

To,

The Inspector General of Forest / Scientist C,
Integrated Regional Office (IRO),
Ministry of Environment, Forest and Climate Change,
Karmayogi Bhawan,
Block-3, F-2 Wing, 5th Floor,
Near CH-3 Circle, Sector – 10A
Gandhinagar – 382010.
E-mail: eccompliance-guj@gov.in, iro.gandhingr-mefcc@gov.in

Sub : Half yearly Compliance report for Environment and CRZ Clearance for "Water Front Development Project at Mundra, Dist. Kutch, Gujarat.

Ref : i) Environment and CRZ clearance granted to M/s Adani Ports & SEZ Limited vide letter dated 12th January, 2009 and 19th January 2009 bearing MoEF letter No. 10-47/2008- IA.III.
ii) Environment and CRZ clearance Extension order granted to Waterfront Development Project at Mundra in Kutchh District (Gujarat) vide letter dated 7th October 2015 bearing MoEF letter No. 10-47/2008- IA.III.
iii) MoEF&CC's Order dated 18.09.2015

Dear Sir,

Please refer to the above cited reference for the said subject matter. In connection to the same, it is to state that copy of the compliance report for the Environmental and CRZ Clearance for the period of October 2024 to March 2025 is being duly uploaded on the Parivesh Portal.

Additionally, a soft copy of the same is being submitted through soft copy (e-mail communication).

Kindly consider the above submission and acknowledge.

Thank you,

Yours Faithfully,

For, **M/s Adani Ports and Special Economic Zone Limited**



Bhagwat Swaroop Sharma
Head – Environment
Mundra & Tuna Port

Encl: As above

Copy to:

- 1). The Director (IA Division), Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003.
- 2). The Zonal Officer, Regional Office, CPCB – Western Region, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara – 390023.
- 3). The Member Secretary, GPCB – Head Office, Paryavaran Bhavan, Sector 10 A, Gandhi Nagar – 382010.
- 4). The Director, Forests & Environment Department, Block – 14, 8th floor, Sachivalaya, Gandhi Nagar – 382010.
- 5). The Regional Officer, Regional Office GPCB (Kutch-East), Gandhidham – 370201.

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Environmental Clearance Compliance Report



Waterfront Development Project,
Mundra, Dist. Kutch, Gujarat

Adani Ports and SEZ Limited
Mundra, Kutch

For the period of
October-2024 to March-2025

Status of the conditions stipulated in Environment and CRZ Clearance

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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

The name of the company was changed from **"Mundra Port and Special Economic Zone Limited"** to **"Adani Ports and Special Economic Zone Limited"** on 6th January 2012.

Activities/facilities approved, major components completed and proposed future activities as per Environment and CRZ Clearance are as below:

Description (Type of Facility or Berth)	Approved Berths or Length as per Environmental & CRZ Clearance	So far Developed and In Operation
	Nos. of Berths or Length	Nos. of Berths
Multipurpose	4 (550 m + 2 Berths)	4
Container	16 (2680 m + 2000 m)	7 (2110 m)
Ro-Ro	2	-
Coal	6	4
Dry-Bulk Cargo	5	-
Liquid/POL	9*	-
LNG	2	Developed and operated by GSPC LNG Limited as per separate permissions obtained and NOC given by APSEZ
Light & Heavy Engineering	2	-
Port Craft	1 (330 m)	-
Shipyard	2	-

* Liquefied Petroleum Gas (LPG) Terminal has been developed by M/s. Mundra LPG Terminal Pvt. Ltd. under Waterfront Development Project of Adani Ports and SEZ Limited and LPG is being handled at existing Multipurpose Terminal APSEZ. M/s. Mundra LPG Terminal Pvt. Ltd is 100% subsidiary of APSEZ.

In addition to above berths or facilities, following components were also approved.

1. Dredging Quantity: 210 Mm³. Overall dredging to the tune of 123 Mm³ is completed till date.
2. Back-up area, back-up facilities like railway line, rail sidings, rail truck loading, open paved areas, associated buildings, utilities, amenities, etc. and connectivity to rail and road corridor for each port were approved and majority of them are constructed and in operation. Remaining facilities will be developed based on future requirements.
3. Seawater intake channel and outfall channel for power plants, desalination plants (47 MLD is operational out of 300 MLD) and other industrial requirements approved and is already in operation.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
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Note:

- APSEZ has applied for EC & CRZ Clearance for expansion of Waterfront Development Project vide dated 7th March 2019.
- MoEF&CC has issued Terms of Reference (ToR) vide Ref. – F. No. 10-24/2019-IA-III dated 17th May 2019 and it is further amended on 27th Sep, 2019, 10th April, 2020 & its latest amendment vide dated 26th Feb, 2024.
- The project proposal has been considered in 364th EAC Meeting held on 15th & 16th May 2024.
- Subsequently, EC & CRZ Clearance for WFDP – Expansion project @ Mundra granted by MoEF&CC vide their Order No. 10-24/2019-1A-III, dated 13th August, 2024.

Compliance Report of Environmental and CRZ Clearance

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Half yearly Compliance report for Environment and CRZ Clearance for the project "Waterfront Development Project (WFDP) at Mundra, Dist. Kachchh, Gujarat of M/s. Adani Ports and SEZ Limited"

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025												
Specific Conditions														
i	No existing mangroves shall be destroyed during construction / operation of the Project.	<p>Complied.</p> <p>As part of the directions given by MoEF&CC vides order dated 18th Sep, 2015, following studies were conducted.</p> <p>1. NCSCM (MoEF&CC promoted Government Agency) study on comprehensive and integrated plan for preservation and conservation of mangroves and associated creeks in and around APSEZ in year 2016-17. The cost of said study was 3.15 Cr, which was incurred by APSEZ.</p> <p>As a part of mangrove conservation plan, APSEZ has done following activities.</p> <p>a. Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island through NCSCM, Chennai. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.</p> <p>b. Tidal observation in creeks in and around APSEZ – The cost of the said activity was INR 1.0 Lacs incurred by APSEZ.</p> <p>c. Algal & Prosopis removal from Mangrove area - The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure – 1.</p> <p>d. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 410.48 Lacs during FY 2024-25 which has incurred by APSEZ. This activity is being done on a continuous basis as a part of CSR activity.</p> <p><u>Summary of Conservation of mangroves:</u></p> <table><tr><th rowspan="2">Mangrove mapping Year</th><th rowspan="2">Monitoring Agency</th><th rowspan="2">Mangrove cover total Area (Ha.)</th><th colspan="2">Mangrove cover area Increased</th></tr><tr><th>Hac.</th><th>%</th></tr><tr><td>2011</td><td></td><td>2094</td><td>-</td><td>-</td></tr></table>	Mangrove mapping Year	Monitoring Agency	Mangrove cover total Area (Ha.)	Mangrove cover area Increased		Hac.	%	2011		2094	-	-
Mangrove mapping Year	Monitoring Agency	Mangrove cover total Area (Ha.)				Mangrove cover area Increased								
			Hac.	%										
2011		2094	-	-										

Status of the conditions stipulated in Environment and CRZ Clearance

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025				
		2011 to 2016-17	NCSCM	2340	246	11.75%
		2017 to 2019 till March	NCSCM	2596	256	10.94%
		2019 to 2021 till March	GUIDE	2723	127	4.89%
		Total		2723	629	--
		Hence, the overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%) .				
As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.						
Sr. No.	Recommendations	Compliance				
1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none">APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island.As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.94%.This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which also shows that the growth of mangroves in a progressive direction.Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019.The cost of the said study was INR 23.56 Lacs incurred by APSEZ.According to GUIDE Mangrove monitoring study report November 2023 (the report was submitted during the last compliance report submission				

Status of the conditions stipulated in Environment and CRZ Clearance

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025																													
				<p>Apr'23 to Sep'23), the distribution of mangroves in Kotadi, Baradi mata, Navinal, Bocha and Khari creeks as well as in the Bocha island was studied using LISS IV satellite images for the duration of March 2019 to March 2021. The mangrove cover in the creeks in and around APSEZ showed a positive trend from March 2019 to March 2021, with an overall increase of 52.79 ha (1.9%) compared to the cover during the year 2019. The total mangrove cover during 2019 was 2670 ha which has increased to 2723 ha during the year 2021.</p> <ul style="list-style-type: none">Hence, overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%).The cost of the said study was INR 23.60 Lacs incurred by APSEZ. <p>Summary of Mangrove mapping and monitoring (from 2011 to 2021):</p> <table><tr><th rowspan="2">Mangrove mapping Year</th><th rowspan="2">Mangrove cover total Area (Ha.)</th><th colspan="2">Mangrove cover area Increased</th></tr><tr><th>Hac.</th><th>%</th></tr><tr><td>2011</td><td>2094</td><td>-</td><td>-</td></tr><tr><td>2011 to 2016-17</td><td>2340</td><td>246</td><td>11.75%</td></tr><tr><td>2017 to 2019 till March</td><td>2596</td><td>256</td><td>10.94%</td></tr><tr><td>2019 to 2021 till March</td><td>2723</td><td>127</td><td>4.89</td></tr><tr><td>Total</td><td>2723</td><td>629</td><td>--</td></tr></table>		Mangrove mapping Year	Mangrove cover total Area (Ha.)	Mangrove cover area Increased		Hac.	%	2011	2094	-	-	2011 to 2016-17	2340	246	11.75%	2017 to 2019 till March	2596	256	10.94%	2019 to 2021 till March	2723	127	4.89	Total	2723	629	--
Mangrove mapping Year	Mangrove cover total Area (Ha.)	Mangrove cover area Increased																													
		Hac.	%																												
2011	2094	-	-																												
2011 to 2016-17	2340	246	11.75%																												
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2019 to 2021 till March	2723	127	4.89																												
Total	2723	629	--																												
		2.	Tidal observation in creeks in and around APSEZ	<ul style="list-style-type: none">APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal, Bocha and Khari creeks under the guidance of NCSCM.The observed tidal ranges indicate that the creeks experience normal tidal ranges, adequate for the growth of mangroves.The cost of the said activity was INR 1.0 Lacs.																											
		3.	Removal of Algal and Prosopis	<ul style="list-style-type: none">Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in																											

