaminated teats when nursing. There may be long-term chronic effects as a result of migration through oil-contaminated waters.

Planktons: Serious effects of oil spill on plankton have not been observed so far in open sea. This is probably due to high reproductive rates and immigration from unaffected areas. The plankton population in shallow water is moderate of range and may be affected to some extent, which may take few weeks to recover.

Algae: Oil does not stick on to larger algae because of their mucilaginous coating. Intertidal areas denuded of algae in oil spill, readily gets repopulated after the removal of oil. Algae cultured for the economically important products such as Agar lose their commercial value if tained.

Marsh Plants: There are variations in the effect of oil spill among different species of marsh plants. Perennials with robust underground root system are more resistant than annuals and shallow rooted plants. But annuals such as Glasswort recolonise faster that perennials like grass Spartina since they produce large number of tidally dispersed seeds at a time.

Mangroves: Mangroves are home to diverse of plant and animal life. The term mangroves applies to several species of trees and bushes having some form of aerial breathing root which enable them to live in fine, poorly, oxygenated mud.The long roots, called prop roots stick out well above the water level and help to hold the mangrove tree in place. A coating of oil on these prop roots can be fatal to the tree. Since the growth rate of mangroves are very so slow, replacing a mangrove tree will take decades (IMO). Mangroves: are very sensitive to oil. Natural recovery of oiled mangroves will take many years. They are also breeding and nursing grounds of fishes and prawns. They are also home to many species living in harmony with them. They are highly prodcuitive ecosystems and have very high sensitivity interms of both biodiversity and slow recovery.

Protected Areas:When a large area is covered by important ecosystems and highly bodiverse species they become relatively sensitive as the impact of oil on these will be highly dangerous.

6.7. Oil Spill Sensitivity Map

The coastal area has been extensively studied and the ecological resources have been mapped for the Kandla Port Area. The oil spill sensitivity map of the Kandla Port Limit have been given as **Figure 6.3** below.

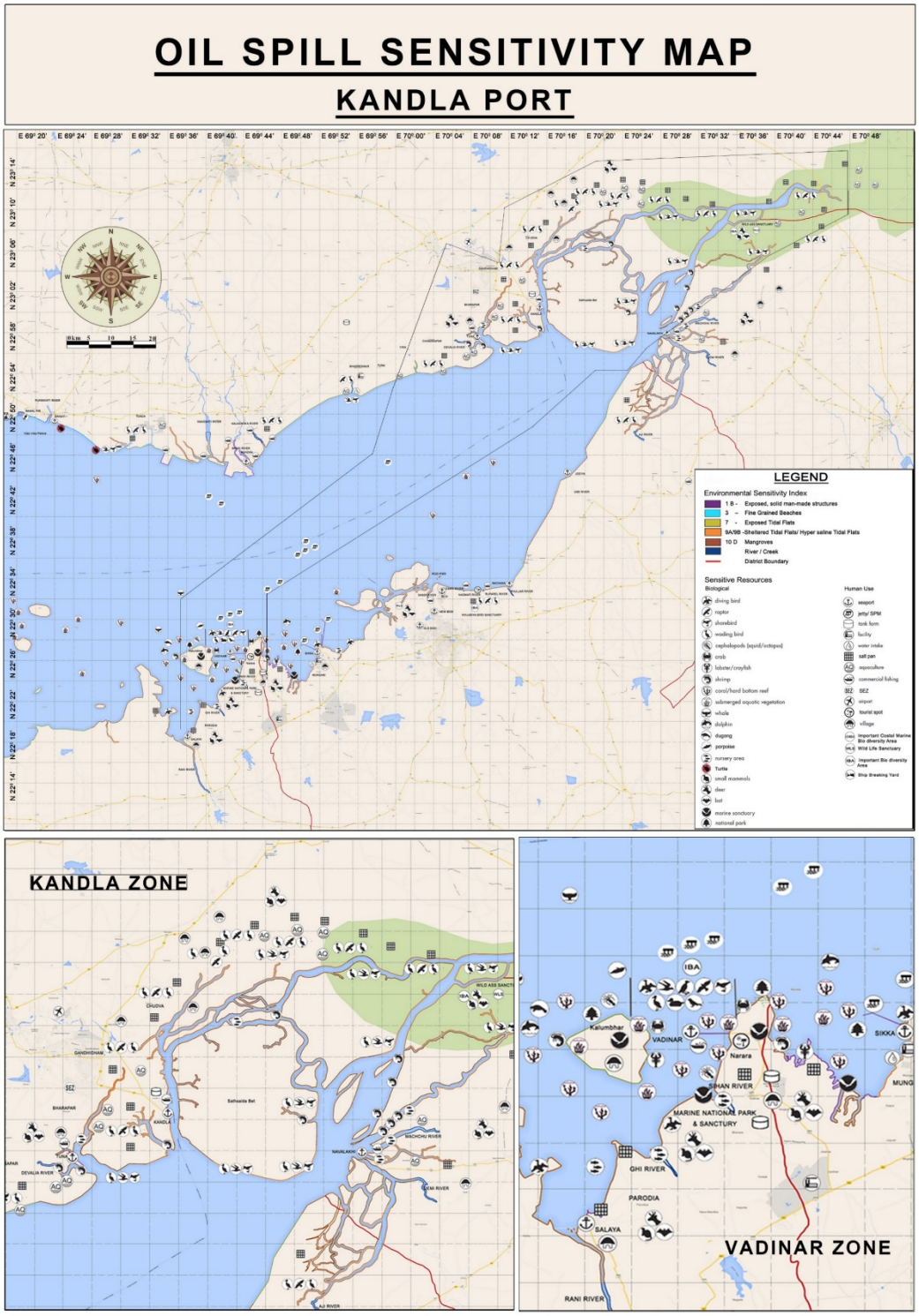


Figure 6.16. Oil Spill Sensitivity Map for Kandla Port

6.8. Response Consideration

As discussed in the previous section, there are highly vulnerable resources and sensitive shoreline throughout the KPT limit. Mangroves are the most sensitive shore, followed by shelteretd hypersaline mudflats, exposed mudflats, exposed manmade structures within the KPT limit. In additiona to this there are small streches of exposed shores, wavecut rocky platforms, salt marshes and fine sand beaches adjoining the coral islands but the shores and dominated by mangroves or mudflats having higher sensitivity. Also there are very small ridges of shell and coarse grained beaches adjoining mudflats.

Again small strips of Rip- Raps or Seawalls will be asscoiated with areas of human interferences and low stablity such as Beaches.

Corals, Birds nesting and flocking areas, etc., are occurring simultaneously and hence are to be considered as multi-resources area under the biological resources category. All these multi-resource area are the most sensitive part in the KPT limit. The details of the Shoreline Type, Sensitivity Index and Response Considerations are to be given as **Table 6.6** below. The sensitivity of biological resources have been already discussed in the previous sections.

Table 6.6. Shoreline Type, Sensitivity Index & Response Considerations

Sl. No.	Type of Shoreline	Locations	Oil Behavior
1	Exposed Rocky Shore (1A)	Islands of MNPS near Vadinar Terminal	• Oil is held offshore by waves reflecting off the steep, hard surface in exposed settings • Oil readily adheres to the dry, rough surfaces, but it does not adhere to wet substrates • Most resistant oil would remain as a patchy band at or above the high-tide line
2	Exposed Solid Vertical Structures (1B)	Areas near Port, Jetties and Terminals	• Seawalls and piers are particularly common in developed areas to provide protection to residential and industrial developments. • They are common along inlets, urbanized areas, and developed beachfront sites. • They are composed of concrete and stone, wooden, or metal bulkheads and wooden pilings. • Organisms, such as barnacles, shellfish, and algae may be common on pilings. • Biota on concrete structures along the upper intertidal or supratidal zones is sparse. • Oil would percolate between the joints of the structures. • Oil would coat the intertidal areas of solid structures. • Biota would be damaged or killed under heavy accumulations
3	Fine to Medium - Sand Beaches (3)	Islands of MNPS near Vadinar Terminal are having narrow beaches and between Mundra & Tuna. Shell beach ridges are found near Kandla	• These beaches are generally flat, wide, and hard-packed. • They are commonly backed by dunes or seawalls along exposed, outer coasts. • Along sheltered bays, they are narrower, often fronted by tidal flats. • Upper beach fauna are scarce. • Light oil accumulations will be deposited as oily swashes or bands along the upper intertidal zone. • Heavy oil accumulations will cover the entire beach surface, although the oil will be lifted off the lower beach with the rising tide. • Maximum penetration of oil into fine-grained sand will be 10 cm. • Burial of oiled layers by clean sand within the first few weeks will be less than 30 cm along the upper beach face. • Organisms living in the beach sands may be killed either by smothering or by lethal oil concentrations in the interstitial water. • Shorebirds may be killed if oiled, though they may shift to clean sites
4	Rip Rap (6B)	Adjoining Port areas & terminals either exposed	• Riprap structures are composed of cobble- to boulder-sized rock fragments. • Riprap structures are placed for shoreline protection and inlet Stabilization.

		or sheltered corresponding to 1B & 8B	• Mid- and low-intertidal zone biota on the riprap may be plentiful and varied. • Deep penetration of oil between the boulders is likely. • Oil adheres readily to the rough rock surfaces. • If oil is left uncleansed, it may cause chronic leaching until the oil asphaltizes. • Resident fauna and flora may be killed by the oil
5	Exposed Tidal Flats (7)	Throughout the GoK Coast	• Oil does not usually adhere to the surface of exposed tidal flats, but rather moves across the flat and accumulates at the high-tide line. • Deposition of oil on the flat may occur on a falling tide if concentrations are heavy. • Oil does not penetrate the water-saturated sediments. • Biological damage may be severe, primarily to in fauna, thereby reducing food sources for birds and other predators.
6	Sheltered Manmade Structures (8B)	At sea ports/terminals such as Kandla, Vadinar, Navlahi & Mundra, Bedi	• Oil will adhere readily to rough surfaces, particularly along the high-tide line, forming a distinct oil band • • the lower intertidal zone usually stays wet (particularly if algae covered), preventing oil from adhering to the surface
7	Vegetated River Bank	Along major River Sihan & Ghi near Vadinar & Aji, Demi & Machu near Navalakhi, Devalia near Kandla, & Kalagogha near Mundra	• These areas are composed of low banks with grasses (subject to flooding) or steeper banks with trees going to the water's edge. • They are found in fresh or brackish water localities. • They are composed of a variety of plant species. • Light oil concentrations will coat the outer fringes of the area. • Heavy oil concentrations will penetrate into the area and heavily coat the plant and ground surfaces. • Biological impact may be severe if oil concentrations are heavy. • Oil persistence may be several months if not cleaned. • During winter, shore-fast ice could prevent or limit oil impact. • Odor and taste of fresh water supplies could be impacted by trace contamination
8	Sheltered Mud Flats(9A)/ Hypersaline Mudflats (9B)	Present all along the coast, inside the creeks and towards the inner portion of islands near Vadinar & Inner creeks of Kandla	• oil does not usually adhere to the surface of sheltered tidal flats, but rather moves across the flat and accumulates at the high-tide line • deposition of oil on the flat may occur on a falling tide if concentrations are heavy • oil will not penetrate the water -saturated sediments, but could penetrate burrows or other crevices in muddy sediments

			• in areas of high suspended sediments, sorption of oil can result in deposition of contaminated sediments on the flats • • biological damage may be severe
10	Freshwater Swaps/ Marshes(10B)	On the banks of rivers emptying into the GoK	• Oil in any appreciable quantity may be very persistent due to minimal flushing and organic soils. • Degree of vegetation oiling is a function of tidal range and local topography. • Season of oiling is important; dormant vegetation is least sensitive to oil; blooming and seeding plants are most sensitive. • Resident biota are likely to be heavily impacted, particularly reptiles, amphibians, and crustaceans, with high mortality predicted. • Odor and taste of fresh water supplies could be impacted by trace contamination • Freshwater marshes/swamps are found in the upper reaches of tidal streams, rivers or tributaries Marshes are characterized by typical soft-bodied, non-persistent, herbaceous vegetation such as grasses. • Swamps have dense stands of water-tolerant shrubs and trees. • These areas have an extremely high degree of species diversity and abundance in flora and fauna; may harbor rare, threatened, or endangered species on the local, regional, or national level. • They are extremely valuable as breeding and nursery areas for wetland-dependent amphibians and reptiles, as well as other fish, birds, and mammals. • Sediment generally consists of organic rather than mineral soils, resulting in a rather soupy consistency, and making foot travel difficult to impossible
11	Fringing and Extensive Salt Marshes (10 C)	Kandla adjoining the creeks of Kandla, Nakti, Phang , Sara	• Intertidal wetlands containing emergent, herbaceous vegetation. • Width of the marsh can vary widely, from a narrow fringe to extensive. • Relatively sheltered from waves and strong tidal currents. • Resident flora and fauna are abundant and consist of numerous species. • Provide a nursery ground for numerous fish species. • Bird life is seasonally abundant. • Oil adheres readily to marsh vegetation. • The band of coating will vary widely, depending upon the tidal stage at the time oil slicks are in the vegetation. There may be multiple bands. • Large slicks will persist through multiple tidal cycles and coat the entire stem from the high-tide line to the base. • If the vegetation is thick, heavy oil coating will be restricted to the outer fringe, with penetration and lighter oiling to the limit of tidal influence.

			• Medium to heavy oils do not readily adhere or penetrate the fine sediments, but they can pool on the surface and in burrows. • Light oils can penetrate the top few centimeters of sediment and deeply into burrows and cracks (up to one meter)
12	Mangroves (10 D)	All along the creeks in and around Kandla, on the margins of mudflats and also in the islands of MNPS near Vadinar.	• Mangrove Forests are composed of salt tolerant trees that form dense stands with distinct zonation. • The fringing forests have relatively high wave activity and strong currents. • But those found in bays and estuaries are well sheltered. • Attached to the prop roots are moderate densities of algae, snails and crab. • They are also nursery grounds of prawns. • Fresh spills of light refined products have acute, toxic impacts to both trees and intertidal biota. These products will penetrate deep into the forests, stopping only at high-tide line resulting in sediment contamination. • Fresh crude will have great persistence where it penetrates burrows and prop root cavities. • Heavier oils tend to coat the intertidal zone, with heaviest concentrations at the high-tide line. • Heavy Oil will coast the intertidal section of prop roots, resulting in defoliation and eventual death of the tree if significant coverage occurs. In the sheltered areas, oil may persist for many years.
13	Corals Reefs	Around the Islands of MNPS near Vadinar, including Kalumbhar and Narara.	• Live corals are unlikely to become oiled, since they are rarely exposed at the sea surface except those in the intertidal area. But once oiled

In addition to the above the areas and features requireing special attention are given as **Table 6.7** below.

Table 6.7. Areas Requiring Important Considerations

Sl. No.	Areas requiring special consideration	
1	Oil Spill Threat Zones	• Ports, Oil Handling Facilities, Refineries
2	Corals	•
3	Sub tidal Habitats	• Submerged aquatic vegetation
4	Birds	• Nesting sites, Waterfowl overwintering concentration areas • High concentration migration stopovers • High concentration resident bird colonies
5	Marine Mammals	• Migration corridors • Population concentration areas
6	Terrestrial Mammals	• Concentration & frequenting areas
7	Fish and Shellfish	• Anadromous fish spawning streams • Estuarine areas which are important fish nursery areas • Special concentration areas for estuarine and demersal fish • Shellfish seed beds, leased beds, high concentration areas • Crab, shrimp, and lobster nursery areas
8	Reptiles	• Marine turtle nesting beaches
9	Recreation	• High-use recreational beaches • Marinas and boat ramps • High-use boating, fishing, and diving areas
10	Management Areas	• MNPS, WLSs, ICMBA • Research Stations • Mangrove Plantations • Other Wildlife management areas • Estuaries of rivers like Narmada & Tapti
11	Resource Extraction	• Commercial fishing areas • Water intakes • Salt Pans • Aquaculture sites • Offshore Exploration Sites • Defense Installations
12	Cultural & Heritage Resources	• Archaeological and other historically significant sites

Source: Data Analysis

7

DEVELOPMENT OF OIL SPILL RESPONSE STRATEGY

The oil spill response strategy is finalized based on vulnerability of the coastline which can be described based on different factors namely source of spill, location of oil slick containment, type and quantity of oil spilled, marine meteorological condition, shoreline characteristics and sensitivity to oil spill in the area. The following section deals with development of oil spill response strategy.

7.1. Potential Sources

Ports, SPMs, other Oil handling facilities & Ships are the sources of oil spill with in Kandla Port Limit. The location map of Ports, SPMs & Capitive Jetties of Gulf of Kachchh which are the most probable location of oil spill within Kandla Port limit is given as **Figure 7.1**.The likelihood and the consequence of specific spills should be calculated based on the out comes of a 'Detailed Risk Assesment Study'.

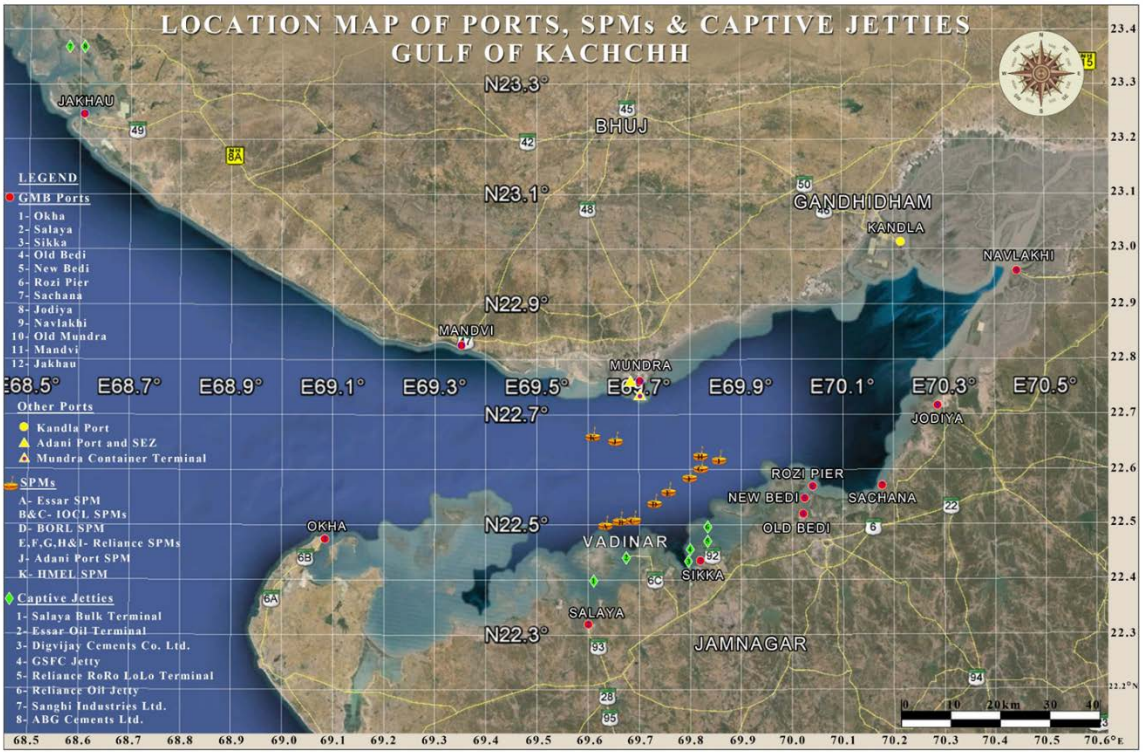


Figure 7.1. Location Port and allied facilities in Gulf of Kachchh

Oil Jetties can handle up to a maximum size of vessel 56,000 DWT.SPM handle Very Large Crude Oil Vessels (VLCC) with a maximum pumping capacity of 10000 tonnes per hour. Hence it should be inferred that the area is having high density of potential sources.

7.2. Types of Oil Handled & Characteristics

Oil is an important commodity handled at the port. The details of oil handled by the facilities in the KPT area and their characteristics are given as **Table 7.1** below.

Table 7.1. Details of Oil Handled & Characteristics

Sl. No:	Type of Oil	Specific Gravity	Genre	Characteristics	Examples
1	Light Oil	< 0.84	White Oil	Non- persistent, Volatile	Products including Aviation Fuel, Kerosene, Motor Spirit, Naphtha, HSD
2	Crude Oil	>0.84	Black Oil	Persistent, Viscous, Emulsion, Fresh Oil amenable to dispersants	Arabian Light, Arabian Heavy etc.,
3	Heavy Oil	>0.95	Black Oil	Persistent, Viscous, Emulsion, Generally not amenable to dispersants	Fuel Oils, LSWR
4	Edible Oil Crude/ Refined	>0.92	Black Oil	Persistent, Viscous,	

(Source: Annual Report)

7.3. Sensitivity of the Shoreline

As already discussed the port limit extends between the Northern and Southern arms of Gulf of Kachchh. Northern and North - Eastern portions are rich in mangroves and the Southern shore is rich in a wide variety of organisms including Corals, Fishes, Birds and Mangoves. The area of Marine National Pak adjoining and extending on both sides of Vadinar will be the worst affected area during a recognisable spill scenario. There is also a chance that due the presence of extensive creek systems, the oil can directly spilt into inner areas of GoK. There are rivers system entering into the GoK near Vadinar. During high tide oil can enter inland through these inlets. Also it is important that due to the presence of circulating currents of GoK the contaminants on entering the any part of the inner GoK can exert stress on the Marine National Park and Sanctuary (MNPS) and is a cause of concern. Also fisheries are concentrated in the creek section of Sathsaida Bet and the Surajbari area is famous for seasonal prawn fishery. There are vast salt pans functioning in the Kandla creek area and also there are

patches near Mundra, Navlakhi and Vadinar. There are also prominent water intake points at Vadinar and Mundra.

7.4. Prioritization of Resources

Prioritization of resources is an integral part of sensitivity mapping since it will be helpful in determining the response priorities, achieving optimal resource use and essentially ensure maximum resource protection. This was done by giving ranks to each resource types which has been already described under the heads of Environmental sensitivity ie., Sensitivity to Oil Pollution, Environmental Value, Cultural & Social values and Economic values (Kankra et al, 2008). Ranks between1-10 was assigned for the resource. Same rank was given to different resource when they occupied same position in different heads. Two resource may take a same value as required by the circumstance. Hence, it is not necessary that all the values must be present under one category at a time. Intake points considered here are only of industrial use. Weightages were given to each head ie., Sensitivity to Oil Pollution (30), Environmental Value (30), Cultural & Social values (20) and Economic values (20). Priority Index (PI) was worked out based on this. Details of Prioritisation of Resources is given as **Table 7.2** below.

Table 7.2. Prioritization of resources

Resources	Sensitivity for Oil Pollution (1-10) Weight (30%)	Cultural & Social Values (10%)	Scientific Values (20%)	Environmental Importance (30%)	Economic Considerations (10%)	Total Relative Response of Sensitivity	Risk Value	Priority	
								Index	Order
Rocky Coast	3	1	2	2	1	2.1	1	2.1	D
Port/ Harbour/ Jetties	1	7	2	4	8	3.4	2	6.8	C
Intake Locations	10	2	1	1	2	3.9	3	11.7	B
Salt Pans	3	8	2	6	5	4.4	1	4.4	D
Sandy Beach	6	8	3	5	2	4.9	2	9.8	D
Fishing Grounds	7	8	5	6	8	6.2	2	12.4	B
Subtidal Coral Reefs	2	9	10	9	6	6.8	1	6.8	C
Intertidal Mudflats	7	4	7	8	3	6.6	2	13.2	B
Mangroves	9	10	8	10	8	9.1	3	27.3	A

Resources	Sensitivity for Oil Pollution (1-10) Weight (30%)	Cultural & Social Values (10%)	Scientific Values (20%)	Environmental Importance (30%)	Economic Considerations (10%)	Total Relative Response of Sensitivity	Risk Value	Priority	
								Index	Order
Intertidal Corals	10	9	10	9	9	9.5	3	28.5	A

(Source: Adopted Kankra)

S- Sensitivity to Oil Pollution, Wi- Weightage, E-Environmental Value, PI- Priority Index

C& S – Cultural & Social, Ec- Economic

7.5. Development of Response Strategy

Based on the above characteristics, suitable response strategy to be adopted is discussed below. The rating process was based upon independent data, manufacturers' information, experience and engineering estimates. Important consideration for the response technology assesment are discussed below:

7.5.1. Highest Effective Speed

The highest effective speed rating assumes that the equipment being rated is used by people who have been trained and are experienced in fast water response with that technology. The speed in knots represents the highest practical current or speed of advance, as applicable, that the technology can still effectively deflect, contain or skim oil from the water. Effectiveness will generally be diminished at the higher velocities, however, the majority of the oil (more than 50 percent) encountering the device will be controlled or recovered as desired at that upper limit speed rating.

7.5.2. Effective in Waves

Effectiveness in waves is dependent upon the oil recovery rate and oil recovery efficiency or deflection/containment capability. Generally, a technology that has good reserve buoyancy, adequate freeboard and draft, or can be decoupled from the influences of waves, will continue to be effective in waves. Short-crested waves usually degrade the performance of equipment more than large long-period swells. A low (L) rating represents effectiveness in calm water conditions up to one-foot short crested waves. A medium (M) rating indicates effectiveness in short crested waves between 1 and 3-feet high, while a high (H) rating represents satisfactory performance in waves 3 to 6-feet high. Effectiveness in these conditions means that the technology will contain or collect the majority of the oil it encounters.

7.5.3. Effective in Debris

Floating debris will cause problems with equipment by damaging it, moving it or rendering it ineffective. Some equipment is less affected by debris due to its robust nature or method of containment/recovery. Some skimmers use debris screens that protect the pump but often require manual tending to remove the debris. A high (H) rating means that the skimmer will continue to function well in floating debris with minimal manual tending required. Medium (M) rating represents a degraded performance level in debris, while a low (L) rating indicates serious problems with performance in debris. Both M and L ratings require significant manual tending to remove debris.

7.5.4. Effective in Shallow Water

Effectiveness in shallow water indicates the technology has a low or no draft requirement and that it will effectively contain, deflect or remove oil as designed. A yes (Y) indicates that a skimmer or boom system is manufactured that is effective in 2-feet deep water or it is not limited by a water depth of two feet. It is possible that some skimmers or boom systems receiving a no (N) rating could be produced by the manufacturer to function in shallow water.

7.5.5. Ease of Deployment

The ease of deployment rating reflects the amount of complexity, training required, people and logistics involved to deploy and use the technology successfully. The more resources and training required to deploy the technology and use it effectively, the lower the rating. The faster a technology can be deployed with a minimum number of people and support equipment, the higher the rating. Generally, technology with a good (G) or a very good (VG) ease of deployment rating will continue to be effective close to the highest effective speed rating when using inexperienced personnel.

7.5.6. Oil Viscosity Range

A low (L) rating indicates that a skimmer is effective in light oil with a viscosity between 1 and 100 cSt. Medium (M) indicates effectiveness in medium grade oils with a viscosity between 100 and 1,000 cSt, while high (H) means the skimmer was effective at recovering heavy oil with a viscosity between 1,000 and 60,000 cSt. A skimmer was considered effective if tests recorded reasonable recovery rates and recovery efficiencies of at least 50 percent. If a viscosity range is not listed for a skimmer, then the skimmer is not effective at recovering oil in that viscosity range.

