

**DEENDAYAL PORT AUTHORITY**  
**(Erstwhile: DEENDAYAL PORT TRUST)**



[www.deendayalport.gov.in](http://www.deendayalport.gov.in)

EG/WK/5202 (D)/ Part (CRZ 2)/ 76

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Dated: 13/05/2026

To,  
The Director (Env.) & Member Secretary,  
Forest & Environment Department,  
Govt. of Gujarat,  
Gujarat Coastal Zone Management Authority,  
Block No.14, 8<sup>th</sup> floor, New Sachivalaya,  
Gandhinagar - 382 010

**Sub:** Single Point Mooring (SPM) and allied facilities off Veera in Gulf of Kutch for handling crude oil on BOT basis in the state of Gujarat by M/s. Kandla Port Trust (Now Deendayal Port Authority)- **Six monthly compliance report of conditions stipulated in CRZ Recommendations reg.**

- Ref.:**
1. Letter No. ENV-10-2011-1883-E dated 24/05/2012
  2. DPT letter No. EG/WK/4712/Part I/1164 dated 06/06/2013
  3. DPT letter No. EG/WK/4712/Part I/1164 dated 04/01/2014
  4. DPT letter No. EG/WK/4712/Part I/128 dated 15/05/2014
  5. DPT letter No. EG/WK/4712/Part I/226 dated 15/10/2014
  6. DPT letter No. EG/WK/4712/Part I/227 dated 06/05/2015
  7. DPT letter No. EG/WK/4712/Part I/165 dated 15/10/2015
  8. DPT letter No. EG/WK/4712/Part I/130 dated 09/05/2016
  9. DPT letter No. EG/WK/4712(EC)/Part I/128 dated 08/12/2016
  10. DPT letter No. EG/WK/4712(EC)/Part I/233 dated 28/06/2017
  11. DPT letter No. EG/WK/4712(EC)/Part II/601 dated 12/12/2017
  12. DPT letter No. EG/WK/4712(EC)/Part II/286 dated 08/06/2018
  13. DPT letter No. EG/WK/4712(EC)/Part II/10 dated 15/02/2020
  14. DPT letter No. EG/WK/4712/EC/Part II/40 dated 12/11/2020
  15. DPT letter No. EG/WK/4712/EC/Part II/152 dated 12/07/2021
  16. DPA letter No. EG/WK/(D) Part (CRZ 2) /134-1 dated 01/02/2022
  17. DPA letter No. EG/WK/(D) Part (CRZ 2)/126 dated 30/06/2022
  18. DPA letter No. EG/WK/5202 (D)/Part (CRZ 2)/228 dated 01/02/2023
  19. DPA letter No. EG/WK/5202 (D)/Part (CRZ 2)/345 dated 04/08/2023
  20. DPA letter No. EG/WK/5202 (D)/Part (CRZ 2)/12 dated 10/01/2024
  21. DPA letter No. EG/WK/5202 (D)/Part (CRZ 2)/124 dated 30/08/2024
  22. DPA letter No. EG/WK/5202 (D)/Part (CRZ 2)/28 dated 12/02/2025
  23. DPA letter No. EG/WK/5202 (D)/Part (CRZ 2)/28 dated 14/07/2025
  24. DPA letter No. EG/WK/5202 (D)/Part (CRZ 2)/119 dated 12/12/2025

Sir,

Kindly refer above-cited references for the said subject.

.....cont.....

In this connection, it is to state that the Gujarat Coastal Zone Management Authority, vide the above-referred letter dated 24/05/2012, had recommended Deendayal Port Authority the subject project.

Subsequently, the MoEF&CC, GoI, had accorded the Environmental & CRZ Clearance vide letter dated 11/12/2013 for the subject project. Subsequently, MoEF&CC extended the validity of the Environmental Clearance till 10/12/2023.

Now, as directed under Specific Condition No. 26 mentioned in the CRZ Clearance letter dated 25/05/2012, i.e. **A six-monthly report on compliance of the conditions mentioned in this letter shall have to be furnished by the DPT on a regular basis to this Department and MoEF&CC, GoI**, please find enclosed herewith point-wise compliances of the conditions stipulated in CRZ recommendations issued by GCZMA vide letter dated 24/05/2012 along with necessary annexures (**Annexure 1**) for the period October, 2025 to March, 2026 for kind information & record please.

Further, as per the MoEF&CC, Notification S.O.5845 (E) dated 26.11.2018, in which it is mentioned 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 a soft copy of the same via e-mail in ID [gczma.crz@gmail.com](mailto:gczma.crz@gmail.com) & [direnv@gujarat.gov.in](mailto:direnv@gujarat.gov.in).

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

Yours faithfully,

XEN (EMC)  
Deendayal Port Authority

Encl.: as above

**Copy to:-**

Shri Amardeep Raju, MoEF&CC, GoI  
Scientist E, Ministry of Environment, Forest and Climate Change,  
& Member Secretary (EAC-Infra.1),  
Indira Paryavaran Bhavan,  
3<sup>rd</sup> Floor, Vayu Wing, Jor Bagh Road, Aliganj,  
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# **Annexure 1**

## Annexure 1

### Compliance Report for the period October 2025 to March 2026

**Subject:** Point-wise Compliance of the conditions stipulated in CRZ recommendation granted by Forest & Environment Department, GoG for the project "Single Point Mooring (SPM) and allied facilities off Veera in Gulf of Kutch for handling crude oil on BOT basis in the state of Gujarat by M/s. Kandla Port trust".

**Ref No: CRZ recommendations issued vide letter No. ENV-10-2011-1883-E dated 24/05/2012 for the subject project.**

S. No.	CRZ Conditions	Compliance Status
<b>SPECIFIC CONDITIONS</b>		
I	The DPT shall strictly adhere to the provisions of the CRZ Notification, 2011, issued by the Ministry of Environment, Forests and Climate Change, Government of India	It is assured that the provisions of the CRZ Notification, 2011 shall be strictly adhered to by DPA.
II	The COT shall be outside the CRZ areas as submitted by the KPT.	No activity has started yet.
III	The KPT shall obtain all necessary permissions from different Government Departments/Agencies before commissioning their activities.	No activity has started yet.  However, it is relevant to mention that, DPA had already obtained CTE/NOC from GPCB vide letter No. PC/ CCA - KUTCH - 971/ GPCB ID: 36299/ 106252 dated 06/03/2012 and GPCB further extended the CTE validity vide Order dated 02/03/2017.
IV	No dredging, reclamation and construction activities shall be carried out in the CRZ area categorised as CRZ I (A), and it shall have to be ensured that the mangrove habitats and other ecologically important and significant areas, if any, in the region are not affected due to any of the project activities	No activity has started yet.
V	The KPT shall be held responsible for any accidental oil spill, if takes place due to rupture/damage of pipelines and the KPT shall bear the total cost for remedial measures and restoring the original environment in the area.	No activity has started yet.
VI	No effluent or sewage shall be discharged into the sea/creek or in the CRZ area and shall be treated to confirm to the norms prescribed by the	No activity has started yet.

<b>S. No.</b>	<b>CRZ Conditions</b>	<b>Compliance Status</b>
	Gujarat Pollution Control Board and would be reused/recycled within the plant premises to extract possible.	
VII	The KPT shall prepare and regularly update their Local Oil Spill Contingency and Disaster Management Plan in consonance with the National Oil Spill and Disaster Contingency Plan and shall submit the same to this department after having it vetted through the Indian coast guard.	No activity has started yet.  It is relevant to mention that, DPA already has Oil Spill Contingency and Disaster Management Plan.
VIII	No ground water shall be tapped to meet with the water requirements during the construction and/or operation phases.	No activity has started yet.
IX	The KPT shall contribute towards the cost of any common study that may be carried out for the KPT region for environmental protection and management issues.	Point noted
X	The KPT shall implement all the suggestions/recommendations given by the NIO in the marine rapid EIA report.	No activity has started yet.
XI	The KPT shall strictly comply with all the conditions stipulated by the Gujarat Pollution Control Board in its consent to establish (NOC) and the CCA	No activity has started yet.
XII	The KPT 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.	DPA/successful bidders will bear the cost of external agencies that may appoint by the Department for supervision/monitoring of proposed activities and the environmental impact of proposed activities.
XIII	The KPT shall take up mangrove plantation in an area of 50 Ha. as well as greenbelt development with the Gujarat ecology commission/forest department.	As per the directions of the GCZMA and MoEFCC, GoI, to date, DPA has undertaken a Mangrove Plantation in an area of 1650 Hectares since the year 2005. The details have already been communicated with the earlier compliance reports submitted.  It is also relevant to mention here that, as per the direction of the Gujarat Coastal Zone Management Authority, DPA has already prepared and submitted a report on the mangrove conservation and management plan formulated by the Gujarat Institute of Desert Ecology during the study period of Jan-April, 2015 (Report