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025	
		<p>growth from mangrove areas</p>	<p>some of the mangrove areas, which has been removed manually.</p> <ul style="list-style-type: none"> The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure - 1.
		<p>4. Awareness of mangroves importance in surrounding communities</p>	<ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done awareness camps/activities created in the community regarding importance of mangroves. Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 15005 Cattles and hence enhancing cattle productivity. Dry Fodder 15,74,250 Kg Green – 51,66,805 Kg. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 410.48 Lacs during FY 2024-25, which was incurred by APSEZ. Grass Land development: 213 acres of gauchar land has been cleaned and allocated for Grass land development with strong Community Contribution and Mobilization. Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no unauthorized persons allowed within coastal as well as mangrove areas. APSEZ has celebrated the International Day for the Conservation of the Mangrove Ecosystem with coordination of Adani Foundation from 24th to 26th July 2024 to raise awareness of the importance of mangrove ecosystems as "a unique, special and vulnerable ecosystem". The report for the same was submitted during the EC compliance report submission for the period Apr'24 to Mar'25. Refer CSR report attached as Annexure 2.
		<p>To comply with the GCZMA recommendations regarding mangrove monitoring at every 2 years, recently APSEZ has awarded the work order to NCSCM, Chennai vide order no. 4802055905, dated 24/09/2024 with cost 45.87 Lacs for</p>	

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
		<p>mangrove mapping in and around APSEZ March 2021 to March 2023.</p> <p>NCSCM has conducted ground truthing during 5th to 7th Mar'25 & 22nd to 27th Apr'25 in and around our APSEZ area for mangrove mapping & study work has been completed. Final Mangrove mapping report is awaited from NCSCM.</p> <p>2. A Regional Impact Assessment study through Chola MS, Chennai (NABET accredited consultant) to identify impacts of all the existing as well as proposed project activities in Mundra region inline to ToR issued by GCZMA. The cost of said study was 1.3 Cr, which was incurred by APSEZ.</p>
ii	There shall be no filling up of the creek and reclamation of the creeks.	<p>Complied.</p> <p><u>Conservation of creeks:</u></p> <ul style="list-style-type: none"> • The prominent creek system (main creeks and small branches of creeks) in and around APSEZ are: (1) Kotdi (2) Baradimata (3) Navinal (4) Bocha (5) Mundra (Oldest port (Juna Bandar) leading to Bhukhi river). • All above creek mouths are open allowing free flow of water in to the creeks and surrounding areas and there is no filling or reclamation of any creek area. • This aspect is also confirmed from the study of NCSCM in 2017-18, which highlights the bathymetry data of the entire coast around APSEZ. • From the bathymetry data it can be concluded that there are sufficient depths at the creek mouths and all creek mouths are open allowing flushing of water. • APSEZ has so far constructed 19 culverts having total length of approx. 1100 m with total cost of INR 20 Crores. Three RCC Bridges have also been constructed over Kotdi creek with total length of 230 m and cost of INR 10 Crores. Photographs showing the same were submitted along with half yearly compliance report for the period of Apr'17 to Sep'17. • Please refer condition no. i of EC & CRZ compliance report for further details.
iii	The Project proponent shall comply with all the Orders/directions of the	Complied.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
	Honorable High Court of Gujarat and Supreme Court in the matter.	There are two ongoing matters pending (One is pending at High Court and other is pending at Supreme Court). Details of ongoing legal cases is attached as Annexure - 3 .
iv	Adequate safety measures for the offshore structure and ship navigation shall be taken in view of the High Current in the area.	<p>Complied.</p> <p>The hydrodynamic study for the waterfront area has been carried out by HR Wallingford, a maritime design expert. As per the recommendations in their report, the following safety measures are implemented.</p> <ol style="list-style-type: none"> 1. The alignment of the berth has been kept in line with the current flow in order to reduce the effect of current on vessels moored alongside. 2. The breasting dolphins have been designed in such a configuration so as to provide appropriate lead to the vessels mooring ropes. 3. The berth being in line with the current flow will facilitate Pilotage operation and provide better maneuverability of vessels. 4. The strength of the berth structure has been calculated to absorb the energy transferred to fenders while berthing of tanker vessels at the terminal. 5. Navigational buoys and lead lights marking the channel and clearing distance off the breakwater are installed. 6. The strength of the fenders at the berth and the SWL of the bollards / winches are sufficient to absorb the forces of vessels alongside keeping in mind the monsoon weather conditions. 7. Sufficient depths are maintained at all times to ensure 10% UKC at the time of berthing / un-berthing. 8. The capstans / winches / bollards are of adequate strength with respect to the vessels being handled. 9. The berth has been designed at an appropriate distance from the existing berths at MMPT-1 in order to safely allow berthing / un-berthing of vessels at MMPT-1 with vessels berthed at the South Port tanker terminal. 10. Berths have been planned close to the breakwater as there is a reduced strength of current along the coastline.
v	The shore line changes in the area shall be and monitored periodically the report submitted every 6	<p>Complied.</p> <p>Shore line change aspect has been studied in detail as part of following two studies;</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
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Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
	months to Regional Office Bhopal.	<ul style="list-style-type: none"> Bathymetry & Topography study, preparation of plan for protection of creeks/ mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary. A Regional Impact Assessment study to identify impacts of all the existing as well as proposed project activities in Mundra region. <p>As per the outcome of these studies, no erosion is observed on the coast of the project area. As part of the Regional Impact Assessment study, the possible changes in shoreline that may occur due to the proposed developments in 10 km area on either side of the waterfront development project have been predicted. It has been inferred from the modelling study that the shift in the shoreline will be less than 0.5 m/year, which reconfirms that the APSEZ facility would pose insignificant impact on the Mundra shoreline. Accretion is observed at South port and at West port due to approved reclamation activities.</p> <p>Based on the study outcome, it is recommended to map the coastal morphology (shoreline change) at least once in three years.</p> <p>Shoreline change study was carried out by M/s. Gujarat Institute of Desert Ecology, Bhuj in 2022 as a part of the Environmental Management Plan (EMP) compliance with the CIA study. The cost of said study was INR 17.39 Lacs.</p> <p>In the last study, the rate of shoreline changes statistics on a time series of multiple shoreline positions of a totally 43 km coastline stretches (16 km on the west side and 27 km on the east side of Adani main port) on either side of Adani Ports and Special Economic Zone Ltd (APSEZL) has been taken into account for the calculation by using satellite images.</p> <p>As a part of the NGT direction, the shoreline change analysis has been carried out for the years 2015-2022 to study the immediate changes after the commissioning of the port and initiation of the activities (September 2015) for short-term variation for the year 2015-2022 using EPR method has been carried out.</p>

Status of the conditions stipulated in Environment and CRZ Clearance

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025																
		<p>The details of the rate of shoreline changes (Short interval time) recorded from 2015 to 2022 are summarized in below table.</p> <table><tr><th rowspan="2">Period</th><th rowspan="2">Name of the block</th><th rowspan="2">Average Shoreline Change (M/Year)</th><th colspan="2">Shoreline Change(M)</th></tr><tr><th>Maximum Accretion</th><th>Maximum Erosion</th></tr><tr><td rowspan="2">2015-2022</td><td>West Port</td><td>-11.43</td><td>39.86</td><td>-78.68</td></tr><tr><td>Eastern side</td><td>-26.60</td><td>191.32</td><td>-165.19</td></tr></table> <p>The Shoreline Change Assessment Study report of GUIDE was submitted along with half yearly compliance report for the period of Oct'22 to Mar'23.</p> <p>The Shoreline change study was carried out by M/s. Chola MS, Chennai (NABET accredited consultant) also as a part of Waterfront Development Project – Expansion EIA study. The summary of the said study are as below.</p> <p>To estimate the shoreline, change due to the earlier approved waterfront development plan, a historical shoreline change assessment has been undertaken using the satellite imagery for a period of 2008 to 2018. To avoid any major errors in estimating the shoreline, the satellite data for similar tidal condition was considered for 2008, 2013 and 2018. AMBUR Methodology was used to study the historical analysis.</p> <p>10 km radius stretch of shoreline on either side of the APSEZ project boundary has been considered for assessing the historical shoreline change scenario. The baseline shoreline change assessment depicts the influence of both natural causes and also possible changes in the shore due to various development activities in the study area during the designated period. For this study, shoreline on left side of APSEZ is termed as West Side Shoreline and that of the right side as East Side Shoreline for ease of recognition.</p> <p>The maximum accretion and erosion rate of the west side shoreline over a period of 10 years during the year 2008 – 2018 are observed to be 4.78 m/yr and 1.93 m/yr respectively.</p>	Period	Name of the block	Average Shoreline Change (M/Year)	Shoreline Change(M)		Maximum Accretion	Maximum Erosion	2015-2022	West Port	-11.43	39.86	-78.68	Eastern side	-26.60	191.32	-165.19
Period	Name of the block	Average Shoreline Change (M/Year)				Shoreline Change(M)												
			Maximum Accretion	Maximum Erosion														
2015-2022	West Port	-11.43	39.86	-78.68														
	Eastern side	-26.60	191.32	-165.19														

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
		<p>The maximum accretion and erosion rate of the east side shoreline over a period of 10 years during the year 2008 – 2018 are observed to be 05 m/yr and 0.82 m/yr respectively.</p> <p>Please refer Annexure B (Compliance of MoEF&CC Order dated 18th Sep, 2015) for further details regarding the mentioned studies.</p>
vi	<p>The recommendations of the risk assessment shall be implemented; any change in the design of the project shall come before the committee for seeking necessary approval.</p>	<p>Complied.</p> <p>Risk Assessment was carried out at the time of preparation of the EIA report for the Liquid Berths and LNG terminal. However, it may be noted that liquid berths are not yet developed. Hence recommendations of Risk Assessment will be implemented once the liquid berths & pipelines are developed by APSEZ.</p> <p>The LNG terminal is constructed by GSPC LNG Ltd. and a separate Environment and CRZ clearance is obtained by them. Please refer general condition no ix below for details regarding the same.</p> <p>LPG is being handled from the existing multipurpose terminal. A detailed risk assessment study as per MoEF&CC letter no. F. No. 10-47/2008-IA-III dated 31st May, 2016 was carried out by iFluids Engineering for handling as well as storage activities. Recommendations of the risk assessment have been implemented as part of the construction activity and details of the same were submitted along with half yearly compliance report for the period of Oct'18 to Mar'19. Reports of the same were submitted to MoEF & CC along with half yearly compliance report for the period of Apr'17 to Sep'17. Implantation report of risk assessment study during operation phase was submitted along with half yearly compliance report for the period Oct'19 to Mar'20.</p> <p>There are no other activities which attract requirement of Risk Assessment.</p>
vii	<p>Mangrove plantation of 200 ha to be done in consultation with GEER / GEC of Forest Department, a detailed plan shall be</p>	<p>Complied.</p> <p>APSEZ has consulted Gujarat Institute of Desert Ecology (GUIDE) as they are one of the authorized agencies of Dept. of Forest & Env., Govt. of Gujarat for carrying out mangrove</p>