7.5.7. Oil Recovery Efficiency & Recovery Rate

Skimmer specific performance ratings are based upon independent performance test data when available and manufacturer claims. When data were not available, physics and engineering principles

were used to approximate performance. Generally, oil recovery efficiency will decrease and oil recovery rate will increase with speed. Technologies with the higher efficiencies and recovery rates that were not significantly degraded by increases in speed were given higher ratings. Skimmers with comparatively lower efficiencies and recovery rates that degraded quickly at faster speeds were given lower ratings. Skimmers that demonstrated a poor (P) performance for recovery efficiency and/or oil recovery rate in currents above one knot were not included in this.

As per above consideration, booming strategies, specialized boom requirements, alternate containment methods and high-speed skimmers are rated in several categories and presented in **Table 7.3** and **7.4** below.

Table 7.3. Booming Strategies

Sl. No.	Technology Name	Highest Effective Speed kts.	Eff. in Waves	Eff. in Debris	Eff.in Shallow	Ease of Deployment	Comments
1	Cascade *	4	L	M	Y	F	Short sections independently moored to shore.
2	Deflection *	4	L	M	Y	F/G	Longer sections with shore tiebacks downstream.
3	Chevron (closed)*	3	M	M	Y	G	Quick to deploy because it uses fewer anchor points.
4	Chevron (open)*	3	M	M	Y	G	Allows for vessel traffic between openings.
5	Current Rudder*	3	M	H	N	F	Allows for vessel traffic by control of rudder from shore.
6	Double Boom*	3	M	H	Y	F	Improved containment but hard to keep separated properly.
7	Boom Deflectors *	4	M	M	Y	G	Deflectors used to keep boom at an angle without anchors.
	Boom (Specialized)						
1	Fast Sweep (V-Shaped)	2.	H	L	N	G	Net across foot of boom keeps it in a V-shape.
2	Rapid Current Boom	3.	L	L	N	P	Inclined plane, fabric bottom with outlet holes in pocket.
3	Horizontal Oil Boom	3.	M	L	N	F	Two booms connected by net & filter fabric.
4	Holes in lower draft*	2	M	L	N	G	Larger draft with relief holes in lower skirt to reduce drag.

5	Net in foot of boom	1.	H	L	N	G	Short vertical net at foot of the boom.
6	Foam 6"X 6",two tension lines*	4	L	L	Y	VG	Typical fast water diversion boom with upper & lower tension.
7	External Tension Line foam	2	M	L	N	F	High stability, limited reserve buoyancy.
8	Shell High Current "Boom"	3	L	M	Y	P	Rigid aluminum perforated inclined plane structure, diversion system.
	Alternate Methods						
10	Pneumatic Boom	2.	M	H	N	G	High power required (30 hp/ft).
11	Water Jet (Horizontal)	4.	M	M	Y	F	Reasonable power requirements (3 hp/ft).
12	Water Jet (Plunging)	4	M	M	N	F	Reasonable power requirements.
13	Air Jet	3	M	M	Y	F	Low power required (1 hp/ft).
14	Flow Diverters	6	H	M	Y	VG	No power, changes surface currents to direction of anchor point.
15	Floating Paddle Wheel	3	M	M	Y	G	Low power required (0.25 hp/ft), high-energy transfer.
16	Earth Dam (underflow)*	2	M	M	Y	P	Barrier blocking low flow into an inlet or out of a stream.

Table 7.4. Skimmer Specific Performance

Sl. No:	Technology Name	Highest Effective Speed (kts.)	Eff. in Waves	Eff. In Debris	Eff. In Shallow	Ease of Deployment	Oil Viscosity Range	Oil Recovery Efficiency	Oil Recovery Rate	Comments
Incline Skimmers										
1	Dynamic	3	M/H	M	Y	G	L,M,H	G	G	VOSS & Self Propelled versions.
2	Static	5	M/H	M	N	G	L,M,H	G	G	VOSS, low maintenance
ZRV Skimmer										
1	Rope Mop	5	H	H	N	G	L,M,H	VG	F	VOSS & Self propelled catamarans

2	Sorbent Belt	6	M	M	N	G	L,M, H	VG	F	Very high maintenance but effective
Quiescent Zone										
1	Expansion Weir *	3	L	L	Y	G	L,M	F	G	Expansion slows flow
2	Circulation Weir	3	M	L	Y	G	L,M, H	G	G	VOSS, portable lagoon
3	Brush Conveyor	3	M/ H	M/ H	N	G	M,H	VG	F	VOSS, barge & self-propelled
4	Streaming Fiber & Belt	3	M	L	N	G	L,M	G	F	Fibers slow flow, belt & weir remove oil
Lifting Belt										
1	Filter Belt	3.5	M/ H	M/ H	Y	G	M,H	VG	F	Self-propelled & induction impeller
2	Rotating Disk Brush									
3	Rotating Brushes	3	M/ H	M/ H	Y	G	M,H	VG	F	VOSS, barge & self-propelled
Surface Slicing										
1	High Current Oil Boom	6	L	L	N	G	L,M, H	F	G	Weir with foil bow
2	Multi-purpose Oil Skimmer Sys.	3	M/ H	L	N	G	L,M, H	F	G	Wave following weir
3	Russian Debris Skimmer	3	L	M/ H	N	G	L,M, H	G	G	Debris filter, weir and gravity separator tank.
4	Trailing Adsorption									
5	Trailing Rope Mop	4	H	H	N	F	L,M, H	VG	F	Batch processing requires retrieval of rope mops
6	Free Floating Sorbent*	5	H	H	Y	G	L,M, H	VG	F	Free drifting sorbents and recover them downstream
Legend		*H*	*High*		*Y*	*Yes*		*VG*	*Very Good*	
		M	*Medium*		*N*	*No*		*G*	*Good*	
		L	*Low*					*F*	*Fair*	
								P	*Poor*	

Notes:	*1.Low is effective in calm water to 1 foot waves, Medium is effective in 1 to 3 foot waves, and High is effective in 3 to 6 foot waves* *2.Yes indicates that a skimmer or boom system is effective in 2 foot of (shallow) water.* *3. Low indicates a skimmer is effective in light oil 1-100 cSt viscosity, Medium 100-1,000 cSt and High 1,000-60,000 cSt* *4.Oil recovery efficiency is the percent of oil recovered compared to the total volume or oil and free water collected.* *5. Oil recovery rate is the rate of oil collected which is a combination of recovery efficiency and throughput efficiency. "Controlled tests results with oil were not available so ratings were based on engineering principles, expert opinions and field experience. Technology names with no asterisk were rated based upon data obtained from controlled tests with oil.*

7.5.8. Shoreline Consideration

Shoreline Response Team should follow Shore Line Clean Up Assessment Technique (SCAT which is a standardized method of assessing, recording and reporting the degree of oiling of the shoreline. The steps during SCAT include:

- Identify sensitive resources
- Evaluate shoreline oiling conditions
- Recommend clean-up methods and end points
- Apply the concept of Net Environment Benefit Analysis (NEBA) to the shoreline response strategies

The shorelines are to be divided into segments. Segments are defined geographic areas with a similar character in terms of physical features and sediment types. Sub segments can be used if the extent of oiling varies significantly between a given segments. Results are to be standardised. Descriptions are used to describe the oil observed. The SCAT Team should calibrate their classifications of oil observed prior to conducting full scale surveys.

Report / log form (with clipboard), Method of communications (e.g. mobile, satellite phones, VHF radio), Handheld GPS, Digital Camera, Compass, Additional batteries shall be available with the shoreline response team.

The shoreline assessment will be followed by selection of appropriate shoreline clean-up measures. The selection of most appropriate methods and equipment to be used in each case will be determined by presence of hazard:

- Character and amount of stranded oil
- Character of shoreline
- Tidal range and times
- Prevailing sea weather conditions
- Availability of equipment
- Accessibility of the contaminated area for equipments
- Availability of personnel
- Presence of sensitive wildlife or other features which may be damaged by cleaning operations, availability of local transport
- Storage treatment and disposal facilities for the recovered materials and cost and local, state, national or international policies and priorities.

Shoreline character comprises mainly four components ie., Substrate type- the material that the shore is comprised of, Shoreline form- the shape of the shoreline, Energy- a function of currents, wind and waves, Biological character- the plant and animal communities present. Each component is to be analysed separately before choosing the response option. Parameters used to describe the distribution of the oil on shorelines are given below:

- Length (m) - The distance along a shoreline that is oiled
- Width (m)- The distance from the top of the highest elevation of the shore that is oiled to the bottom
- Percentage cover-An estimate of the percentage of the substrate surface within the area that is oiled
- Thickness (mm or cm) - The distance from the substrate surface to the top of the oil layer. Often this cannot be measured accurately because the surface layer is too thin.
- Depth-The depth below the surface that is oiled. For buried oil, depth should be measures from the top of the substrate surface to the oily layer.

After completing the SCAT survey based on the observation, Shoreline Clean-up operations are to be initiated and guideline for the clean-up of various shoreline types are given as **Table 7.5** below.

Table 7.5. Shoreline Response Operations

Sl. No.	Type of Shoreline	Response Operations
1	Exposed Rocky Shore (1A)	• In the case of Gujarat they are many times associated with corals. Hence, have rich biota. Hence immediate severe biological impacts will be occurring especially in tidal pools but, the oil will not remain stranded. • When exposed coral become oiled, it is best left undisturbed and to recover naturally. • Natural cleaning of coral platforms that dry out at low water can be assisted by low pressure flushing with seawater to minimize exposure of reef communities to oil.
2	Exposed Solid Vertical Structures (1B)	• These areas require high-pressure spraying in order to: remove oil; prepare substrate for decolonization of barnacle and oyster communities; minimize aesthetic damage; prevent the chronic leaching of oil from the structure. • Walls and other vertical structures may exhibit a band of oil throughout the tidal range that can be removed by pressure washing from boats or rafts. • Oil that has migrated under quays, jetties or other structures built on piles or columns can be difficult to remove, particularly when headspace is restricted. • Wash created by vessels' propellers may assist removal of bulk oil but fine cleaning may not be possible and the oil can be left to degrade naturally. • Wooden structures, particularly where rot is established, may be damaged by more aggressive clean-up techniques.
3	Fine to Medium - Sand Beaches (3)	• Among the easiest beach types to clean. • Cleanup should concentrate on the removal of oil from the upper swash zone after all oil has come ashore. • Removal of sand from the beach should be minimal to avoid erosion problems; special caution is necessary in areas backed by seawalls. • Activity through both oiled and dune areas should be severely limited, to prevent contamination of clean areas. • Manual cleanup, rather than road graders and front-end loaders, is advised. • All efforts should focus on preventing the mixture of oil deeper into the sediments by vehicular and foot traffic. • Sand beaches are often regarded as valuable amenity resources, with priority given to cleaning them. • Beaches usually have good access and because the depth of oil penetration into the beach for many oils is limited, are generally considered the easiest shoreline type to clean. • However, oil can become buried in the beach by successive tides and low viscosity oils will penetrate into coarse grained sands.

		• Flushing, surf washing or harrowing techniques may be appropriate to address buried oil.
4	Rip Rap (6B)	• When the oil is fresh and liquid, high-pressure spraying and/or water flooding may be effective, making sure to recover all released oil. • Heavy and weathered oils are more difficult to remove, require scrapping and/or hot-water spraying. • It may be necessary to remove heavily oiled riprap and replace it. • In favourable weather conditions, floating oil may be collected at the base from boats. • Workers on the structure, and to some extent within it (as far as it is safe to do so), can remove oiled debris and clean boulders and tetrapods with pressure washers or manually with rags and sorbents. • Passive cleaning, hereby sorbents are placed along the face of this structures, allows oil washed out with the movement of tides, swell and wave action to be recovered. • In certain situations, this natural action can be augmented by pumping water into the structure to flush out the oil. • Pressure washing and passive cleaning is recommended in accessible place where as use of sorbents and natural cleaning is preferred in place of inaccessible places.
5	Exposed Tidal Flats (7)	• Currents and waves can be very effective in natural removal of the oil. • Cleanup is very difficult (and possible only during low tides). • The use of heavy machinery should be restricted to prevent mixing of oil into the sediments. • On sand flats, oil will be removed naturally from the flat and deposited on the adjacent beaches where cleanup is more feasible.
6	Sheltered Manmade Structures (8B)	• cleanup of seawalls is usually conducted for aesthetic reasons or to prevent leaching of oil • • low - to high-pressure spraying at ambient water temperatures is most effective when the oil is fresh
7	Vegetated River Bank (9B)	• Cleanup should proceed cautiously. • Under light coatings, cleanup is probably unnecessary; under heavy accumulations, oil on the sediment surface might be removed to enable new growth. • Low-pressure spraying (ambient) may aid oil removal. • Plant cutting should be closely supervised if undertaken.
8	Sheltered Mud Flats(9A)/ Hyper	• These are high-priority areas necessitating the use of spill protection devices to limit oil-spill impact; deflection or sorbent booms and open water skimmers should be used • cleanup of the flat surface is very difficult because of the soft substrate; many methods may be restricted

	saline Mudflats (9C)	• low -pressure flushing and deployment of sorbents from • Shallow - draft boats may be helpful
10	Freshwater Swaps/ Marshes(10B)	• These are high-priority area necessitating the use of spill protection devices to limit oil spill impact; deflection or sorbent booms and skimmers. • Under light oiling, the best practice is to let the area recover naturally. • Any cleanup activity which would mix the oil into organically rich sediments should be avoided. • Manual pickup should be conducted from a floating platform (e.g., jon boat or inflatable). • Only the least-intrusive cleanup methods should be employed to avoid compounding the environmental impact of a spill. • Quick flushing and removal of oil while it is still fluid can reduce long-term impacts
11	Fringing and Extensive Salt Marshes (10 C)	• Under light oiling, the best practice is to let the area recover naturally. • Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing. During flushing, care must be taken to prevent transport of oil to sensitive areas down slope or along shore. • Cleanup activities should be carefully supervised to avoid vegetation damage. • Any cleanup activity must be sure not to mix the oil deeper into the sediments. Trampling of the roots must be minimized. • Cutting of oiled vegetation should only be considered when other resources present are at great risk from leaving the oiled vegetation in place
12	Mangroves (10 D)	• Under light accumulations of any type of oil, no clean-up is recommended • If sheen are present, use sorbent booms to pick up the oil as it is naturally removed, being sure to change the booms frequently. • Only light fuel oil requiring clean-up is diesel oil. • Heavy accumulations could be skimmed or flushed with low- pressure water flooding as long as there is no serious disturbance to substrate. • Oil debris should be removed without disturbing substrate. • Live vegetation should never be cut or otherwise removed. • Sorbents can be used to remove wide heavy coatings from prop roots in the areas of firm substrate with close supervision.
13	Corals Reefs	• However, should exposed coral become oiled, it is best left undisturbed and to recover naturally. • Natural cleaning of coral platforms that dry out at low water can be assisted by low pressure flushing with seawater to minimize exposure of reef communities to oil utilizing water of the same locality can be done.

		• Where recovery of oil is necessary, for example to prevent its embolization, this should be undertaken with care to minimise damage to the fragile structures. • Rehabilitation should be done in worst scenario utilizing undisturbed native fragments.

7.6. OSR Inventory for KPT Limit

As per risk classification of ports and allied facilities as per NOS-DCP, based on type of cargo handled, quantity of bunkers carried onboard ships calling at the port, single point mooring facility at the port, and ship-to-ship transfer operations at the port KPT belongs to Risk Category A. The risk categorization is appended at **Table 7.6.**

Table 7.6. Risk categorization of ports

Risk Category	Description
A	Ports handling crude oil/ tanker visits/ SPM/ STS
B	Ports handling ships carrying more than 1000 tons of fuel/ bunker oil
	Ports handling products only
C	Other than Cat 'A' and Cat 'B'

Source: NOSDCP

The planning standards for oil spill response resources for each risk category of ports is appended at **Table 7.7.**

Table 7.7. Oil Spill Response equipment for each risk category of ports

	Description		Risk category		
			A	B	C
Equipment	Inflatable Boom (metres)		2000	1000	600
	Skimmer (20 TPH)		4	4	2
	OSD Applicator (no.)		6	2	2
	Oil Spill Dispersant (litres)		10,000	5,000	3,000
	10 Tons Flex Barge (no.)		4	02	2
	Current Buster booms if tidal current >2 knots (meters)		400	400	
	Sorbent boom (meters)		500	200	
	Sorbent Pads (no.)		2000	1000	
	Shoreline cleanup Equipment	Mini Vacuum pumps	5		
		OSD Applicator	5		
		Fast tanks	5		
Vessel	Work Boats		2	1	1
	Tugs		2	1	
Man Power	IMO Level 1		10	6	2
	IMO Level 2		4	2	
	Other		10	10	5

Source: NOSDCP

As per the above categorization Kandla and Vadinar port falls into Category A., which should have minimum inflatable Boom of capacity 2000m. Inflatable booms of capacity 1200m which is already available with the ports. Considering the minimum standards for Category A and the ecological sensitivity areas along the coast and the creek mouth of length not less than 1 km it is preferably to

have 1000m more booms in the deck. Similarly as per NOSDCP, the minimum number of skimmers required is 20 TPH x 3. KANDLA Port is having 49 TPH x 2 fast flow skimmer and Brush skimmer of capacity 12TPH which satisfies the minimum requirement. Oil Spill Dispersant Storage on board with 12000 L in 3 Tugs.

As per NOS-DCP to cater a Tier 1 spill at KANDLA Port, the port should have to have response equipment for containing 700 MT of Oil. The following section evaluates the sufficiency of OSR equiment at KPT. As per the data sheet available, the oil thickness of various types of oil and concentrations with respect to area is shown as **Table 7.8**.

Table 7.8. Oil Appearance, Thickness & Concentration of Spill

Code	Description	Layer-Thickness Interval		Concentration	
		microns (µm)	inches (in.)	m^3 per Km^2	bbl/acre
S	Sheen (silver/gray)	0.04 – 0.30	1.6×10^{-6} – 1.2×10^{-5}	0.04 – 0.30	1×10^{-3} – 7.8×10^{-3}
R	Rainbow	0.30 – 5.0	1.2×10^{-5} – 2.0×10^{-4}	0.30 – 5.0	7.8×10^{-3} – 1.28×10^{-1}
M	Metallic	5.0 – 50	2.0×10^{-4} – 2.0×10^{-3}	5.0 – 50	1.28×10^{-1} – 1.28
T	Transitional Dark (or True) Color	50 – 200	2.0×10^{-3} – 8×10^{-3}	50 – 200	1.28 – 5.1
D	Dark (or True) Color	>200	$> 8 \times 10^{-3}$	>200	> 5.1
E	Emulsified	Thickness range is very similar to dark oil.			

Source:Chart from Bonn Agreement Oil Apperance Code (BAOAC) May 20,2006 modifies by A. Allen

Considering the worse Tier-1 spill, the area of impact is estimated as follows:

- Volume of Oil = 700 MT
- Thickness of Oil at the point of Spill (at zero time) = 200 µm (approx.)
- Area of Impact= (700MT/200µ) = 3.5×10^6 m^2 (approx.)
- Length of the coast immediately impacted = sqrt (Area of Impact) approx. ≈ 1870m
- Average response time = 60 minutes (Mobilization of Resources +Deployment of Boom, Skimmer etc + considering Flotilla speed of 10 Knots/hr).

As per the above examination it was found that , the OSR equipments available at Kandla is sufficient to cater the requirements of Kandla Zone, but considering the minium requirement for Category A ports and distance between Kandla & Vadinar seriously extending the response time and thus imposing severe treat to sensitive life, preferabely the inventroy at Vadinar could be expanded in a phased manner.

However shoreline response resources are not provided in the present inventory and provision for the same shall be incorporated to it at the earliest through Mutual Aid pooling.Considering the presence of bets within the shoreline and their characteristics, essential resources for shoreline response are to be provided such as River boom, Deflection boom, Intertidal Boom, Shoreline Cleanup Equipments etc. As the entire KPT limit is ecologically important, part of MNPS and supporting species like mangroves and corals calls for the more number of shore line equipments inclusive of Sorbent booms, Absorbent Pads, Pillows, Rolls, Sheets. Details for the same are given as **Table 7.9** below.

Table 7.9. Details of Shoreline Cleanup Equipments for Kandla

Sl No.	Equipments	Unit	Kandla	Vadinar
1	BOOM			
a	Beach sealing Boom(500mtr)	No.		
b	Auto/River Boom(200mtr)	No.	5	2
c	Fence Boom(150mtr)	No.		
2	SORBENT			
a	Boom-50 mtr	No.	6	6
b	Pillows	No.	50	50
c	Rolls	No.	50	50
d	Sheets	No.	50	50
e	Pads	No.	50	100
3	CLEAN UP Equipment			
a	Hot Water Pressure Cleaner, Showels, Rakes, Diggers etc.	set	5	8
4	Miscellaneous			
a	Light set Generator, PPE, Safety Items (Safety Shoes, Hard Hats, etc.),Personal Items (Coveralls, Boots, etc.)	set	10	10
5	Trained minimum man power	set	10	10

8

INCIDENT MANAGEMENT MECHANISM

Incident management is essential part of efficient emergency response operations. It makes the entire process structured at the same will add flexibility to operations to meet the response goals. It involves command, control and coordination of activities, individuals, organizations and the community.

8.1 Organisation of Oil Emergency Preparedness & Response Team

Effective emergency plans require that, in the event of an accident nominated personnel are given specific responsibilities, often separate from their daily routine activities. It is recommended to setup an Emergency Organisation for responding to a oil spill incident which will be activated from the moment of spill to the termination of operation and even extending to decision making, record keeping etc. The Oil Spill Response Organisation Chart proposed for the Kandla Port Trust is given as **Figure 8.1 below.**

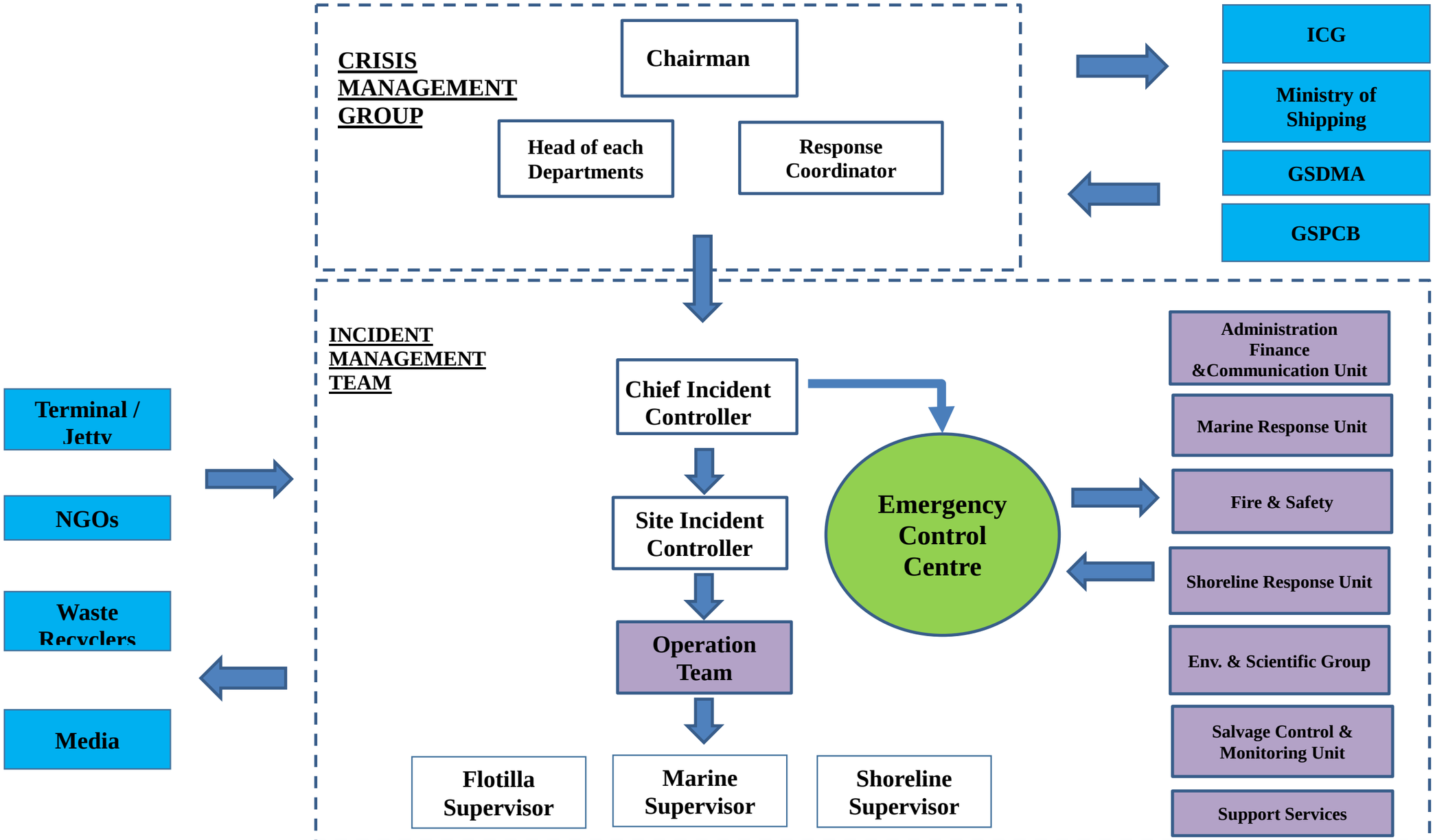


Figure 8.1. Oil Spill Response Organization Chart

8.1.1 Crisis Management Group

Crisis Management Group is the principal authority for oil spill prepardness & response within Kandla Port Limit. It shall be established at Kandla Port Trust utilizing the following key personnels:

- Chairman
- Deputy Chairman
- Chief Engineer (Civil Department)
- Chief Engineer (Mechanical Department)
- Secretary (General Administration)
- Chief Vigilance Officer (Vigilance Department)
- Traffic Manager (Traffic Department)
- FA & CAO (Finance & Accounts Officer)
- Chief Medical Officer (Medical Officer)

An appropriate person shall be nominated as the Response Co-ordinator who will be directly in touch various division, departments & agencies as and when required.