S. No.	CRZ Conditions	Compliance Status
		<p>already submitted along with earlier compliance reports submitted).</p> <p>For regular monitoring, DPA vide work order dated 3/5/2021 has assigned work to M/s GUIDE, Bhuj for Monitoring of mangrove plantation carried out by DPA (Period from 24/5/2021 to 23/5/2022). The final report submitted by M/s GUIDE has already been communicated with the earlier compliance report submitted.</p> <p>Further DPA has assigned work to M/s GUIDE, Bhuj vide work order dated 10/06/2024 for "Monitoring of Mangrove Plantation 1600 Ha carried out by DPA" for the Period of 10/06/2024 to 09/06/2025. The final report submitted by M/s GUIDE has already been communicated with the earlier compliance report submitted.</p> <p>Also, DPA has assigned work to M/s GUIDE, Bhuj vide work order dated 20/01/2026 for "<i>Monitoring of mangrove plantation 1650 Ha carried out by DPA</i>", is attached here as <b>Annexure- A</b>.</p> <p>DPA had entrusted the work to Forest Department, Gujarat for developing a greenbelt in and around the Port area at a cost of Rs. 352 lakhs in an area of about 32 hectares and the work is already completed.</p> <p>Further, DPA has appointed the Gujarat Institute of Desert Ecology (GUIDE) for "Green belt development in Deendayal Port Authority and its Surrounding Areas, Charcoal site' (Phase-I)" vide Work Order No.EG/WK/4757/Part [Greenbelt GUIDE], dated 31<sup>st</sup> May 2022. The final report has already been communicated with the earlier compliance report.</p> <p>Also, DPA has assigned work to M/s GUIDE, Bhuj vide work order dated 20/12/2023 for "maintenance of Greenbelt Development in Deednaya Port Authority at Kandla (phase-I)". The final</p>

S. No.	CRZ Conditions	Compliance Status
		<p>report is attached herewith as <b>Annexure-B.</b></p> <p>DPA has assigned the Greenbelt development in Deendayal Port Authority and its surrounding areas, Phase II, to M/s GUIDE vide Work order EG/WK/4751/Part (Greenbelt)/327 dated 23.06.2023. A copy of the final report submitted by GUIDE has already been communicated along with last compliance report. Additionally, DPA has given the work of "maintenance of Greenbelt Development in Deednayaal Port Authority at Kandla (phase-II) for two years" to M/s. GUIDE vide work order Civil/engineering/EMC/820/greenbeltdevelopmentphaseII/2023/45 dated 17/07/2025, is attached here as <b>Annexure- C.</b></p> <p>Further, DPA has assigned the "Greenbelt Development in Deednayaal Port Authority (DPA) and its Surrounding Areas (Phase III)along with two years maintenance period" vide work order Civil/Engineering/pipeline/3564/GBDinDP-A&amp;ItssurroundingIII/2024/14 dated 27/01/2025. Final report against successfully plantation was submitted by GUIDE, is attached herewith as <b>Annexure- D.</b></p>
XIV	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 activity has started yet.
XV	The KPT shall have to contribute finically for taking up the socio-economic up-lifting activities in this	CSR activities are being attended by DPA. Copy of the activities undertaken by DPA

S. No.	CRZ Conditions	Compliance Status
	region in consultation with the forest and environment department and the district collector/district development officer.	as a part of CSR is enclosed as <b>Annexure E</b> .
XVI	A separate budget shall be earmarked for environmental management and socio-economic activities and details there of shall be furnished to this department as well as to the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	The allocation made under the scheme of "Environmental Services & Clearance thereof other related Expenditure" during RBE 2025-26 is Rs. 585 Lakhs.
XVII	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	DPA already has an Environment Management Cell. Further, DPA has also appointed an expert agency to provide Environmental Experts from time to time. Recently, DPA appointed M/s Precitech Laboratories, Vapi vide work order dated 04/10/2024. (A copy of Work Order is attached as <b>Annexure F</b> )  In addition, it is relevant to submit here that DPA has appointed a Chief Manager (Environment & Safety) and two manager (Environment & Safety) on a contractual basis for a period of 3 years, further extendable to 2 years (A copy of the Duty report is attached here as <b>Annexure - G</b> )
XVIII	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 MoEF, GOI	No activity has started yet.
XIX	A six-monthly report on compliance of the conditions mentioned in this letter shall have to be furnished by the KPT on a regular basis to this department/MoEF, GOI	DPA has been submitting six monthly compliance reports vide referred letters dated 06/06/2013, 04/01/2014, 15/10/2014, 06/05/2015, 15/10/2015, 09/05/2016, 28/06/2017 04/12/2017, 12/11/2020, 12/07/2021 01/02/2022, 30/06/2022, 01/02/2023, 04/08/2023, 10/01/2024, 30/08/2024, 12/02/2025, 14/07/2025 and 12/12/2025 to MoEF&CC, GoI.
XX	Any other conditions that may be stipulated by this department from time	DPA/Successful bidder will comply with any other condition that may be stipulated

<b>S. No.</b>	<b>CRZ Conditions</b>	<b>Compliance Status</b>
	to time for environmental protection/management purpose shall also have to be complied with the KPT.	by Forest and Environment Department, GoG from time to time for environmental protection/ management purposes.

# **Annexure - A**

# DEENDAYAL PORT AUTHORITY



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No.EG/WK/4751/Part (Marine Ecology Monitoring)/19

Date: 20/01/2026

To,  
Gujarat Institute of Desert Ecology,  
P.O.Box No. 83,  
Opp.Changleshwar Temple, Mundra Road,  
Bhuj (Kachchh)- 370 001, Gujarat (India).  
Tel.: 02832-329408, 235025, Tele/Fax: 02832-235027  
Email : desert\_ecology@yahoo.com

//Kind Attn.: Dr.V.Vijay Kumar, Director, GUIDE, Bhuj.//

**Sub: Monitoring of Mangrove Plantation 1650 Ha. carried out by DPA (Statutory requirement) reg.**

**Ref.: 1) DPA letter dated 03/11/2025.**

**2)Your letter No. GUIDE/DPA/Offer/MM-1650/380/2025 dated 07/11/2025 – Monitoring of Mangrove Plantation in an area of 1650 Ha carried out by DPA (Statutory requirement).**

Sir,

The Competent Authority, Deendayal Port Authority, has been pleased to accept your offer for the subject work, vide, your above letter dated 07/11/2025 (Annexure A) amounting to Rs. 34,65,000.00 + applicable GST (Rupees Thirty four lakhs and Sixty five thousand only plus applicable GST) with all terms & conditions mentioned in that letter. The other details are as under:

## **2. Scope of work:**

The Monitoring of Mangrove Plantation (1650 Ha) carried out by DPA (Statutory requirement). The monitoring study will cover components such as density, diversity and abundance. Other variables such as canopy cover, GBH, height, along with the recruitment and regeneration classes will also be investigated. Additionally, carbon sequestering potential of the plantation will also be studied in view of Climate Change mitigation measures.

Conti./-

**3. The Terms & Mode of Payment:**

- 1) 50% of the project budget should be remitted within 15 days from the date of submission of Inception Report by GUIDE, Bhuj
- 2) 25% of the project budget should be remitted within 15 days from the date of submission of Draft Report by GUIDE, Bhuj
- 3) 25% of the project budget should be remitted within 15 days from the date of submission of Final Report by GUIDE, Bhuj

**4. Obligation of DPA:**

- Assistance regarding the statutory clearance from authorities concerned to be rendered by DPA for field visits.
- Study area map along with GPS co-ordinates is to be provided by the DPA.

**5. Time Period: One year (One time monitoring in a year) i.e from 01/02/2026 to 31/01/2027**

Kindly send the acknowledgement of this work order & commence the work w.e.f. 01/02/2026.

Thanking you.