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	submitted within six months from the date of receipt of this letter.	<p>afforestation. GUIDE has completed mangrove plantation in an area of 200 ha at Jakhau, Gujarat during the year 2012-13. Copy of the mangrove plantation completion certificate was submitted along with EC compliance report for the period Apr'18 to Sep'18. Total expenditure for the said work was INR 40 lakh.</p> <p>To enhance the marine biodiversity, till date APSEZ has carried out mangrove afforestation in 4140 ha. area across the coast of Gujarat. Total expenditure for the same till date is INR 1592.8 lakh.</p> <p>Details on Mangroves afforestation & Green belt development carried out by APSEZ till Mar'25 is annexed as Annexure - 4.</p> <p>Other than this Adani Foundation – CSR Arm of Adani Group at Mundra-Kutch has initiated multi-species plantation of mangroves in Luni village in association with GUIDE, Gujarat. During 2018-2019 (Phase-I) multi-species mangrove plantation was carried out in 10 ha, during Phase-II (2019-2020) it was 02 ha and during Phase III (2020-2021) it is 01 ha. During FY 2021-22, 03 ha area coastal stretches have been planted with species. During current FY 2022-23, 04 Hecter plantation has been planted with various species. Total 20 Ha. multi-species mangrove plantation has been carried out till March-23 association with M/s. GUIDE, Gujarat.</p> <p>These plantations are diligently maintained and continually monitored. Notably, these forests have evolved into a thriving habitat for various marine and migratory bird species, enriching the local ecosystem.</p> <p>Please refer attached Annexure - 2 for CSR activity report carried out by Adani Foundation.</p>
viii	It shall be ensured that during construction and post construction of the proposed jetty the movement of fishermen vessel of the local	<p>Complied.</p> <p>During project proposal, APSEZ proposed to provide four (4) dedicated accesses at Juna Bandar, Luni, Bavdi Bandar and Zarpara for the fishermen to approach the sea for fishing activity. However, during construction as well as operation,</p>

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	communities are not interfered with.	<p>through fishermen consultative process, so far APSEZ has provided seven (7) access roads instead of four (4). Total length of all the approach roads is approx. 23 Kms and expenditure involved is Rs. 637 Lacs. There is no hindrance to the movement of fisherman boats.</p> <p>APSEZ is actively working with local community around the project area and provides required support for their livelihood and other concerns through the CSR arm – Adani Foundation. Adani Foundation is working in main five persuasions as below.</p> <ul style="list-style-type: none">❖ Education❖ Community Health❖ Rural Infrastructure❖ Sustainability Livelihood❖ Skill Development <p>Brief information about activities in the main five persuasions is mentioned below. Activities carried out for the same are summarized as below.</p> <table><tr><th>Area</th><th>Activity</th></tr><tr><td>Community Health</td><td><ul style="list-style-type: none">❖ Mobile Heath Care Units and Rural Clinics<ul style="list-style-type: none">• 7 Rural Clinics• 5 villages of Mundra & 2 village Mandvi block has benefited by rural clinic service.• Total 23799 Patients Benefitted in FY 24-25 (direct & indirect) by Mobile van and rural clinic.• Provided 52,063 medical health services.❖ 45602 nos. patients have been supported for operations, OPD, IPD, Medicines and lab-test at Adani Hospital Mundra Pvt. Ltd.❖ Financial Assistance for Critical Illness<ul style="list-style-type: none">• Understanding the burden of life-threatening diseases on economically weaker families, the Foundation provides financial support for patients suffering from heart, liver, kidney diseases, and cancer. In</td></tr></table>	Area	Activity	Community Health	<ul style="list-style-type: none">❖ Mobile Heath Care Units and Rural Clinics<ul style="list-style-type: none">• 7 Rural Clinics• 5 villages of Mundra & 2 village Mandvi block has benefited by rural clinic service.• Total 23799 Patients Benefitted in FY 24-25 (direct & indirect) by Mobile van and rural clinic.• Provided 52,063 medical health services.❖ 45602 nos. patients have been supported for operations, OPD, IPD, Medicines and lab-test at Adani Hospital Mundra Pvt. Ltd.❖ Financial Assistance for Critical Illness<ul style="list-style-type: none">• Understanding the burden of life-threatening diseases on economically weaker families, the Foundation provides financial support for patients suffering from heart, liver, kidney diseases, and cancer. In
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		<p>the current year alone, 45,602 patients from Mundra, Mandvi, and Anjar Blocks have received critical medical assistance at Adani Hospital, Mundra, in collaboration with Adani GK General Hospital, Bhuj.</p> <p>❖ General Health Camp</p> <ul style="list-style-type: none"> It aims to make quality healthcare accessible to underserved communities by providing free consultations and basic medical services. Doctors conducted health check-ups, including blood pressure monitoring, respiratory assessments, and screening for seasonal illnesses. Patients were also provided with necessary medicines on the spot, ensuring timely treatment and care. Such camps play a vital role in promoting health awareness and addressing common health issues in rural areas where access to healthcare is limited. In the current year 1922 patients benefited through General Health Camp <p>❖ Specialty Health Camp</p> <ul style="list-style-type: none"> It organizes to support focused medical care to rural communities through consultations from specialists such as gynecologists, pediatricians, orthopedists, ophthalmologists, and physicians. The primary objective is to address critical health issues among women and children, particularly during pregnancy, to prevent maternal and infant mortality. Additionally, Specialty Health Camps are organized promptly in response to disease outbreaks in villages, ensuring quick medical support and controlling the spread of illnesses. . In the current year 3217 patients benefited through Specialty Health Camp. <p>❖ Eye Vision Care Initiative</p> <ul style="list-style-type: none"> This year, Adani Foundation, in collaboration with Vision Spring, has launched a comprehensive Eye Vision Care program to

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		<p>address uncorrected refractive errors and improve eye health in the community. The initiative focuses on students ("See to Learn"), SHG women ("See to Earn"), and APSEZ drivers ("See to Be Safe"), ensuring better education, livelihood, and road safety. It also promotes "Vision for All" across the community. It is a holistic eye care campaign starting from the process of registration to eyeglass dispensing, and cataract surgery support. In the current year 10,000 patients benefited through Eye Vision Care program.</p> <p>❖ Cataract-Free Mundra Initiative</p> <ul style="list-style-type: none"> To combat vision loss among the elderly, the Cataract-Free Mundra campaign has screened 567 individuals at the village level. Patients identified with cataracts are referred to GK General Hospital, Bhuj, for surgery, followed by post-operative care and follow-ups. This initiative has restored vision for many senior citizens, helping them regain independence and quality of life. In the current year 68 successful cataract operations through Cataract-Free Mundra campaign. <p>❖ Menstrual Hygiene Awareness Camps</p> <ul style="list-style-type: none"> Promoting health and dignity among adolescent girls and women, menstrual hygiene awareness camps are regularly organized in schools and community centers. These sessions focus on educating participants about menstrual health, hygiene practices, and breaking cultural taboos. Sanitary pads are also distributed to encourage proper menstrual care and improve overall health outcomes for women and girls. <p>❖ Medical Services Data from April 2024 to March - 2025:</p> <ul style="list-style-type: none"> Mobile Van – 11066 beneficiaries Rural Clinic – 2500 beneficiary

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		<ul style="list-style-type: none"> Medical Support & Dialysis – 2733 beneficiary General Health Camp – 1922 beneficiary Specialty Health Camp – 3217 beneficiaries Blood Donation Camp – 2902 beneficiary Cataract Camp – 567 beneficiaries Eye Vision Care – 10000 beneficiaries Driver Health Check Up – 7156 beneficiaries <p>❖ Animal Husbandry:</p> <ul style="list-style-type: none"> Fodder support to 24 Villages, benefiting 36808 cattle, Dry Fodder Support - 15,74,250 Kg & Green Fodder Support - 51,66,805 Kg Under the Preventive Health Care program, the Foundation, in partnership with the Animal Husbandry Department, organizes regular cattle health camps across 24 villages. These camps provide veterinary check-ups, vaccinations, and treatments for common diseases. Life-saving vaccines, such as those for Foot-and-Mouth Disease (FMD) and Clostridial infections, help ensure long-term immunity and healthier livestock. Additionally, medicines and vaccines are supplied by the Foundation. Cattle vaccinated -14,056 Deworming tablet distributed – 1460 Cattle benefited – 15000+
	Sustainable Livelihood – Fisher folk, Agriculture & Women	<p>➤ <u>WOMEN EMPOWERMENT:</u></p> <p>❖ Self Help Groups</p> <ul style="list-style-type: none"> 88 Self Help Groups in coordination with National Rural Livelihood Mission. 920+ Members Over Rs.39 Lacs Saving Amount Corpus <p>❖ Job Sourcing - Govt</p> <ul style="list-style-type: none"> 11 Women supported for application and process of Gram Rakshak Dal, Bank Sakhi, Bima Sakhi and Professional Resource Person. Average income Rs.7500 Per Month <p>❖ Making SHG Self Reliant</p>

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			<ul style="list-style-type: none"> • 16 SHG are making strides towards self-reliance. Various handicrafts, dry and fresh food making, stitching, tie and die etc. • 175+ women - Monthly average income @ Rs.7000 of each member/Month ❖ Social Empowerment • 4 Livelihood Enhancement Training through RSETI • Financial support for business set up • Legal rights and domestic violence workshops • Family counselling for Job Sourcing ❖ Job Sourcing - Private • Coordination for Job by Unnati Portal with Adani Group company companies, Britannia, B Medical and Emphazer company • 758 Women supported till date for job sourcing. • Average income Rs.10,800 Per Month ❖ <u>"CHETNA" - INITIATIVE WITH GENDER DIVERSITY</u> • Adani Foundation, in collaboration with Unnati Portal and Adani Solar, launched an initiative to provide equal opportunities for employment and self-development to women from Kutch. • Till Now 614 women from Kutch are successfully employed at Adani Solar, marking a significant step towards their economic empowerment and fostering gender diversity in the workforce. ❖ <u>Highlights of the Work done by our SHG!</u> • Sathwaro'24 - Powering Art, Empowering Artisans: 3 women SHGs from Adani Foundation Mundra participated in the prestigious Sathwaro Mela at the Belvedere Club, Ahmedabad, showcasing Mud Art, Bead Art, and Soof Art, along with two artisans specializing in Rabari and Doori work, achieving an impressive turnover of Rs.1,30,000/-.