8.1.1.1 Roles & Responsibilities

- Responsible for the preparation and review of Oil Spill Contingency Plan for Kandla Port
- Procurement & development of OSR Equipments and facilities
- Responsible for getting the port personnel trained at IMO level 1 & 2
- Responsible for formulating MoU with Mutual Aid Group
- Review of Oil Spill Response Preparedness
- Site Visit & Review of report prepared by Chief Incident Controller (CIC)
- Responsible for communication with various National and State Level Authorities and media
- Responsible for Coordination, Communication with State Level Agencies such as State Disaster Management Agency (SDMA), State Pollution Control Board, Coast Guard Headquarters NW Region, Dept. of Fisheries, Forest, Wildlife.
- Constitution of Incident Management Teams as nominated by Chief Incident Controller (CIC)
- Responsible for allocation & deployment of personnel for handling oil spill incidents

- Providing Guidance to Emergency Response Units including arranging external assistance to
- Providing administrative and financial assistance to operations
- Declaration of the closure of Oil Spill Response Operations

8.1.1.2 Specific Duties of Response Coordinator

- Communicate between the Crisis Management Group and Incident Management Team
- Co-ordinate the activities of Incident Management Team after incorporating the recommendation of CMG
- Organise CMG meetings including joint meetings with IMT.
- Give proper instruction to CIC from time to time after consulting with CMG
- Arranging supporting as and when required by the IMT on approval of Chairman

8.1.2 Incident Management Team (IMT)

Oil spill response facility to be established will have an Incident Management Team. The Incident Management Team is the team who takes up the response activities under a Chief Incident Controller with its opertation team and independent supporting units, who actually deals with the response activities at field. Incident facilities including Emergency Control Centre, Incident Command Centre, Forward Command Point, Staging Areas, Safe Forward Point, Joint Information Centre, Waste Management & De-contamination blocks will be directly functioning under IMT.

The section below presents the functional responsibilities and reporting requirements of IMT and facilities established as a part of it..

8.1.2.1 Chief Incident Controller (CIC)

CIC is the key responsible officer for the management and co-ordination of response operations at the scene of a pollution incident to achieve the most cost effective and least environmentally damaging resolution to the problem. CIC shall have overall responsibility to protect personnel, site facilities, and the public before, during, and after an emergency or disaster. The CIC shall be present at the emergency control centre (ECC) for counsel and overall guidance. He will be the contact point to the coordinators of individual units under ECC and resources & personnels under this unit will be transferred to the operations team depending upon the requirement of the situation. CIC can also delegate the power to pool the resources and personnel to SIC or SICs depending upon the intensity & extent of the incident and ask for briefing from time to time. In the case of small spills CIC itself can act as the SIC.

8.1.2.2 Official in Charge of CIC

Dy.Conservator, Kandla Port will act as the CIC in an event of oil spill.

8.1.2.3 Responsibilities of the Chief Incident Controller

The key responsibilities of CIC shall include the following:

- Preparation, review and updation of the OSCP
- Assessment of situation and declaration of an oil spill emergency
- Activation of Emergency Control Centre
- Approval of Incident Action Plan prepared by the SIC/SICs during spill
- Mobilisation of Oil Spill Response Resources
- Coordinate Surveillance and Monitoring Oil Spill Events
- Coordination with CMG and other personnels on direction from CMG
- Continuous review of situation and decide on appropriate response strategy
- Taking stock of casualties and ensure timely medical attention
- Ordering evacuation of personnel as and when necessary
- To be responsible for ensuring that appropriate local and national government authorities are notified, preparation of media statements, obtaining approval from the CMG and releasing such statements once approval received
- Assessing the situation and requesting to CMG for organizing consultation with ICG and District Authorities when a Tier 2 or Tier 3 spill is to be declared.
- Ensuring correct accounting and position of personnel after the emergency

8.1.2.4 Reporting Requirements of CIC

The Chief Incident Controller shall report to the Crisis Management Group through the Response Coordinator.

8.1.3 Emergency Control Centre (ECC)

Emergency Control Centre will be established at KPT office with 24 hr control room at the port office under the supervision CIC. ECC acts as the key coordinating centre for responding to any oil spill incidents. The emergency control center may be defined as the place from which the operations to handle the emergency are directed and coordinated. CIC will be assisted by an In-Charge who will be taking care the reporting requirements of various response units, operation team and other stakeholders of the event and other interested parties.

ECC equipped to receive and transmit information and directions from all the areas of the marine terminal as well as outside and will be located in an area of minimum risk. The ECC shall be away from the potential hazards and provide maximum safety to personnel and equipment and should be preferably made of non-combustible building of either steel frame or reinforced concrete with two exists and adequate ventilation. Preferable it should be placed in connection with KPT Pollution Response Centre or integrated with exiting VTMS. It should also act a data repositrory that will be a point of gathering and dessimination of all information significant to the situation. Thus the Centre shall be equipped with facilities for Communication, Coordination, Survillience, Monitoring, Conferencing – Real & Virtual and Repository.

8.1.3.1 Officer In charge of ECC

Dy. Conservator, the CIC himself will be Official In Charge of ECC.

8.1.3.2 Role of ECC

8.1.3.3 Facilities to be maintained with ECC

- A copy of the Oil Spill Contingency Plan (OSCP); maps and display charts and diagrams showing buildings, roads, underground fire mains, important hazardous material and process lines, drainage trenches, and utilities such as steam, water, natural gas and electricity;
- Situation boards (continuously updated to present a summary of the current situation and response actions being taken);
- Aerial photographs, if possible, and maps showing the site, adjacent industries, the surrounding community, high-ways, rivers, etc., help determine how the disaster may affect the community so that the proper people can be notified, adequate roadblocks established, and the civil authorities advised sufficient telephone lines to enable full liaison with outside bodies;
- Names, addresses, and telephone numbers of employees, off-site groups and organizations that might have to be contacted; all telephone lists being reviewed for accuracy on a scheduled basis and updated, as necessary;
- Dedicated and reliable communication equipment; enough telephones and at least one fax line to serve the organization for calls both on-and off-the-site;
- Fixed and portable two-way radio equipment to keep in contact with activities on-scene and to maintain continuity of communications when other means fail;
- Meeting room including conference rooms

- Plan board, logbook, tape recorder, television, DVD and Video facilities for playing back records from aircraft and helicopters, as well as monitoring media coverage of the incident with a person assigned to record pertinent information and to assist in investigating causes, evaluating performance, and preparing reports;
- Emergency lights so that operations can continue in the event of power failure; Photocopy, fax and e-mail facilities; and dedicated computers with LAN/ internet facility to access the installation data and the latest and updated soft copies of all standard operating practices (SOP),Reference material such as applicable government regulations, emergency equipment lists etc.

8.1.3.4 Reporting Requirements of ECC

CIC, the head of ECC will report the Crisis Management Group through the response coordinator.

8.1.4 Site Incident Controller (SIC)

CIC shall identify SIC, who will be reporting directly to him and SIC shall be nominated for full day shifts of operation for Port. SIC will have a operational team under him which will be supported with appropriate planning, technical, scientific, chemical, environmental, logistical, administrative, financial units as and when required on request to CIC.

8.1.4.1 Official in Charge of SIC

Dy. HOD, Marine Department/ Chief Operational Manager of port may act as the SIC in an event of oil spill. If EE is given the chart the port officer can be given the charge of operational team.

8.1.4.2 Responsibilities of the Site Incident Controller

The key responsibilities of SIC shall include the following

- Assist in developing and updating workable oil spill emergency contingency plan based on the experience specific to the area, organize and equip the organization inline with OSCP based on the and train the personnel;
- Preparation of Incident action plan (IAP) describing activities and logistical support covering the basic elements the situation, mission, execution, administration and logistics, command, control, co-ordination and communication with functional responsibilities.
- To communicate to the Emergency Control Centre through which it can communicate among groups and organize joint activities
- To ensure that the response to the oil pollution emergencies is in line with entity procedures, and to coordinate business continuity or recovery plan from the incident

- Request for any specialist support to the CIC
- Give feedback on seeking assistance of mutual aid members and external agencies.

Also SIC through respective coordinators will be responsible for:

- Communication links between the units
- Distribution of messages within the units
- Taking Minutes during meetings to record decision
- Typing Services
- Updation of situation boards & Charts
- Providing catering to the units and also forward a copy of the same to CIC.

8.1.4.3 Reporting Requirements of Site Incident Controller

The site incident controller shall report to the CIC

8.1.5 Operational Team

Operations unction is responsible for the management of all activities that are undertaken to resolve the incident and the management of all resources deployed in the field. The operations are organized in to divisions on the basis of the geography or operations being conducted. Divisions are major areas of activities which can be broken down in to the type of activity or geographical area according to the type and demands of the incident. Operations as well as functions involved as given as **Table 8.1** below:

Table 8.1. Functions of the Operation Team

Sl.No:	**Operations**	**Functions**
Offshore		
1	Marine operations	Marine containment and recovery
2	Salvage	
3	OSD	Aerial dispersants, Marine dispersants
Onshore		
1	Shoreline operations	
2	Offshore & Onshore	
3	Aerial operations	Aerial surveillance
4	Wildlife response	
5	Waste management	

8.1.5.1 Official In charge for Operational Team

Manpower trained at Level I of IMO Training from Technical wing shall constitute operational team. There may be a team leader to command the operational team as the official Incharge or it can be under the command of SIC himself. The operational team will have ability to conduct marine as well as

shoreline response operations. Marine response include offshore and coastal water operations whereas shoreline team will be positioned on the land area of the coastline. In the interface areas like creeks, salt pans etc, that they may work together. Number of members in each such team may be varied depending upon the incident.

8.1.5.2 Responsibilities

He is responsible for the provision of scientific and environmental information, maintenance of incident information services, and assist in the development of Strategic and Incident Action Plans. He shall ensure the distribution of all information to the operational team as well as take back details from them to Crisis Management Group and to all response personnel generally.

He is responsible to the CIC for all response operational activities. This includes ensuring that the requirements of Incident Action Plans (IAP) are passed on to operational personnel in the field, and for ensuring that the plans are implemented effectively and complied throughout the operation.

Responsibilities of Operational Team in general is described below:

- Obtain briefing from incident command
- Identifying level of priority
- Surveillance of Oil Spill, Monitoring of Water Quality
- Estimation of Quantity of Spill , possible trajectory identification
- Developing Tactics in support of Incident Action Plan (IAP)
- Response resources Allocation for each division or sector and assessment
- Deployment of response resources including flotilla
- Maintain a log of activities
- Review of Operations

8.1.5.3 Reporting Requirements

Operational Team is to report the SIC through its team leader if SIC himself is not in charge. In addition to the regular reporting special incidents, accidents and change overs are to be reported to CIC also. Incase of activation of Units from emergency control centre they will be also coming under the operational team with its own team leaders reporting to the Site Incident Controller even though they will be activated by ECC head the Chief Incident Controller

8.1.6. Emergency Response Units

Seven emergency response units are proposed for achieving effective managemnet of emeregency. There will different units having specific roles under the ECC dealing with administration, fire & safety, salvage monitoring and control, marine response activities, shoreline response, environmental and scientific aspects to act on emergencies as required. Response units are directly coming under the CIC through a coordinator. He will arranging the additional supports by of the CMG responsible for management of the ECC. Of which some sepcialised one will be activated only if the situation recommends. under the recommendation of site incident controller to the CIC.

Table 8.2. Responsibility allocation for Emergency Response Unit

Sl. No.	Emergency Response Unit	Status	Co-ordinator*
1	Shoreline Response Unit	Specialised	Dy. HOD, Civil Department
2	Marine Response Unit	Essential part of OT	Dy. HOD, Marine Department/ Chief Operational Manager #
3	Salvage, Control & Monitoring Unit	Specialised	Dy. HOD, Traffic Department
4	Environmental & Scientific Unit	Specialised	Dy. HOD, Medical Department
5	Fire & Safety Unit	Regular	Dy. HOD, Mechanical Department
6	Administration Unit	Regular	Dy. HOD, General Administration Department
7	Finance Unit	Regular	Dy. HOD, Finance & Accounts Department
8	Support Services – including –		
	Logistics	Regular	Dy. HOD, Vigilance Department
	HR, Media & Public Relations	Regular	Dy. HOD, General Administration Department

Note:

* In the case the organisation is lacking inhouse strength in any of these area, outsourcing can be done and in that case the team leader of the contract agency will be functioning under the respective co-ordinator.

Depending the location of Spill whether Kandla Zone or Vadinar Zone.

8.1.6.1. Administration Unit

Administration and Communication Coordinator is responsible for providing administerial support during the emergency.

Administration team is responsible for the general management of the unit and providing personnel for Communication links between the units, Distribution of messages within the units, keeping records of messages and expenditure, taking minutes during meetings to record decision; typing services, updating situation boards and charts; and providing catering to the units. He shall also ensure adequate

liaison between the incident management team and the media. All queries received from the media should be directed to this person. Before releasing any information, there should be have the approval of either the relevant Coast Guard Commander or CIC, depending on the size of the spill.

8.1.6.2 Official In charge

Dy. HOD, General Administration Department will act as the coordinator.

8.1.6.3 Responsibilities

The key responsibilities shall include

- to coordinate with mutual aid members and other external agencies
- to direct them on arrival of external agencies to respective coordinators at desired locations
- to mobilize oil spill responders and resources for facilitating the response measures
- to monitor mobilization and demobilization of personnel and resources
- to provide administrative and logistics assistance to various teams
- to be responsible for all financial, legal, procurement, clerical, accounting and recording activities including the contracting of personnel, equipment and support resources detail out

8.1.6.4 Reporting Requirements

He is to report the CIC.

8.1.6.5 Fire & Safety Unit

The implementation of operational guidelines and oversight of work practices to ensure the safety of response personnel and the public is integral to any response operation. Monitoring of operations to ensure there are safe working conditions is required throughout the response.

8.1.6.5.1 Official In charge

Dy. HOD, Mechanical Department shall be acting as the Fire and Safety Coordinator.

8.1.6.5.2 Responsibilities

- Development & execution of emergency response plan
- Train all team members for fire response
- Overall responsible for fire prevention

- To ensure that everyone is evacuating and none is entering the restricted area during emergency
- Operation and maintenance fire detection, notification and suppression systems
- Providing first aid to the injured person and transportation of the patient
- Recommend the Site Incident Controller to impose as well as release fire emergency

8.1.6.5.3 Reporting Requirements

He will be reporting to the CIC.

8.1.7 Salvage Monitoring & Control Unit (SMCU)

Salvage operations undertaken by the SMCU shall include:

- Lightering- Transferring Cargo, Pumping, deploying fenders etc., towing after refloating in case of grounding
- Air Lift
- Tidal Lift & Heaving- beach gear
- Refloating of breaking out stranded vessels

8.1.7.1 Role of SMCU

The SMCU will be the agency to monitor and control salvage operations

8.1.7.2 Official In charge of SMCU

Dy. HOD, Traffic Department will act as the official in charge.

8.1.7.3 Reporting Requirements of SMCU

He will be reporting to the CIC.

8.1.8 Marine Response Unit (MRU)

To direct response action at sea/ coastal waters.

8.1.8.1 Role of MRU

Marine response operations include surveillance, monitoring, containment and recovery and temporary storage of recovered oil.

8.1.8.2 Official In charge of MRU

Dy. HOD, Marine Department/ Chief Operational Manager will act as the official in charge.

8.1.8.3. Reporting Requirements of MRU

He will be reporting to the CIC.

8.1.9 Shoreline Response Unit

To direct response action at shore. The shoreline surveys will be conducted by shoreline response unit forming the part of operations team. The results of shoreline surveys will need to be communicated to the crisis management group to plan priority areas for clean-up for the next operational period. It will help to identify and prioritize shorelines for clean up, confirming the shoreline ranking with the ground data based on over flights, aerial photography, remotely sensed data, ground truthing, existing maps and data.

8.1.9.1 Role of SRU

Shoreline assessment survey, Shoreline Cleaning, storage, disposal and transportation are the important duties of SRU

8.1.9.2 Official in charge

Dy. HOD, Civil Department will act as the official in charge.

8.1.9.3 Reporting Requirements of SRC

He will be reporting to the CIC.

8.1.10 Environmental and Scientific Unit

The principal aim of pollution response operations is to minimize impacts upon ecological and socio-economic resources. Effective planning here for requires up to date and co ordianted information about the resources within a given area. Resources map, sensitivity charts and risk level matrices for 10km radial distance of each port will provide guidelines for identification of resources at immediate risk. The environment unit identifies and priortises resources at risk, recommends acceptable method of clean up and the end point at which cleanup activities should cease.

8.1.10.1 Official in Charge

Dy. HOD, Medical Department shall act as the Environmental and Scientific Coordinator at present. The port may pre appoint Environmental Scientist as an In Charge to support the E & S co-ordinator.

8.1.10.2 Role of Environmental and Scientific Coordinator (ESC)

ESC is to provide the CIC with an up-to-date and balanced assessment of the likely environmental effects of an oil spill based on the nature and extent of spill tendency of drift and direction of drift. The Planning Section will advise on environmental priorities and preferred response options, taking

into account the significance, sensitivity and possible recovery of the resources likely to be affected. In major incidents, the ESC may directly advise the relevant Coast Guard Commander.

8.1.10.3 Reporting Requirements of ESC

The Environmental and Scientific Coordinator shall report to the CIC.

8.1.11 Financial Services

Finance function monitors and maintains records about cost incurred in responding to the incident including the provision of accounting, time recording and costs analysis. The function is particularly relevant to the oil and has incidents due to the ability to recover costs under relevant compensation conventions. E.g., CLC Bunkers convention, fund etc. Finance may also be responsible for handling of claims for damages, loss of use or inconveniences.

8.1.11.1 Official in Charge

Dy. HOD, Finance & Accounts Department is the Financial Unit Coordinator

8.1.11.2 Role of Financial Unit Coordinator

Accounts: Accounts refer to arrangement for the payment of services, materials, etc procured during response operations. These payments may be arranged directly by individual organizations involved in the incident in which case accounts becomes more focused on record maintenance for the purposes of cost recover at a later date.

Insurance/ compensation: Insurance or compensation arraignments may be required to cover losses, damages or injury to response resources and personnel. Again these requirements may be covered by individual organsistion. There may be a need to create an office of function within the command structure to specifically address compensation arrangements.

Cost recovery:The polluter pays principle is fundamental to responding to ship sourced pollution incidents. The preparation of claims and in particular co ordination across agencies requires specific attention within the response organsiation. Consideration should be given to the early contact and exchange of information with insurers, IOP fund etc on anticipated costs.

8.1.11.3 Reporting Requirements

The financial coordinator shall report to the CIC.

8.1.12 Support Services

Human Resources & Logistics are the major support services.

8.1.12.1 Official in Charge

Dy. HOD, General Administration Department & Dy. HOD, Vigilance Department are the coordinators for the Human Resources & Logistics services respectively.

Human Resources:This section support the response operations with trained and skilled manpower by evaluating existing manpower, providing additional manpower as requirement arises.

Logistics: Logistic unction supports the operations function through the provision and maintenance of all resources and services. There are strong links between logistics and planning due to the implementation of strategies being depended upon the supply of resources

8.1.12.2 Responsibility

Support Services Coordinators shall ensure that all resources are made available as required. This include the procurement and provision of personnel, equipment and support services for operations in the field and for the management of resources staging areas.

8.1.12.3 Reporting Requirements

He will be reporting to the CIC.

In addition to this the following facilities will be established at the incident location which is important in the case of a large spill. SIC will be responsible for the operation of these facilities.

Incident Command Centre (ICC): The incident command centre is where the incident management team directs response activities in an emergency situation at site. Every incident will have an ICC which can take a number of forms, depending on the type and size of incident and may be a vehicle trailer, tend or offices.

Even in Tier -2 & Tier- 3 Situation - There should be only one ICC for an incident, no matter how many organizations are involved. If the various agencies and or jurisdictions are separated physically, it can be difficult to implement an effective system of management. Each organsiation should be therefore be represented in the ICC.

ICC should be equipped with communication systems. A joint information centre may be established to provide a central point of coordination for information and communications representatives from key organizations.

Important considerations while setting up an ICC are given below:

- Be positions away from the general Nosie and confusion associated with the incident
- Be positions outside the actual and potential hazard zone particularly for HNS incidents
- Have the ability to expand and adapt as the indent demands increases

- Have the ability to provide security for the control access to the ICC as necessary
- Be clearly identified
- Be sheltered from weather.

Staging Area: Staging areas are to be identified where prepared personnel and equipment are gathered prior to deployment. The staging area may include provision for the crew welfare and equipment maintenances.

- Staging areas should provide for
- A secure location for resources prior to deployment
- Greater accountability by having available personnel and resources together in one location
- Keeping track of resources
- Assisting in the check in of personnel arriving at the incident
- Facilitating the planning of resources deployment
- Mitigating traffic congestion

Further considerations in establishing staging areas are:

They should be close to the location of the tactical assignments. They should be close to a safe area. They should have separate entrance and exit routes. They should be large enough to accommodate the anticipated levels of resources flowing through. They should be located in an area where vehicles and personnel will cause minimal environmental damage.

Safe forward point: It is a safe location near the incident from which forward operations can be supported outside the immediately affected as of vapour plume.

Major response programs such as Containment, Recovery shall be followed by associated activities such as decontamination of equipment and temporary waste management whose responsibility will be covered by the incident management team. The SIC shall divide the responsibilities between different team such as operation, logistics etc depending on the situation. Decontamination facilities should be established to wash down both equipment and personnel in order to minimize secondary contamination. Ideally there would be associates with other waste management facilities; however, special requirements, such as bunding, etc., may require separate facilities to be established. Temporary waste management facilities should be established in the early stages of a response operation. Consideration should be given to the establishment of both temporary ad long term storage facilities as well as transportation and final disposal requirements. The positioning of the facilities should also take account

of logistics i.e., ability to handle predicted amounts of waste, as well as public health and environmental considerations and transportation routes.

9

INITIAL PROCEDURES

9.1. Notification of Oil Spill to Concerned Authorities

9.1.1. Identification of Oil Spill

Master or other persons having charge of ships and persons having charge of ships will be many times the first person to identify the spill. Otherwise a representative of the Port authority will be identifying the spill during his routine surveillance or by chance. Sometimes any other organization or individual may report a spill.

Occasions of report:

- a discharge above permitted level or probable discharge of oil
- damage, failure or breakdown of a ship of 15m length
- a discharge during operation of the ship

The pollution shall be reported in a specified format which is usually referred as Marine Pollution Incident Report POLREP. In all these cases the spills within the port limit / premises are to be reported to the respective port authority. The report shall have the following information:

- Identity of ship/ facility
- Time, type and location of the incident
- Quantity and type of the substance involved
- Weather, sea state and tidal conditions in the area

The report of the incident recieved will be communicated to the emergency control centre by the CIC to the SIC as per the instructions of Crisis Management Group. Irrespective of the quantity of spill even a threat of marine pollution shall be immediately reported to Indian Coast Guard MRCC. Any way in local response of Tier 1 for the Coast Guard has no other role than to monitoring and guidance. After giving due consideration to the importance of the situation, the notification shall be sent to:

- District Disaster Management Authority (DDMA) of all coastal states
- State, District & Local Disaster (Oil Spill Crisis) Management Groups
- All port and terminal/facility operators in Gujarat, with call for attention to the regional ones
- Coast Guard (Regional HQ in Gandhi Nagar and nearby stations-Porbandar)
- Gujarat Pollution Control Board (GPCB)

9.2. Estimating Fate of Slick & Preliminary Estimate of Reponses Tier

Quantity of the spill can be assessed from the ship Master or designated person in case of a known source with which the Response Tier could be fixed. Otherwise visual judgment of experienced hands will help to determine it. OOSA of INCOIS can be effectively utilised for this.

9.2.1 Quantifying Floating Oil

Gauging the thickness and coverage of floating oil is a difficult task. Therefore an accurate assessment of the quantity of any oil observed at sea is virtually impossible. At best, the correct order of magnitude can be estimated by considering certain factors. The gravity-assisted spread of spilt oil is quite rapid and most liquid oils will soon reach an equilibrium thickness of about 0.1 mm characterised by a black or dark brown appearance. Similarly, the colouration of sheen roughly indicates its thickness. Approximate quantity of floating oil can be determined from relation between the appearance, thickness and volume of floating oil at sea as given in the **Table 9.1** below.

Table 9.1. Approximate Quantity of Floating Oil

Sl. No	Oil Type	Appearance	Approximate Thickness	Approximate Volume (m1/3/km1/2)
1	Oil Sheen	Silvery	0.0001 mm	0.1
2	Oil Sheen	Iridescent	0.0003 mm	0.3
3	Crude And Fuel Oil	Black/Dark brown	0.1 mm	100
4	Water-In-Oil Emulsions (Mousse)	Brown/Orange	>1 mm	>1000

Source: NOS-DCP

By estimating the percentage coverage of the oil type in question, the actual area covered relative to the total sea area affected can be calculated from timed over flights at constant speed. Aerial photography will sometimes allow the percentage of floating oil to be calculated more accurately and the use of a polaroid or other types of instant picture camera can therefore be valuable. “Response to Marine Oil Spills,” ITOPF ltd. 1987, Page 1.16 o illustrate further the process of estimating oil quantities the following example is given: “During aerial reconnaissance flown at a constant speed of

180 knots, crude oil 'mousse'" and silver sheen were observed floating within a sea area, the length and width of which required respectively 75 seconds and 45 seconds to overfly. The percentage cover of 'mousse' patches within the contaminated sea area was estimated at 10% and the percentage cover of sheen at 90%". From this information it can be calculated that the length of the contaminated area of sea measured is: 75 (seconds) x 180 (knots) = 3,75 nautical miles or 6.945 kilometres ie.,3600 (seconds in one hour). Similarly, the width is: 45 x 180 = 2.25 nautical miles or 4.167 kilometres The total area is 8.4375 square nautical miles which is approximately 29 square kilometres.

The volume of "mousse" can be calculated as 10% (percentage coverage) of 29 (square kilometres) x 1000 (approximate volume in m^3 per km^2 - from the **Table 9.1.** As 50 % of this mousse would be water, the volume of oil present would amount to approximately 1450 m^3. A similar calculation for the volume of sheen yields 90% of 29 x 0.1 which is equivalent to approximately 2.61 m^3 of oil. It can be seen from the example that the sheen, through may cover a relatively large area of sea surface, the volume of oil contained will be negligible. Therefore, it is crucial that the observer is able to distinguish between sheen, thicker oil, and emulsion.

9.2.2. Forecasting Slick Movement

It is important to be able to forecast the probable movement of a slick as well as likely changes in properties of the oil after it has been spilled. This helps in identifying sensitive resources in the path of the slick and to take appropriate response measures. The task of forecasting the position of an oil slick can only be accomplished if data on winds and currents are available since both contribute to the movement of floating oil. Other factors to be considered are waves and tides.

It has been found empirically that floating oil will move downwind at about 3% of the wind speed. In the presence of surface water current, an additional movement of the oil equivalent to the current strength will be imposed in any wind-driven motion. If the wind is negligible, which is rarely the case, the oil will move only under the influence of currents and tides. Surface currents dominate the movement of the slick unless the winds are extremely strong. Close to land, tidal currents must be taken into account, but farther out to sea their contribution is minimal since they are cyclic and tend to cancel out over time, although rarely ever completely. This gives rise to a residual current, which will determine the long-term movement of the slick.

9.3. Notifying Key Team Members and Authorities

DDMA will inform the key team members and authorities within and outside the organization after getting due consent of the District Collector.

9.4. Manning Control Room

Control room will be established at ECC with sufficient facilities for control and coordination.

9.5. Collecting Information

Information collected from the field shall be collected in the Field Logbook. This can be maintained as a descriptive notebook detailing site activities and observations so that an accurate, factual account of field procedures may be reconstructed. Logbook entries will be signed by the individuals making them. Entries should include, at a minimum, the following:

- Site name and reference number.
- Names of personnel on-site.
- Dates and times of all entries.
- Description of all site activities, including site entry and exit times.
- Noteworthy events and discussions.
- Weather conditions.