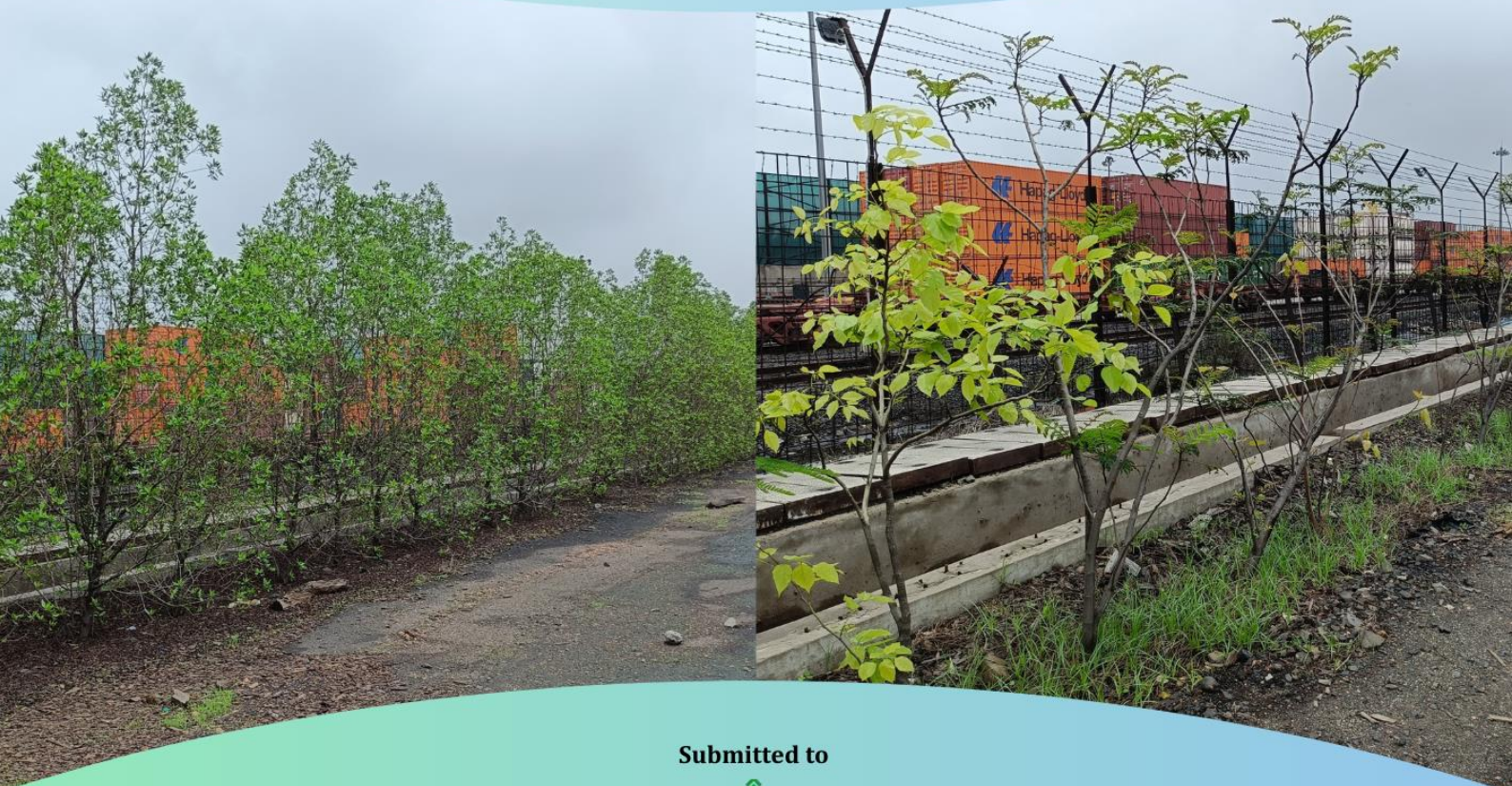
**Encls: As above**

Yours faithfully,

**Executive Engineer (EMC)  
Deendayal Port Authority**

# **Annexure – B**

**Final Report**  
on  
**Maintenance of Greenbelt  
Development in  
Deendayal Port Authority at Kandla  
Phase-I**



**Submitted to**



દેવેન્દ્રાલ પોર્ટ અધિકારી  
DEENDAYAL PORT AUTHORITY

**Deendayal Port Authority**  
Administrative Office Building  
Post Box No.50, Gandhidham (Kachchh)  
Gujarat-370201

**Submitted by**



**Gujarat Institute of Desert Ecology**  
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Kachchh, Gujarat  
[www.gujaratdesertecology.com](http://www.gujaratdesertecology.com)

*Final Report*

on

**Maintenance of Greenbelt Development in the  
Deendayal Port Authority at Kandla, Phase-I**

**Co-ordinator**

**Dr. V. Vijay Kumar, Director**

**Principal Investigator**

**Dr. Jayesh B. Bhatt, Scientist**

**Co-Principal Investigator**

**Mr. Bhagirath Paradva, Project Fellow**

**Mr. Rakesh Popatani, Project Fellow**



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## 1. INTRODUCTION

The Greenbelt cover/forest is important for the survival of human as well as the wildlife. The greenbelt cover provides ecological services such as purifying air, reducing soil erosion, improving ground water table, reducing salinity. In addition, it also caters the services such as food, fodder, medicine, etc. along with playing a vital role in providing habitats for wildlife and maintaining ecological balance, climate regulation, biodiversity conservation, etc. Moreover, Vegetation also absorbs various pollutants from the environment and help in effective pollution control. However, industrialization, mining, infrastructural development, etc. has exerted pressure in reducing and fragmenting natural vegetation cover over the world.

The concept of green belt has evolved in recent years to develop vegetations or green spaces alongside of industries, mines, thermal power station, roadsides, and other development units is an effective mechanism to rejuvenate the environment through vital vegetation cover that safeguard the health of human and other living organisms. (Flemming, 1967; Hanson and Throne, 1970; Warren, 1973; Ganguly, 1976). Green belts in and around urban and industrial areas are important to the ecological health of any given region. Greenbelt has been developed in view of the following factors; (i) physical characteristics of the green belt e.g. distance from the source, width, and height and leaf surface area density (ii) aerodynamic properties e.g. Wind speed through greenbelt and effective height of the incident air stream (iii) deposition velocity of the pollutant and (iv) atmospheric stability conditions (CPCB, 2000).

As per the National Forest Policy (NFP,1988), it is necessary to encourage the planting of trees alongside of roads, railway lines, rivers and streams and canals, and on other unutilized lands under state/corporate, institutional or private ownership. According to NFP (1988) Green belts should be raised in urban/industrial areas as well as in arid tracts. Such a program me will help to check erosion and desertification as well as improve the microclimate.

Green infrastructure serves to provide on ecological framework for social, economic and environmental health of the surroundings. The main components of this approach include storm water management, climate adaptation, less heat stress, rich biodiversity,

food production, better air quality, sustainable energy production, clean water and healthy soils, as well as the more anthropocentric functions such as increased quality of life through recreation and providing shade and shelter in and around infrastructure and industrial areas. Green infrastructure is thought to be effective in scenarios, where green plants capable of absorbing air pollutants and act as a sink for pollutants. Leaves with their vast leaf area in the tree canopy, absorb pollutants. Thus, plants effectively reduce pollutant concentrations in the ambient air. Plants grown in such a way as to function as pollutant sinks are collectively referred to as green infrastructure or green belts. Apart from functioning as a pollutant sink, green belts also provide other benefits like aesthetic improvement habitat for birds and animals, maintain soil moisture soil quality and ground water recharge. The greenbelts help in improving the ecology, maintenance of biodiversity, fugitive emissions, noise pollution, providing fresh air and increasing aesthetic values of an area.



## 2. RATIONALE

Deendayal Port in Kachchh District of Gujarat State (erstwhile known as Kandla Port Trust), operated by Deendayal Port Authority (DPA), is a gateway Port to the hinterland in the western and northern states of India. It is one of the 11 major Ports of India situated at 22°59'39.77" N latitude and; 70°13'20.14" E longitude on Kandla creek at Gulf of Kachchh. The inclusion of Karachi Port in Pakistan after India's partition and heavy traffic congestion at the then Bombay Port gave impetus for promoting Deendayal Port during the year 1950s. In 1955, Deendayal Port acquired the status of a major Port in India. Because of its proximity to the Gulf countries, large quantities of crude petroleum and other assorted cargo are imported through Deendayal Port. Regular expansion/developmental activities such as the addition of jetties, allied Special Economic Zones (SEZ), industrial parks and ship bunkering facilities are underway to cope with the increasing cargo handling demands.