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		<ul style="list-style-type: none"> • New Stitching Centre - Livelihood opportunities for local women: In Vandh Village, by providing advanced stitching and embroidery training, the new stitching center empowers women with skills and employment. Equipped with 11 modern machines, women are producing 5,000 bags, gaining financial independence and professional confidence. • Women empowerment initiative: Adani Foundation is empowering rural women through skill training, exposure visits, and SHG formation, enabling them to achieve financial independence and entrepreneurship. • Skill Training: Stone Dust Art Training Mud Art Training Beauty & wellness Training. 100+ Local women empowered • Exposure Visit: Visit to Welspun Stitching Centre for women to learn about stitching enterprises • New SHG Formation: <ul style="list-style-type: none"> ○ Madhav Saheli" a Food service SHG ○ "Gopinath Saheli" a Tailoring SHG ○ "Suidhaga" a Tailoring SHG • CELEBRATED INTERNATIONAL WOMEN'S DAY WITH 1,000 LAKHPATI DIDIS: • On 5th March, Adani Foundation celebrated the strength and resilience of women by marking International Women's Day with 1,000 Lakhpatti Didis. The event highlighted the Foundation's ongoing efforts to empower rural women through meaningful livelihood opportunities. • Over 614 women have been connected with job opportunities at Adani Solar, while 850+ women entrepreneurs received support to grow their businesses. ❖ MENSTRUAL HYGIENE AWARENESS: • Adani Foundation is dedicated to educating and empowering rural girls and women from marginalized communities about menstrual health.

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		<ul style="list-style-type: none"> We aim to break negative social stigmas around menstruation and improve their overall well-being. 61 Villages covered 8300+ School girls & women participated till now <p><u>EMPOWERING FISHERFOLK COMMUNITIES THROUGH EDUCATION:</u></p> <p>❖ PERSISTENT EFFORTS FOR FISHERMAN DEVELOPMENT:</p> <ul style="list-style-type: none"> Educational Kit Support – 686 beneficiaries Fisherman Shelter Support – 273 beneficiaries Vehicle transportation Support – 1368 beneficiaries Cycle Support to high school going students – 111 beneficiaries Scholarship Support – 648 beneficiaries Youth Employment – 494 beneficiaries Linkage with Fisheries Scheme – 195 beneficiaries Ramatotasav Community Engagement – 3534 beneficiaries Man-Days mangrove plantation - 56,523 beneficiaries <p>❖ Scholarship Support:</p> <ul style="list-style-type: none"> To uplift financially challenged communities, we extended scholarships support of Rs. 3,58,765 to 35 students, enabling them to pursue higher secondary and technical education. This support is helping break the cycle of poverty and create a brighter future for these students and their families. <p>❖ Vehicle Transportation Facilities:</p> <ul style="list-style-type: none"> Ensure seamless access to education for 121 school-going children from Modhva, Tragadi, and Zarpara Bandar Fisherfolk Students in reaching the nearest School, eliminating barriers to regular attendance. Additionally, personal cycle support to 5 fisherfolk students.

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		<ul style="list-style-type: none"> ❖ Job opportunity <ul style="list-style-type: none"> Acting as a bridge between industries and fisherfolk youth, the Adani Foundation facilitated job placements for 30 fisherfolk as RTG operators, in the HR department, and as supervisors in APSEZ companies. In the APSEZ area and colony, 45 fisherfolk youth have been offered professional painting roles. To ensure they are skilled for the role, they underwent comprehensive training in partnership with Asian Paints. This initiative has enhanced their livelihoods and provided sustainable employment opportunities. ❖ Awareness camp on Menstrual health: <ul style="list-style-type: none"> A menstrual health awareness camp was organized for 200+ women from the fishing communities of Modhva and Tragadi villages. The program focused on educating them about menstrual hygiene, PCOD, and menopause management. It promoted healthy practices, offered guidance on managing related health issues, and distributed sanitary products to support their overall well-being. ❖ Potable water Distribution: <ul style="list-style-type: none"> Providing access of potable Drinking water Facilities to Nine fisherfolk vasahat on Daily bases, either By Water tanker or Linkage with Nearest Gram panchayat. 5000+ Fisherfolk Population are getting benefit ➤ <u>SUSTAINABLE LIVELIHOOD - AGRICULTURE:</u> ❖ BIOGAS PROJECT <ul style="list-style-type: none"> In our ongoing efforts to promote sustainable and eco-friendly farming practices, we have successfully registered 863 farmers from five different talukas in the Kutch district. Each registered farmer will receive financial support of ₹9,000 for the installation of biogas plants on their farms. This initiative aims to provide farmers with a renewable source of energy, reduce

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			<p>dependency on conventional fuels, and improve overall agricultural productivity.</p> <ul style="list-style-type: none"> • Benefits of Biogas: <ul style="list-style-type: none"> ○ Renewable Energy Source: Biogas is a sustainable and renewable energy source that reduces dependence on fossil fuels. ○ Cost Savings: Farmers save on fuel expenses as biogas can be used for cooking, heating, and electricity generation. ○ Waste Management: Biogas plants efficiently manage agricultural waste by converting it into useful energy. ○ Environmental Impact: Biogas reduces greenhouse gas emissions, contributing to climate change mitigation. ○ Soil Health: The by-product, known as digestate, is a nutrient-rich organic fertilizer that enhances soil fertility. ○ Improved Livelihoods: Biogas provides farmers with additional income and energy security, improving their overall quality of life. • Biogas benefit Key Highlights <ul style="list-style-type: none"> ○ Total Farmer Registered - 863 Farmers ○ Financial Support for each farmer - Rs. 9000 ○ Geographical coverage in Kutch - 6 Talukas ❖ DRIP IRRIGATION - ENHANCING LIVELIHOODS IN KUTCH: <ul style="list-style-type: none"> • The Drip Irrigation Initiative by Adani Foundation promotes efficient water use in farming by providing financial support to farmers for installing drip systems. It helps conserve water, improve crop yield, and encourage sustainable agriculture in Kutch. • In 2024-25, Adani Foundation supported sustainable water management in Kutch by Promoting drip irrigation across 490 villages in Abdasa, Lakhpat, Mandvi, Mundra, and Nakhtrana talukas. Covering a total area of 2,074,53 hectares, the initiative benefited 1,041 farmers. This effort enhanced irrigation efficiency, boosted agricultural

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			<p>productivity, and contributed to water conservation and eco-friendly farming practices in the region.</p> <ul style="list-style-type: none"> ❖ Natural Farming <ul style="list-style-type: none"> As part of our commitment to sustainable agriculture, we have focused on promoting natural farming practices to conserve soil health and enhance environmental sustainability. Till Date 2,275 Farmers trained in Natural Farming 226 Farmers successfully transformed to 100% Natural Farming 857 Farmers linked with GOG to support cattle welfare scheme ❖ Green Carnival <ul style="list-style-type: none"> Organized an annual Green Carnival, providing farmers with a dedicated marketplace to sell their organic produce directly to consumers. This event is hosted by our employee company and attracts many buyers interested in organic products. ❖ Sales Achievements <ul style="list-style-type: none"> This year, the Green Carnival was a resounding success, with farmers selling a total of 16,241 kg of organically grown vegetables and fruits at the event. Achieved Rs. 6,49,640+ Total revenue.
		Education	<ul style="list-style-type: none"> ❖ Enriched reading corners to develop reading habits <ul style="list-style-type: none"> Library books were issued twice a month, and a dedicated reading corner was established in each school to enhance accessibility. Additionally, over 1,000 books and various magazines were provided 2,09,640 Books issued between students ❖ Progressive Students: Strengthening foundational literacy, numeracy and skills <ul style="list-style-type: none"> A total of 6,540 students from Class 3 to 7 were assessed in reading, writing, and math skills, with 2399 students identified as needing additional support.

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		<ul style="list-style-type: none"> Targeted interventions helped 1,520 students successfully integrate into regular academic programs ❖ Utthan's Impact: A Data-Driven Overview of Utthan Initiatives <ul style="list-style-type: none"> Distribution of sports kits, music kits, TLM kits, and stationery kits. to 12K+ Students Value education is imparted through films that teach important life lessons and moral values to 1K+ Students Provide students to engage in fun and educational activities, fostering their holistic development. 8K+ students. Children toy foundation kit to 5k+ Students Building as Learning Aid (7K+ Students): BALA transforming school spaces into vibrant learning environments through creative artwork. Environmental Education Project: 80 Schools, 12000+ Students Adani Competitive Coaching Center: 27 School, 5000+ Students Oasis Reading workshop: 700+ Workshop. 20000+ Students Capacity building of teachers: 150 Teachers, 16000+ Hours ❖ Key finding of third-party assessment: <ul style="list-style-type: none"> The Utthan program assessment employed a quasi-experimental, mixed-methods design with pre- post comparisons and stratified random and purposive sampling to evaluate student outcomes, program impact, and sustainability. The sample included 288 intervention students, 96 non- intervention students, 53 Sahayak, 30 head teachers, 30 SMC members, 30 parents, and community members, with data collected through FGDs, SSIs, and KIIs. Univariate and bivariate analyses were conducted, and field notes were transcribed to identify themes. These themes were aligned with objectives and compared to past data to uncover discrepancies and analyze their causes.

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		<ul style="list-style-type: none"> More than 90% of the students have achieved proficiency in reading, writing and numeracy skills in Utthan Schools. Utthan sahayak as catalyst: The introduction of Saha yaks (teacher assistants) ensures personalized student support and bridges gaps between schools and families, fostering greater parental involvement. Sahayak have mentioned improvements in their classroom management practices, strong parent and community management and understanding of student child development 97% of students reported improved confidence in leadership and communication and 97% of students in Utthan schools have mentioned interest in attending school. Teachers' capacity building: Comprehensive teacher training programs enhance instructional quality, equipping educators with tools to deliver FLN-focused curriculum effectively. Community engagement through home visits and mothers' meetings, the project strengthens parental accountability and participation, directly influencing students' motivation and performance. <p>❖ Holistic Development & Achievements</p> <ul style="list-style-type: none"> Academic and Institutional Developments: Board exam results showcased excellent student performance, with targeted remedial sessions introduced for continuous improvement. The Housekeeping Training Program (May 28) emphasized cleanliness and hygiene maintenance among staff. Teacher Development and Training: Teacher Capacity Building Program (June 6) enhanced instructional strategies and curriculum planning. NABET Accreditation Training (June 12) ensured compliance with national educational standards.