Site observations include oil type, sea/ wind forecast, surveillance, beach reports. Surveillance and sampling are the initial responses immediately started after the occurrence of a spill.

9.5.1 Identifying Resources Immediately at Risk for Informing Parties

Based on the already available data from the resources map and sensitivity maps resources immediately at risk and requiring protection based on priority is identified. Identification of the responsible party or source for an oil spill incident may require the laboratory analysis of oil samples. This is one part of the overall task of investigating the oil spills and suspected sources. Comparison of the spilled oil with its potential source samples can provide evidence of the source of the oil. It is possible to identify the difference between one oil and another and similarities between spilled oil and its source. Early detection of accident and emergency response is essential.

9.6. Surveillance

The aim of surveillance is to detect, characterize and preferably quantify spilled oil that may be present in a range of settings (on-water, in-water and onshore). This is of critical importance in enabling the incident command to effectively determine the scale and nature of the oil spill scenario, make decisions on where and how to respond, control various response operations and, over time, confirm whether or not the response is effective.

Irrespective of the final response strategy selected monitoring of oil spill will commence immediately after the oil spill and will continue until the response operation is terminated. The information gathered through monitoring and evaluation will be used by the Incident Management Team to steer the response, and ensure that the most effective and efficient response strategies are being adopted.

Five monitoring and evaluation methods are discussed in this section:

- Aerial Surveillance
- Vessel Surveillance
- Satellite Surveillance
- Surface Plume Tracking
- Spill Trajectory Modelling.

9.6.1. Aerial Surveillance

Aerial surveillance is the first response for any ongoing reportable incident as it allows the Incident Management Team to quickly gather initial information about the incident and formulate tactical plans to combat the spill. Aerial surveillance can be carried out throughout the incident management process to provide feedback to the command centre on daily progress and to help evaluate the success of the response strategies.

A written or verbal flight task is given to the aerial observer detailing the purpose of the mission, such as:

- Confirming the location of the spill using ladder or spiral search path
- Quantifying the amount of oil on the water and verifying the results from modelling
- Directing response operations such as directing vessels/aerial dispersant application planes onto the thickest part of the oil
- Conducting shoreline surveys to identify areas that may have been, or may be impacted.

Followed by the aerial surveillance and preliminary shoreline survey substantiated by notes, sketches, photographs and videos supported by GPS readings. In case considerable part of oil spill sunk due to environmental conditions, oil characteristics or both, under water survey may be required. The survey may be undertaken using visual assessment, divers, remotely operated vehicles, acoustic sensors or sorbents. Environmentally hazardous areas must be marked specifically based on the secondary data already available so that many accidents resulting in loss of life and property can be averted.

The accuracy of visual assessments can be compromised by the presence of naturally occurring substances similar in appearance, behaviour, or odour to petroleum hydrocarbons. These include mineral sands, rotting vegetation, peats, mud, lichens, marine stains or bacterial films. In the case of an unknown source sampling from suspected sources both offshore and land based installations such as mobile drilling rigs, fixed or moored production systems, pipelines, oil terminals etc.

9.6.2. Vessel Surveillance

Before the arrival of aircraft for aerial surveillance, vessels available on the scene can help to conduct initial visual surveillance by following the leading edge of the slick. This location information can then be communicated to the Incident Management Team to guide the aerial surveillance aircraft to the slick. This is only a temporary measure as the vessel's visibility range is restricted and there is a risk of secondary contamination of the vessel.

9.6.3. Satellite Surveillance

Surveillance of oil spill is also possible through satellites with sensors such as SAR (Synthetic Aperture RADAR – an active sensor that sends out a microwave pulse and reads the return) and Optical sensors – (Relies on reflected energy). RADAR imagery is the preferred option as the active pulse from space reacts with surface textures giving all-weather day/night imaging. This service may be engaged through Space Application Centre, Ahmedabad.

9.7 Sampling

Identification of the responsible source for an oil spill incident is essential because of its legal implication. Laboratory analysis of the oil samples is thus required following a spill incident. From that is possible to identify differences between one type of oil & the other and also to determine the similarities between spilled oil and its source. Source of the oil could be identified by the comparison of the spilled with the potential source samples. Sampling is as important as laboratory analysis and investigation.

Sampling of both biotic and abiotic resources from spill effected area is the first and foremost part of the oil spill testing. Resources can be water, oil, sediment, air or biota. Samples should be representative, since they are used to quantify the oil, predict its weathering characteristics and to identify the source.

Improper samples or sampling will lead to wrong results and conclusions that will not stand up in legal examination and subsequently laboratory analysis and investigations will become mere wastage. Personnels who are supposed to collect the samples should be given minimum training and practice to do better response in a real spill situation. A sampling plan shall be adopted that will be describe the

sampling procedures in brief and will ensure that all the required operations are taking place accurately and sequentially without any missing.

Sampling of oil from different environment site, from vessel engine to water body or even from an organism will be required. Also they can be of varied forms mainly of heterogeneous nature some of which are given below.

- Oil, oily water, heavily emulsified oil, tar balls or lumps on the water surface
- Mixtures of oil, sorbents or other materials which are soaked with oil
- Oiled animals on the water surface or on beaches mainly in the intertidal area
- Oil in tanks on ships, offshore constructions or land facilities
- Oily water bilges and slop tanks on ships, offshore constructions or land facilities
- Oily sludge in the sludge tanks on ships, offshore oil installations/ drilling rigs or land facilities.

Sampling equipment shall be pre cleaned to remove any oil residues including finger oils that may mix with the oil collected and interfere with the laboratory analysis. Oil contaminated sampling containers should be avoided. Sampling equipment if not purchased pre cleaned shall be cleaned with a detergent wash, rinsed with distilled water and then rinsed with solvents like dichloromethane, hexanes etc. Pre cleaned supplies can be wrapped in aluminium foil to prevent contamination while being stored or transported to the spill.

Table 9.2. Details for Oil Spill Sampling

<table>
<tr><th>Sl. No</th><th>Sample Type</th><th colspan="2">Sample Container</th><th colspan="2">Quantity of Sample</th></tr>
<tr><td rowspan="3">1</td><td rowspan="3">Oil</td><td colspan="2" rowspan="4">Glass Bottle 500ml Clean. Coloured (dark) glass is preferred for water samples.
Preferably supplied by laboratory.
Top should be sealed with aluminium foil under the cap.</td><td>Pure Oil Source Sample</td><td>30-50 ml</td></tr>
<tr><td>Contaminated Oil (Emulsified Oil, oil from the sea or shore, sandy tar ball)</td><td>10-20g</td></tr>
<tr><td>Debris with oil, oil stained sand</td><td>Sufficient quantity that oil content is approx.10g</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">Water</td><td>Water sample with visible oil</td><td>1 litre</td></tr>
<tr><td>Water sample with no visible oil</td><td>3-5 litre</td></tr>
<tr><td rowspan="2">3</td><td rowspan="2">Sediment</td><td>Fine: Silt - Pebble</td><td colspan="3">Glass Jar 250ml Clean. Coloured (dark) glass is preferred for water containing samples.
Preferably supplied by laboratory.
Top should be sealed with aluminium foil under the cap.</td></tr>
<tr><td>Coarse: Cobble</td><td colspan="3">Wrapped in aluminium foil Once wrapped they can be stored in plastic bags.</td></tr>
</table>

Sl. No	Sample Type	Sample Container	Quantity of Sample	
4	Biota	Glass Jar Same as Glass Bottle/ Jar	Oiled Feather	5-10 feathers depending on the quantity of oil present
		Wrapped in aluminium foil Whole specimens. Once wrapped they can be stored in plastic bags.	Fish, shellfish (flesh and organs)	Multiple individuals of the same species totaling 30g

Source: ITOPF

A sampling kit may be arranged for this with necessary sampling equipments as described in the **Table 9.3** given below.

Table 9.3. Components of the Sampling Kit

Sl. No	Item	Details
1	Sample jars (250 ml or other size)	Pre cleaned, teflon or aluminium cap or alfoil barrier as required. Plastic should not be used
2	Slick/pooled oil sampling equipment	Wooden spatulas/tongue depressors or stainless steel spatulas/spoons.
3	Sheen sampling equipment	TFE fluorocarbon polymer nets or small squares of sorbent. Polymer nets or bags with rings and extension poles, TFE polymer sheets of mesh fabric can also be used.
4	Disposable gloves	100% nitrile medical examination gloves
5	Sorbent padding for storage cooler.	
6	Sample storage coolers with pre-frozen freezer blocks.	
7	Waterproof plastic envelope.	
8	Sample identification labels	>1/sample. White Adhesive 5cm to 10cm water and oil resistant
9	Sample Log Sheets.	
10	Chain of Custody Forms.	
11	Decontamination equipment if needed,	
12	Cardboards Shipping Tubes, & Fibre board boxes	(25cmx25cmx25cm), For packing sample jars for shipment
	Sorbent material	
	Grease proof plastic bags 50cmx 65cm	
13	Tape for sealing jars, shipment tubes and fiberboard box 2 to 10cm wide	
14	Towels absorbent cloth or paper, twine	
15	Tongue depressors or pre-cleaned metal scoop	To aid collecting samples of heavy oil or tar balls

Sl. No	Item	Details
16	Sediment Sampler	
17	Onsite Probes	Eg. DO, Turbidity, Conductivity, Odour, Ambient Hydrocarbon Detector, Mutli Wavelength Fluorimeter etc.
18	Kit/ Pouch to hold all sampling equipment to spill location	

Source:IMO

9.8 Sample Identification and Security

Sampling identification, labelling and security is very important part of oil spill sampling, especially when it has a forensic value. The sample jar is to be sealed using tape to seal the lid to the jar, before placing the labels on the jar. While placing the labels on the jar, two labels should be kept one for the purpose of sample identification and the other for chain of custody. Writings on the jar should be legible and written using indelible ink. A sample identification label has been shown in **Figure 9.3** below.

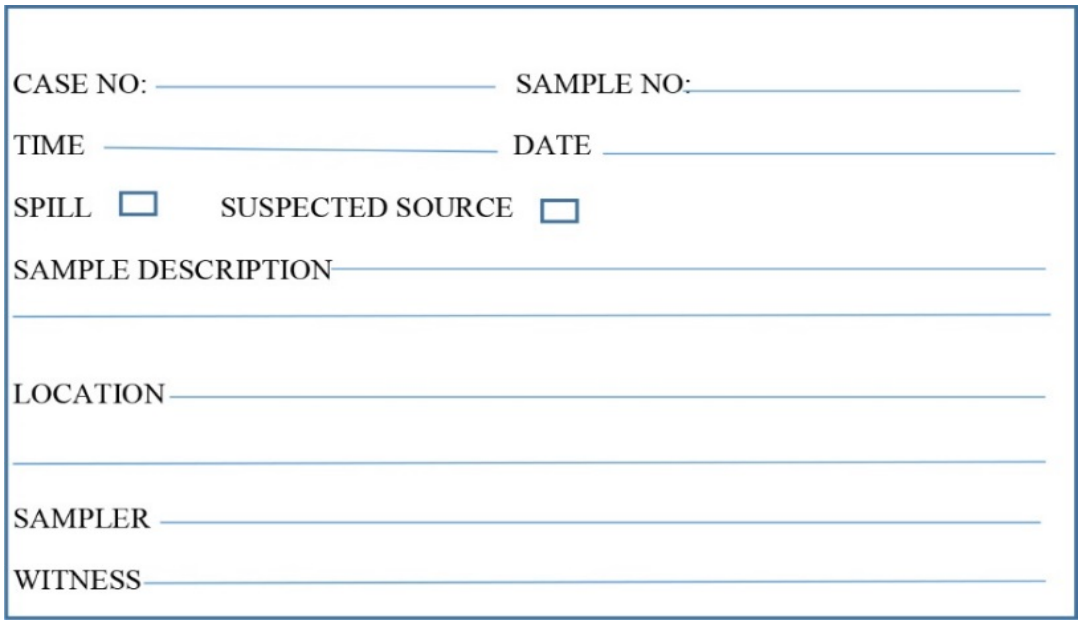


Figure 9.1. Sample Identification Label

9.8.1 Labelling and Sealing

All necessary information required for identification of the sample shall be there on the label such as geographic location, signature on suspected source sample from master or crew man, dates sealed and who sealed sample, etc., should be a part of the label.

Case number is a unique number assigned by investigator to help keep track of spills over time. Sample number stands for serial number given for each sample 1, 2, 3 etc. Sample description used to

distinguish one sample from another sample. For water samples the description should have information relating the sample to a fixed point like name of creek, distance form a bridge pier or any other identifiable structure. For sample from suspected vessels the description should have the name of the vessel and specific location of the sample such as engine oil bilge. Samples taken from a shore facility should include the name of the facility including a city, location of the sample on the facility (IMO).

9.8.2 Sample Log

For each sampling operation a sample log should be prepared and transferred along with along with sampling jars and kept in safe custody. It should contain all the available details regarding the sample including the necessary things given below.

- Sample number or code (Optional, but advisable for multiple sampling at a single location).
- Sample description (oil, debris, thick slick, film, sediment, air and biota etc).
- Time and Date (24 hr clock, Day/Month/Year).
- Location (GPS coordinates or other description).
- Name of person taking the sample.
- Witness (If a sample for legal purposes).
- Identification and description of samples and locations.
- Subcontractor information and names of on-site personnel.
- Dates and times of sample collections and chain-of-custody information.
- Records of photographs.
- Site sketches of sample location including identification of nearest roads and surrounding developments.
- Calibration results.

Additional notes may be added as and when required as follows as:

Sediment type (sand, mud, pebble), colour& texture, biological (shellfish, marine worms, sea grass, algae), visible oil, length of core, Sample leakage or loss during collection, sample disturbance.

9.8.3 Chain of Custody (CoC)

After sampling it is important that a samples are to be kept in a person's custody or possession so that either he can see them or they are locked up. The sample description here should be exactly same as that of sample label. All persons who have control of the samples need to sign in the signature part of the CoC as well as the chain of custody label on the sample. CoC document should be sent with the samples to the laboratory. Format for chain of custody is attached as **Table 9.4**.

Table 9.4. Format for Chain of Custody

Chain of Custody Record					
Organization's name					
Address:					
Spill	Source	Sample no	Description of samples for case no:		
Person Assuming Responsibility for Samples			Time/ Date		
Sample number	Relinquished by:	Time/ date	Received by	Time/ date	Reason for change of custody
Sample number	Relinquished by:	Time/ date	Received by	Time/ date	Reason for change of custody
Sample number	Relinquished by:	Time/ date	Received by	Time/ date	Reason for change of custody
Page of _					

9.9 Handling the samples

Samples must be handled, stored and transported with care so that they remain uncontaminated, intact and fit for purpose. Handling procedures should also be documented such that sample integrity can be demonstrated. Containers should be filled as full as possible to exclude air and avoid evaporative losses of light hydrocarbons. All samples should be labelled immediately. Labels should not be placed inside the sample container. Labels should be applied to containers after the sample has been sealed. This will allow the container's exterior to be cleaned and dried before the label is attached. While sampling care should be taken that there is no contamination from exhausts of engines or cooling water of sampling vehicles.

9.10 Storing the samples

Samples should be held overnight or for any extended time in a secure room, within a suitable container ie. a refrigerator. A sample room may be established and a sample room controller may be appointed and log may also be kept for the room. Samples should have a Chain of Custody record attached to

track the location and handling of samples. Samples are stored in a cool dark room. Weathering may be accelerated in the presence of heat and sunlight. The samples may be placed in an insulated pouch or Styrofoam cooler. A closed vehicle is no desirable especially in summer even when a cooler is used. Hence it is better to avoid such journeys or for the optimum condition i.e., keep the samples in an explosion proof refrigerator at 2 to 7 °C. Samples should not be freezed and hence the temperature should be maintained above -4°celcius. The preservation methods are given **Table 9.5** below.

Table 9.5. Preservation Methods for Different Types of Samples

Sl.No	Sample Type	Preservation Method
1	Sediment	Chilled to < 4 °C- but not frozen
2	Oil	Chilled to < 4 °C- but not frozen
3	Soft Marine Fauna/Fish	10 % formalin in sea water Or freshwater if sample is from fresh water
4	Crustaceans/ Fish	Freezing (for large fish and crustaceans)

All areas where samples are handled or stored must be decontaminated before and after use, designated to be NO smoking areas, isolated from combustion engines, exhausts or other sources of hydrocarbon contamination. Samples will be transferred to the sample intake team to be frozen as soon as possible especially for sediment and tissue chemistry samples. Water samples will be analyzed immediately due to holding time limitations, while sediment and tissue samples collected for VOC and PAH analyses will be archived. Sediment samples collected for nutrient analyses will be analyzed within the 28-day holding time. (*MC 252 Oil Spill – Jean Lafitte National Historic Park and Preserve Submerged Aquatic Vegetation NRDA*)

9.11 Shipping of Samples

The guidelines for this are laid down by International Air Transport Association (IATA). This ensure safe, intact arrival of samples and prevent damage to other parcels. Packaging and Shipping of them is regulated under IATA's Dangerous Goods Regulations. Most of the samples belongs to the following to categories Flammable Liquid, packaging group II consists of oils with flash points less than 23°C eg. gasoline, naptha and most of the crude oil. Flammable Liquid, packaging group III with flash points more than 23°C but less than 60.5 °C eg. Kerosene, jet fuels, turbine fuels, No.1 fuel oils etc.

10

OPERATIONS PLANNING

10.1. Assembling full Response Team

The chief incident controller is ultimately responsible for assembling the response team. First of all he shall assess the incident, by consider the problems in detail, identifying the severity and possible development of the situation and response resources. Once the operations are started he will assume the command, appoint Site Incident Controller the delegate the power of incident command to the site incident controller. The incident command centre shall be established under the direct control of emergency response centre which is already established at each ports.

Further operational team will be constituted with staff appointed to the operational team according to the size and complexity of the incident. He will anticipate management requirements and make appointments as early as possible. Specific Incident Action Plan (IAP) shall be developed by the site incident controller and get it approved by the command. Its objectives, strategies and tactics should reflect the policy and aims of the response.

10.2. Identifying Immediate Response Priorities

Combinations of response options are needed even for small spills since all the response option are not equally feasible at all places as well as in all situations. Especially when the pollution status changes with time.

The possible response options are:

- No action other than monitoring and evaluating the oil
- Containment and recovery of the oil at sea
- Chemical dispersion of oil at sea
- Burning the floating oil at sea
- Shoreline Clean-up

Immediate response priority may be exercised depending of the quantity of oil spilt and location of spill proximity of resources and their sensitivity.

10.3. Mobilizing Immediate Response

After estimating the quantity of spill, analysing the sea and wind state and determining the constraints of operation, immediate response resources including the equipment's and personnel shall be mobilized. Since Tier 1 response facilities are already available at each port, generally no resources need not be channelized from other operators including those within the organisation unless there is an intensive response operation planned that is to be completed in a very short span or there is a breakdown of the equipment.

10.4. Media Briefing

The Chief Incident Controller or in his absence the Incident Command the SIC shall take the task of making statements to the media on behalf of the KPT after getting the consent of the Crisis Management Group. All the statements shall be made consistent with the overall aims of the effort. As need arises a public information officer may be appointed or a joint information centre may be established.

10.5. Planning Medium Term Operations

Regular meetings shall be conducted with the incident management team should focus on the critical success factors for the incident and asses the effectiveness. It will help to revise the plans and better respond to similar situations. The flow diagrams showing the operation planning for response is given as **Figures 10.1.**

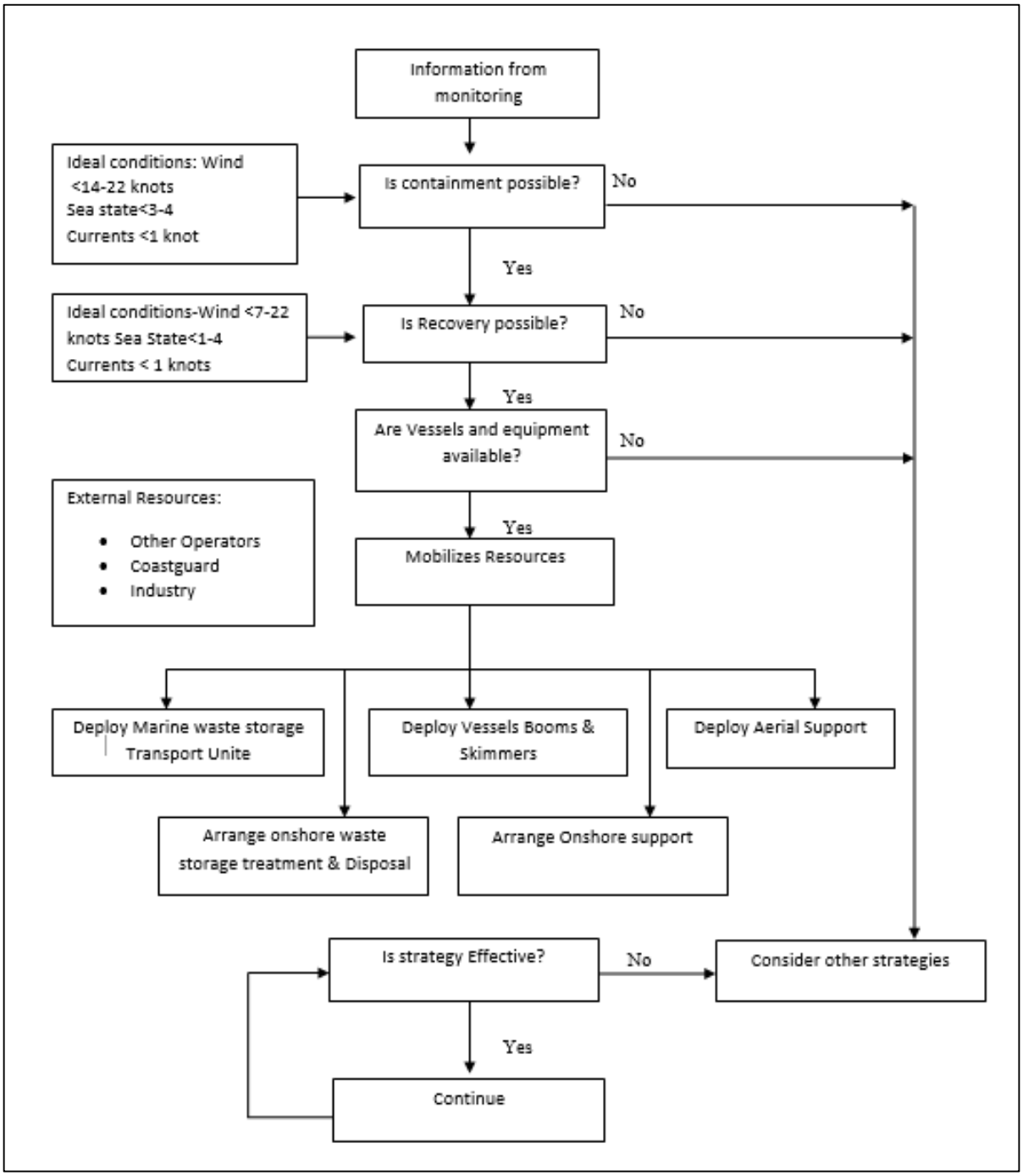


Figure 10.1. Oil Spill Response Planning Chart

(Source:http://www.au.pttep.com/wp-content/uploads/2013/10/PTTEP-Oil-Spill-Contingency-Plan.pdf)

In case of threat perception, the response decision is to be arrived at after prioritising the threat perception and areas where the threat perception is likely to cause maximum damage. Certain 'sacrificial areas 'may have to be considered for the overall response to the threat perception. The general strategy would be ordered for containment and recovery using existing techniques, which may

involve mechanical recovery equipment or use of chemical dispersants. Dispersion decision tree is given as **Figure 10.2**.

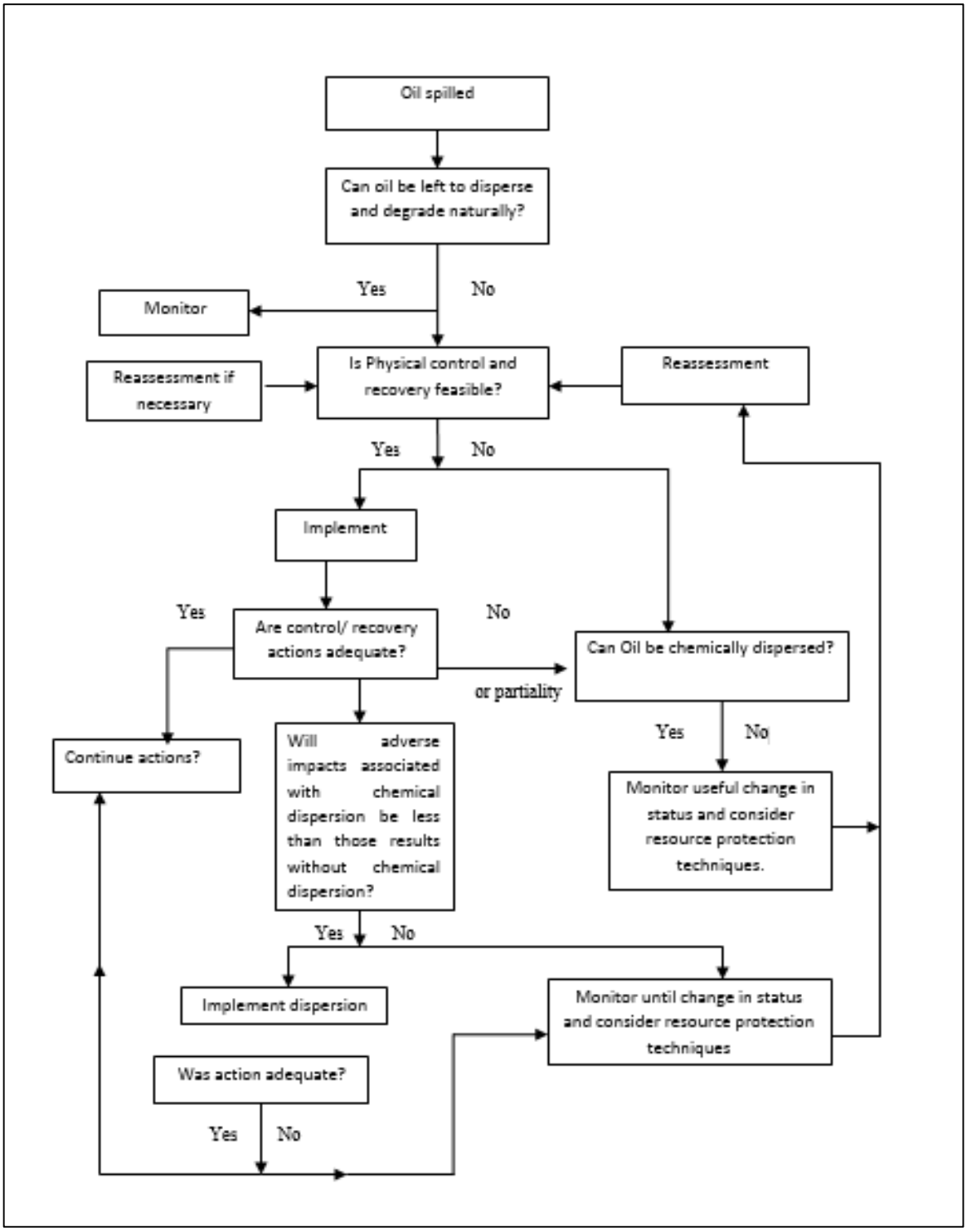


Figure 10.2. Dispersant Decision Tree

11

CONTROL OF OPERATIONS

11.1. Establishing a management team with experts an advisors

A management team may be constituted with members of the KPT as well as from industry, government and non-government organization with an advisory role to implement following points:

- Ensuring expertise in all fields
- Unbiased review of the situation
- Independent decision making
- Wide confidence and approval

During a spill, the situation will be appraised by the Environmental & Scientific Team will be reported to the Crisis Management team who will pool the expertise as required and request for the ensuring their dedicated availability on-scene. Often experts are required in the areas of Spill Response, Wildlife, Marine Environment especially when the organization is not having any previous experience in oil spill response operations.