Major commodities handled by the Deendayal Port are crude oil, petroleum product, coal, salt, edible oil, fertilizer, sugar, timber, soya bean and wheat. This major achievement can be attributed to the user-friendly approach of port with the shipping fraternity stakeholders and constant consultations with them to improve ease of doing business. An assortment of liquid and dry cargo is being handled at Deendayal Port. The dry cargo includes fertilizers, iron scrap, steel, food grain, metal products, ores, cement, coal, machinery, sugar, wooden logs, salt extractions, etc. The liquid cargo includes edible oil, crude oil and other petroleum products. The Deendayal Port Authority Deendayal Port, which handled 8.44 lakh tons of cargo in 1957–58, achieved record throughput of 33.73 MMT in 1996–97, 38.90 MMT in 1997–98, 40.64 MMT in 1998–99, and 46.30 MMT in 1999–2000 — the highest among the major ports of India, thereby achieving a “hat-trick” by ranking first in cargo handling for three consecutive years. Incidentally, DPA is the only major Indian Port to handle more than 127 MMT cargo throughput, and it has also registered as the highest cargo throughput in its history. The Port has handled 3151 vessels during FY 2021-22 compared to 3095 vessels in FY 2019-20. While the Port has flagged off several projects related to infrastructure creation, DPA has successfully awarded the work of augmentation of Liquid cargo handling capacity by revamping the existing pipeline network at the oil jetty area in September 2021. During the financial

year 2024–25, the Port handled 3,732 ships and 150.16 MMT of cargo, ranking 2nd among the major ports of India in terms of cargo volume handled. Deendayal Port is a natural harbor located on the eastern bank of North-South trending Kandla creek at an aerial distance of 145 km from the Gulf's mouth.

Deendayal Port is a multi-cargo port with 16 dry cargo berths, having a total quay length of 3.718 km in a straight line, and 7 oil jetties for handling POL and chemical products. At Vadinar, three Single Buoy Moorings (SBMs) are capable of handling Very Large Crude Carriers (VLCCs) with a maximum pumping capacity of 10,000 tones per hour.

Being located at the inner end of the Gulf of Kachchh (Gok), Deendayal Port has a marine ecosystem with a vast expanse of mangroves, creek systems and allied biota. The Port location is marked by a network of major and minor mangrove-lined creek systems. The coastal belt in and around the Port has an irregular and dissected configuration.

Total rainy days during the monsoon season is limited to only 20 days and are erratic. Freshwater input into the near coastal waters is relatively meagre and appears to have less influence on the ambient coastal water quality except during monsoon months, during which freshwater through flash floods get discharged in the near coastal waters. The annual average humidity is 60%, which increases to 80% during the southwest monsoon (June to September) and decreases to 50% during the months of November and December. The drought phenomenon is common with two drought years in a cycle of 5 years.

The coastal belt in and around the Kandla region is characterized by a network of creek systems and covered by sparse halophytic vegetation, creek water and salt-encrusted land mass, which forms the major land forms. The surrounding environment in a radius of 10 km from the Port is mostly built-up areas consisting of salt works, human habitations and Port related structures on the west and north, creek system, mangrove formations on the east and south. The Deendayal Port and its surroundings have mangroves and creek systems as major ecological entities.

DPA is committed towards environment protection since its establishment and has taken many initiatives towards increasing green cover and greenbelt development in various

areas under DPA through intensive plantation activities and developing greenbelt around its established port and jetty areas and human habitations.

In order to enhance and strengthen greenbelt development, the Deendayal Port Authority has approached Gujarat Institute of Desert Ecology to develop the greenbelt area within the port area in phase wise manner and raise 5000 plants at a suitable site during the first phase (2022-23). In continuation, 10,000 plants have been raised during the 2<sup>nd</sup> phase 2023-24 and 5,200 plants during the third phase.

To ensure success from tree planting, the tree must be properly cared for after the initial planting. A properly maintained trees grow well, has fewer problems and provides benefits to people and our environment. By following the three-year maintenance guidelines, trees receive the care they need to become established.

The year after the trees is planted; these steps have been followed:

- Water and Soil moisture – Checked soil moisture of the top soil
- Mulch – Layer three (3) to four (4) inches above the ground around the tree but not touching the tree trunk.
- Prune – pruning of plants was carried out up to 3-4 feet for all the trees
- Check –no any insect or disease problems on the tree and surrounding areas
- Remove –removal of all tags and twine from the tree to prevent girdling

Maintenance of plantations includes protecting the plants from adverse climatic conditions, fire, insects and fungi, and animals. Maintenance may include measures that are silvicultural (such as well-timed and careful removal of damaged trees and shrubs), chemical (with insecticides or fungicides), biological (with parasites), or mechanical (removing or destroying pests, erecting fences, etc.).

The plantations need to be managed by regular watering, soil enrichment work, manure application, weeding and provide proper protection. Replacement of sapling (replanting) required whenever mortality occurs in the plantation during the growth stage. Plantation requires after care for a period of minimum three years till the saplings attain matured tree stage. Watering of sapling is species specific; therefore, watering needs to be done once in 2 or 3 days as per the season for a period of three years.

### 3. PROJECT SITE



**Map 1.** Project site at adjacent to berth 11-12 (Wood logging site)

### 4. SCOPE OF WORKS

The overall objective is to maintain and monitor the Greenbelt at Deendayal Port.

1. To maintain and monitor the greenbelt raised in and around the Deendayal Port at Kandla.
2. To carryout Soil and Moisture Conservation (SMC) of the selected sites.
3. Regular watering the as per the requirement
4. Cutting and lopping as per the requirement
5. Regular monitoring (survival and growth) of the plantation.

## 5. MANAGEMENT AND MONITORING OF GREENBELT

### 5.1 Monitoring & Sustainability

The plantation within the identified site have been managed and monitored for a period of two years from January 2024 to December 2025. The management of plantation was ensured by appropriate irrigation of the plantation in regular intervals, during summer and winter periods along with dry spells during the monsoon.

As per the guidelines of Town and country planting organization, Govt. of India, any plantation need to be monitored and managed up to three years. Since the plants used to be established well.

### 5.2 Monthly site visits by PI and expert staff

Regular inspections (2–3 times per month) are conducted by officials from DPA and expert staff (GUIDE) to ensure maintenance. All the plants are surviving well and highest height of 17 ft. for *Conocarpus lancifolius* was observed. Similarly indigenous trees have also been grown up to 15-16 ft. height. Trunk size of indigenous trees such as *Delonix regia*, *Azadirachta indica*, *Pongamia pinnata*, *Ficus religiosa* and *Peltophorum pterocarpum* also increased. Soil and moisture conservation work has also been carried out through removing debris and other unwanted gravels and making water enough storage space. Around 8-10 plants have been damaged due to wood logs falling on the plants. A gap of 25-30 plants has also been noticed and gap filling of 50 plants was completed during the project period

Watering have been made through tanker service at given schedule during the different seasons. (Table. 1). Pruning was also made for all the plants for better growth and height. The survival rate of plants is 95.0%, with the remaining 5.0% replanted, resulting in 100%plant cover. Close planting also results in-taller trees with deeper roots and ultimately yield more biomass per unit area and more efficient absorption of pollutants. Trees act as absorptive layer and cleans the air.

**Table 1.** Month wise watering schedule adopted during the project period

Sr. No.	Months	Watering Intervals
1	January	8 (2 days/ Week)
2	February	8 (2 days /Week)
3	March	12 (3 days/ Week)
4	April	12 (3 days/Week)
5	May	12 (3 days/Week)
6	June	12 (3 days/ Week)
7	July	12 (3 days/ Week)
8	August	4 (1 day/Week)
9	September	4 (1 day/Week)
10	October	4 (1 day/Week)
11	November	8 (2 days/ Week)
12	December	8 (2 days/ Week)
<b>Sub total</b>		<b>120 times</b>
<b>Total</b>		<b>120 x 2 =240 times</b>

**Table 2.** List of selected plants species for plantation for greenbelt development

Sl. No.	Scientific Name	Local Name	Height	Canopy Shape	No. of Plant
1	<i>Conocarpus lancifolius</i>	Conocarpus	Tall	Dense, erect	3500
2	<i>Ficus religiosa</i>	Piplo	Tall	Spreading	100
3	<i>Azadirachta indica</i>	Limdo	Tall	Spreading	200
4	<i>Peltophorum pterocarpum</i>	Tamra phali	Tall	Spreading	300
5	<i>Pongamia pinnata</i>	Karanj	Medium	Round, spreading	300
6	<i>Cassia fistula</i>	Garmalo	Medium	Round	100
7	<i>Delonix regia</i>	Gulmohar	Medium	Spreading	300
8	<i>Mimusops elengi</i>	Borsali	Medium	Round	200
<b>Total</b>					<b>5000</b>

## **6. ECOLOGICAL, ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS**

### **6.1 Floral Enhancement**

- Revival of suitable tree species. The greenbelt may improve the ground vegetation by providing microclimate and association overall enhancing biodiversity as whole.
- Aesthetic value of the area is being improved by the implementation of the project.
- Provide shade and cool climate to the workers of this area.