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			<ul style="list-style-type: none"> • Technological Advancements: Inauguration of a New Computer Lab (Sept 27) enhanced digital learning opportunities. • AI and Google Gemini Training (Nov 16) prepared educators for modern teaching methodologies. • Cultural and Co- Curricular Activities: World Book Day (April 23) promoted reading culture through storytelling and book exhibitions. • International Yoga Day (June 21) emphasized mindfulness and physical wellness. • Student Achievements: SVS Science Exhibition (Oct 4): AVMB students won first place for their research on screen time and its impact. • District-Level Science Fair (Dec 9-10): Students represented Mundra Taluka with innovative projects. • Health and Safety Initiatives: Menstrual Hygiene Awareness Program (June 22) educated girls on personal health and wellness. • School-Wide Health Check-Up (July 8) ensured early detection of health concerns. ❖ Project Udaan - Inspiring Minds <ul style="list-style-type: none"> • About Project: Under this project, exposure tours are organized wherein school, college students, faculties, employees from corporates are given a chance to visit the Adani Group facilities. • Total 408 no. of Schools/Colleges/ Institutes participated. • Total 26346 no. of participants participated.
		Rural Infrastructure & Environmental Sustainability	<ul style="list-style-type: none"> ➤ COMMUNITY INFRASTRUCTURE DEVELOPMENT PROJECTS & ITS BENEFICIARIES <ul style="list-style-type: none"> • Renovation of Aanganwadi, Goyarsama Village – 40 beneficiaries • Construction of Pipe Culvert, Old Bandar Fisherman Vasahat - 1200 beneficiaries • Open Shed & Community Hall, Sukhpurvah Mundra – 1200 beneficiaries

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		<ul style="list-style-type: none"> Open Shed at PTC College, Mundra – 160 beneficiaries Renovation of High School, Zarapra Village – 550 beneficiaries Open Shed at Mokha Parking – 2000 beneficiaries Canal Cleaning & Chamber Renovation, Bhadreswar Village – 120 beneficiaries Renovation of Approach Road, Shekadiya and Luni – 1200 beneficiaries R.O. Plant Installation, ITI Mundra & Sanjivni School – 800 beneficiaries Paver Block Floor Work, Wandi Village – 2000 beneficiaries <p>➤ COMMUNITY INFRASTRUCTURE DEVELOPMENT KEY COMMUNITY INFRASTRUCTURE DEVELOPMENTS:</p> <ul style="list-style-type: none"> Educational Facility Renovations <ul style="list-style-type: none"> High School, Zarapra: 550 students benefited. Aanganwadi, Goyarsama: 40 students benefited. High School, Desalpar: 550 students benefited. Kasturba Girls Hostel, Desalpar: 150 girls benefited. Infrastructure Improvements: <ul style="list-style-type: none"> Pipe Culvert, Old Bandar: 1200 people benefited. Box Culvert & CC Road, Zarpara: 12000 people benefited. Approach Road, Shekadiya & Luni: 1200 people benefited. Approach Road, Vadi Vistar: 800 farmers benefited. Water Management Projects: <ul style="list-style-type: none"> Percolation Well, Mota Bhadiya: 80 farmers benefited. Percolation Bore Cleaning, GPVC Villages: 3150 farmers benefited. Pond Deepening & Road Cleaning, GPVC Villages: 6KM cleaned. Sanitation and Health Initiatives:

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		<ul style="list-style-type: none"> ○ R.O. Plant, ITI Mundra & Sanjivni School: 800 students benefited. ○ Toilet Block for Disabled, GPVC Villages: 5 families benefited. ○ Painting & Office Work, CHC Mundra: 14600 people benefited. <p>➤ <u>COMMUNITY RESOURCE CENTRE</u></p> <ul style="list-style-type: none"> ❖ The Community Resource Centre (CRC), located at the Adani Field Office in Baroi, serves as a vital bridge between government schemes and the beneficiaries who need them most. Functioning as a single-window solution, the CRC provides support for online applications and documentation, ensuring that eligible individuals can access various welfare schemes with ease. ❖ Through the facilitation efforts of the Adani Foundation, a total of 2,334 beneficiaries are currently receiving aid under multiple government programs, including Widow Pension, Senior Citizen and Divyang Pension, and the Palak Mata Pita Scheme. This support results in a combined aid of Rs. 3.37 crore monthly. <p>➤ <u>SWAVLAMBAN - "A STEP TOWARDS INCLUSIVITY"</u></p> <ul style="list-style-type: none"> ❖ Under this initiative, the Adani foundation has pledged annual financial assistance of ₹10 lakh to 500 married female divyangs. ❖ Impact <ul style="list-style-type: none"> • Ensuring a future of dignity, security, and stability for beneficiaries. • Strengthening inclusivity and social upliftment through impactful support. <p>➤ <u>INNOVATIVE ENVIRONMENTAL SOLUTIONS FOR SUSTAINABLE FUTURE:</u></p> <ul style="list-style-type: none"> ❖ <u>TERRESTRIAL BIODIVERSITY</u> <ul style="list-style-type: none"> • Project Adani Van: "Harit Paryavaran ki Ek Pahel" focuses on afforestation and community involvement, transforming barren lands into thriving forests with 88,303 plants, enhancing local biodiversity.

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		<ul style="list-style-type: none"> ❖ COASTAL BIODIVERSITY <ul style="list-style-type: none"> The mangrove plantation project at the Luni coastal belt has created 162 hectares of dense mangrove forests, providing a new habitat for various species and showcasing the area's ecological richness. ❖ PLASTIC FREE ENVIRONMENT <ul style="list-style-type: none"> This initiative educates children about plastic pollution and promotes reducing, reusing, and recycling plastic to foster environmental responsibility. ❖ WATER CONSERVATION <ul style="list-style-type: none"> The SWAJAL project addresses groundwater depletion in Kutch by constructing rooftop rainwater harvesting systems, benefiting 1,660+ individuals and ensuring access to quality drinking water. ❖ SOLAR PROJECTS: <ul style="list-style-type: none"> Surya Ghar initiative provides sustainable energy solutions by installing solar panels, significantly reducing electricity costs and promoting environmental sustainability in rural communities. Adani Van – Harit Par yavaran ki Ek Pahel: Massive plantation drives to enhance green cover. Transformed barren lands into thriving forests, promoting sustainability. Biodiversity Enhancement: 78 bird species, 4 mammal species, 12 species of insects and reptiles. Significantly enhanced local biodiversity and ecological health. Prakruti Rath Community- Led Green Initiatives: Distributed 53,886 saplings, enhancing green cover. Strengthened community connection to nature and empowered environmental stewardship. Plantation Achievements: Total Plants: 88,303 across 35 acres Native Species: 70+ species planted. ❖ Biodiversity Knowledge & Interpretation Center <ul style="list-style-type: none"> Biodiversity & Interpretation Center: The center is dedicated to educating, inspiring,

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		<p>and engaging the community in conserving Gujarat's rich biodiverse.</p> <ul style="list-style-type: none"> • Nursery Development: A nursery of 10,000 mangrove seeds was established at the Luni site with the active participation of local fishermen. • Training Sessions: 30+ Employee Training on Biodiversity Conservation at Mundra Petrochem LTD. • Awareness Sessions: An awareness lecture was held at Adani Vidya Mandir, Bhadreshwar, with 50+ students participating. • Workshop on Coastal Conservation: One-day workshop was held with participation of 200+ students of University. <p>❖ Nurturing A Plastic-free Generation</p> <ul style="list-style-type: none"> • Plastic Free Villages: <ul style="list-style-type: none"> ○ 2 villages & 8500 individuals targeted ○ 50+ local vendors, 70+ women in SHGs 325+ students were aware by sessions • Green School Project: <ul style="list-style-type: none"> ○ Covering 75+ Schools ○ 12000+ Students ○ 32000+ Kg Single used plastic recycle at Zero Cost • Coastal Cleanup Day: <ul style="list-style-type: none"> ○ 200+ students and 80 Uthhan Sahayaks led to the successful cleanup of a 1 km stretch of Kashivishvnath Beach, Mandvi. <p><u>WATER CONSERVATION "SWAJAL PROJECT"</u> <u>ENHANCING RURAL WATER RESOURCES</u></p> <p>❖ Adani Foundation has undertaken significant water conservation initiatives to address water scarcity and improve water availability in rural areas.</p> <p>❖ Through the creation of 737 various water structures, the project has increased water capacity by 5,400,735 cubic meters (CUM) and benefited 64,515 people.</p> <ul style="list-style-type: none"> • Check Dam New/Renovation: <ul style="list-style-type: none"> ○ Structures: 29

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			<ul style="list-style-type: none"> ○ Water Capacity Increase: 1,072,332 CUM ○ Beneficiaries: 30,870 ○ Impact: Enhances water storage and irrigation. • Rainwater Harvesting Structures (RRWHS): <ul style="list-style-type: none"> ○ Structures: 330 ○ Water Capacity Increase: 3,300,000 CUM ○ Beneficiaries: 1,650 ○ Impact: Maximizes rainwater capture and usage. Rs. 10950 yearly saved/house • Pond Deepening: <ul style="list-style-type: none"> ○ Structures: 135 ○ Water Capacity Increase: 1,028,403 CUM ○ Beneficiaries: 18,350 ○ Impact: Improves water retention and availability. • Construction of Percolation Wells: <ul style="list-style-type: none"> ○ Structures: 26 ○ Ground Water Recharge: Significant ○ Beneficiaries: 3,000 ○ Impact: Boosts groundwater levels and availability. ○ Bore/Well Recharge ○ Structures: 209 ○ Ground Water Recharge: Significant ○ Beneficiaries: 1,045 ○ Impact: Enhances groundwater recharge and sustainability. • Construction of New Wells: <ul style="list-style-type: none"> ○ Structures: 8 ○ Purpose: Drinking Water ○ Beneficiaries: 9,600 ○ Impact: Provides reliable drinking water sources <p>SURYA GHAR PROJECT - 100% SOLAR VILLAGE</p> <ul style="list-style-type: none"> • Adani Foundation, through its CSR initiative, has launched the Surya Ghar Project to transform 2 villages into 100% solar-powered communities. • This project aims to provide sustainable energy solutions, enhance energy access, reduce reliance on conventional power sources, and promote environmental

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			sustainability while significantly lowering electricity costs for villagers. ❖ The project benefits 4,500+ people. ❖ Environmental Benefits <ul style="list-style-type: none">• Significant reduction in carbon footprint.• Promotes clean, renewable energy.• Serves as a replicable model for other rural communities								
		Skill Development	<p>➤ <u>ADANI SKILL DEVELOPMENT CENTER (ASDC)</u></p> <ul style="list-style-type: none">• The Adani Skill Development Center (ASDC) in Bhuj and Mundra is dedicated to creating a future fueled by a skilled and empowered Indian workforce, driving economic growth. Focused on bridging the gap between industry demands and workforce capabilities, ASDC offers high-quality vocational training, fosters innovation, and promotes entrepreneurship.• The center's impact is significant, with 887 students in Bhuj & Mundra, where 70% of participants are female, and 258 technical trainees already placed in diverse roles such as General Duty Assistant and Domestic Data Entry Operator etc. Six placement drives and 24 guest lectures have further supported career opportunities. In Mundra, courses like RTG Crane Operator, Tally with GST, and Beauty Therapist training have drawn strong participation, especially among women, resulting in 135 placements in beauty therapy alone.• By equipping youth with relevant skills, facilitating job opportunities, and empowering women, ASDC plays a vital role in driving inclusive growth, promoting gender equality, and contributing to the region's economic progress. <p>❖ ASDC - MUNDRA</p> <table><tr><td></td><td></td><td></td><td></td></tr><tr><td>JOC (RTG Crane Operator)</td><td>00</td><td>140</td><td>140</td></tr></table>							JOC (RTG Crane Operator)	00
JOC (RTG Crane Operator)	00	140	140								