Specialist technical advisors may be required to address specific aspects of the incident such as public health and safety, hazardous materials and cultural issues specific to the situation. There specialists may be added to the planning function, though could also be linked directly to the command function if required.

11.2 Organisation of Operation

Staging areas have been selected to accommodate various modes of transportation including overland, air and water. Each location has the means to move equipment and materials quickly and efficiently. These locations have been selected so that they are strategic to coastal terminals and main shipping routes where there is the highest risk of spills.

11.3 Updating Information

Sea weather shall be regularly monitored. Weather forecasts shall be availed from the local and regional meteorological department. Aerial surveillance shall be done as and when required.

11.4 Reviewing and Planning Operations

Studies made of the oil spill risk as well as response measures be done for the area shall be review, especially for determining the possible oil spill trajectories. Available meteorological and hydrographic data should be analyzed to give rough but early predictions of the spill movement. More sophisticated prediction methods may be subsequently used based on the situation. Visual observation of any spill is essential to plan every oil spill response operation.

11.5 Obtaining Additional Equipments, Supplies and Manpower

The equipments and facilities for combating Tier 1 spill is already available at each KPT. Additional response is beyond the scope of the local contingency plan for each port. But MoUs shall be signed between the neighbouring operators to pool the resources for better response during a Tier 1 spill. The spills beyond Tier1 is the responsibility of Coast Guard. The Coast Guard would take over the operation if the spill were beyond the capability of the facility concerned and also when the spill is beyond the port limit ever for a smaller spill.

The Regional Contingency Plan for South Asia sponsored by the United Nations Environment Programme (UNEP) under the UN Regional Seas Programme has been finalised. The participating countries are India, Sri Lanka, Maldives, Bangladesh and Pakistan. The Plan envisages mutual cross border assistance and movement of equipment and personnel for response to an oil spill (Country Profiles, A summary of Oil Response Arrangements & Resources Worldwide, ITOPF).

11.6 Preparing Daily Incident Log and Reports

Daily reports shall be made in the form of incident logs, minutes of meeting, notes on briefing etc. They shall be circulated between respective groups and their officials for different purposes such as informing, evaluation, recommending, approving, documentation, record keeping and circulation.

11.7. Preparing Releases for Public and Press Conferences

Effective public relations are an integral part of any oil spill clean-up operation. In the event of spillage, Chief incident controller will make coordinated arrangements for an experienced public relations officer to disseminate pertinent information to the public and the media to ensure that those who need

to know have a full and timely appreciation of the incident and of the actions taken and progress made during the response.

It is essential that the media team:

- Identifies the agencies that are responsible for handling various aspects of the situation;
- Ensures that media activity does not interfere with the operational activity of the emergency services and
- Ensures that the media do not harass human casualties

A sample initial press release shall include the following details:

- An oil spill has occurred at (location) from (responsible party, if known).
- It was discovered at (time and date).
- The following areas have been affected: (fill in)
- Cause of the spill is being investigated by (fill in) and clean-up operations are underway by (fill in).
- The amount of product spilled is (amount) (or is not known, or is being calculated by the (fill in).
- Brief statement of operations being undertaken and by whom:
- The spilled material is/is not considered to be a health hazard.
- The following precautions should be taken by members of the public in the (fill in area(s)).
- Further updates will be given at (time, date).

11.8. Briefing Local and Government Officials

Briefings shall be done with the local in matter related to health and safety, environmental issues, oil pollution impacts and mitigation. This help them to evacuate from the affected area until everything is cleared.

Regular meetings shall be held with government official to plan the response strategies especially the operation requiring evacuation of locals, selection of disposal options, monitoring of water resources, selection of pre-booming locations etc.

12

TERMINATION OF OPERATIONS

12.1. Marine Oil Spill Response Termination

Marine response operations are terminated under the following circumstances:

- Entire oil spill has been removed
- Surface oil slick has broken up and there is negligible chance to impact a shoreline
- Slick has gone out to sea and is beyond the range of response options and is highly likely to degrade naturally
- Oil has already impacted shorelines and is unlikely to be re-floated.

For the last case, marine response resources will remain on standby until shoreline response has been terminated.

12.2. Shoreline Spill Response Termination

Shoreline clean-up operations may be terminated only in consultation with instruction from the respective government authorities under the following circumstances:

- All accessible shorelines are free of oil
- Clean up is having no further net beneficial effect or having a deleterious effects on the shoreline or associated plants or animals
- Remaining oil is judged to be acceptable or of little or no adverse effect.

The shoreline inspection team will determine when each shoreline segment has been cleaned to a reasonable degree, based on minimizing risk of impact to the environment and preventing human contact with the spilled oil. Guidelines provide criteria for assessing marine/shoreline status before the declaration of termination of operation is given as **Table 12.1.**

Table 12.1. Criteria for declaration of Termination of Operation

Sl. No:	Type of Environment	Decision Criteria
1	Water surface	No recoverable floating oil should remain on the water surface.
2	Sand beaches	The shoreline should be free of liquid oil. Tarballs, tar patties, oiled stranded vegetation and oiled debris that could contaminate wildlife should be removed to the extent removal using reasonable clean-up techniques is feasible. Oil stain on sand that does not produce rainbow sheen may be allowed to weather and degrade naturally
3	Marshes	Marsh vegetation should be free of oil that could contact and contaminate wildlife. Oil that is not likely to affect wildlife may be allowed to weather and degrade naturally.
4	Riprap, seawalls and other manmade structure:	Oiled riprap and seawalls should be free of bulk oil except for oil stain (defined as a thin layer that cannot be scraped off using a fingernail), which may be allowed to weather and degrade naturally.

(Source: Oil Spill Response Plan, Shell, 2011)

12.3. Declaration of Termination

Chief incident controller will be announcing the termination on consultation with the Crisis Management Group after receiving the report from the Site incident controller. The following checks are to be done before announcing the Termination:

- All personnel are accounted for
- All equipment is recovered and cleaned
- All vessels return to their respective berths
- All equipment is cleaned / repaired
- All external equipment is returned to the correct owner/location

12.4. Decontamination and Demobilization

12.4.1. Decontamination Plan

This serves to identify general procedures to be followed by vessels involved with oil spill response operations. As these operations involve transiting through slicks, operating within oiled waters or recovery operations, the vessel hulls, decks, machinery, tanks, piping, deck gear and other areas will be impacted with oil. This plan will be used for all vessels and support equipment, either contaminated or suspected of being contaminated with oil, to return to a non-oiled state.

In view of the extensive equipment inventory involved in the response effort, the responsible party will

- Over see gross decontamination of vessels;

- Establish and oversee temporary berthing of oiled vessels; and
- Over see final decontamination of oil spill recovery vessels and equipment.

The primary focus of this operation will be to expedite clean-up of oiled vessels and response equipment in a safe, organized and efficient manner while minimizing further damage to the environment and waste generation. Equipment decontamination is planned to occur in two phases. Recovered oil is to be off-loaded from skimmers cargo tanks to portable storage tanks and or vacuum trucks pending disposal as per the "Approved" Disposal Plan. Equipment to be transferred into a bermed area and decontaminated. All equipment will undergo full decontamination prior to demobilization.

12.4.2. Methodology

The affected area will be placed inside standard containment boom during the decontamination process. If weather conditions permit, smaller vessels will be used as platforms to facilitate clean-up operations. For Tug/Vessel the hull of the vessel will be wiped by hand with cotton rags. A citrus-based cleaning solution will be used to remove residue oil from the hull. All oil will be wiped from the hull in this manner.

Personnel involved in this operation shall wear modified PPE Level D including raingear, gloves, eye protection and floatation work vest. Preplanning for protection of adjacent areas shall be accomplished in order to minimize cross contamination. Floating oil from sheen-emanating vessels will be minimized with sorbents as necessary to reduce potential loss outside the containment boom. Floating sorbent materials shall be utilized in natural collection points as needed to retain free-floating oil. These sorbents will be tended daily.

12.4.3. Equipment priority

A priority assessment shall be attached to each piece of equipment to ensure a timely flow of equipment through the cleaning process. The Decontamination team leader will work with the appropriate OSR representative to prioritize the vessels to be cleaned.

12.4.4. Cleaning process

A Hypalon liner or like (secondary containment) will be placed under each decontamination pool with the perimeter sufficiently bermed to allow for wastewater and rainwater evacuation. All wastewater will be pumped to a poly portable storage tank vacuum truck for disposal. All pumps, hoses and piping will be left in place to facilitate speedy evacuation of retained oil / water. The final disposal of wash water, oiled sorbents and materials will be accomplished in accordance with the "approved" Disposal

Plan. A citrus-based cleaning solution (PES 51 or like) will be utilized as a degreaser and will be applied by a Hudson sprayer as applicable. By utilizing the PES 51 product, which will not emulsify the oily water, it is possible to recycle/reclaim the rinsates. Because this cleaning solution is citrus based it does not leave a petroleum sheen on the equipment after the cleaning process. Actual pressure washing, if required, will utilize a Landa (or like) hot/cold pressure washer with a temperature range up to 220° F and a pressure rating up to 3000 psi. Every attempt will be exercised to mitigate noise-generating equipment by placing it in insulated areas. Once the piece has been determined clean to the owner's standard, the equipment will be demobilized.

12.5 Preparing formal detailed report

Once the response stand down has been announced, GMB and other stake holders will conduct a formal joint incident investigation considering the following aspects:

- Cause of the incident and other contributing factors
- Mitigating actions taken
- Effectiveness of the response
- Preventive actions required in future

The formal incident investigation will be followed by the preparation of a formal detailed report. It will form the basis for a review of the Crisis Management Group and notes will be circulated with other members of the response organization.

12.6 Reviewing plans and procedures

Feedback will be collected from various levels of the organisation from each stakeholders. The opinions will be finalised in review meetings. Recommendations after the review shall include improvements to the contingency plan, incident actions plans and operating procedures. Independent reviews shall be also to be done with the help of an independent agency which will be helpful in getting correct insight of the cause and impact of spills as well as the response measures taken.These reviews will be especially helpful in developing fine-tuned the communication, demobilization, decontamination and disposal plans and incorporating them in the Area Plan. A review of the spill is the only way to establish the shoreline assessment control points and clean-ups in a region and endpoint documents. From incident assessment it is possible to pre-identify suitable command post locations, tracking of the spill response work can be efficiently assigned and tracked, to ensure the public involvement to save their best interest as well as channelize stakeholder inputs so that the concerned personnel can influence the process.

13

MUTUAL AID

Other ports of the region, terminals, SPMs and other oil handling facility are the important stakeholders for mutual aid. They are supposed to assist the KPT on executing MoU during a spill greater than Tier-1. Also it may be noted that a spill eventhough happening within Tier-1 limit of 700T, its occurrence in a sensitive area can be make it escalated to higher Tiers.

13.1. Oil Spill Response Resources Inventory (OSRRI)

13.1.1. OSRRI available at KPT

Presently KPT is having OSR equipments corresponding to the Risk Category-A ports for combating Tier-1 spill, as per the existing Oil Spill Contingency Plan. The latest annual return submitted to ICG in this regard is given as **Table 13.1** below.

Table 13.1. Annual Return on Preparedness for Oil Spill Response under KPT

Name Of Port/Oil Handling Agency	**Kandla Port Trust, Kandla & Vadinar**			
Containment Equipment	**Description**	**Length**	**Quantity (No.)**	**Operational Status**
	1.Pressure inflatable Boom	200 Mtrs	6	Working
	2.Boom Reels	200 Mtrs	6	Working
	3. Permanent Boom	1000 mtrs	1	Working
	4. Diesel Hydraulic Power Unit		2	Working
	5. Pollution Response Centre		1	Working
	6. Signal Station for communi.		1	Working
	7 Anti-Pollution Craft		1	Working
	8 Oil Absorbent Boom(IOCL)	3'X8" Dia	130	Working
	9 Inflatable Boom(Essar)	450Mtrs	1	Working
	10. Light duty Oil Contain. Book	600 Mtrs	1	Working
	(Coastal Room)(IOCL)			
Recovery Equipment	Description	Capacity	Quantity (No.)	Oerational Status
	Fast flow skimmer	40-49 m3/h	2	Working

	(Inclined plane)	-		
	Brush Skimmer	12 cub.m/hr	1	Working
	Disc Skimmer(IOCL)	20 cub.m/hr	1	Working
	Disc oil Absorbent Pillow(IOCL)	12'X8' size	80	
	Disc Slimmer (Essar)	20 cub.m/hr	1	Working
Temporary Storage Facility	Description	Capacity	Quantity (No.)	Operational Status
	Storage Tank	$10M^3$	5	Working
	Storage Tank	250KL	One	Working
	Portable Tank	4000 Lit.	One	Working
	Floating Tank (IOCL)	25 CUM	2	Working
	Floating Tank (IOCL)	12.5 CUM	4	Working
	Floating Tank (Essar)	5 T	2	Working
	Storage Tank (Essar)	25 T	2	Working
Osd Spraying System	Description		Quantity (No.)	Operational Status
	OSD Spraying booms fitted on tugs- Spray system-1		3 Tugs, for Kandla MT Mehul, MT Kalinga, MT Heera tank for storage on board 4000 Lit. each tug. 3 Tugs, for Vadinar MT Cheeta, 35TBP MT Gajaraj 35 TBP & MT Ashawani 59 TBP Plus 5 Hired Tugs.(3 at Vadinar & 2 at Kandla).	Working
	OSD Booms - 5 mtr long-2			
	Pump unit 70 Ipm-2			
	Off-loading pump-1(10C)			
	Oil Transfer pump-30 cub. m/hr-2 (Essar)			
	Dispersasnt Spray System-2 (IOCL)			
	Dispersasnt Spray System-1(Essar)			
Oil Spill Dispersant	Make		Quantity (1(9.)	Expiry Date Mfg-(3/2015) Life 5
	NIO & CG approved(Nova Chemicals)dispersant-II & II		5000 Ktrs	
	NIO approved dispersant- Ill (IOCL)		3300 Ltrs	
	NIO &ICG approved dispersant (Essar)		25000 Itrs	
	OSD			
Shortline Response Equipment	Description	Capacity	Quantity	Operational Status
	Permanent Storage Tank	5000	1	Working

IMO OPCR Level Trained Responders	Name	Designation	Contact No.	Imo Oprc Level 1/2
	M.N. Kakani	Safety Inspector	02836-	2
	S.J. Makwana	Safety Inspector	02836-270427	2
	M S Bather	Safety Inspector	02836-	2
	D.S. Pandey	Dy FcSO	02836-270176	1
	G.C.Sharma	Station officer	02836-	1
	6.R.R.Dubey	Station officer	02836-	1
	7. D.S.Gurjar	Station officer	02836-	1
	8.K.G.Khalsa	Station officer	02836-	1
	9 M.K.Maheshwan	Station officer	02836-270176	1
	10.D.R.Solanki	Station officer	02836-	1
	11.A.J.Chaudhari	Station officer	02836-	1
	12.G.Nethaji	Station officer	02836-	2
	13. M.R.Vadaviya	POCD	02836-	
Oil Spill Response Craft	Craft Name	Discription	Response Capability	
	MT Karishma	Oil recovery cum debri collection	Please provide particulars at Sections 2-6	
	Tug Heera			
	Tug Mehul			
OSRL Particulars (If Outsourced)	Operator Name		Na	
	Address		Na	
	Phone No.		Na	
	Fax No.		Na	
	E-Mail		Na	
	Engagement Expiry Date		Na	
	Equipment On Hire		Please Provide Particulars At Sections 2-7	
	Imo Oprc Level Trained		Please Provide Particulars At Sections 8	
	Personnel On Hire			
	Manpower On Call			
	Craft On Hire		Please Provide Particulars At Section 9	
	Year Published	Date Of Last Revision	Status Of Approval By Coast Guard	

Spill Contingency Plan	2011	2014-Revision Under Process	Observations Raise By Coast Guard Are Under Compliance	
Personnel To *Be* Contacted C-¯Ase Of Spill	Name	Designation	Contact Particulars	
	Capt. T.Sreenivas For Kandla	Deputy Conservator	Landline	02836-233585
			Mobile	9825232982
			Fax	02836-233585
			E-Mail	dckpt@kpt.gov.in
	Dr. G.S.Rao For Vadinar	COM	Landline	02833-256749
			Mobile	9825212360
			Fax	02833-256543
			E-Mail	drgsrao001@yahoo.com
MoU Details (If Any)	MoU has been made between KPT & Oil Companies for r procurement of Tier-1 facilities for Oil Spill Combat equipments.			

Source: KPT

13.1.2. OSRRI available at ports and allied facilities of the region

Oil spill response capabilities existing as well as proposed at the ports and marine terminals as well as ICG stations in and around Gulf of Kachchh (GoK), in rest of Gujarat and West Coast is given as **Tables13.1 to 13.4** below.

Table 13.2. Details of Oil Pollution Response Capability at Mundra Port, GoK

Sl. No	Particulars	Details
1.	Pollution response equipments held	Three powerful tugs are fitted with OSD spraying boom. All three tugs have 4000 litre of oil Spill dispersant (Approved by NIO) on board for immediate use.
2.	Future plan for acquisition of equipment are	Inflatable boom.
		One more tug with OSD spraying boom and 4000 litre of OSD.
		Absorbent Pads.
3.	Whether any vessel/aircraft available for pollution response capabilities	Tugs are fitted with OSD Booms and OSD and can be used in emergency however there is no dedicated vessel/craft to operations.

Table 13.3. Details of Oil Pollution Response Capability at each GMB Port, GoK

Sl. No:	Equipments	Details
1	Boom	Boom, Air blower, Towing end, Boom reel (300m capacity.), Hydraulic hose set, Beach sealing boom, Towing end, Boom

		repair kit, Storage bag, Water pump, Spare part kit, Air blower & Spare part kit.
2	Skimmer	Multi-skimmer,Spate pump/power pack,Lifting straps & Hose set
3	Flex barge	Flex barge 10t, Tank fittings, Towing equipment
4	Dispersant	Dispersant spray system (osd apllicator),Spray arm, Hose set for DSS
5	Shore clean up set	Absorbent boom, Absorbent pad, Beach broom, Mini vaccum pump,Vaccum dome,Vac aluminium hopper,PPE (5 persons kit),Collapsible tank 6m3,Skimmer rock cleaner,Hydraulic power pack w oil transfer pump, Chalwyn valve and spark arrestor,Oil transfer hose set,Hydraulic hose set, Spare part kit for rock cleaner, Spare part kit for chalwyn valve

Source: Proposed in DPR submitted by KITCO

Table13.4. Oil Spill Response Capability at Pipav Port, Saurashtra Coast

Sl. No	Particulars	Details
1.	Pollution response equipment held	(a) Floating Skimmers -01 No
		(b) Oil Spill combat boat -01 No
		(c) Dispersant Spray System -01 No
		(d) Oil Collection pump -01 No
		(e) Sorbent Pads -01 No
		(f) Sorbent Booms -01 No
		(g) Sorbent Sheets -01 No
		(h) Sorbent Pillows -01 No
		(j) High pressure cleaning pump -01 No
		(l) Oil Spill Dispersant - Nil
		(k) Oil collection Concentrate -01 Unit
2.	Vessels/ Air effort available	Nil

Table 13.5. Oil spill Response Capability at Reliance Industries Limited – Hazira, Gulf of Khambat (GoKh)

Sl. No	Particulars	Details
1.	Pollution response equipment held	No response equipment available. (operations have been rated as “Low risk” in terms of pollution hazard).
2.	Vessels/ Air effort available	Two tugs, Reltug-3 and Reltug-4, with spray booms on both sides and dispersant capacity of 1000 litre are available at RIL, Hazira. These tugs can be shifted to other Reliance locations are per the requirements.

Table 13.6. Oil Spill Response Capability at Coast Guard Region (West)

Sl. No	Particulars	Details
1.		1.RO Boom OSA 2000 with deck Reel - 04(200 m each)

Sl. No	Particulars	Details
	Pollution response equipment held	2. RO Boom Powerpack (old) - 02
		3. RO Boom Powerpack (New) - 02
		4. Vikoma Hi-Sprint Boom with deck Reel - 04
		5. Vikoma PN Diesel Hydraulic Powerpack - 03
		6. Vikoma Hi-Sprint Boom air blower (Echo)- 02
		7. Vikoma air Blower (Honda) - 02
		8. VimkomaSentinal Boom - 01
		9. VikomaSenital Boom Deck Reel - 01
		10. RO Boom 610 (16 x 25) -16
		11. Air Blower for Sl. 10 - 05
		12. Boom Washing Chamber -01
		13. Fresh water Chemical Pump set for Sl. 12 -02
		14. Powerpack for Sl. 12 - 01
		15. RO set (Settling Tank) - 01
		16. RO Clean Unit -01
		17. Beach Cleaning equipment - 01
		18. Hot water cleaner (KEW) - 04
		19. Hot Water Cleaner (L&T) -01
		20. CCN-100 off loading pump -01
		21. Powerpack for Sl. 20 -01
		22. TC-3 Aerial spray unit with bucket -03
		23. TC-3 Aerial Spray Arm set - 05
		24. Spill Spray Pump -04
		25. Spill Spray Arm (set)for Sl.24 -05
		26. Wide Spray System -02
		27. OMI Oil Mop MK-II-9D - 02
		28. SS-50 Disk Skimmer (Vikoma) -04
		29. Powerpack for Sl.28 -04
		30. Welosep Vertex Skimmer - 02
		31. Powerpack for Sl.30 -02
		32. DesmiDestroil Skimmer DS-250 - 04
		33. Powerpack for Sl. 32 - 04
		34. DesmiDestroil Skimmer DS 210 - 02
		35. Powerpack for Sl. 34 - 02
		36. Dunlop Salvage Barge 100 M3 - 02
		37. Dunlop Salvage Barge 30 M3 - 03
		38. Linductor Oil recovery - 02
		39. Vikoma Sea Devil Skimmer - 03
		40. Powerpack for Sl. 39 - 03
		41. Hydraulic Control for Sl. 39 - 03
		42. Hydraulic hand pallet -03
		43. Hydraulic drum lifter -01
		44. Hydraulic power pack lifter -01
		45. Hand trolley -01
		46.Fork lift -01
		47.SeaVac Heli Skimmer -01

Sl. No	Particulars	Details
		48.Pallet Stacking System -56 (Ex Jay24 & Ex Godrej32)
		49.Container top for OSA 200 Boom reel - 03
		50.Oil spill response kit - 01 At Kochi
		51. Seavac 330 Heli skimmer system - 01 -do-
		52. RO Boom -01 -do-
		53. DS 250 Skimme - 01 -do-
		54. Spill Spray equipment - 01 -do-
		55. Spray Pod - 02 747 SQNat Kochi
		56. Spray Pod - 08 750 SQN at Daman
		57. IR/UV System - 02 -do-
		58. TC-3 Bucket with boom S/N 7584 - 01 841 SQN at Daman
		59. Oil Water separator - 01 At Vadinar
		60. Petrol Engine General Purpose - 01 -do-
		61. Rop Mop skimmer(Diesel engine & power pack) - 02 -do-
		62. Oil Spill Kit with accessories - 02 -do-
		63. Dunlop Dragon Barge 30 Ton -03 -do-
		64. Sea Curtain Boom - 2400 m -do-
		65. Sea vacHeli skimmer - 01 -do-
		66. High Pressure Steam Jet Cleaner - 02 -do-
		67. TC-3 Bucket - 01 CGAE Goa
		68. TC-3 Bucke - 01 800 SQN at Goa
		69. TC-3 Bucket - 01 Veera Flight at Kochi
2.	Other efforts/ facilities available	a) Ships and aircraft of Indian Navy as available on West Coast of India.
		(b)Vessels, equipments and facilities in ports and with other authorities engaged in handling / transporting oil on the West Coast of India.
3.	Vessels / Aircraft available	Offshore Patrol Vessel, IPCs/SDBs, IBs and Workboats, Dorniers and Helicopters.

Source: NOS-DCP

Hence it can be concluded that with enough resources, mutual aid for combating with higher Tier requirements of worst case oil spill with in KPT limit can be achieved with other regional ports and operators. MoUs should be executed and manitained in such as way that optimisation of resources and minimisation of response time can be achieved.

14

OIL WASTE DISPOSAL MECHANISM

Oil waste disposal is one of the most serious trouble faced during an oil spill. Oil waste generated during and oil spill include recovered oil, oily debris including items of protective clothing, equipment used for cleanup operations etc. The sppropriate disposal option depends upon type and amount of oil, location of spill, environmental and legal aspects, economic considerations. It can be seen that only heavier oils such as Crude Oil, Fuel Oil , Lubricants etc., require cleanup and response operations while non-persistant oils doesnot require cleanup hence disposal.

Extreme care is to be taken while oil collection since earlier it is collected, less likely the contamination and hence easier the recovery operations. Weathering makes the oil more viscous. Oil directly collected from the water will be having less debris but will be highly emulsified. Thus the oil waste can be classified as:

- Oil contaminated with water
- Emulsified Oil contaminated with water
- Oil collected from the shore contaminated with sand
- Oil collected from the shore contaminated with wood, plastic or seaweed
- Solid Tarballs

Hence it can be easily inferred that each type of waste will require a different method of treatment and disposal.

Storage of oil waste collected during spill is important prior to disposal. Initially they will be stored in the temporary staging areas located close to the spill location and further they may be collected and transffered to a suitable location with in the KPT area before disposal if possible. Steps involved in oil waste disposal are the following Construction of waste storage areas,Sampling of disposed materials, Testing of accumulated materials for identification of hazardous materials, Segregation and transportation of waste, Dismantling of waste staging areas, Decontamination of the location and Collection & dispose of washdown/ rinsate. Following section details the important steps involved in the oil waste disposal mechanism:

14.1. Temporary/ Onfield Storage

Wastes acumulated in temporary storage location should be categorised, segregated, inventories and transported off-site fro recysling or disposal. No additional permits are needed for collection and temporary storage of the waste from an oil spill emergency as long as the waste is properly contained, labeled and stored. Different types of containers used for oil waste collection and transportation are given as **Table 14.1** below.