### **6.2 Fauna Enhancement**

- The birds such as Dove, Mayna, Sparrow, Bulbul and Butterfly were noticed in the plantation area.
- The greenbelt may become nesting site for many birds and home for many lifeforms such as butterfly, insects, reptiles etc. which have been observed at greenbelt site.

### **6.3 Air Quality Improvement**

- The improvement in air quality of surrounding areas of the greenbelt.
- Potential pollution absorption by mature trees: Greenbelts are contributing to carbon sequestration reducing the impact of Climate change and global warming. Also helps in reducing dust and noise pollution.

### **6.4 Microclimate & Hydrological Effects**

- Community expectations of increased rainfall: Though not yet tracked, stakeholder views and desk research suggest improvements in soil moisture.

### **6.5 Employment Opportunities**

- Daily-wage labour engaged in planting and maintenance: Around 25-30 members of the local community are involved in the planting and maintenance activities, which create employment opportunities and foster income generation.



**Plate 1.** Soil and moisture conservation works carried out at the plantation site



**Plate 2.** Periodical monitoring and field observations during the project period



**Plate 3.** Regular watering and monitoring of plantation for healthy growth



**Plate 4(a).** Regular monitoring, watering and assessment of plant survival



**Plate 4(b).** Continued monitoring, watering, and survival assessment at site



**Plate 5(a).** Observations of SMC measures along with weed removal



**Plate 5(b).** Continued SMC work and assesment of survival



**Plate 6.** Assessment of plant damage during the monsoon period



**Plate 7.** Periodical verification and joint inspection with DPA officials



**Plate 8.** Current status of the plantation at the time of reporting



**Gujarat Institute of Desert Ecology**

Opp. Changleshwar Temple,  
Mundra Road, Bhuj-370 001,  
Kachchh, Gujarat  
[www.gujaratdesertecology.com](http://www.gujaratdesertecology.com)

# **Annexure – C**

**DEENDAYAL PORT AUTHORITY**  
**(Erstwhile: DEENDAYAL PORT TRUST)**



दीनदयाल पत्तन प्राधिकरण  
DEENDAYAL PORT AUTHORITY

[www.deendayalport.gov.in](http://www.deendayalport.gov.in)

ISO 9001-2015 &  
ISO 14001-2015 Certified Port

Administrative Office Building  
Post Box NO. 50  
GANDHIDHAM (Kutch).  
Gujarat: 370 201.  
Fax: (02836) 220050  
Ph.: (02836) 220038

No. Civil Engineering/EMC/820/GreenbeltDevelopmentPhaseII/2023/45

Dated: 17/07/2025

To,  
The Gujarat Institute of Desert Ecology (GUIDE),  
P. O. Box No. 83,  
Opp. Changleshwar Temple, Mundra Road,  
Bhuj (Kachchh)-370 001,  
**Gujarat (India).**  
Tel: 02832-329408, 235025.  
Tele/Fax: 02832-235027.  
**E-mail:** [vijay196129@gmail.com](mailto:vijay196129@gmail.com)

**Kind Attention:** Dr. V. Vijay Kumar, Director, M/s GUIDE, Bhuj.

**Sub:** Maintenance of Greenbelt Development in Deendayal Port Authority at Kandla (Phase II) for two years.

**Ref.:** GUIDE, Bhuj offer vide letter no. GUIDE/MAINT-DPA-GRN/412/2024-25 dated 11/12/2024.

Sir,

Your offer for the subject work submitted vide above referred letter dated 11/12/2024 (**copy attached - Annexure A**) amounting to **Rs. 53,55,900.00 + 18% GST** (Rupees Fifty-Three Lakhs Fifty-Five thousand and Nine Hundred Rupees plus eighteen percent GST only), including all terms & conditions mentioned in the proposal, has been accepted by the competent authority in Deendayal Port Authority.

**2. Scope of work:**

Monitoring, maintenance and watering at regular intervals (through water tanker) for a period of 2 years (2025-26 and 2026-27).

**3. Obligation of Deendayal Port Authority:**

Assistance regarding the statutory clearance from authorities concerned to be rendered by DPA for field visits/maintenance of plantation activities.

.....Cont.....

**4. Terms of Payments:**

1. 30% of the project budget should be paid to GUIDE within 30 days from the date of submission of Inception report by GUIDE.
2. 40% of the project budget should be paid to GUIDE within 15 days from the submission of progress report for the first year.
3. 20% of the project budget should be paid to GUIDE within 15 days from the submission of the mid-term progress report for the second year.
4. 10% of the project budget should be paid to GUIDE within 15 days from the submission of completion report for the second year.

Payment shall be released after successful completion of the above tasks.

**5. Time period: 2 years.**

- 6.** Kindly send acknowledgment of this work order and start the work w.e.f. 21/07/2025.

Thanking you.

Yours faithfully,



XEN (EMC)  
Deendayal Port Authority

# Annexure D

# *Final Report* *On*

**Greenbelt Development in Deendayal Port Authority (DPA) and its surrounding areas (Phase-III) along with two years maintenance**



*Submitted to*



**Deendayal Port Authority**  
Administrative Office Building  
Post Box No.50, Gandhidham (Kachchh)  
Gujarat-370201

*Prepared by*



**Gujarat Institute of Desert Ecology**  
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[www.gujaratdesertecology.com](http://www.gujaratdesertecology.com)



*Final Report*

on

Greenbelt Development in Deendayal Port Authority (DPA) and  
its surrounding areas (Phase-III) along with two years  
maintenance

**Co-ordinator**

Dr. V. Vijay Kumar, *Director*

**Principal Investigator**

Dr. Jayesh B. Bhatt, *Scientist*

**Co-Principal Investigator**

Mr. Bhagirath Paradva, *Project Fellow*

Mr. Rakesh Popatani, *Project Fellow*

**Team Member**

Mr. Vivek Chauhan, *Junior Research Fellow*

***Submitted by***



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## INTRODUCTION

A greenbelt is a designated area of undeveloped, wild, or agricultural land surrounding urban areas, intended to limit urban sprawl, protect natural environments, improve air quality, and promote biodiversity. Greenbelt development involves creating and maintaining these areas, often through strategic planting of trees, shrubs, or other vegetation to form natural barriers between urban and rural landscapes. Thus, greenbelt offers a number of benefits for population. Vegetation absorbs various pollutants from the environment and thus help in effective pollution control. However, economic development like industrialization, mining, infrastructural development, etc. have exerted pressure and led to reduction and fragmentation of natural vegetation cover across the globe. Industrial and infra-structural developmental activities are likely to pollute the environment with varying magnitudes. Nevertheless, the pre-eminence of resistance of each of the organisms helps themselves to overcome the hazards caused by such pollutants.

Therefore, the general concept of greenbelt has evolved to develop vegetation or green spaces alongside of industries, mines, thermal power stations, roadsides, and other developmental unit it is an effective measure to rejuvenate the environment through vital vegetation cover that safeguards the health of human and other living organisms. Greenbelts in and around urban and industrial areas are important to the ecological health of any given region.

## RATIONALE

Deendayal Port in Kachchh District of Gujarat State (erstwhile known as Kandla Port Trust), operated by Deendayal Port Authority (DPA), is a gateway Port to the hinterland in the western and northern states of India. It is one of the 11 major Ports of India situated at 22°59'39.77" N latitude and; 70°13'20.14" E longitude on Kandla creek at Gulf of Kachchh. The inclusion of Karachi Port in Pakistan after India's partition and heavy traffic congestion at the then Bombay Port gave impetus for promoting Deendayal Port during the year 1950s. In 1955, Deendayal Port acquired the status of a major Port in India. Because of its proximity to the Gulf countries, large quantities of crude petroleum and other assorted cargo are imported through Deendayal Port. Regular expansion/developmental activities such as the addition of jetties, allied Special Economic Zones (SEZ), industrial parks and ship bunkering facilities are underway to cope with the increasing cargo handling demands.