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		Please refer Annexure - 2 for full details of CSR activities carried out by Adani Foundation in the Mundra region. Budget for Horticulture Department for the FY 2024-25 is to the tune of INR 831 lakh. Out of which, Approx. INR 570 lakh has spent during the year FY 2024-25.																																																														
ix	Relocation of the fishermen community if any shall be done strictly in accordance with the norms prescribed by the State Government.	<p>Not Applicable</p> <p>The project was conceptualized in such a way that there are no fishermen settlements in the project proposal. Hence there is no relocation of fishermen communities required.</p>																																																														
x	Marine ecology monitoring shall be done regularly during construction of breakwater and dredging /disposal operation.	<p>Complied.</p> <p>Maintenance dredging is ongoing activity. Marine monitoring is being carried out once in a month by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Summary of the same for duration from Oct'24 to Mar'25 is mentioned below.</p> <p>Total Sampling Locations & frequency: 09 Nos. (Frequency: Once a month)</p> <table><tr><th rowspan="2">Parameter</th><th rowspan="2">Unit</th><th colspan="3">Surface</th><th colspan="3">Bottom</th></tr><tr><th>Min</th><th>Max</th><th>Avg.</th><th>Min</th><th>Max</th><th>Avg.</th></tr><tr><td>pH</td><td>--</td><td>7.98</td><td>8.34</td><td>8.18</td><td>7.85</td><td>8.12</td><td>8.01</td></tr><tr><td>BOD (3 Days @ 27 °C)</td><td>mg/L</td><td>2.5</td><td>3.4</td><td>2.90</td><td>BDL(MDL:1.0)</td><td>BDL(MDL:1.0)</td><td>BDL(MDL:1.0)</td></tr><tr><td>TSS</td><td>mg/L</td><td>102</td><td>144</td><td>124.02</td><td>80</td><td>128</td><td>101.24</td></tr><tr><td>DO</td><td>mg/L</td><td>6.45</td><td>7.04</td><td>6.77</td><td>6.35</td><td>6.84</td><td>6.63</td></tr><tr><td>Salinity</td><td>ppt</td><td>35.12</td><td>36.34</td><td>35.75</td><td>36.12</td><td>37.35</td><td>36.74</td></tr><tr><td>TDS</td><td>mg/L</td><td>34560</td><td>36642</td><td>35405</td><td>35180</td><td>36720</td><td>36109</td></tr></table> <p>*BDL – Below Detection Limit *MDL – Minimum Detection Limit</p> <p>Approx. INR 17.27 Lakh is spent for all environmental monitoring activities during the FY 2024-25 for overall APSEZ.</p> <p>Marine monitoring for west port area is being carried out by M/s. Adani Power (Mundra) Limited (Pre-monsoon & Post-monsoon) through NABL accredited and MoEF&CC authorized agency namely M/s. UniStar Environment &</p>	Parameter	Unit	Surface			Bottom			Min	Max	Avg.	Min	Max	Avg.	pH	--	7.98	8.34	8.18	7.85	8.12	8.01	BOD (3 Days @ 27 °C)	mg/L	2.5	3.4	2.90	BDL(MDL:1.0)	BDL(MDL:1.0)	BDL(MDL:1.0)	TSS	mg/L	102	144	124.02	80	128	101.24	DO	mg/L	6.45	7.04	6.77	6.35	6.84	6.63	Salinity	ppt	35.12	36.34	35.75	36.12	37.35	36.74	TDS	mg/L	34560	36642	35405	35180	36720	36109
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		<p>Research Labs Pvt. Ltd. Monitoring reports are also enclosed as Annexure - 5.</p> <p>Summary of ecological parameters of M/s. Adani Power (Mundra) Limited is given below:</p> <p>PHYTOPLANKTON DIVERSITY: Phytoplankton sampling was carried out at 5 stations. At each station, water samples were collected from surface and bottom waters. During the sampling period the phytoplankton population in the coastal waters of APL-Mundra, was more diverse during the post-monsoon season (December 2024) than pre-monsoon (March 2025) (Table 6). However, the overall phytoplankton abundance was more during post-monsoon than the pre-monsoon season. The detailed species percentage composition reported during both sampling period is given in Annexure I and II. In December 2024, the phytoplankton community was represented with a total of 41 phytoplankton genera belonging to diatoms (35 genera) and dinoflagellates (6 genera). Overall, 37 phytoplankton genera representing diatoms (31 genera) and dinoflagellate (6 genera) reported during March 2025 sampling. Diatoms Species belonged to <i>Amphora</i> sp., <i>Amphiprora</i> sp., <i>Asterionella</i> sp., <i>Bacillaria</i> sp., <i>Chaetoceros</i> sp., <i>Corethron</i> sp., <i>Coscinodiscus</i> sp., <i>Cyclotella</i> sp., <i>Cylindrotheca</i> sp., <i>Cymbella</i> sp., <i>Diploneis</i> sp., <i>Ditylum</i> sp., <i>Fragilaria</i> sp., <i>Guinardia</i> sp., <i>Lauderia</i> sp., <i>Leptocylindrus</i> sp., <i>Licmophora</i> sp., <i>Lithodesmium</i> sp., <i>Navicula</i> sp., <i>Nitzschia</i> sp., <i>Odontella</i> sp., <i>Pinnularia</i> sp., <i>Pleurosigma</i> sp., <i>Pseudo-nitzschia</i> sp., <i>Rhizosolenia</i> sp., <i>Streptotheca</i> sp., <i>Thalassiosira</i> sp., <i>Thalassiothrix</i> sp., and <i>Thalassionema</i> sp. were common during both sampling period. Total 4 dinoflagellate genera i.e., <i>Ceratium</i>, <i>Prorocentrum</i>, <i>Protoperidinium</i> and <i>Scrippsiella</i> sp. were common during both December 2024 and March 2025 samplings.</p> <p>The phytoplankton abundance in the study region was higher during the 156.6 to 395.2 cells x 10² L⁻¹ during December 2024 as compared to March 2025 (ranged from 163.2 to 323.2 cells x 10² L⁻¹). In December 2024, the highest phytoplankton abundance was observed at St-5 in the surface (395.2 cells x 10² L⁻¹). The lowest phytoplankton abundance (156.6 cells x 10² L⁻¹) was observed at St-2 in</p>

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		<p>surface water. During March 2025, phytoplankton abundance was higher at St-5 in surface water ($323.2 \text{ cells} \times 10^2 \text{ L}^{-1}$) and lowest at St-3 bottom water ($163.2 \text{ cells} \times 10^2 \text{ L}^{-1}$). The diatom genera, <i>Rhizosolenia</i> (up to $44.8 \text{ cells} \times 10^2 \text{ L}^{-1}$) during December 2024 (Annexure I), whereas in March 2025, <i>Coscinodiscus</i> (up to $38.4 \text{ cells} \times 10^2 \text{ L}^{-1}$) was also predominant along with <i>Navicula</i> (up to $33.6 \text{ cells} \times 10^2 \text{ L}^{-1}$) (Annexure II). The study shows that the marine water around was enriched with the diverse phytoplankton population during the sampling period.</p> <p><u>BENTHIC DIVERSITY:</u></p> <p>Subtidal region: The macrobenthic population study revealed large spatiotemporal variation with the benthic population during the study period. Overall, more macrobenthos abundance and biomass were reported at subtidal stations than at intertidal stations. The macrobenthic abundance and biomass were more during the December 2024 than the March 2025 sampling. In December 2024, the macrobenthos density ranged from 725 no./m^2 to 960 nos./m^2 at sampling stations (Table 7). The biomass of the macrobenthic community in the study region was ranged from 1.4 g/ m^2 to 2.0 g/ m^2 in the study region. The maximum abundance and biomass of benthic microorganisms was reported at St-4 (960 nos./m^2 and 2.0 g/m^2). During March 2025, the macrobenthos density was ranged from 590 to 890 nos./m^2. The macrobenthic biomass was ranged from 1.5 to 2.3 g/ m^2.</p> <p>In species composition (Annexure IV), Polychaete species (Phylum Annelida) belonging to the family Paraonidae, Pilargidae, Capitillidae, Cossuridae, Glyceridae, Ciratullidae, Nephthyida, Nereidae, Lumbriconeridae, Spionidae were abundant contributing ~71% to macrobenthic population during December 2024. In March 2025, polychaete species contributed ~82.3% to macrobenthic population (Annexure IV). Overall, the presence of Polychaete, Amphipods, and Nemerteans suggest the availability of food organisms for benthic predators in the area. The macrobenthic population reported during both studies reveals that the large spatial-</p>