Table 14.1. Types of Oil Waste Handled

Sl. No.	Type of Container	Type of Waste	Volume (m3)	Instructions for Use
1	Plastic Bags	Soild & Liquid [C]	0.04/bag	Not suitable for light oils, sharps or long term storage. Half fill only. Should be moved using
2	200 Litre Drums with Cover	Soild & Liquid [C]	0.2	Half fill only.
3	Flexible bags/ containers	Liquid	1 to 10	Recommended during on vessel operations. Finds difficulty while loading into trucks for final disposal.
4	Barges which are covered during operations.	Liquid	Already available available sizes at KPT	
5	Rigid Tanks	Liquid	Variable	At locations close to the public area requiring additional safety implications
6	Plastic- lined pits	Liquid [C]	Variable	Needs to be well lined at areas of low water table, away from importannt water sources.

c- Conditional- Adapted only if other preferred options are not available.

Bulk oil should be stored separately from oily debris so that effective treatment and disposal methods can be followed. It is better that in the bulk storage facility for highly viscous materials, the tanks are to be fitted with heating coils.

Highly viscous oils are best stored in open containers such as barges, skips or drums to facilitate treatment and transfer operations. If special purpose containers are not available, bulk oil from shorelines can often be held within compacted earth walls or in simple storage pits lined with suitable oil-proof material like heavy gauge polyethylene. Pits should be filled in after complete removal of the oil and, as far as possible, the area restored to its original state. Plastic bags should be regarded as a means of transporting oily material rather than storage since they tend to deteriorate rapidly under the effect of sunlight. It should also be borne in mind that if the contents are ultimately to be treated in

some way prior to disposal, it will usually be necessary to empty the bags and dispose them off separately.

It is beneficial to reduce the amount of material to be transported by separating oil from water and from sand during temporary storage. Water-in-oil emulsions can be broken to release the water; oil seeping from heaped beach material and debris can be collected in a ditch surrounding the storage area; and sieving techniques can be used to separate clean sand from tar balls.

14.2. Transportation

This phase involves in water and land phase. In water phase floating tanks driven by tugs or inbuilt tanks in tugs. In land phase terrestrial vehicles can be utilised for hauling.

14.3. Segregation

Segregation of the waste can be done prior to transportation or after it. Many times segregation of different types of waste help in reducing the quantity of material to be transported. Preferred segregation of oil waste are given as **Table 14.2** below.

Table 14.2. Preferred Segragation for Various Types of Oil

Sl. No.	Phase & Type of Waste		Preferred Segregation
1	Liquid	Oil	Non-emulsified Oils
			Emulsified Oil
		Wastewater	Waterfrom temporary storage
			Water from emulsion seperators
			Water from Chemically demulsified oil
2	Soild	Oil	High pour point oils
			High viscosity emulsions
			Tar ballls
		Oily Debris	Oil mixed with cobble or sand
			Oil mixed with wood, vegetation, plastics or sorbents

14.4. Disposal

Disposal of the oil waste is to done considering the type of oil, availability of space, expenditure etc.Important methods of oil waste disposal are given as **Table 14.3** and are detailed in the following sections.

Table 14.3. Disposal Methods for Oil Waste

Sl. No.	Type of Material	Nature	Disposal Methods
1	Liquid Oil Waste	Mainly oil with some water	Recovery & Recycling
			Incineration
2	Oily water	Mainly water with some oil	Oil water seperation unit
			Bioremediation

3	Soild Oil + Inorganic Waste	Including sediments	Bioremediation
			Landfill. Only after oil content reduced to <30ppm or 20%.
4	Soild Oil + Organic Waste	Dead vegetation,animals & birds and other biodegradable materials	Bioremediation
			Landfill
5	Other soild waste materials	Including synthetic materials	Landfill
6	Hazardous materials		Offsite disposal

14.4.1. Recovery and Recycling

To the maximum possible extent, the oil is to be recovered for eventual processing or blending with fuel oils. Possible recipients for processing or blending are refineries, power stations, cement and brick works and contractors who specialize in recycling waste oils. There are approved waste oil recycler for KPT, the details of are given as **Annexure XIII.**

But for recovery and recycling the oil should be have the following characteristics:

- Pumpable
- Low in solids
- Salt content of less than 0.1% for processing through a refinery or less than 0.5% for blending into fuel oil.

Oil collected from the water is likely to be the easiest to prepare for processing since the requirement will be only to separate water. This separation can frequently be achieved by gravity either in collection devices such as vacuum trucks or in portable tanks, where the water is allowed to run-off or pumped from the bottom of the tank.

The extraction of water from water-in oil emulsions is sometimes more difficult. Unstable emulsions can usually be broken by heating up to 80°C and allowing the oil and water to separated by gravity. More stable emulsions may require the use of chemicals known as emulsion breakers or demulsifiers, which also tend to reduce the viscosity of most oils rendering them more pumpable. But disposal of water collected will contain high percentaged of the emulsion breaker and oil. From oiled sedmiments waterwashing using low pressure hoses can be used to loosen and lift off oil from debris contained in a temporary storage pit. The resulting oil/water mixture can then be pumped away and separated by gravity. Separation can also be achieved in a closed system using water or a solvent. Cleaning of large amount of oiled shore material on site will reduce the cost considerably but avoiding the transportation of large quanity of sediments.

14.4.2. Landfill

This is a disposal option when the recovery of oil is impractical. The oiled waste is directly dumped into the designated landfill sites. Materials intended for direct dumping should have maximum oil content of about 20%. The guidelines to be followed while selecting the landfill sites are the following:

- Landfill Sites should be located well away from fissured or porous strata to avoid the risk of contamination of ground water, particularly if this is abstracted for domestic or industrial use.
- Disused quarries and mines are often ideal.
- Co-disposal of oil and domestic waste is often an acceptable method even though degradation of the oil is likely to be slow due to the lack of oxygen.
- The total quantity of oil should not exceed 1.5% of the total volume of the site.

In the case of shorelines lightly contaminated with oily debris or tar balls, it may be possible to bury the collected material at the back of the beach well above high water mark provided there is no risk of damage to vegetation and with sufficient covering so that the oiled beach is not uncovered through normal beach erosion.

Stabilising agents such as Quicklime or Calcium oxide, cement and pulverized fuel ash can be used to bind oily sand, provided there are no large pieces of debris. This will result in the formation of an inert product which will prevent the oil from leaching out. Then it can be disposed under less stringent conditions than unstabilised oily sand.

14.4.3. Bioremmediation

Bioremediation utilizing a group of naturally occurring microorganisms which can break down hydrocarbons either through aerobic or anaerobic processes can be used for disposing oil contaminated debris. It can be done either in-situ or ex-situ. Land farming and disposal in sand dunes are ex-situ techniques which have been practiced over long span of time and are better options that make use of biodegradation. The techniques of bioremediation which utilizes existing microorganisms and manipulating oxygen and nutrient levels are termed as bio stimulation whereas introduction of supplementary organisms to supplement those present is called bio augmentation. Plans are also utilized in some cases and then the technique is termed as phytoremediation. The process is highly temperature dependent. Lighter oils are toxic to microorganisms and many times inhibit their growth while weathered heavier oils may contain large quantity of poorly degradable compounds.

Land farming involves the spreading of the oily materials over the soil in this layers. Hence the aerobic decomposition is largely completed in one to three years. It requires adequate area within reasonable distance and all parts of the site should be accessible to trucks. Located away from surface and underground water sources. The soil should be of low permeability. In the case of biodegradable organic waste composting can be adopted. Dune disposal another option where significant quantities can be buried in stable coastal sandy areas and dune pastures. It will work well only when the area is not water logged.

14.4.4. Incineration

The open burning of oily debris is recommend only in remote areas. When oil is burnt in the open it also tend to spread and can leach into the ground. Tarry residue will remain since it is really possible to achieve complete combustion. Portable incinerators which are able to contain oily waste and can create very high temperatures. Rotary kiln and open hearth types are most appropriate. Fixed industrial incinerators are an option if long term storage is available. The combustion will be self-sustaining if the fuel content is around 25 % and water content is not more than 50%. Monitoring should be done for noxious gases in this case.

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CONCLUSION AND RECOMMENDATION

KPT is already having an Oil Spill Contingency Plan in place and Oil Spill Response (OSR) resources are also in place. Considering the ever increasing traffic at the Port which also handle POL commodities, contingency plan shall be maintained in such as way as to cater the threat posed by an uncertain oil spill event. Based on the observation of the study, to supplement the existing plan, the following conclusion and recommendations are made:

- Kandla port is one among the thirteen major ports of India located in Gulf of Kachchh (GoK) which hosts one of the world's splendid ecosystems and its rich & highly bio-diversified intertidal flora and fauna. The area is located close to the international shipping line and is an approach for another 5 ports. Presently, there are oil handling facilities of Reliance, IOCL, BORL including SPMs within the Kandla port limit near Vadinar. Also there are Oil berths at Kandla creek and an SPM is to be operational off Veera. Along with this, its location close to the busy international shipping routes, place the area unreasonably under the oil spill threat. Vadinar being the POL hub, extreme caution is required for this area.
- Port handles ships with a capacity above 50,000 DWT while SPMs handle Very Large Crude Carriers (VLCC) having capacities ranging from 87,000 to 3,25,000 DWT. During the financial year 2014-15 the port handled 92.50 MMT cargo. Kandla & Vadinar terminals were visited by 1724 & 530 ships respectively during the same period. The port handles different kinds of oil including Crude Oil,POL, Edible Oil and Bunker Fuel Oil.
- Presently, KPT holds minimum OSR equipments for Risk Category-A port as per NOS-DCP to cater Tier-1 facilities. Eventhough, Tier-1 is concerned with preparedness and response to a small spill within the capabilities of an individual facility or harbour authority with 700 tonnes cited as the upper limit for quantity, the circumstances of the spill and the surrounding environment will determine the actual level of response. This factor is very critical in the KPT limit, located with in an extremely sensitive as well as vulnerable locality.

- Located in the Kandla Creek, in the western most part of Little Rann of Kachchh (LRK) at the mouth of GoK, the port area is immedately surrounded by high density of creeks, mangrove swamps, mudflats, patches of dry salt waste (Rann), vast salt pans and aquaculture ponds. However, the port limit extends to Vadinar in the southern arm which is located admist the extremely sensitive coastline with rich corals and islands, where the SPMs and other oil handling facilities are operating for various petroleum companies. These areas are essentially the part of the protected areas Marine National Park & Sanctuary (MNPS) and Important Bird and Biodiversity Areas (IBAs). Hence the risk of oil spill here is determined to be very high.
- Environmental Sensitivity Map was prepared for the KPT limit. Mangroves are the most sensitive shore feature, followed by shelteretd hypersaline mudflats, exposed mudflats, exposed manmade structures within the KPT limit. In addition to this there are small streches of exposed rocky shore shores, wavecut rocky platforms, salt marshes and fine sand beaches adjoining the coral islands.But the shores and dominated by mangroves or mudflats having higher sensitivity. Also there are very small ridges of shell and coarse grained beaches adjoining mudflats. Small strips of rip- raps or seawalls will be asscoiated with areas of human interferences, low stablity sections etc. Important biological resources such as Corals, Birds nesting and flocking areas etc., are occurring simultaneously in the MNPS area in the Vadinar Zone. Hence this zone of KPT Limit is to be considered as multi-resources are and is the most sensitive part in the KPT limit.
- While prioritising resources inaddtion to the oil spill sensitivity, other consideration of the resource such as ecological value, economic value, social and cultural value is to be taken into account. Thus first priority is to be given for Corals and Mangroves, followed by mudflats, fishing grounds and intake locations. Rocky Coast is having the lowest priority.
- Port is responsible for the cleanup operations within port limit. In the case of KPT due to the presence of islands, bets in hard mudflats, shoals etc., the port has to give equal importance to offshore and onshore response operations. From the present inventory available, it can be seen that, sufficient shoreline protection and cleanup resources are not available at KPT. Hence, Beach sealing Boom, Auto/River Boom,Fence Boom,Sorbent in the form of Boom, Pillows, Rolls, Sheets and Pads, Clean up equipment such as Hot Water Pressure Cleaner,Showels,Rakes,Diggers etc., have been proposed.
- Incident Magagement Mechanism for KPT for ensuring proper Oil Spill Response and Preparedness is porposed. Crisis Management Group headed by the Chairman will be the prime authority of the Oil Spill Response Mechanism. Dy.Conservator, KPT have been porposed as

the Chief Incident Controller. Emergency Control Centre will be established at KPT office with 24 hr control room at the port office under the supervision CIC for coordinating the response activities.Incidnet Management Team will be lined up under the CIC though the Site Incident Controller and other response unit coordinators. Cheif Operating Manager at Vadinar is given the charge of Marine Resposne Unit incase of spill in Vadinar Zone.

- Presently, KPT is in MoU with ESSAR and IOCL. Mutual Aid is applicable to the other stakeholders of the area including facility operators RELIANCE, BORL (which are operating within the port limit,also having individual facility level contingency plan for 500m area surrounding the facility) and to the local ports of the region Navlakhi (under taken by Gujarat Maritime Board) and Adani Port & Special Economic Zone, Mundra for combating Tier-2 spills upto 10,000 Tonnes under the Onscene Command of Regional Commander ICG. MoUs may be updated including all stakeholders of the region for optimising the resources and minimising the response time.
- Storage of oil waste collected during spill is important prior to disposal. Initially, they will be stored in the temporary staging areas located close to the spill location and further they may be collected and transfered to a suitable location within the KPT area before disposal if possible. Landfill sites should be located well away from fissured or porous strata to avoid the risk of contamination of ground water, particularly if this is utilised for domestic or industrial use. Materials intended for direct dumping should have a maximum oil content of about 20% only. Incase of the absence of suitable disposal sites, the same can be transfered to the approved waste oil recycler of KPT.

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Annexure

Annexure I

The composition, functional responsibilities and reporting requirements of CMG

The composition, functional responsibilities and reporting requirements of CMG				
Sl. No	**Crisis Management Groups (CMGs)**	**Functions**	**Composition**	**Reporting Requirements**
1	National Level Crisis Management Group for Oil Spills (NOS CMG)	• Continuously monitor the post incident situation arising out of a major oil pollution incident and suggest measures for prevention and to check recurrence of such incidents; • Arrange, in the event of an oil pollution incident, all manpower, equipments, resources financial assistance as may be necessary; • Conduct post-accident analysis of such major oil pollution incidents and evaluate responses; and • Review the adequacy of national and other contingency plans, and suggest measures to reduce risks of oil pollution from sea ports and oil installations.	• **Chairperson** – Defense Secretary • **Members-**Defense Secretary, Foreign Secretary, the Secretaries of Environment and Forests, Shipping, Petroleum and Natural Gas, Urban Development, Ocean Development, Science and Technology, Agriculture and Co-operation, Chemicals and Petrochemicals, Industrial Development, Secretary (Security) in the Cabinet Secretariat.,Director General Coast Guard, Chairman of the Concerned Port, Director General Hydro Carbons, Any member co-opted as deemed necessary	The NOS-CMG is the apex body to deal with major oil pollution incidents and to provide expert guidance for handling major oil spills.
2	State Level Crisis Management Group for Oil Spills (SOS CMG)	• Review local oil spill contingency plan for the State local and all facility oil spill contingency plans with a view to examine its adequacy and forward a report to the Central Coordinating Authority (CCA) for oil spills once in three months; • Nominate personnel to the Local Action Group (LAG) and Local Action Group Support Team (LST) and review the status of these teams; • Assist the State Government in managing oil pollution incident at a site in the State; • Assist the State Government in the planning,	• **Chairperson** - Chief Secretary • **Member Secretary**- Chairman State Maritime Board • **Members**- Secretary (Labour), Secretary (Environment) ,Secretary (Health) ,Secretary (Industries), Secretary (Public Health Engg.), Secretary (Fisheries), Chairman, State Pollution Control Board, 4- Experts (Industrial Safety & Health) nominated by State Govt., Secretary/ Commissioner(Transport), Director (Industrial Safety)/ Chief Inspector of Factories ,Fire Chief, Commissioner of Police, One Industry Representative nominated by	The SOS-CMG is the apex body in the State to deal with major oil pollution incidents and to provide expert guidance for handling major oil pollution incidents.

		preparedness and mitigation of major oil pollution incident at a site in the State; • Continuously monitor the post incident situation arising out of a major oil pollution incident in the State and forward a report to the Central Coordinating Authority for oil spills review the progress report submitted by the District Crisis Management group respond to queries addressed to it by the District Crisis Management groups; • Publish a list of experts and officials in the State who are concerned with the management of oil pollution incidents.	State Govt., State Civil Defense Chief ,Secretary (Revenue/Home), Directorate of Industrial Safety and Health, Any other member deemed necessary by the Chairman	
3	District Level Crisis Management Group for Oil Spills (DOS CMG)	• Review all the facility oil spill contingency plans prepared by the occupier of Major Accident Hazards installation viz., sea ports and oil installations for the preparation of the district oil spill contingency plan; • Assist in the preparation of the district oil spill contingency plan; • Assist the district administration in the management of oil pollution incidents; • Continuously monitor every oil pollution incident; • Ensure continuous information flow from the district to the NOS-CMG and SOS-CMG regarding oil pollution incident situation and mitigation efforts; forward a report of the oil pollution incident within fifteen days to the SOS-CMG; and conduct at least one full scale mock-drill of an oil pollution incident at a facility each year	• **Chairperson** - District Collector • **Member Secretary**- Inspector of Factories • **Members**- District Energy Officer, Chief Fire Officer, District Information Officer, Controller of Explosives, Chief Civil Defense, One Trade Union Representative nominated by District Collector, Deputy Superintendent of police , District Health Officer/Chief Medical Officer, Commissioner Municipal Corporations, Representative of the Department of Public Health Engineering, Representative of Pollution Control Board, District Agriculture Officer, 4 Experts (Industrial Safety & Health) nominated by District Collector, Commissioner (Transport), One Representative of Industry to be nominated by the District Collector, Chair-person/Member-Secretary of Local Crisis Groups, Representative of the Port,	The DOS-CMG is the apex body in the district to deal with major oil pollution incidents and to provide expert guidance for handling oil pollution incidents;

		• Forward a report of the oil pollution incident within fifteen days to the SOS-CMG. • Conduct at least one full scale mock-drill of an oil pollution incident at a facility each year and forward a report of the strength and the weakness of the plan to the SOS-CMG. conduct at least one full scale mock-drill of an oil pollution incident at a facility each year	Representative of State Maritime Board, District Forest Officer/ Wildlife advisor, Any other member deemed necessary by the Chairman	

4	Local Level Crisis Management Group for Oil Spills (LOS CMG)	• Prepare local oil spill contingency plan for the industrial pocket; • Ensure dovetailing of the local oil spill contingency plan with the district oil spill contingency plan; • Train personnel involved in oil pollution incident management; • Educate the population likely to be affected in an oil pollution incident about the remedies and existing preparedness in the area; • Conduct at least one full scale mock-drill of an oil pollution incident at a site every six months forward a report to the DOS-CMG • Respond to all public inquiries on the subject. Months forward a report to the DOS-CMG; and respond to all public inquiries on the subject.	• **Chairperson** - Sub-divisional Magistrate / District Emergency Authority • **Member Secretary**- Inspector of Factories • **Members**- Industries in the District/Industrial area/ industrial pocket, Transporters of Hazardous Chemicals(2 Numbers), Fire Officer, Station House Officer (Police), Block Development Officer, One Representative of Civil Defense, Primary Health Officer, Editor of local Newspaper, Community leader/ Sarpanch/ Village Pradhan nominated by Chairperson, One Representative of Non-Government Organization to be nominated by the Chairperson ,Two Doctors eminent in the Local area, nominated byChairperson, Two Social Workers to be nominated by the Chair-person, Environmental NGOs preferably dealing with corals, mangroves, marine environment, Representative of oil agencies, Any other member deemed necessary by the Chairman	The LOS-CMG is the body in the industrial pocket to deal with oil pollution incidents and coordinate efforts in planning, preparedness and mitigation of an oil pollution incident

Annexure II

Inventories for the tier 1 pollution response

Inventory Standards at Port Facilities

The ports are classified into a risk category based on type of cargo handled, quantity of bunkers carried onboard ships calling at the port, single point mooring facility at the port, and ship-to-ship transfer operations at the port. The risk categorization is appended at Table A1

Table A1 Risk categorization of ports

Risk Category	Description
A	Ports handling crude oil/ tanker visits/ SPM/ STS
B	Ports handling ships carrying more than 1000 tons of fuel/ bunker oil
	Ports handling products only
C	Other than Cat 'A' and Cat 'B'

The planning standards for oil spill response resources for each risk category of ports is appended at Table A2.

Table A2 Oil Spill Response equipment for each risk category of ports

	Description		Risk category		
			A	B	C
Equipment	Inflatable Boom (metres)		2000	1000	600
	Skimmer (20 TPH)		4	4	2
	OSD Applicator (no.)		6	2	2
	Oil Spill Dispersant (litres)		10,000	5,000	3,000
	10 Tons Flex Barge (no.)		4	02	2
	Current Buster booms if tidal current >2 knots (meters)		400	400	
	Sorbent boom (meters)		500	200	
	Sorbent Pads (no.)		2000	1000	
	Shoreline cleanup Equipment	Mini Vacuum pumps	5		
		OSD Applicator	5		
		Fast tanks	5		
Vessel	Work Boats		2	1	1
	Tugs		2	1	
Man Power	IMO Level 1		10	6	2
	IMO Level 2		4	2	
	Other		10	10	5

Inventory Standards at Oil Installations

The oil installations are classified into risk categories based on the number of offshore platforms operated in the area, SPMs in area, drilling and production of crude oil, type of product handled viz., LPG, LNG or Naphtha, or whether FPSO. The risk categorization of oil installations is appended at Table A3

Table A3 Risk categorization of oil installations

Risk Category	Description
Super 'A'	Operating more than five offshore platforms in one area
A	Offshore E&P Installations for crude oil
B	SPMs handling crude oil/FPSO
C	Ship/ platform involved in ship to ship crude oil transfer

The planning standards for oil spill response resources for each risk category of oil installations is appended at Table A4 .

Table A4 Oil Spill Response resources for each risk category of oil installations

	Description		Risk category			
			SUPER A	A	B	C
Equipment	Inflatable Boom in metres		2000	1000	600	600
	Skimmer (20TPH)		4	4	2	2
	OSD Applicator (no.)		6	2	2	2
	Oil Spill Dispersant (litres)		10,000	5,000	3,000	3,000
	Flex Barge 10 tons (no.)		4	2		
	Current Buster booms atports where tidal current is>2 Kn (no.)		2	2		
	Sorbent boom pack (meters)		500	200		
	Sorbent Pads (no.)		2000	1000		
	Shoreline Cleanup Equipment	Mini Vacuumpumps	5			
		OSD Applicator	5			
		Fast tanks	5			
Vessel	Work Boats		2	1		1
	MSV/OSV/Tugs		2	1	1	
Man Power	IMO Level 1		10	6	2	2
	IMO Level 2		4	2		
	OTHER		10	10	5	5

Inventory Standards at Coastal States

Sl no	Palletized contents
1	Inflatable Boom 240m in 10m & 20m lengths
2	Boom ancillary pallet
3	Shore Sealing Boom 400m in 10m & 20m lengths
4	Minivac System
5	Multi Skimmer 10TPH and 20 TPH
6	Portable temporary Storage Devices x 8 nos.
7	Inflatable Shelters
8	Decontamination Station Equipment
9	Spate pumps x 3
10	Suitable Power pack
11	Discharge hose
12	Command pallet (Walkie Talkie, Torch, Folding Table, Folding Chair Map of the Area, etc)

Annexure III

The format for reporting an event

(Refers to Para 12)

OIL SPILL REPORT FORM

Particulars of Person/Organisation Reporting Incident

a. Title :

b. Company :

c. Telephone/Telex Numbers :

d. Date/Time :

e. Spill Location :

f. Type and Quality of Oil Spill :

g. Cause of Spill :

h. Response to Spillage, if any :

j. Any Other Information :

Annexure

POLREP MESSAGE FORMAT

(See amplification in succeeding table)

Reference : IMO - 560 (1995)

Address From ..... To .....
Date Time Group
Identification
Serial Number

Part 1 (POLWARN)	1.	Date and time
	2.	Position
	3.	Incident
	4.	Outflow
	5.	Acknowledge
	40.	Date and Time
	41.	Position
	42.	Characteristics of pollution
	43.	Source and cause of pollution
	44.	Wind direction and speed
	45.	Current or tide
	46.	Sea state and pollution
	47.	Drift of pollution
Part II (POLINF)	48.	Forecast
	49.	Identify of observer and ships on scene
	50.	Action taken
	51.	Photographs or samples
	52.	Names of other agencies informed
	53-59.	Spare
	60.	Acknowledge
	80.	Date and time
	81.	Request for assistance
	82.	Coast
	83.	Pre-arrangements for the delivery
	84.	Assistance to where and how
	85.	Other agencies requested
Part III (POLFAC)	86.	Change of command
	87.	Exchange of information
	88.	Names and number of
	89.	Description of equipment
	90.	ETA and arrival information
	91.	Place of embarkation
	92.	Place of disembarkation
	93-98.	Spare

Appendix E

Annexure IV

Allocation of responsibilities in the management of oil spills

Responsibility allocation for various department in management of oil spill		
Sl no	**Authority**	**Responsibility**
1	Ministry of Defence	The Ministry of Defence with administrative responsibility for the Coast Guard organization is the Ministry responsible for central coordination of oil spills of national significance in coastal and marine environment of various maritime zones. Their responsibilities are listed as below • Surveillance of maritime zones against oil spills • Combating oil spills in various maritime zones except in the waters of major ports • Central Co-ordinating Agency for combating of oil pollution in the coastal and marine environment of various maritime zones of the country • Implementation of national contingency plan for oil spill disaster. • (Following) controlling activities in various maritime zones except within the limits major ports • Inspection of oil record books • Apprehending violators of anti-pollution provisions mentioned under Sections 356 G (1) and (2) of the Merchant Shipping Act. • Checking of vessels for carrying necessary insurance certificates against oil pollution damage
2	Indian Coast Guard	• Responsible for maintaining and implementing the National Oil Spill Disaster Contingency Plan. • Responsible for acting as the Central Coordinating Agency for combating of oil pollution in various maritime zones, except in the waters of ports and within five hundred meters of offshore exploration and production platforms, coastal refineries, and associated facilities such as single buoy mooring, crude oil terminal and pipeline • They will review the progress reports submitted by the State Crisis Management Groups; • Respond to queries addressed to it by the State Crisis Management Groups and the District Crisis Management Groups; • Publish State-wise list of experts and officials who are concerned" with the handling of oil pollution incidents.
3	Ministries and departments of the government of India	**Ministry of Environment and Forests-** • Enactment of legislation for prevention and control of marine pollution from land and sea based sources • Prevention and control of marine pollution at source, on land or the sea • Monitoring of pollution up to the shore • Cleaning of beaches affected by oil pollution through coastal states and Union Territories.