Major commodities handled by the Deendayal Port are crude oil, petroleum product, coal, salt, edible oil, fertilizer, sugar, timber, soya bean and wheat. This major achievement can be attributed to the user-friendly approach of port with the shipping fraternity stakeholders and constant consultations with them to improve ease of doing business. An assortment of liquid and dry cargo is being handled at Deendayal Port. The dry cargo includes fertilizers, iron scrap, steel, food grain, metal products, ores, cement, coal, machinery, sugar, wooden logs, salt extractions, etc. The liquid cargo includes edible oil, crude oil and other petroleum products. The Deendayal Port Authority Deendayal Port, which handled 8.44 lakh tons of cargo in 1957–58, achieved record throughput of 33.73 MMT in 1996–97, 38.90 MMT in 1997–98, 40.64 MMT in 1998–99, and 46.30 MMT in 1999–2000 — the highest among the major ports of India, thereby achieving a “hat-trick” by ranking first in cargo handling for three consecutive years. Incidentally, DPA is the only major Indian Port to handle more than 127 MMT cargo throughput, and it has also registered as the highest cargo throughput in its history. The Port has handled 3151 vessels during FY 2021-22 compared to 3095 vessels in FY 2019-20. While the Port has flagged off several projects related to infrastructure creation, DPA has successfully awarded the work of augmentation of Liquid cargo handling capacity by revamping the existing pipeline network at the oil jetty area in September 2021. During the financial year 2024–25, the Port handled 3,732 ships and 150.16 MMT of cargo, ranking 2<sup>nd</sup> among the major ports of India in terms of cargo volume handled. Deendayal Port is a natural harbour located on the eastern bank of North-South trending Kandla creek at an aerial distance of 145 km from the Gulf's mouth.

Deendayal Port is a multi-cargo port with 16 dry cargo berths, having a total quay length of 3.718 km in a straight line, and 7 oil jetties for handling POL and chemical products. At Vadinar, three Single Buoy Moorings (SBMs) are capable of handling Very Large Crude Carriers (VLCCs) with a maximum pumping capacity of 10,000 tonnes per hour.

Being located at the inner end of the Gulf of Kachchh (Gok), Deendayal Port has a marine ecosystem with a vast expanse of mangroves, creek systems and allied biota. The Port location is marked by a network of major and minor mangrove-lined creek systems. The coastal belt in and around the Port has an irregular and dissected configuration.

Total rainy days during the monsoon season is limited to only 20 days and are erratic. Freshwater input into the near coastal waters is meagre and appears to have less influence on the ambient coastal water quality except during monsoon, during which

freshwater through flash floods get discharged in the near coastal waters. The annual average humidity is 60%, which increases to 80% during the southwest monsoon (June to September) and decreases to 50% during the months of November and December. The drought phenomenon is common with two drought years in a cycle of 5 years.

The coastal belt in and around the Kandla region is characterized by a network of creek systems and covered by sparse halophytic vegetation, creek water and salt-encrusted land mass, which forms the major land forms. The surrounding environment in a radius of 10 km from the Port is mostly built-up areas consisting of salt works, human habitations and Port related structures on the west and north, creek system, mangrove formations on the east and south.

DPA is committed towards environment protection since its establishment and has taken many initiatives towards increasing green cover and greenbelt development in various areas under DPA through intensive plantation activities and developing greenbelt around its established port and jetty areas and human habitations.

In order to enhance and strengthen greenbelt development, the Deendayal Port Authority has approached Gujarat Institute of Desert Ecology (GUIDE), Bhuj to develop the greenbelt area within the port area in phase wise manner and raise 5000 plants at a suitable site during the first phase (2022-23). In continuation, 10,000 plants have been raised during the 2<sup>nd</sup> phase 2023-24 and 5,200 plants during the third phase i.e. 2025-2026 along with the garden development at Officers club in Gopalpuri.



## PROJECT SITE

Based on observation made by the GUIDE team and officials from Deendayal Port Authority, a site at Road Over Bridge (RoB) to oil jetty road and Gopalpuri have been identified and selected for the greenbelt development under the third phase. The area proposed for green development of Deendayal Port is barren land without any vegetation. The soil of the area is black muddy and is high saline soil with saline ground water. The area is very dry and hot during the summer.



**Map 1.** Satellite view of Plantation Sites

## SCOPE OF WORK

- The overall objective is to Development Greenbelt at Deendayal Port Area. The following activities under the Greenbelt development have been carried out:
- Inventories the suitable sites for greenbelt development in and around the Deendayal Port at Kandla.
- Carryout Soil and Moisture Conservation (SMC) and management of the plantation sites.
- Identify suitable plant species as per site scenario for the greenbelt plantation and plantation of plant saplings (5000 plants-suitable to the area & 200 plants at Gopalpuri-fruit bearing/medicinal/air purifying) including maintenance of the same for 1<sup>st</sup> year, along with maintenance, management and monitoring of plantation including drip/tanker water supply for a further period of 2 years.
- Adopting plantation technique and soil/manure amendments.
- Regular monitoring (survival and growth) of the plantation during plantation phase.

## APPROACH AND METHODOLOGY FOR GREENBELT DEVELOPMENT

Following steps have been adopted for greenbelt development:

### 1. Planning Phase:

- Involve site selection, environmental assessments, and choosing appropriate plant species based on local ecosystems.
- DPA officials and environmental experts collaborated to design sustainable spaces that support biodiversity and recreation.
- Selected native trees/suitable to the condition and local environment to ensure ecological compatibility and resilience.

### 2. Implementation Phase:

- Included land preparation (clearing and levelling), planting trees and shrubs, and constructing pathways or recreational facilities.
- Sustainable practices are prioritized to minimize environmental disruption.

### 3. Maintenance Phase: This phase will be initiated after completion of plantation.

Focuses on long-term care such as watering, pruning, pest control, and replanting. Regular monitoring ensures the health of vegetation and ecosystems. Community involvement and education are key to sustaining the greenbelt

## Plantation techniques

- Site development for a plantation includes clearance for weeds and it involves, bush cutting, soil and moisture conservation works and marking of pits for planting of saplings, etc.
- After clearing the land sites for pits, plantation have been marked on ground using a measuring tape to ensure the desired spacing.
- Pits of 45 cm x 45 cm and 45 cm depth have been dug for tree plantation. Pits have been deep enough to ensure that the roots of the plants do not curl up once the planting material is placed in it.
- Since the soil is highly saline, a fertile soil around 06 dumpers have been added for better survival.
- Charcoal is added for better moisture conservation and survival.
- The pit has been filled a little above the ground level so that after the earth settles the upper surface of the pit is at same level as that of ground thus avoiding any water logging.
- The plantation has been carried out in three phases (1<sup>st</sup> in Gopalpuri-200 plants & 2<sup>nd</sup> Road Over Bridge (RoB)-Oil jetty road side and 3<sup>rd</sup> RoB to West Gate Road 5000 plants).
- In addition, garden development at officer's club have also been carried out by planting ornamental plants and bio-fencing of *Volkameria inermis*.

**Table:1** Plantation site with locations

Sr. No.	Name of the site	Location (Latitude-Longitude)
1	Oil jetty Road site 1	23°02'11"N 70°11'16"E
2	Oil jetty Road site 2	23°02'11"N 70°11'17"E
3	Oil jetty Road Site 3	23°02'00"N 70°11'20"E
4	Oil jetty Road Site 4	23°02'02"N 70°11'22"E
5	RoB west Get Road site	23°01'29"N 70°11'18"E
6	Gpoalpuri Bulbul 11	23°04'46"N 70°07'51"E
7	Officers club	23°04'45"N 70°07'59"E

## Selection of Plant Species for Plantation

Various indigenous tree species suitable for the area have been identified and selected for plantation areas based on soil quality, available water facility, and other environmental parameters.

**Table 2.** Complete list of plants planted at Officer's Club, Gopalpuri

SI. No.	Scientific Name	Local Name	Plant no.
Ornamental plants			
1	<i>Euphorbia mili</i> , <i>Euphorbia heterophylla</i> , <i>Jatropha integrefolia</i> etc.	Mix Flowers	50
2	<i>Chrysalidocarpus lutescens</i>	Areca palm	10
3	<i>Wodyetia bifurcata</i>	Fox tail palm	10
4	<i>Ficus benamina</i>	Benjamin fig	10
5	<i>Radermachera sinica</i>	Red mochiya	10
6	<i>Thuja orientalis</i>	Thuja	02
7	<i>Araucaria columnaris</i>	Christmas tree	02
8	<i>Cocos nucifera</i>	Coconut	06
9	<i>Volkameria inermis</i>	Mahendi vilayati	600
Fruit bearing plants			
10	<i>Malinkara zapota</i>	Chiku	3
11	<i>Citrus limon</i>	Limbu	3
12	<i>Citrus medica</i>	Bijora	3
13	<i>Cocos nucifera</i>	Nariyel	3
14	<i>Syzygium cumini</i>	Jambu	3
15	<i>Ficus carica</i>	Anjir	3
16	<i>Morus alba</i>	Shetur	5
17	<i>Phyllanthus emblica</i>	Amla	3
18	<i>Psidium guajava</i>	Jamfal	3
19	<i>Punica granatum</i>	Dadam	3
20	<i>Terminalia catappa</i>	Badam	5
21	<i>Pithecellobium dulce</i>	Gorsamli	3
22	<i>Tamarindus indica</i>	Khatiamli	5
23	<i>Carissa carandas</i>	Karmda	5

24	<i>Moringa oleifera</i>	Mitho sargavo	5
26	<i>Limonia acidissima</i>	Kothi	3
<b>Medicinally important plant</b>			
1	<i>Murraya koenigii</i>	Mitho limdo	5
2	<i>Plumbago zeylanica</i>	Chitrak	5
3	<i>Vitex negundo</i>	Nagod	8
4	<i>Nyctanthes arbor-tristis</i>	Parijat	8
5	<i>Justicia adhatoda</i>	Ardusi	5
6	<i>Butea monosperma</i>	Kesudo	5
7	<i>Hibiscus rosa-sinensis</i>	Jasud	5
8	<i>Bauhinia purpurea</i>	Kanchnar	5
9	<i>Terminalia arjuna</i>	Arjun	5
10	<i>Azadirachta indica</i>	Limdo	5
11	<i>Ficus racemosa</i>	Umro	5
12	<i>Aegle marmelos</i>	Bili	5
<b>Air purifying plant</b>			
1	<i>Cestrum diurnum</i>	Divsno raja	5
2	<i>Nerium oleander</i>	Lal Karen	8
3	<i>Plumeria rubra</i>	Khad champo	8
4	<i>Thespesia lampas</i>	Parspipalo	8
5	<i>Alstonia scholaris</i>	Saptaparni	8
6	<i>Neolamarckia cadamba</i>	Kadam	5
7	<i>Ficus elastica</i>	Rabarplant	3
8	<i>Livistona chinensis</i>	Fenpalm	3
9	<i>Polyalthia longifolia</i>	Asopalav	8
10	<i>Roystonea regia</i>	Roayalpalm	2
11	<i>Millettia pinnata</i>	Karanj	8
12	<i>Delonix regia</i>	Gulmhor	5
13	<i>Ficus benjamina</i>	Ficus	5
<b>Total</b>			<b>200+ (700)</b>

**Table 3:** List of planted at Site: RoB to Oil Jetty Road & RoB to West Gate Road

Sr. No.	Scientific Name	Local Name	No. of plants
1	<i>Conocarpus lancifolius</i>	<i>Conocarpus</i>	2000
2	<i>Peltophorum pterocarpum</i>	Peltophorum	600
3	<i>Millettia pinnata</i>	Karanj	600
4	<i>Delonix regia</i>	Gulmahor	600
5	<i>Tabubia rosea</i>	Tabubia	600
6	<i>Senna siamea</i>	<i>Kasid</i>	600
<b>Total</b>			<b>5000</b>



**Table 4:** Schedule of watering for the year

Sr. No.	Months	Number of Time
1	February 2025	8 times (2 days /Week)
2	March	12 (3 days/ Week)
3	April	12 (3 days/Week)
4	May	12 (3 days/Week)
5	June	12 (3 days/ Week)
6	July	12 (3 days/ Week)
7	August	4 time (1 day/Week)
8	September	4 time (1 day/Week)
9	October	4 time (1 day/Week)
10	November	8 times (2 days/ Week)
11	December	8 times (2 days/ Week)
12	January 2026	8 times (2 days/ Week)

*\*Watering may increase as per the climatic condition*





**Plate 1:** Addition of fertile soil



**Plate 2:** Digging out the pits for plantation



**Plate 3:** Plantation work in progress



**Plate 4:** Supply of charcoal for better growth and survival



**Plate 5:** Plantation of remaining plants



**Plate 6:** Watering in progress



**Plate 7: SMC work at Gopalpuri**



**Plate 8:** Plantation at officer's club-Gopalpuri



**Plate 9:** Garden development at officer's club-Gopalpuri



**Plate 10:** Garden development at officer's club-Gopalpuri

# **Annexure – E**

**1) CSR Works sanctioned by DPA for the year 2025-2026**

<b><u>Sr. no</u></b>	<b><u>Name of work</u></b>	<b><u>Actual cost (Rs in Lakhs)</u></b>
1.	Proposal to reincarnation of Bhukhi River of Kutch. - Krushi Research Innovation and Development Association, Mumbai (KRIDA)	800
2.	Proposal of CSR Funds for two hostels and community Sanskar Kendra for five year - Seva Sadhna , Bhuj	86.56
3.	Request for providing following instruments:- 1) LCD TV- 01 Nos 2) Printer/Xerox machine – 01 nos 3) Projector – 01 NOS etc. - Shri Balguru Prathmik Shala , Sunderpuri run by Shri Vankar Balguru Vikas Trust	2.50
4.	Request for funds for Tree Plantation at Vadinar Area. - from President of Kishan Morcha , Dist. Devbhoomi Dwarka for Tree Plantation.	15.00
5.	Request for providing financial assistance for Lab setup of Green Hydrogen & Training to Trainers to fulfil the requirement of industry for skilled work force in Green Hydrogen etc.	40.00
6.	Request for funds under CSR for our NGO For seting up Library, BERA Test Machine & Audiometry Machine, School Bus, repairing of roof & electrification etc. for deaf & dumb children. - Mata Lachmi Rotary Charitable Society - Adipur	81.45
7.	Request for AWG machines, RO Plants, Sound Systems etc. - Border Security Force 90Bn, Gandhidham	50.75
8.	Request for setting up of 150LPD atmospheric water generator (AWG) with generators at borders areas and Recarpeting/upgradation of Tennis clay court at 68Bn BSF, aiyanagar, bhuj by converting into Synthetic Tennis Court - Border Security Force 68Bn, Bhuj	50.00
9.	Request for AWG machines for Gujarat Border Areas. - SHQ- Border Security Force - Gandhinagar	70.00
10.	Construction of Community hall etc. at Bhuj - Shree Meghvanshi Gurjar Sang, Bhuj Kutchh.	125.00
11.	Request for Solar Power system and other infrastructure facility, Interactive smart board, Botanical Garden development, etc. – Gandhidham Collegiate Board, Gandhidham.	34.75
12.	Request for Ambulance vehicle and Construction of a Dining Shed at the RanBasera Bhuj - Shree Lok Seva Sarvajainik Trust, Bhuj	34.41
13.	Community Hall and Overhead Water Tank, Pump room etc. - Shri Veera Gram Panchayat, Veera	40.00
14.	Proposal for afforestation and environmental awareness activities in villages - Seed Foundation, Gandhinagar	30.00
15.	Providing Maruti Ertiga car for transportation of mentally retarded children under CSR - Radhey Differently Abled Foundation, Dwarka	10.00
16.	Solar Power System To achieve sustainability and reduce energy costs, the NGO proposes installing a 63.13 KW solar rooftop plant across three main buildings (Boys Hostel, Girls Hostel, and Paramshanti English Medium School) at Bhachau campus. - Shree Navjivan Viklang Sevashrey, Bhachau - Shree Navjivan Viklang Sevashrey, Bhachau	27.41
17.	Request for CSR support for Medical Equipments at Civil Hospital, Ahmedabad. - Office of The Medical Superintendent, Ahemdabad.	100.00
18.	CSR fund for Financial assistance under DPA's CSR funds for raising the level of playing arena of KDTTA Indoor stadium by Kutchh District Table Tennis Association, Gandhidham	75.00

19.	Financial Assistance to construction of building mind power development centre for specially visually impaired children with equipments, furniture cctv, airconditioner, etc. by Shri Navchetan Andhjan Mandal, Madhapar, Bhuj	50.00
20.	District Sainik welfare kalyan boards, Bhuj & Jamnagar	60.00
21.	Development of National Maritime Heritage Complex (NMHC), Lothal	607.66
22.	Jeevan prabhat (gandhidham), & Hari Astro Trust (Adipur), Manav Seva Trust	30.00
23.	Gandhidham Municipal Corporation for Heritage Road development, Junction and other Landmark Development, Library etc	100.00
24.	Maritime India Foundation (MIF)	100.00
25.	Indian Ports Association (IPA)	100.00
26.	Construction of Ramkrishna Seva Mandal Centre at Mundra taluka	25.00
27.	Procurement of kitchen equipment and machineries to serve Mid-Day meals to government school children in Bhuj by The Akshay Patra Foundation	16.00
	<b><u>Total Cost</u></b>	<b><u>2761.49</u></b>