		Ministry of Shipping- • They are responsible for prevention and control of pollution arising from ships all over the sea including the major ports areas, • Responsible for enactment and administration of the legislation related to prevention and control and combating of pollution arising from the ships • **Functions through DG (Shipping)-** To Comply with provision made in section 356 G(1) and (2) of Merchant Shipping Act, 1958 (Amendment) for the Purpose of Inspection of construction of ships and tankers in order to comply with provision of MARPOL 73/78 or of the other convention on maritime pollution formulated by IMO and/or other related bodies, Merchant Shipping Act and issue of necessary certificates, and Penalizing the offenders apprehended by the Indian Coast Guard and port authority for violations of the above provisions of the Act, including processing of pollution damage claims etc. • **Functions through major ports authorities within port limits-** Inspection of oil record books, apprehending of violators of anti-pollution provisions mentioned under section 356 G(1) and (2) of the Merchant Shipping Act, checking of vessels for carrying necessary insurance certificate against oil pollution damage, empowered to handle necessary anti-pollution provisions mentioned under Indian Ports Act, 1908 (Amendment), monitoring and combating of oil pollution in the port areas
		Ministry of Petroleum and Natural Gas- • Combating of oil pollution around offshore exploration and production platforms up to 500 mtrs • Combating of oil pollution around coastal refineries through the concerned refineries
		Department of Ocean Development– Scientific monitoring of marine pollution arising from land based ship-based and other resources in various maritime zones including coastal waters, but excluding monitoring of oil pollution within the limits of major ports, oil platforms, installations and structures
4	State Governments	• The State Governments of coastal states are responsible for coordinating the district and local administration and operation of the National Plan for shore line response and as per the provisions of the National Disaster Management Act, 2005 • The State and District Authorities will provide a wide range of site-specific information and resources, either in relation to environmental impacts, or response activities through authorities, such as Transport, Conservation and Resource Management Departments, Environmental Protection Authorities, emergency services, port/ Harbour authorities, and local conservation groups.

5	Support agencies	The following responsibilities are allocated to various support agencies for implementation of the National Oil Spill Disaster Contingency Plan: • **The Navy/ coastal state authorities/ port authorities** will make their communication/ operation centers facilities available to receive and disseminate reports of marine pollution accidents. • **The Indian Navy and the Indian Air Force** will provide fixed wing aircrafts or helicopters to conduct aerial surveillance or provide logistic support in movement of men and materials to the incident site. They will also provide ground to air communication link at the site for use by the on scene Commander. • **The Port Authority** will provide tugs and pollution control equipment at the incident site within port limits. • **The Ministry of Shipping, and Ministry of Petroleum and Natural Gas** will provide tankers or tank barges for storage of recovered oil or oil in water emulsions, and will arrange for storage and eventual disposal of recovered oil. • **Director General of Shipping,** Ministry of Shipping, will be responsible for all negotiations with the vessel, cargo owners, and insurers and will also conduct all negotiations regarding compensations and indemnification. • **The Ministry of Environment and Forest and Ministry of Agriculture** will provide scientific advice regarding species at risk, shore-line sensitivity, restriction of fishing activities, use of dispersant chemicals, beach cleaning methods, etc. • **The Ministry of Finance** will provide authorization for expenditure and funds for initial response and ensure adequate financial records are maintained. • **Coastal state authorities/ district administration/ departments/ public works/civil defence** corps will provide personnel and equipment, as required, for shoreline clean-up and ensure safety and protection of the local population and resources.

Annexure V

Specialist advice and assistance

Specialist Advice and Assistance		
Sl no	**Authority**	**Responsibility**
1	Directorate General of Shipping	• Issuance of statutory notice to the polluting ship as per the provision of Merchant Shipping Act, 1958. • Invoking relevant provision of the Merchant Shipping Act, 1958 in case the polluting ship fails to the action as required by the act to prevent or minimize pollution. • Advising concerned affected ports or other entities to deal with evidences for the purpose of raising claims on accounts of damage caused by the pollution and initiating legal action against the polluted. • Reporting such incidents to the Flag State of the ship or the neighboring Coastal State which is effected due to pollution. • Supervising salvage operations while dealing with oil pollution casualty if requested by the ports or other entity. • Investigating oil pollution contravention under the provisions of MS Act, 1958. • To keep Ministry of Shipping, Government of India and other concerned authorities posted on the pollution, action taken, progress report on combatment and follow-up action till normalcy of situation. • To advice Indian Coast Guard on pollution related matters under the provision of Merchant Shipping Act, 1958 whenever requested. • To take administrative and legal action for processing claims against damages incurred by Coast Guard and other agencies relating to any other oil pollution incidents • Advice concerned agencies to collect evidences for the purpose of claims pollution ships. • To advice the receiver of wreck with respect to pollution aspect and response. • To advice Indian ship-owners to mobilize ships for the purpose of oil transshipment if required
2	Indian Register of Shipping	• To provide advice relating to ship safety, structural integrity and stability of marine casualties; • To depute representatives to attend to a casualty and salvage at the SMCU when established.
3	Maritime Rescue Co-Ordination Centre	• In addition to coordinating the rescue and saving of life, to provide drift calculations and advice on offshore currents • Enabling messages to be communicated directly to vessels, during an incident, with its range of communication facilities including International Maritime Satellite (INMARSAT) systems,
4	DG Shipping Communication Centre	To provide advice relating to ship safety, structural integrity and stability of marine casualties and other details of the ship through coordination established with the Flag State of the stricken vessel.

5	Ministry of Environment, Forest and Climate Change	• To develop and implement national policy, programs and legislation to protect and conserve India's natural environment including regulation of dumping of wastes at sea, declaration and management of marine protected areas in Indian waters and conservation of listed threatened, migratory and marine species • To advise on matters relating to the Environment Protection from Dumping at Sea including the permitting and reporting of emergency dumping of material at sea; • To advise on potential impacts of oil spills on threatened marine and migratory species, such as seabirds, marine turtles, whales and dolphins. • To advice on likely to impact of oil spill on marine protected areas in Indian waters • To provide advice on habitats in marine protected areas, seabirds, marine mammals, marine invertebrates and macro algae, along with advice on rates of hydrocarbon biodegradation, dispersal and the use of dispersants. • To determine policy for usage of dispersants in the sea areas of the territorial waters over which the state exercises jurisdiction.
6	Archeological Survey of India	• Conduct underwater archaeological studies in Indian Waters • Assist/ advise in protection and maintenance of cultural heritage of the nation near to shore. • Documentation of underwater sites and ancient shipwrecks
7	Indian National Centre for Ocean Information Services	• To provide ocean state forecast. • To provide software based prediction of the trajectory of spilled oil.
8	Indian Navy	• Augment aerial surveillance capability of Coast Guard as necessary in the area when oil spill has occurred. • To make arrangements for oil transshipment operations from any tanker which has caused or is causing or is expected to cause oil spillage. • Promulgate general cautionary messages.
9	Indian Air Force	• Augment aerial surveillance capability of Coast Guard as necessary in the area when oil spill has occurred. • To make available its C-130 J Super Hercules aircraft for aerial monitoring of spills and aerial spraying of oil spill dispersants.

10	Ministry of Earth Sciences/ Department of Ocean Development/ National Institute of Oceanography	• Mapping of ecologically sensitive areas in the coastal and offshore region in consultation with Ministry of Environment and Forests. • Review of the sensitivity mapping listed by other agencies. • To provide scientific support through Coastal Ocean Monitoring and Prediction System (COMAPS) Centre and Units in investigations of oil pollution monitoring during oil spills and also deployment of its research vessels for this purpose, whenever necessary. • To organize research on impact of pollution on marine life based on actual oil pollution incidents.
11	Ministry of Agriculture/ Department Of Animal Husbandry, Dairying and Fisheries	• To arrange for suitable fishing vessels on which oil dispersant equipment can be mounted if the local action group concerned is unable to mobilize this requirement locally. • Sensitivity mapping of the sea areas within the territorial waters of the state with specific information on fish breeding grounds. • To provide Fishery Survey of India vessels for spraying of oil spill dispersants or other response measures
12	Ministry of Petroleum and Natural Gas and Oil Agencies	• To assist, when required, in consultation with DG Shipping, with chartering of tanker/s for oil transshipment operations. • To make available anti-pollution equipment and chemicals as are available with them. • To assist in the storage ashore of oil transshipped from wrecked or damaged tanker. • To assist in the assessment of the value of the oil transshipped. • To provide equipment and personnel resources and advice on a range of issues, including oil characteristics and local industry resource availability • To depute an Industry Adviser to the MRC during response to a major oil spill.
13	Shipping Corporation of India	• To arrange for tankers or ships or tank barges for transport and collection of recovered oil. • To arrange for any personnel required to assist oil transshipment operation or to assist otherwise as may be required.

14	Major ports/Non Major ports/Oil Terminals/Oil Installations/SPM operators	• To be in charge of the overall co-ordination of actions in the area within port limits as regards to anti-oil pollution • To identify a suitable sea going tug when required for the operations. • To identify surface crafts, on which dispersant spraying equipment can be mounted, and which can be used for rigging the boom. • To ensure that for the purpose of part XIII of the Merchant Shipping Act, 1958, actions are taken by the various authorities under the overall legal responsibility of the receiver of wrecks and dock concerned. • To ensure that at least the minimum equipment are kept available locally at all times • To arrange for training of personnel expected to be engaged in above operations. • To arrange for periodical exercise under the guidance of the RCC to keep equipment and personnel on continuous readiness for oil spill response operations. • To consult the ICG, DG Shipping, or other authority, when further advice/ assistance is required. • To keep the I CG apprised of action being taken.
15	Coastal State Governments and State Pollution Control Boards	• To take all suitable measures to prevent pollution on shoreline. • To render all possible assistance to the coordinator of the On Scene Commander, Local Action Group and district Commander particularly in accordance with the contingency plan. • To maintain adequate quantity of basic pollution response equipment like deflective booms, fence booms, spray equipment along with specialized equipment for beach protection and shoreline cleanup. • To identify suitable type of tug/boat/fishing vessel in consultation with On-Scene Commander/ Coast Guard for mounting the dispersant spraying equipment. • To take actions as applicable to the major ports, in respect of incidents at ports under jurisdiction.
16	Mercantile Marine Department	• To render all possible assistance to the coordinator of the Local Contingency/ Action Plan. • To provide technical advice to Local Action Group and CCA. • To assist Local Action Group in identifying surface craft suitable for mounting dispersant spraying equipment. • To assist Local Action Group in preparation of Local Contingency / Action Plan. • To assist the CG/RCC in examining ships for efficiency of anti-pollution equipments fitted on board as per Merchant Shipping Act, 1958. • If deemed necessary, to restrict movement of ships and personnel involved in oil pollution on receipt of related information.

17	Local Fisheries Authority	• To assist/advise Local Groups in identifying the rich fishing grounds so as to give priority for protection of such grounds from oil spills as well as use of dispersants • The local action groups in consultation with Coast Guard regional headquarters to identify the fishing vessels suitable for mounting the oil spill dispersant equipment.
18	Coastal Refineries and Crude Unloading Terminals	• To assist the local action group in the implementation of the Local Action Plan. • To assist the local action group in obtaining from their headquarters available additional equipment and chemicals if and when required. • To assist in chartering of tankers to undertake transportation / transshipment operations • To arrange for the storage of oil transshipped. • To assess value of oil transshipped and cost of refining or disposal as the case may be.
19	Offshore Oil Installations	• Occupiers of offshore oil installations are to maintain an oil spill contingency plan meeting specified requirements and maintain appropriate manpower, equipment and resources for oil spill response taking into consideration any guidelines and suggestions that may be issued by the Government of India/ Coast Guard from time to time. • To periodically forward a list of response inventory to the Coast Guard for scrutiny, evaluation and updating holdings. • To provide response equipment, material, trained personnel, and ships when required by the Coast Guard/ OSC on as available basis and without affecting safety of operations. • To immediately combat oil pollution around its installations up to 500 metres and continue to provide equipment, material, trained manpower, sampling efforts, and vessels as may be required by OSC when such oil spill spreads beyond 500 metres. • To provide data on crude oil and oil discharges. • To provide data on sub-sea pipe lines as required by OSC or MRC or CG MRCC. • To provide transshipment facilities in case the offshore installation, or any agency under its control is the polluter. • To provide staging facilities for helicopters in the offshore areas when engaged in pollution response in the vicinity whether or not the installation and agencies under its control are the polluters.
20	Receiver of Wrecks	• To assist Local Action Groups in whatever manner necessary and possible. • To take all actions necessary under Part XIII of the Merchant Shipping Act, 1958 (In this connection, the receiver of wreck shall consult the DGS, as and when required). • In situations where he has the local responsibility for certain actions and/or operations, he may authorize other agencies, who are better equipped.

21	Bombay Natural History Society	• Advise in restoration and cleaning of affected wildlife • Assist in estimating affected birds, mangroves in the area • Identifying, monitoring and mitigating the adverse impact of oil spill to the bio-diversity • Identifying Important Bird Areas (IBA) • ENVIS (Environmental Information System) Centre to study Avian Ecology and Inland Wetlands • Ecological Benchmarking in association with corporates, government and other NGOs
22	Central Marine Fisheries Research Institute	• Assist in estimating the effect of spill to fish and livelihood of fishermen in the area • Assist in identifying the types of fishes in the area • Assist in restoration of fishing in area after cleanup • Assist in estimating the Economic loss due to ban of fishing in the affected area • To understand the fluctuations in abundance of marine fisheries resources in relation to change in the environment • To develop suitable mariculture technologies for finfish, shellfish and other culturable organisms in open seas to supplement capture fishery production. • To act as a repository of information on marine fishery resources with a systematic database. • To provide consultancy services.
23	Integrated Coastal And Marine Area Management Project Directorate	• Responsible for preservation and conservation of marine environment in India • Identify the high risk areas • Promulgate the sensitivity mapping and area of priority
24	Mangrove Society of India	• To protect and conserve Indian mangroves by adopting environment friendly, scientifically sound techniques/methodologies. • To build up their capacities for protection and conservation of Indian mangroves. • To act as watchdog and advise in matters concerning the conservation of mangroves. • To train younger generations and will create awareness amongst them to conserve and protect mangroves • To organize alliances and networks with partners to develop an appropriate developmental perspective to conserve mangroves. • To organize issue-based Forums to achieve appropriate solutions to mangrove protection. • Capacity building of port and oil agencies, Central government and other state government agencies, stakeholders etc. By providing necessary training for their personnel. • To assist and coordinate activities pertaining to mangrove restoration consequent to oil pollution. • To play an active role in ensuring the participation of local people in making decisions in respect of mangroves. • To provide necessary scientific information in respect of mangroves

25	National Biodiversity Authority	• To regulate and advise the Government of India on issues of conservation, sustainable use of biological resources and fair and equitable sharing of benefits arising out of the use of biological resources. • To advise the Central Government agencies on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of the utilization of biological resources; and advise the State Governments in the selection of areas of biodiversity importance to be notified under Sub-Section (1) of Section 37 as heritage sites and measures for the management of such heritage sites; • The State Biodiversity Boards (SBBs) advise the State Governments, on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of the benefits arising out of the utilization of biological resources; 3Mangrove Society of India (MSI) is a non-profit and non-political organization working for protection, conservation and sustainable use of mangroves. Many of its members are consultants/advisers to various Government agencies. Some are on the National and International mangrove committees. MSI has affiliation with research and government institutions, corporate houses, NGO's and stakeholders etc. from Maharashtra, Gujarat, Kerala, Karnataka, Tamil Nadu etc. • The local level Biodiversity Management Committees (BMCs) promote conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of land races, folk varieties and cultivars, domesticated stocks and breeds of animals and microorganisms and chronicling of knowledge relating to biological diversity.
26	Reef Watch Marine Conservation	• To conduct education, awareness, training and capacity building programs for stakeholders • To provide expertise through its Information Network of institutions and individuals working on marine and coastal issues for development of OSCPs and incident response • To provide environmental information / education on biodiversity hotspots • To provide policy support • To facilitate a dialogue and consensus at various levels for conservation, management and sustainable utilization of coastal and marine resources / ecosystems in the development of protection priorities in OSCPs, NEBA and incident response.
27	Ms Swaminathan Research Foundation	• To provide advice on conservation of mangrove wetlands and sustainable utilization of their resources.
28	Wildlife Trust of India	• To assist in managing or preventing wildlife crises and mitigating threats to individual wild animals, their populations and habitats through holistic strategies and practical interventions. • To maintain national database on wildlife protected area and share the data with stakeholders for development of OSCPs and incident response. .

Annexure VI

The current national inventory in regards of oil spill response

National Oil Spill Response Capability

Aid to response	Provision by
Capping device (rating ≥ 10,000 PSI, 3000m depth, possibility of offset installation)	Ministry of Petroleum & Natural Gas
Subsea oil spill dispersant system	
Large scale OSD stockpile	
Emergency towing vessels (bollard pull ≥ 200 tons) x two	Ministry of Shipping
Salvage vessel	
Hot Tapping Device	
High Volume Offshore Skimming System	Ministry of Defence
Incineration Boom	
Aerial Dispersant Delivery System	
Ecological Sensitivity Index Map	Ministry of Environment and Forests
Oil Finger Printing Laboratory	Dept. of Science and Technology
Radar oil spill detection capability	MoD, MoPNG, MoS

Annexure VII

The national oil spill response capability supported by the concerned Ministries

National Oil Spill Response Capability

AID TO RESPONSE	PROVISION BY
Capping device (rating ≥ 10,000 PSI, 3000m depth, possibility of offset installation)	Ministry of Petroleum & Natural Gas
Subsea oil spill dispersant system	
Large scale OSD stockpile	
Emergency towing vessels (bollard pull ≥ 200 tons) x two	Ministry of Shipping
Salvage vessel	
Hot Tapping Device	
High Volume Offshore Skimming System	Ministry of Defense
Incineration Boom	
Aerial Dispersant Delivery System	
Ecological Sensitivity Index Map	Ministry of Environment and Forests
Oil Finger Printing Laboratory	Dept. of Science and Technology
Radar oil spill detection capability	MoD, MoPNG, MoS

Annexure VIII

The guiding template for the preparing of a new facility level contingency plan

The guiding template for the preparing of a new facility level contingency plan

Strategy

1. Introduction
    - 1.1 Authorities and responsibilities
    - 1.2 Coordinating committee
    - 1.3 Statutory requirements
    - 1.4 Mutual aid agreements
    - 1.5 Geographical limits of plan
    - 1.6 Interface with ROSDCP and NOSDCP

2. Risk assessment
    - 2.1 Identification of activities and risks
    - 2.2 Types of oil likely to be spilled
    - 2.3 Probable fate of spilled oil
    - 2.4 Development of oil spill scenarios including worst case discharge
    - 2.5 Shoreline sensitivity mapping
    - 2.6 Shoreline resources, priorities for protection
    - 2.7 Special local considerations

3. Response strategy
    - 3.1 Philosophy and objectives
    - 3.2 Limiting and adverse conditions
    - 3.3 Oil spill response in offshore zones
    - 3.4 Oil spill response in coastal zones
    - 3.5 Shoreline oil spill response
    - 3.6 Storage and disposal of oil an doily waste

4. Equipment
    - 4.1 Marine oil spill response equipment
    - 4.2 Inspection, maintenance and testing
    - 4.3 Shoreline equipment, supplies and services

5. Management
    - 5.1 Crisis manager and financial authorities
    - 5.2 Incident organization chart
    - 5.3 Manpower availability (on-site, on-call)
    - 5.4 Availability of additional manpower
    - 5.5 Advisors and experts – spill response, wildlife, and marine environment
    - 5.6 Training/safety schedules and drill/exercise Programme

6. Communications
    - 6.1 Incident control room and facilities
    - 6.2 Field communications equipment
    - 6.3 Reports, manuals, maps, charts and incident logs

Action and operations

7. Initial procedures
    - 7.1 Notification of oil spill to concerned authorities
    - 7.2 Preliminary estimate of response Tier
    - 7.3 Notifying key team members and authorities
    - 7.4 Manning control room
    - 7.5 Collecting information (oil type, sea/wind forecasts, aerial surveillance, beach reports)
    - 7.6 Estimating fate of slick (24, 48 and 72 hours)
    - 7.7 Identifying resources immediately at risk, informing parties

8. Operations planning
    - 8.1 Assembling full response team
    - 8.2 Identifying immediate response priorities
    - 8.3 Mobilizing immediate response
    - 8.4 Media briefing
    - 8.5 Planning medium-term operations (24-, 48-and 72-hour)
    - 8.6 Deciding to escalate response to higher Tier
    - 8.7 Mobilizing or placing on standby resources required
    - 8.8 Establishing field command post and communications

9. Control of operations
    - 9.1 Establishing a management team with experts and advisors
    - 9.2 Updating information (sea/wind/weather forecasts, aerial surveillance, beach reports)
    - 9.3 Reviewing and planning operations
    - 9.4 Obtaining additional equipment, supplies and manpower
    - 9.5 Preparing daily incident log and management reports
    - 9.6 Preparing operations accounting and financing reports
    - 9.7 Preparing releases for public and press conferences
    - 9.8 Briefing local and government officials

10. Termination of operations
    - 10.1 Deciding final and optimal levels of beach clean-up
    - 10.2 Standing-down equipment, cleaning, maintaining, replacing
    - 10.3 preparing formal detailed report
    - 10.4 Reviewing plans and procedures from lessons learnt

Data directory

Maps/charts

1. Coastal facilities, access roads, telephones, hotels, etc.
2. Coastal charts, currents, tidal information (ranges and streams), prevailing winds
3. Risk locations and probable fate of oil
4. Shoreline resources for priority protection
5. Shoreline types

6. Sea zones and response strategies
7. Coastal zones and response strategies
8. Shoreline zones and clean-up strategies
9. Oil and waste storage/disposal sites
10. Sensitivity maps/atlas

Lists

1. *Primary oil spill equipment:* booms, skimmers, spray equipment, dispersant, absorbents, oil storage, radio communications, etc (manufacturer, type, size, location, transport, contact, delivery time, cost and conditions)

2. *Auxiliary equipment:* tugs and work boats, aircraft, vacuum trucks, tanks and barges, loaders and graders, plastic bags, tools protective clothing, communications equipment, etc (manufacturer, type, size location, transport, contact, delivery time, cost and conditions)

3. *Support equipment:* aircraft, communications, catering, housing, transport, field sanitation and shelter etc (availability, contact, cost and conditions).

4. *Sources of manpower:* contractors, local authorities, caterers, security firms (availability, numbers, skills, contact, cost and conditions)

5. *Experts and advisors*: environment, safety, auditing (availability, contact, cost and conditions)

6. *Local and national government contacts*: (name, rank and responsibility, address, telephone, fax, telex)

Data

1. Specifications of oils commonly traded
2. Wind and weather
3. Information sources

Annexure IX

The format of Annual Return

ANNUAL RETURNS ON PREPAREDNESS FOR OIL SPILL RESPONSE					
1	NAME OF PORT / OIL HANDLING AGENCY				
2	CONTAINMENT EQUIPMENT	DESCRIPTION	LENGTH	QUANTITY (No.)	OPERATIONAL STATUS
3	RECOVERY EQUIPMENT	DESCRIPTION	CAPACITY	QUANTITY (No.)	OPERATIONAL STATUS
4	TEMPORARY STORAGE FACILITY	DESCRIPTION	CAPACITY	QUANTITY (No.)	OPERATIONAL STATUS
5	OSD SPRAYING SYSTEM	DESCRIPTION		QUANTITY (No.)	OPERATIONAL STATUS
6	OIL SPILL DISPERSANT	MAKE		QUANTITY (Kg.)	EXPIRY DATE
7	SHORELINE RESPONSE EQUIPMENT	DESCRIPTION	CAPACITY (if applicable)	QUANTITY (No.)	OPERATIONAL STATUS
8	IMO OPRC LEVEL TRAINED RESPONDERS	NAME	DESIGNATION	CONTACT No.	IMO OPRC LEVEL 1/ 2

9	OIL SPILL RESPONSE CRAFT	CRAFT NAME	DESCRIPTION	RESPONSE CAPABILITY	
				PLEASE PROVIDE PARTICULARS AT SECTIONS 2-6	
10	OSRO PARTICULARS (IF OUTSOURCED)	OPERATOR NAME			
		ADDRESS			
		PHONE NO.			
		FAX NO.			
		E-MAIL			
		ENGAGEMENT EXPIRY DATE			
		EQUIPMENT ON HIRE		PLEASE PROVIDE PARTICULARS AT SECTIONS 2-7	
		IMO OPRC LEVEL TRAINED PERSONNEL ON HIRE		PLEASE PROVIDE PARTICULARS AT SECTION 8	
		MANPOWER ON CALL			
		CRAFT ON HIRE		PLEASE PROVIDE PARTICULARS AT SECTION 9	
11	OIL SPILL CONTINGENCY PLAN		YEAR PUBLISHED	DATE OF LAST REVISION	STATUS OF APPROVAL BY COAST GUARD
12	PERSONNEL TO BE CONTACTED IN CASE OF SPILL	NAME	DESIGNATION	CONTACT PARTICULARS (a) LANDLINE (b) MOBILE (c) FAX (d) E-MAIL	
13	MoU DETAILS (IF ANY)				

Annexure X

The certificate of endorsement

Certificate of Endorsement

(To be certified personally by an officer not below the post of Deputy Conservator of a port facility or the Installation Manager of an oil installation, or offshore installation, or equivalent legally responsible authority)

I hereby certify that:

1. The oil spill contingency plan for the facility under my charge has been prepared with due regard to the relevant international best practices, international conventions, and domestic legislation.
2. The nature and size of the possible threat including the worst case scenario, and the resources consequently at risk have been realistically assessed bearing in mind the probable movement of any oil spill and clearly stated
3. The priorities for protection have been agreed, taking into account the viability of the various protection and clean-up options and clearly spelt out.
4. The strategy for protecting and cleaning the various areas have been agreed and clearly explained.
5. The necessary organization has been outlined, the responsibilities of all those involved have been clearly stated, and all those who have a task to perform are aware of what is expected of them
6. The levels of equipment, materials and manpower are sufficient to deal with the anticipated size of spill. If not, back-up resources been identified and, where necessary, mechanisms for obtaining their release and entry to the country have been established.
7. Temporary storage sites and final disposal routes for collected oil and debris have been identified.
8. The alerting and initial evaluation procedures are fully explained as well as arrangement for continual review of the progress and effectiveness of the clean-up operation
9. The arrangements for ensuring effective communication between shore, sea and air have been described.
10. All aspects of plan have been tested and nothing significant found lacking.
11. The plan is compatible with plans for adjacent areas and other activities.
12. The above is true to the best of my knowledge and belief.
13. I undertake to keep the plan updated at all times and keep the Indian Coast Guard informed of any changes through submission of a fresh certificate of endorsement.

Seal	Signature Name Designation Organisation
Place	Date

Annexure XI

The SOP for pre-booming

Standard Operating Procedure

The Standard Operating Procedures (SOP) for pre-booming will be as follows:-

- The deliverer will deploy the boom such that it completely surrounds the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation or the deliverer may pre-boom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.
- The boom will be deployed with a minimum stand-off of five feet away from the sides of a vessel, measured at the waterline. This stand-off may be modified for short durations needed to meet a facility or ship's operational needs.
- The deliverer will periodically check the boom positioning and adjust as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events.
- For pre-boomed transfers, within one hour of being made aware of a spill, the deliverer will be able to complete deployment of the remaining boom, should it be necessary for containment, protection, or recovery purposes.
- The determination of safe and effective booming must be made prior to starting a transfer or, if conditions change, during a transfer.
- The deliverer must be able to quickly disconnect the entire boom in the event of an emergency.

Alternative Measures

If owing to metrological or other factors or mobility desired of the tanker and it's assisting craft it is not feasible to safely and effectively implement pre-booming as a SOP, the following alternate measures will be taken by the deliverer to address ecological sensitivity concerns of the areas likely to be affected by the spill:-

- As an alternative to pre-booming, a suitable oil spill response craft will be stationed during cargo discharge, in the vicinity of the tanker for immediate response.
- On being made aware of a spill, the deliverer will have the ability to safely commence tracking of the spill in low visibility conditions.
- Within one hour of being made aware of a spill, the deliverer will be able to completely surround the vessel(s) and facility/terminal dock area directly involved in the oil transfer

operation, or the deliverer may pre-boom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.

Annexure XII

Pro forma for Annual Returns on preparedness for oil spill response and joint inspection

Pro forma for Annual Returns on Preparedness for Oil Spill Response and Joint Inspection

Appendix E7/G.Rev.1 to NOS-DCP 2015
(Para 4.7 & 4.9 refers)

MAIN PARTICULARS						
1.	Name *					
2.	Place *					
3.	Head of Agency *					
4.	Head of HSE *					
OIL HANDLING INFORMATION						
5.	Total quantity handled *					
6.	Oil handling jetties	*Sl no.*	*1*	*2*	*3*	*4*
		Jetty				
		Length (m)				
7.	No. of SPM's (if any)					
8.	Average no. of Ships handled		Daily	Weekly	Monthly	Annually
9.	Other oil facilities					
OIL SPILL RESPONSE ORGANISATION						
10.	Chief incident Controller					
11.	Site Incident Controller(s) *		1*			
			2			
			3			
			4			
12.	Administration & Communication Coordinator					
13.	Support Services	Human Resource Services Coordinator				
14.		Logistics Service Coordinator				
15.		Media and Public Relation Coordinator				
16.		Operations and Technical Coordinator				
17.		Environmental and Scientific Coordinator				

18.	Training	Date	No. of participants	Nature of training and brief remarks

19.	Mock drills and exercises	Date	Scale/ level of exercise/ drill	Agency conducting exercise	No. of participants	Agencies participated

STATUS OF CONTINGENCY PLAN		
20.	Plan date *	
21.	Plan approval date	
22.	Plan last resubmission date	
23.	Date of last revision	
24.	Remarks on status	

ASSESSMENT OF CONTINGENCY PLAN			
25.	Has there been a realistic assessment of	the nature and size of the possible threat?	
		the resources at risk?	
		the probable movement of oil spill?	
26.	Have priorities for protection been agreed?		
27.	Has strategy for protecting and cleaning the various areas been agreed and clearly explained?		
28.	Has the necessary organisation been outlined and the responsibilities of all those involved been clearly stated with no 'Grey areas'?		
29.	Will all who have a task to perform be aware of what is expected of them?		
30.	Are the levels of following sufficient to deal with the anticipated size of spill?	Equipment?	
		Materials?	
		Manpower?	
	If not	have back-up resources been identified?	
		have mechanisms for obtaining their release and entry to the country been established?	
31.	Have the following been identified for collected oil and debris?	temporary storage sites	
		final disposal routes	
32.	Are the alerting and initial evaluation procedures fully explained?		
33.	Are the arrangements for continual review of the progress and effectiveness of the clean-up operation fully explained?		
34.	Have arrangements for ensuring effective communication been described?		
35.	Have all aspects of the plan been tested and nothing significant found lacking?		
36.	Is the plan compatible with plans for adjacent areas and other activities?		

RESOURCES AT RISK IN WORST CASE SCENARIO						
37.	Environment	Coral reefs (m^2)	Swamps/ marshes (m^2)	Fish/ spawning grounds (m^2)	Bird breeding/ flocking areas (m^2)	Estuaries (m^2)
38.	Commercial *	Agricultural land (km^2)	Fish farms (m^2)	Aquaculture farms (m^2)	Water intakes (Name & no)	Salt Pans (m^2)
39.	Plankton	Marine mammals	Sheltered shoreline	Shallow sub- tidal		
40.	Recreational	Tourist beaches (Names)	Amenity beaches (Names)	Bathing beaches (Names)	Pilgrimage beaches (Names)	
41.	Wildlife and forest	Mangroves (m^2)	Endangered Species (names)	Marine National parks (m^2)	Wild life habitats parks (m^2)	

RESPONSE RESOURCES					
42.	Containment equipment *	Description	Length	Quantity (no.)	Operational status
43.	Recovery equipment *	Description	Capacity	Quantity (no.)	Operational status
44.	Temporary storage facility *	Description	Capacity	Quantity (no.)	Operational status
45.	OSD spraying system *	Description		Quantity (no.)	Operational status
46.	Oil spill dispersant	Make		Quantity (liters.)	Expiry date
47.	Shoreline response equipment	Description (if applicable)	Capacity	Quantity(no.)	Operational status
TRAINED RESPONDERS					
48.	IMO OPRC level 1 Trained Responders *	*Name*	*Designation*	*Contact no.*	*Date of certificate*
49.	IMO OPRC level 2 Trained Responders *				
50.	Oil spill response craft	*Craft name*	*Description*	*Response capability*	
				Please fill particulars at Sl. 42-46	

EXTERNAL RESOURCES				
51.	OSRO particulars	Operator name		
		Address		
		Phone no.		
		Fax no.		
		E-mail		
		Engagement expiry date		
		Equipment on hire	Yes/No	Please fill particulars at Sl. 42-47
		Trained responders on hire	Yes/No	Please fill particulars at Sl. 48-49
		Manpower on call	Yes/No	Please fill particulars at Sl. 48-49
		Craft on hire	Yes/No	Please fill particulars at Sl. 50
52.	MoU details (if any)			

FUTURE PLAN		
53.	Proposed jetty/ terminal/ SPM	
54.	Proposed acquisition of response equipment	

CERTIFICATION			
(To be certified personally by an officer not below the post of Deputy Conservator of a port facility or the Installation Manager of an oil installation, or offshore installation, or equivalent legally responsible authority)			
55.	Certified By	Name: *	
		Designation: *	
		Contact No: *	
		Mobile No: *	
		Fax No:*	
		Email Id: *	
		Date: *	

INTERACTION WITH AUTHORITIES RELEVANT FOR SPILL MANAGEMENT			
56.	Interaction Date	Official interacted with	Brief outcome of interaction

COMMENTS (for Coast Guard Use Only)					
			(Check relevant box)		
			Unsatisfactory	*Satisfactory*	*Very Satisfactory*
57.	Response Preparedness				
58.	Efficiency	Equipment handling			
59.	Adequacy	Equipment			
		Trained Manpower			
		Crafts and vessels			
		Infrastructure			
		Support			
60.	Overall assessment				
61.	Final assessment comments				

Name:	*Designation:*	*Signature:*
Date:		
Note : (*) Required field mandatory		

Oil Spill Disposal → Agencies.
29/06/2016
from.
KPT.

STATEMENT SHOWING KANDLA PORT REGISTERED PARTIES FOR REMOVAL OF GARBAGE, USED OIL/WASTE OIL ETC.

Sr. No.	Name of Party	License for Removal of	Last Validity of License	Remarks
1	M/s. Harish A. Pandya 15, Brahm Samaj Bldg,Plot-106,Sec-08 Behind Oslo Cinema, G'dham- Kachchh	Dry Soild Waste (Non-hazardous) Kandla,Vadinar& Tuna	From 18/12/2015 to 17/12/2016	info@harishpandya.com
2	M/s. Alicid Organic Industries Ltd., Fact.- 207/208 Hanumant Henduva, Opp. Gujcomasol, Near Khari River,Highway Post - Palavasana, Mehsana - 2.(Guj)	Waste Oil/Used Oil Kandla & Vadinar	From 5/12/2015 to 4/12/2016	alicidorganic@gmail.com naazshippingservice@hahoo.co.in
3	M/s. Shree Venkatesh Engineering Works, Valsura Road Jamnagar-361 002	Dry Soild Waste (Non-hazardous) Vadinar Port	From 12/12/2012 to 11/12/2013	admin@venkateshengg.com Not renewed
4	M/s Continental Petroleum Limited A-166 & F-162-165, RIICO Industrial Area, Behror - 301 701 Dist :- Alwar (Rajasthan)	Used Oil/ Waste Oil Kandla	From 14/10/2015 to 13/10/2016	conpetco@gmail.com Not renewed
5	M/s. Industrial Esters & Chemicals P. Ltd., 202, Madhav Appartment, Jawahar Road, Ghatkopar (East), Mumbai- 400 077	Waste Oil/Used Oil Kandla	From 2/12/2015 to 1/12/2016	sludgeoil16@yahoo.co.in
6	M/s. Anna Pertrochem Pvt. Ltd., E-49, RICCO Growth Center, Phase-II P.O. :Maval, Ambaji Industrial Area, Abu Road - 307 026 (Rajasthan)	Waste Oil /used oil Kandla & Vadinar	From 4/9/2015 to 3/9/2016	annapetrochemempvtltd@yahoo.com annapetrochemempvtltd@gmail.com
7	M/s. Jay Ambe Thinchem, Plot No.- C-1/B-2010, IV Phase, GIDC, Vapi -396 195	Waste Oil/Used Oil Kandla	From 7/5/2015 to 6/5/2016	sludgeoilindia@yahoo.com
8	M/s Gujarat Petrochem Plot No.48-50, GIDC, Vartej Bhavnagar	Waste Oil/Used Oil Kandla	24/12/2009 to 23/12/2010	gujoilad1@yahoo.com Not renewed
9	M/s. Reliance Barrel supply Company 200/34, Behind Kashiram Textile Mill, Narol - Ahmedabad-382 405	Waste Oil/ Used Oil Kandla Port	From 11/03/2013 to 10/03/2014	Not renewed
10	M/s. Hind Petrochem & Refinery Survey No.109 & 111, Part of village Pratapnagar Ta.Savli Dist :- Vadodara	Waste Oil/ Used Oil Kandla Port	From 11/08/2014 to 10/08/2015	hindpetro@hotmail.com Not renewed
11	M/s Gujarat Mobil Pvt.Ltd. R.Survey No.62, Paiki,Behind Plot No.62/A,B,C Vill :- Mamsan Dist : Bhavnagar	Waste Oil/ Used Oil Kandla Port	From 21/12/2011 to 20/12/2012	gmpl1996@gmail.com Not renewed

12	M/s Sanna Oil Process, New Good Luck Market, Opp.PWD stores, Chandola lake, Narol Road, A'bad-380028	Waste oil/ Used oil Kandla Port	From 21/01/2016 to 20/01/2017	kandla.sludgeremoval35@gmail.com shanaoilprocess@yahoo.com
13	M/s Balaji Rang Udyog Pvt. Ltd. Plot No.44,MIDC, Taloja Industrial Area(NCZ), Taloja - 410208 Dist : Raigad(MS)	Waste Oil Kandla Port	From 28/12/2011 to 30/06/2012	Not renewed
14	M/s Shri Rang Petrochem Industries 51/A, AKVN Industrial Area, Meghnagar-457779 Dist : Jhabua (M.P.)	Waste Oil/Used Oil Kandla Port	From 26/02/2013 to 25/02/2014	srpimp05@rediffmail.com Not renewed
15	M/s. United Shipping Company Plot No.167, Sector-1/A G'dham- Kachchh	Waste Oil/Used Oil Kandla Port	From 10/06/2015 to 9/06/2016	info@risinggroup.co sunil@risinggroup.co pritam@risinggroup.co
16	M/s Tanu Petrochem Pvt.Ltd. Plot No.238, PHASE-II,IDA, Pashamailaram (U), Patancheru(M) Medak District - 502 307 (AP)	Used Oil/ Waste Oil Kandla	From 6/07/2012 to 5/07/2013	Tanu_Petrochem@yahoo.com Not renewed
17	M/s Navkar Enterprise, Block - 185/186,Village :- Chachravadi, Tehsil :- Sanand, Dist :- Ahmedabad (Guj)	Waste Oil/Used Oil Kandla/ Vadinar	From 8/09/2015 to 7/09/2016	pjani885@gmail.com
18	M/s. Fine Refiners Pvt. Ltd. Plot-40, GIDC, Vartej, Bhavnagar - 364 401 (Guj)	Used Oil/ Waste Oil Kandla	From 20/04/2016 to 19/04/2017	info@finerefiners.com
19	M/s Vishwa Trade Link Inc., Plot No.170/2/A, TP-03, Anjar - Kachchh	Dry Soild Waste (Non-hazardious) Kandla/Vadinar	From 3/12/2014 to 2/12/2015	vishwatradelink@gmail.com umit_jani@yahoo.com
20	M/s. Chirag Enterprise, SRC Shop No.05, Khanna Market, G'dham- Kachchh	Dry Soild Waste Non-hazardious Kandla	From 18/5/2012 to 17/5/2013	nur_sekh@yahoo.com Not renewed
21	M/s. Naaz Shipping Services, Office No.35, First Floor, Grain Merchant Association Bldg. Plot No.297, Ward-12-B, Near Old Court, Gandhidham	Dry Soild Waste Non-hazardious Kandla /Vadinar	From 23/9/2015 to 22/9/2016	naazshippingservice@hahoo.co.in nasirkhan685@gmail.com
22	M/s Jai Ambe Industries 11,Uma Industrial Estate,Opp. Mahalaxmi Rubtech,Vasna, Iyava village Ta:-Sanand- Dist.A'bad	Used Oil/ Waste Oil Kandla	From 7/11/2012 to 6/11/2013	hapandya2003@yahoo.com Not renewed

23	M/s Daman Ganga Paper Mill Pvt.Ltd. Plot No.257/258, Silvasa Road, GIDC, Vapi Valsad	Used Oil/ Waste Oil Kandla	From 17/12/2013 to 16/12/2014	damanganga@damanganga.com Not renewed
24	M/s abc Petrochem Pvt.Ltd Gut No.10, Vill :-Vardha, Tal. Wada, Dist.:- Thane (MS)	Used Oil/ Waste Oil Kandla	From 12/12/2012 to 11/12/2013	Not renewed
25	M/s R.S.Oil Industries Junglepur, Jalan Industrial Complex, Baniyara, P.O.Begri, Domjur Howrah-711411	Used Oil/ Waste Oil Kandla	From 7/1/2013 to 6/1/2014	rsoilindgo@gmail.com Not renewed
26	M/s Kutch Petrochem Pvt Ltd. Plot No.121, Sect- 9-C, Behind Ashok Leyland Gandhidham-Kachchh	Used Oil/ Waste Oil Kandla/Vadinar	From 29/1/2016 to 28/1/2017	kutchppl@rediffmail.com karanpandya@yahoo.in thakarjimmy@gmail.com
27	M/s Talha Traders Plot No.B-510, NU-4, Sapnanagar Gandhidham-Kachchh	Dry Soild Waste Non-hazardious Kandla	From 26/7/2013 to 25/7/2014	Not renewed
28	M/s Omega Marine Services Shop No.2, Brahm samaj Building Plot No. 106, Sector-8, Gandhidham	Dry Soild Waste Non-hazardious Kandla	From 12/5/2016 to 11/5/2017	omegamvn@hotmail.com karanpandya@yahoo.in thakarjimmy@gmail.com
29	M/s North East Lubricia Pvt.Ltd. Factory :- Survey No.404, Village Abitghar, Tal :- Wada, Dist :- Thane -421 303 (MS)	Used Oil/ Waste Oil Kandla	From 24/1/2014 to 23/1/2015	www.nelubrica.com Not renewed
30	M/s Rajdeep Enterprise, Factory :- Survey No.246, Plot No.5, Opp. Galaxy, Bearings Ltd., Rajkot-Gondal N.H.No.8-B, Shapar (Veraval)	Used Oil/ Waste Oil Kandla	From 19/5/2015 to 18/5/2016	rajdeep_enterprise@yahoo.co.in
31	M/s Poonam Petrochem Pvt. Ltd. 513, Nasibullah Compound, Kurla- Kalina Road, Near Baghadad Hotel, Kurla (W) Mumbai- 400 070	Used Oil/ Waste Oil Kandla	From 6/12/2014 to 5/12/2015	poonampetro@gmail.com Not renewed
32	M/s Priyanshi Corporation C/o Maruti Petroleum, Shop No.2 N.H.-8 B, Shapar Veraval Ta.Kotda, Sangani, Dist-Rajkot-360 024	Used Oil/ Waste Oil Kandla	From 19/8/2015 to 18/8/2016	Contact No.7383599838 Mr.Sharad Jain
33	M/s Atlas Organic Pvt.Ltd. Office No.204/206, Elisbridge Shopping Centre, Opp Town Hall, Ashram Road, A'bad -380 006	Used Oil/ Waste Oil Kandla	From 17/9/2015 to 16/9/2016	atlasorganics@yahoo.com
34	M/s Shine Petrochem A-804, Samudra Complex, Near Classic Gold Hotel, Off-C.G.Road Navrangpura- A'bad	Used Oil/ Waste Oil Kandla	From 9/9/2015 to 8/9/2016	shinepetrochem@gmail.com
35	M/s Amar Hydro Carbon Pvt Ltd. Plot No.36, Survey No.165/1 to 180/1+2, Narayan Estate, Near IOC Pump, Iyava Tal. Sanand, Dist- A'bad	Used Oil/ Waste Oil Kandla	From 14/10/2015 to 13/10/2016	amarhydrocarbon@gmail.com

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ANNEXURE 2

Monitoring the implemental Safe guards
Ministry of Environment, Forests & Climate Change
Regional office (W), Gandhinagar.
Monitoring Report (Upto May, 2022)
Part – 1
DATA SHEET

1. Project type: River valley/Mining/ Industry/thermal/nuclear/Other (specify)	Infrastructure and Miscellaneous Projects and CRZ
2. Name of the project	Development of Plots for Construction of Liquid Storage Tank Farm at Kandla, Gujarat by Deendayal Port Authority (Erstwhile: Deendayal Port Trust)
3. Clearance Letter (s). OM no and date	MoEF, New Delhi vide File No. 10-36/2008 – IA-III dated 02/02/2010 had granted Environmental/ CRZ Clearance to Deendayal Port Authority for the subject project. Further, MOEF&CC, New Delhi vide File No. 10-36/2008-IA.III dated 18/08/2015 had extended the validity period of EC/CRZ Clearance up to 01/02/2020.
4. Location a) District (s) b) State (s) c) Location/latitude/longitude	 Dist: Kutch State: Gujarat Location: Kandla, 23°1'48.32"N and 70°11'57.60"E
5. Address for Correspondence a) address of Concerned Project ChiefEngineer(with pin code &telephone/telex/fax numbers b) Address of Executive projectEngineer/manager/(with pin codefax numbers)	**Chief Engineer,** Deendayal Port Authority, A.O. Building, Annex, Post Box No.-50, Gandhidham- Kutch. Gujarat Pin – 370201 Tel : 02836-233192, Fax-02836-220050. **Chief Engineer,** Deendayal Port Trust, A.O. Building, Annex, Post Box No.-50, Gandhidham- Kutch. Gujarat Pin – 370201
6. Salient features of the project	1. Out of total 17 plots, DPA allotted 13 plots (3, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18 & 19) to various plot allottees.

b) Salient features of the Environmental management plan	Further, Commercial operation started for 13 plots (3, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18 & 19) and also obtained CTO from GPCB. The Plots no. 8, 9, 11 & 16 will be auctioned again in due course. Two plots reserved for parking facilities. Total area requirement = 108.46 acres 2. The tentative capacity works out for the proposed tank farm is 9.0 Lakhs Kiloliters. 3. This liquid storage mainly used for storage of liquid cargo as permitted in CRZ Notification, 2011 and its amendment from time to time. 1. Provision of Parking of heavy vehicles and sufficient space for loading / unloading of tankers within individual plot limit have been made by all successful plot allottees. 2. Successful plot allottees had already placed the detailed on site and Off site Emergency Management Plan as per the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989, as amended to date. 3. The solid waste have been properly collected, segregated and disposed off as per the provision of solid waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 by successful plot allottees. 4. A first Aid Room had already been provided by successful plot allottees during the construction activities. 5. Secure construction practices have been adopted by successful plot allottees in which no any construction spoils take placed.
7. Breakup of the project area a) Submergence area : forest & non-forest b) Others	Nil Nil
8. Breakup of the project affected population with enumeration of those losinghouses/dwelling units only agricultural land & landless	

labourers/artisen a) SC. ST/Adivasis b) Others (please indicate whether these figures arebased on any scientific and systematic survey carried out of only provisionalfigures, if a survey is carried out give details and years of survey).	 Nil Nil
9. Financial details a) Project cost as originally planned and subsequent revised estimates and the year of prices reference	Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3,4,5,6,7,10,12,13,14,15,17,18& 19) and started commercial operation. The Plots no. 8, 9, 11 & 16 will be auctioned again in due course. Plot No. 3, 4, 5 & 6: M/s. Aegis Logistics: 42 Cr. approx. Plot No. 7: M/s. Shreeji Liquid Storage Pvt. Ltd.: Planned Project Cost: 79.98 Plot No. 8 & 9: Not alloted Plot No. 10: M/s. Friends Bulk Handlers Ltd.: Planned Project Cost: 45 Cr Plot No. 11: Surrendered Plot No. 12: M/s. Viking Lighatrage and cargo handlers Pvt. Ltd.: Planned Project Cost: 28.5 Cr Plot No. 13: M/s. Gokul Agro Resources Limited: Planned Project Cost- 25 Cr. Plot No. 14: M/s. Kutch Oil and Soap Industry: Planned Project Cost-22 Cr. Plot No. 15: M/s. Seabridge Terminal Pvt. Ltd.: Planned Project Cost-35 Cr. Plot No. 16: Surrendered Plot No. 17: M/s. Emperious Infralogistic Pvt. Ltd.: Planned Project Cost- 40 Cr. Plot No. 18: M/s. Sunshine Liquid Storage Pvt. Ltd.: Planned Project Cost-23 Cr. Plot No. 19: M/s. Ambaji Import Pvt. Ltd.: Planned Project Cost-36.7 Cr. - Not Applicable Out of total 17 plots, DPA allotted 13 plots to various plot allottees (Plot No. 3, 4, 5, 6, 7,

b) Allocation made for environmentalmanagement plans with item wise and year wise break-up c) Benefit cost ratio/Internal rate of Return and the year of assessment Whether (c) includes the cost of environmental management plans so far. d) Actual expenditure incurred on the project	10, 12, 13, 14, 15, 17, 18 & 19) and started commercial operation.The Plots no. 8, 9, 11 & 16 will be auctioned again in due course. Plot No. 3, 4, 5 & 6: M/s. Aegis Logistics: Planned EMP Cost:----- Plot No. 7: M/s. Shreeji Liquid Storage Pvt. Ltd.: Planned EMP Cost:----- Plot No. 8 & 9: Not allotted Plot No. 10: M/s. Friends Bulk Handlers Ltd.: Planned EMP Cost: 6 Lakhs Plot No. 11: Surrendered Plot No. 12: M/s. Viking Lighatrage and cargo handlers Pvt. Ltd.: Planned EMP Cost: 8 Lakhs Plot No. 13: M/s. Gokul Agro Resources Limited: Planned EMP Cost- 10.0 Lakh Plot No. 14: M/s. Kutch Oil and Soap Industry-Planned EMP Cost-4 lakh Plot No. 15: M/s. Seabridge Terminal Pvt. Ltd.: Planned EMP Cost: -------- Plot No. 16: Surrendered Plot No. 17: M/s. Emperious Infralogistic Pvt. Ltd.: Planned EMP Cost- 2.2 Lakhs, Plot No. 18: M/s. Sunshine Liquid Storage Pvt. Ltd.: Planned EMP Cost-3.5 lakh Plot No. 19: M/s. Ambaji Import Pvt. Ltd.: Planned EMP Cost-3.9 lakh Plot No. 3, 4, 5 & 6: M/s. Aegis Logistics: Actual Project Cost: 42 Cr. approx. Plot No. 7: M/s. Shreeji Liquid Storage Pvt. Ltd.: Actual Project Cost:---------- Plot No. 8 & 9: Not allotted Plot No. 10: M/s. Friends Bulk Handlers Ltd.: Actual Project Cost: 43.5 Cr Plot No. 11: Surrendered Plot No. 12: M/s. Viking Lighatrage and cargo handlers Pvt. Ltd.: Actual Project Cost: Work in progress Plot No. 13: M/s. Gokul Agro Resources

e) Actual expenditure incurred on the environmental management plans so far.	Limited: Actual Project Cost- 22.8 Cr. Plot No. 14: M/s. Kutch Oil and Soap Industry- Actual Project Cost-22 Cr. Plot No. 15: M/s. Seabridge Terminal Pvt. Ltd.: Actual Project Cost-36 Cr. Plot No. 16: Surrendered Plot No. 17: M/s. EmperiousInfralogistic Pvt. Ltd.: Actual Project Cost- 40 Cr. Plot No. 18: M/s. Sunshine Liquid Storage Pvt. Ltd.: Actual Project Cost-14.46 Cr. Plot No. 19: M/s. Ambaji Import Pvt. Ltd.: Actual Project Cost-23.12 Cr. Plot No. 3, 4, 5 & 6: M/s. Aegis Logistics: Actual EMP Cost:------- Plot No. 7: M/s. Shreeji Liquid Storage Pvt. Ltd.: --------- Plot No. 8 & 9: Not allotted Plot No. 10: M/s. Friends Bulk Handlers Ltd.: Actual EMP Cost: 3.2 Lakhs Plot No. 11: Surrendered Plot No. 12: M/s. Viking Lighatrage and cargo handlers Pvt. Ltd.: Actual EMP Cost: 2.10 Lakhs Plot No. 13: M/s. Gokul Agro Resources Limited: Actual EMP Cost- 7.9 Lakhs Plot No. 14: M/s. Kutch Oil and Soap Industry-Actual EMP Cost-3.6 Lakh Plot No. 15: M/s. Seabridge Terminal Pvt. Ltd.:------ Plot No. 16: Surrendered Plot No. 17: M/s. Emperious Infralogistic Pvt. Ltd.: Actual EMP Cost- 2.2 Lakhs Plot No. 18: M/s. Sunshine Liquid Storage Pvt. Ltd.: Actual EMP Cost-2.9 Lakh Plot No. 19: M/s. Ambaji Import Pvt. Ltd.: Actual EMP Cost-3.3 Lakh
10.Forest land requirement a) The status of approval for diversion of forest land for non-forestry use b) The status of clear felling c) The status of compensatory a forestation, if any	Nil Nil- Not related. NIL Nil

d) Comments on the viability & sustainability of compensatory a forestation programmed in the light of actual field experience so far	None
11. The status of clear felling in non-forest areas (such as submergence area ofreservoir, approach roads), if anywith quantitative information.	NA, No felling is required
12. Status of construction a) Date of commencement (Actual and/orplanned) b) Date of completion (Actual and/or planned)	The project pertains to development of plots. Hence not applicable.
13. Reasons for the delay if the Project is yet to start	----------
Date of site visited a) The dates on which the project wasmonitored by the regional office onpervious occasion. if any b) The date site visit for this monitoring report	----------