# **Annexure – F**

दीनदयाल पोर्ट प्राधिकरण  
DEENDAYAL PORT AUTHORITY



Office of the Dy. Chief Engineer  
(EMC & I/c), Ground Floor,  
Administrative Office Building  
Post Box No. 50, Gandhidham-Kachchh  
Email: seplkpt@gmail.com  
www.deendayalport.gov.in

\*\*\*\*\*

No: EG/WK/4783/VII/ 143

Date: 04/10/2024

To,  
M/s. Precitech Laboratories Pvt. Ltd.  
1<sup>st</sup> floor, Bhanujyot Complex,  
Plot no. C5/27, B/h. Pachratna Complex,  
Near GIDC Char Rasta,  
VAPI-396195  
Mail - [vapi@precitechlab.com](mailto:vapi@precitechlab.com)

**WORK ORDER**

**Sub: "Strengthening of Existing Environmental Management Cell of Deendayal Port Authority: Appointment of Environment Expert for two years and further extendable for one years."**

- Ref:** 1) Tender dated 28/12/20223 submitted by M/s Precitech Laboratories Pvt. Ltd., Vapi.  
2) LOA No. EG/WK/5375/171 dated 19/09/2024.  
3) Performance Guarantee submitted by M/s. Precitech Laboratories Pvt Ltd in the form of Bank Guarantee of Rs. 9,45,000.00 vide Bank Guarantee no. 1102924BG0B00238 dated 30.09.2024 issued by State Bank India, Commercial Branch, Vapi.

Sir,

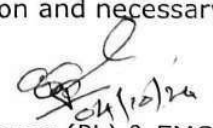
Kindly refer above cited Letter of Acceptance dated 19/09/2024.

- 1) You shall have to provide Key Experts as per tender requirement during the entire contract period. Accordingly, you shall have to submit the qualification and experience certificates of the Key experts to be appointed at DPT, as per tender conditions for verification & approval.
- 2) Please submit the agreement of contract as per Tender Conditions.
- 3) Kindly commence the work on or before 07/10/2024.

Please note that the time period for providing Consultancy service for the subject work will be Initially for Two years and further extendable for one year on mutual consent as per tender condition.

Accordingly, a copy of Form-III is enclosed herewith for information and necessary action please.

Encl: Form - III

  
Dy. Chief Engineer (PL) & EMC (I/c),  
Deendayal Port Authority

- CC: 1. TPA to CE - For kind information to Chief Engineer, please.  
2. RAO, DPA  
3. Sr. DD (EDP) with a request to hoist this work order in website of DPA.

दीनदयाल पोर्ट प्राधिकरण  
**DEENDAYAL PORT AUTHORITY**



Office of the Dy. Chief Engineer  
(EMC & I/c), Ground Floor,  
Administrative Office Building  
Post Box No. 50, Gandhidham-Kachchh  
Email: seplkpt@gmail.com,  
www.deendayalport.gov.in

\*\*\*\*\*  
No: EG/WK/4783/VII/

Date: 4/09/2024  
10

**FORM - III**

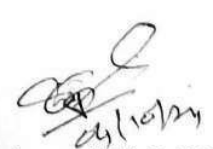
**(Under rule 21(2) of the Contract Labour (Regulation and Abolition) Central Rules, 1970; and Rules 7(3) of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Central Rules, 1980)**

**CERTIFICATE BY PRINCIPAL EMPLOYER FOR OBTAINING LICENCE FROM ASSISTANT LABOUR COMMISSIONER (C), GOPALPURI.**

**Certified that:**

I have engaged the applicant "Precitech Laboratories Pvt Ltd. 177, 1<sup>st</sup> floor, Bhanujyot Complex, Plot no. C5/27, B/h. Pachratna Complex, Near GIDC Char Rasta, VAPI-396195. as a contractor in my establishment for the work "**Strengthening of Existing Environmental Management Cell of Deendayal Port Authority: Appointment of Environment Expert for two years and further extendable for one years.**" to be carried out for **24 months** (as per tender) and the work will be commenced on or before **07/10/2024**.

- 1) I undertake to be bound by all the provisions of the Contract Labour (Regulations and Abolition) Act, 1970 (37 of 1970) and the Contract Labour (Regulations and Abolition) Central Rules, 1971 The inter-State Migrant Workman (Regulation of Employment and Conditions of Service) Act, 1979 (30 of 1979) and the Inter State Migrant Workmen (Regulation of Employment and Conditions of Service) Central Rules, 1980\* in so far as the provisions are applicable to me in respect of the employment of Contract Labour/inter-state migrant workmen by the applicant in my establishment.
- 2) The engagement of contract labour in the said work is not prohibited under sub-section (1) of section 10 of the Contract Labour (Regulation and Abolition) Act, 1970 (37 of 1970) or an award or a settlement.

  
Dy. Chief Engineer (PL) & EMC (I/c),  
Deendayal Port Authority

# **Annexure – G**

CE  
may posted in  
Civil Engineering Deptt/  
Chairman's office, after clearance  
of all formalities there  
J. S. J.

Date: 25<sup>th</sup> August



To,

The Secretary,  
Deendayal Port Authority,  
Gandhidham, Kutch

**Subject:** Duty Report for the post of Chief-Manager (Environment & Safety) on contractual basis at DPA – reg.

Sir,

I Dr. Utkarsh S. Mukkannawar, have been selected and offered the position of Chief Manager (Environment & Safety) on contractual basis under professional functionaries category vide Letter No. GA/PS/4292(PF)/2025/1347 with effective from 12<sup>th</sup> August'2025.

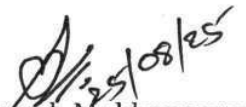
As per terms clause no 19, I "have to report for medical examination before the Chief Medical Officer, DPA at Gopalpuri Hospital....."

Accordingly, I hereby submit and enclose my medical examination Report as clinically healthy and "FIT to Join".

Further, I hereby submit my duty report today i.e., 25<sup>th</sup> August 2025 (FN) along with duly signed acceptance copy of Offer Letter, the original copy of the medical report enclosing clinical documents and two passport size photos for your kind perusal.

Thanking you,

Yours faithfully,

  
Dr. Utkarsh Mukkannawar

Mob: 9822077507

CE  
May be posted in Civil Engineering  
Department, after due clearance  
& formalities as per t/c of  
engagement, under intimation to  
GAD please.  
Date: 10<sup>th</sup> September 2025

To,  
The Secretary,  
Deendayal Port Authority,  
Gandhidham, Kutch

*[Signature]*  
Secretary.

**Subject:** Duty Report for the Port of Manager (Environment & Safety) on contractual basis at DPA - reg.

Sir,

I Ms. Neha Chandrashekhar Dekate, have been selected and offered the position of Manager (Environment & Safety) on contractual basis under professional functionaries' category vide letter no. GA/PS/4292 (PF)/2025/1349 with effective from 12<sup>th</sup> August'2025.

As per clause no. 19, "I have to report for medical examination before the Chief Medical Officer, DPA at Gopalpuri Hospital....."

Accordingly, I hereby submit and enclose my medical examination report as clinically healthy and "FIT to Join".

Further, I hereby submit my duty report today i.e. 10<sup>th</sup> September 2025 (FN) along with duly signed acceptance copy of Offer letter, the original copy of the medical report enclosing clinical documents and two passport size photos for your kind perusal.

Thanking you,

Yours faithfully,

*[Signature]*

Ms. Neha Dekate

Mob: 9096069665

CG/Sr AS

may be posted in Environment  
Cell of Civil Engineering Deptt, subject  
to clearance of due formalities  
as per terms & conditions of engagement  
in DPA on contract, also.

To,  
The Secretary  
Administrative Building  
Deendayal Port Authority

*[Handwritten Signature]*  
Secretary

Date: 03/09/2025

**SUBJECT: Duty Report for Contractual Engagement as Manager – Environment & Safety in Deendayal Port Authority (DPA)**

Ref: DPA letter GA/PS/4292(PF)/2025/1348 dated 12/08/2025

Sir,

With reference to the above referred letter dated 12/08/2025 I am hereby pleased to submit my Duty Report and I confirm to join the organization with effect from today i.e. 03/09/2025.

Thanking You

Yours Faithfully

*[Handwritten Signature]*

Rajeshwari Sharma