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		<p>temporal variation with the benthic population could be due to the change in bottom substratum.</p> <p>Intertidal region: The sandy substratum with low organic matter affects the occurrence of the macrobenthic community in the intertidal region. In December 2024, the highest biomass was measured (0.09 g/m² to 0.4 g/m²) in the intertidal region. The highest density of macrobenthic organisms was reported at station IT-2 (LW) (256 nos./m²), whereas the lowest density was reported at Station IT-1 (HW) (116 nos./m²). During March 2025, the macrobenthic biomass was ranged from (0.08 to 0.5 g/m²). At IT-1 (LW) the higher macrobenthic population (122 nos./m²) and biomass (0.5 g/m²) was reported. No macrobenthic community was observed at St-3 (HW and LW) may be due to sandy sediment during both sampling periods. In species composition (Annexure V), Polychaete species dominated the macrobenthic population in the intertidal region.</p>																																																												
xi	Regular Monitoring of air quality shall be done in the settlement areas around the Project site and appropriate safeguard measures shall be taken.	<p>Complied.</p> <p>Ambient Air Quality and Noise monitoring are being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Summary of the same for duration from Oct'24 to Mar'25 is mentioned below:</p> <p>Air sampling locations & frequency: 13 nos. (twice a week including surrounding villages)</p> <table><tr><th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th><th>Average</th><th>Perm. Limit^{\$}</th></tr><tr><td colspan="6">AAQM</td></tr><tr><td>PM₁₀</td><td>µg/m³</td><td>42.00</td><td>85.91</td><td>72.71</td><td>100</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>16.85</td><td>42.39</td><td>30.28</td><td>60</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>10.80</td><td>34.01</td><td>22.16</td><td>80</td></tr><tr><td>NO₂</td><td>µg/m³</td><td>14.12</td><td>38.46</td><td>26.34</td><td>80</td></tr><tr><td colspan="6"></td></tr><tr><th>Noise</th><th>Unit</th><th>Leq Min</th><th>Leq Max</th><th>Leq Ave.</th><th>Leq Perm. Limit*</th></tr><tr><td>Day Time</td><td>dB(A)</td><td>57.30</td><td>69.30</td><td>64.53</td><td>75</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>57.20</td><td>65.70</td><td>62.19</td><td>70</td></tr></table>	Parameter	Unit	Min	Max	Average	Perm. Limit ^{\$}	AAQM						PM ₁₀	µg/m ³	42.00	85.91	72.71	100	PM _{2.5}	µg/m ³	16.85	42.39	30.28	60	SO ₂	µg/m ³	10.80	34.01	22.16	80	NO ₂	µg/m ³	14.12	38.46	26.34	80							Noise	Unit	Leq Min	Leq Max	Leq Ave.	Leq Perm. Limit*	Day Time	dB(A)	57.30	69.30	64.53	75	Night Time	dB(A)	57.20	65.70	62.19	70
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		<p>\$ as per NAAQ standards, 2009 * as per CC&A granted by GPCB Values recorded confirms to the stipulated standards.</p> <p>Please refer Annexure - 5 for detailed analysis reports. Approx. INR 17.27 Lakh is spent for all environmental monitoring activities during the FY 2024-25 for overall APSEZ, Mundra.</p> <p>Ambient air quality monitoring in surrounding villages is being carried out by Adani Power (Mundra) Limited, Mundra through NABL accredited and MoEF&CC authorized agency namely M/s. UniStar Environment & Research Labs Pvt. Ltd. and monitoring reports of the same are also enclosed in Annexure - 5.</p> <p>The following safeguard measures are taken for abatement of dust / fugitive emissions.</p> <ul style="list-style-type: none">• Regular water sprinkling on road and other open area• Regular cleaning of roads through mechanized equipment• Dry fog Dust Suppression System (DSS) in hopper, transfer towers and conveyor belts• Use of water mist canon• Closed type conveyor belts• Regular sprinkling on coal heaps with mechanized system• Covering other types of dry bulk cargo heaps• Installation of wind breaking wall• Development of greenbelt along the periphery of the storage yards/back up area• Mechanized handling system for coal and other dry bulk cargo• Wagon loading and truck loading through closed silo								
xii	Sewage arising in the Port area shall be disposed off after adequate treatment to conform to the standards stipulated by Gujarat State Pollution Control Board and shall be utilized / recycled for Gardening, Plantation and Irrigation.	<p>Complied.</p> <p>Entire quantity of sewage generated is being treated in designated ETP / STP and treated sewage is used for Horticulture purposes.</p> <table><tr><th>Location</th><th>Capacity</th><th>Quantity of Treated Water (Avg. from Oct'24 to Mar'25)</th><th>Type of ETP / STP</th></tr><tr><td></td><td></td><td></td><td></td></tr></table>	Location	Capacity	Quantity of Treated Water (Avg. from Oct'24 to Mar'25)	Type of ETP / STP				
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		LT	265 KLD	54.60 KLD	Activated Sludge																																																																																				
		West Port	55 KLD	15.09 KLD	FAB																																																																																				
		<p>Third party analysis of the treated water is being carried out once in a month at ETP & twice in a month at West Port by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Summary of the same for duration from Oct'24 to Mar'25 is mentioned below.</p> <table border="1"> <thead> <tr> <th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th><th>Average</th><th>Perm. Limit[§]</th></tr> </thead> <tbody> <tr> <td colspan="6">Industrial Effluent / Sewage (For ETP)</td></tr> <tr> <td>pH</td><td>--</td><td>7.14</td><td>7.64</td><td>7.34</td><td>6.5 – 8.5</td></tr> <tr> <td>TSS</td><td>mg/L</td><td>18</td><td>54</td><td>32</td><td>100</td></tr> <tr> <td>TDS</td><td>mg/L</td><td>580</td><td>648</td><td>622</td><td>2100</td></tr> <tr> <td>COD</td><td>mg/L</td><td>78.4</td><td>92.20</td><td>84.77</td><td>100</td></tr> <tr> <td>BOD (3 Days @ 27°C)</td><td>mg/L</td><td>23.0</td><td>27.0</td><td>25.17</td><td>30</td></tr> <tr> <td>Ammonical Nitrogen as NH₃-N</td><td>mg/L</td><td>12.10</td><td>22.40</td><td>18.45</td><td>50</td></tr> <tr> <td colspan="6">Domestic Sewage (For STP)</td></tr> <tr> <td>pH</td><td>--</td><td>7.11</td><td>7.46</td><td>7.25</td><td>6.5 – 8.5</td></tr> <tr> <td>TSS</td><td>mg/L</td><td>14.00</td><td>24.00</td><td>18.50</td><td>100</td></tr> <tr> <td>BOD (3 Days @ 27 °C)</td><td>mg/L</td><td>13.00</td><td>16.80</td><td>15.16</td><td>30</td></tr> <tr> <td>Residual Chlorine</td><td>ppm</td><td>0.55</td><td>0.74</td><td>0.65</td><td>Min. 0.5</td></tr> <tr> <td>Fecal Coliform</td><td>MPN/ 100 ml</td><td>50.00</td><td>70.00</td><td>60.00</td><td><1000</td></tr> </tbody> </table> <p>[§] as per CC&A granted by GPCB Values recorded confirms to the stipulated standards.</p> <p>Monitoring and analysis of ETP and STP wastewater and treated water is also being carried out regularly through in-house laboratory for the parameters such as pH, TDS, TSS, COD, Chlorides, and residual chlorine.</p> <p>Please refer Annexure - 5 for detailed analysis reports. Approx. INR 17.27 Lakh is spent for all environmental monitoring activities during the FY 2024-25 for overall APSEZ, Mundra.</p> <p>It is also noted that GPCB is doing regular site inspection</p>				Parameter	Unit	Min	Max	Average	Perm. Limit [§]	Industrial Effluent / Sewage (For ETP)						pH	--	7.14	7.64	7.34	6.5 – 8.5	TSS	mg/L	18	54	32	100	TDS	mg/L	580	648	622	2100	COD	mg/L	78.4	92.20	84.77	100	BOD (3 Days @ 27°C)	mg/L	23.0	27.0	25.17	30	Ammonical Nitrogen as NH ₃ -N	mg/L	12.10	22.40	18.45	50	Domestic Sewage (For STP)						pH	--	7.11	7.46	7.25	6.5 – 8.5	TSS	mg/L	14.00	24.00	18.50	100	BOD (3 Days @ 27 °C)	mg/L	13.00	16.80	15.16	30	Residual Chlorine	ppm	0.55	0.74	0.65	Min. 0.5	Fecal Coliform	MPN/ 100 ml	50.00	70.00	60.00	<1000
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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
		<p>along with wastewater sampling and analysis.</p> <p>Last visit of the Regional Office, GPCB was done on 25.11.2024 for West Port APSEZL has submitted the reply to the site visit report vide letter dated 04.12.2024. Acknowledgement copy and GPCB Lab Reports are attached as Annexure – 6. GPCB lab report shows all the parameters are well within the permissible limit.</p> <p>Last visit of Regional Office, GPCB was done on 31.01.2025 for Main port and APSEZL has submitted the reply report vide letter dated 04.02.2025. Acknowledgement copy and GPCB Lab Reports are attached as Annexure – 7. GPCB lab report shows all the parameters are well within the permissible limit.</p>
xiii	Adequate Plantation shall be carried out along the roads of the Port premises and a green belt shall be developed.	<p>Complied.</p> <p>APSEZ has developed its own "Dept. of Horticulture" which is taking measures/ steps for terrestrial greening as well as mangrove plantation.</p> <p>The species such as <i>Ficus Infectoria</i>, <i>Ficus religiosa</i>, <i>Terminalia arjuna</i>, <i>Cocos nucifera</i>, <i>Washingtonia fillifera</i>, <i>Casurina spp.</i>, <i>Azadirachta Indica</i>, <i>Eucalyptus spp.</i>, <i>Jatropha curacus</i>, <i>Ficus bengalensis</i>, <i>Subabool spp.</i>, <i>Casia fistula</i>, <i>Date Palm</i> and <i>Delonix regia</i> are grown within APSEZ area.</p> <p>Within the port areas approx. 189.41 hectare of greenbelt having 461349 trees with the density of 2435 trees per hectare is developed till date within port premises. So, far APSEZ has developed 457.99 ha. area as greenbelt with plantation of more than 9.06 Lacs saplings within the APSEZ area.</p> <p>Please refer Annexure - 4 for further details regarding greenbelt development, mangrove afforestation and updated green belt development plan. Budget for Horticulture Department for the FY 2024-25 is to the tune of INR 831 lakh. Out of which, Approx. INR 570 lakh has spent during the year FY 2024-25.</p>
xiv	There shall be no withdrawal of Ground	Complied.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
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	Water in CRZ area for this Project.	APSEZ does not draw any ground water for the water requirement. Present source of water for various project activities is desalination plant of APSEZ and/or water through Gujarat Water Infrastructure Limited (GWIL). Average water consumption for entire APSEZ area is 5.40 MLD during compliance period i.e. Oct'24 to Mar'25.
xv	Specific arrangements for rain water harvesting shall be made in the Project design and the rain water so harvested shall be optimally utilized. Details in this regard shall be furnished to this Ministry's Regional Office at Bhopal within 3 months.	<p>Complied</p> <p>Groundwater recharge cannot be done at the project site since the entire project is in the intertidal / sub tidal areas. Rainwater within the project area is managed through storm water drainage.</p> <p>We have installed Rainwater recharge bore well (4 Nos.) within our township to recharge ground water. Details of the same were submitted along with half yearly EC compliance report for the period Apr'19 to Sep'19. During FY 2024-25 Approx. 7.40 ML of rainwater has been recharged to increase the ground water table.</p> <p>We have also connected roof top rainwater duct of operational building (Tug berth building within MPT) with u/g water tank for utilization of collected rainwater for gardening / horticulture purpose. Details of the same were submitted along with EC Compliance report for the period Oct'18 to Mar'19.</p> <p>However, Adani Foundation – CSR arm of Adani Group has carried out rainwater harvesting activities in the nearby villages for benefit of the locals.</p> <p>Water conservation Projects i.e., Roof Top Rainwater Harvesting, Desilting of Check dams, Bore Well Recharge and Pond deepening were taken up in past years, review and monitoring of all water harvesting structures had been taken up.</p> <p>To make connections between human actions and the level of biological diversity found within a habitat and/or ecosystem, this year Adani Foundation launch project "Sanrakshan" in coordination with GUIDE and Sahjeevan.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
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		<p>Since 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain in current year 1.11 mtr ground water table increased as per increased in coastal belt of Mundra as per Government Figures.</p> <p>Our water conservation work is as below.</p> <p>The Water Conservation Projects completed during the current Compliance period:</p> <ul style="list-style-type: none"> ➤ WATER CONSERVATION "SWAJAL PROJECT" ENHANCING RURAL WATER RESOURCES <ul style="list-style-type: none"> ❖ Adani Foundation has undertaken significant water conservation initiatives to address water scarcity and improve water availability in rural areas. ❖ Through the creation of 737 various water structures, the project has increased water capacity by 5,400,735 cubic meters (CUM) and benefited 64,515 people. ➤ Check Dam New/Renovation: <ul style="list-style-type: none"> ○ Structures: 29 ○ Water Capacity Increase: 1,072,332 CUM ○ Beneficiaries: 30,870 ○ Impact: Enhances water storage and irrigation. ➤ Rainwater Harvesting Structures (RRWHS): <ul style="list-style-type: none"> ○ Structures: 330 ○ Water Capacity Increase: 3,300,000 CUM ○ Beneficiaries: 1,650 ○ Impact: Maximizes rainwater capture and usage. Rs. 10950 yearly saved/house ➤ Pond Deepening: <ul style="list-style-type: none"> ○ Structures: 135 ○ Water Capacity Increase: 1,028,403 CUM ○ Beneficiaries: 18,350 ○ Impact: Improves water retention and availability. ➤ Construction of Percolation Wells: <ul style="list-style-type: none"> ○ Structures: 26 ○ Ground Water Recharge: Significant ○ Beneficiaries: 3,000 ○ Impact: Boosts groundwater levels and availability. ➤ Bore/Well Recharge:

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		<ul style="list-style-type: none"> ○ Structures: 209 ○ Ground Water Recharge: Significant ○ Beneficiaries: 1,045 ○ Impact: Enhances groundwater recharge and sustainability. ➤ Construction of New Wells: <ul style="list-style-type: none"> ○ Structures: 8 ○ Purpose: Drinking Water ○ Beneficiaries: 9,600 ○ Impact: Provides reliable drinking water sources ➤ WATER MANAGEMENT PROJECTS: <ul style="list-style-type: none"> ○ Percolation Well, Mota Bhadiya: 80 farmers benefited. ○ Percolation Bore Cleaning, GPVC Villages: 3150 farmers benefited. ○ Pond Deepening & Road Cleaning, GPVC Villages: 6KM cleaned. ➤ DRIP IRRIGATION - ENHANCING LIVELIHOODS IN KUTCH: <ul style="list-style-type: none"> ○ The Drip Irrigation Initiative by Adani Foundation promotes efficient water use in farming by providing financial support to farmers for installing drip systems. It helps conserve water, improve crop yield, and encourage sustainable agriculture in Kutch. ● In 2024-25, Adani Foundation supported sustainable water management in Kutch by Promoting drip irrigation across 490 villages in Abdasa, Lakhpat, Mandvi, Mundra, and Nakhtrana talukas. Covering a total area of 2,074.53 hectares, the initiative benefited 1,041 farmers. This effort enhanced irrigation efficiency, boosted agricultural productivity, and contributed to water conservation and eco-friendly farming practices in the region. <p>Earlier Completed Activities/Projects:</p> <ul style="list-style-type: none"> ● Large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) and Augmentation of 3 check dams. ● Ground recharge activities (pond deepening work for 61 ponds) individually and 26 ponds under Sujlam Suflam Jal Abhiyan were

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		<p>built leading to a significant increase in water table and higher returns to the farmers.</p> <ul style="list-style-type: none"> • New Pond Deepening Under Ajadi ka Amrut Mahotsav done in Goyarsama village Approx Deepening Capacity is 12000 Cum. • Roof Top Rainwater Harvesting 145 Nos. (40 Nos. current FY 2022-23) which has 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family. • Recharge Borewell 208 Nos (19 Nos. current FY 2022-23) which is best ever option to direct recharge the soil. • Drip Irrigation approx. 1505 Farmers benefitted in coordination with Gujrat Green Revolution Company till date. • Bund construction on way of Nagmati River could save more than 575 MCFT water quantity which recharged in ground due to which borewell depth decreased by 50-100 Ft in Zarpara, Bhujpur and Navinal Vadi Vistar. • Pond Pipeline work at Prasla Vistar Zarpara which increase recharge capacity more than 25% in 100 hector area. • Check dam gate valve construction at Bhujpur which controlled more than 350 MCFT water to go into sea and get recharged current year. <p>With the objective of to preserve the rainwater to reduce the impact of salinity and recharge the ground water (the main source of water) to facilitate the Agricultural activities as well as for drinking water.</p> <p>Please refer Annexure - 2 for full details of CSR activities carried out by Adani Foundation in the Kutch region. "The budget allocated for CSR activities for the financial year 2024-25 was INR 1,564.72 lakh and fully spent during FY 2024-25.</p>
xvi	Land Reclamation shall be carried out only to the extent that it is essential for this Project.	<p>Complied.</p> <p>Out of approved reclamation area of 1138 ha for west port, 695 ha area is reclaimed and out of approved reclamation area of 700 ha for south port, 665 ha area is reclaimed. Details of the same were submitted along with half yearly compliance report for the period of Apr'17 to Sep'17 and there is no further change.</p>
xvii	No Product other than those permissible in the Coastal Regulation Zone Notification, 1991 shall be	<p>Complied.</p> <p>No products other than those permissible in the CRZ Notification 1991 are stored in the CRZ area.</p>

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Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
	stored in the Coastal Regulation Zone area.	

General Conditions

i	<p>Construction of Proposed structures, if any in the Coastal Regulation Zone area shall be undertaken meticulously confirming to the existing Central/local rules and regulations including Coastal Regulation Zone Notification 1991 and its amendments. All the construction designs/ drawings relating to the proposed construction activities must have approvals of the concerned State Government Departments/ Agencies.</p>	<p>Complied.</p> <p>All construction activities are carried out confirming to the existing rules and regulation and as per the CRZ notification.</p> <p>Further, the requisite permissions from Gujarat Maritime Board (GMB), for carrying out construction activities are taken from time to time. Details of the same are mentioned below:</p> <ul style="list-style-type: none">• Permission for starting construction work for South port vide letter no GMB/N/PVT/711/870 dated 26.02.2009• Permission for starting construction work for West port vide letter no GMB/N/PVT/711/871 dated 26.02.2009 <p>The copies of these letters were submitted along with half yearly compliance report for the period of Apr'16 to Sep'16.</p> <p>The project has been developed as per Consent to Establish (CtE) and Consent to Operate (CtO) granted by SPCB. The present in-force CtE & CtO are mentioned below.</p> <table><tr><th>S. No.</th><th>Permission</th><th>Project</th><th>Ref. No. / Order No.</th><th>Valid till</th></tr><tr><td>1</td><td>CtE – Amendment</td><td>LPG Terminal</td><td>PC/CCA-KUTCH-1437/PCB ID-53331/473995</td><td>03.10.25</td></tr><tr><td>2</td><td>CtE – Amendment</td><td>LPG Terminal</td><td>PC/CCA-KUTCH-1437/GPCB ID-53331/587015</td><td>01.03.26</td></tr><tr><td>3</td><td>CtE – Amendment</td><td>WFDP</td><td>17739 / 15618</td><td>18.05.27</td></tr><tr><td>4</td><td>CC&A - Renewal</td><td>West Port – WFDP</td><td>AWH-113458</td><td>01.02.27</td></tr><tr><td>5</td><td>CC&A – Renewal</td><td>Mundra Port Terminal</td><td>AWH-117045</td><td>20.11.26</td></tr><tr><td>6</td><td>CC&A - Correction</td><td>Mundra Port Terminal</td><td>PC/CCA-KUTCH-39(8)/GPCB ID 17739/592900</td><td>20.11.26</td></tr></table>	S. No.	Permission	Project	Ref. No. / Order No.	Valid till	1	CtE – Amendment	LPG Terminal	PC/CCA-KUTCH-1437/PCB ID-53331/473995	03.10.25	2	CtE – Amendment	LPG Terminal	PC/CCA-KUTCH-1437/GPCB ID-53331/587015	01.03.26	3	CtE – Amendment	WFDP	17739 / 15618	18.05.27	4	CC&A - Renewal	West Port – WFDP	AWH-113458	01.02.27	5	CC&A – Renewal	Mundra Port Terminal	AWH-117045	20.11.26	6	CC&A - Correction	Mundra Port Terminal	PC/CCA-KUTCH-39(8)/GPCB ID 17739/592900	20.11.26
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Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025				
		7	CC&A - Renewal	LPG Terminal	PC/CCA-KUTCH-1437/PCB ID-53331/816485	27.06.2029
		8	CC&A – Amendment	Mundra Port Terminal	WH-141598	20.11.2026
		9	CC&A – Amendment	West Port – WFDP	WH-139724	01.02.2027
		<p>The permissions mentioned above (Sr. 1 to 6) was submitted along with earlier compliance report submission.</p> <p>The permission copies (Sr. No. 7) was submitted during the EC Compliance report submission for the period Apr'24 to Sep'24.</p> <p>The permission copies (Sr. No. 8 & 9) attached as Annexure – 8.</p>				
ii	Adequate provision for infrastructure facilities such as water supply, fuel, sanitation etc. shall be ensured for construction workers during the construction phase of the project so as to avoid felling of trees/mangroves and pollution of water and the surroundings.	<p>Not applicable</p> <p>Most of the construction labours reside in the nearby villages where all basic facilities are easily available. There are no housing requirements for labours inside the project area.</p>				
iii	The project authorities must make necessary arrangements for disposal of solid wastes and for the treatment of effluents by providing a proper wastewater treatment plant outside the CRZ area. The quality of treated effluents, solid waste, and noise level etc. must conform to the standards laid down by the competent authorities including the Central/ State Pollution Control	<p>Complied.</p> <p>Monitoring of environmental attributes viz. Air, Water, Noise, Soil, etc. is being carried out on regular basis by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi and Approx. INR 17.27 Lakh is spent for all environmental monitoring activities during the FY 2024-25 for overall APSEZ, Mundra.</p> <p>Please refer Specific Conditions no. x, xi & xii for further details regarding environmental monitoring.</p> <p>Liquid Effluent & Sewage – It is being treated at decentralized treatment plants and treated water confirming the stipulated norms is being utilized for horticulture purposes within APSEZ. Please refer specific condition no xii</p>				

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
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	<p>Board and the Union Ministry of Environment and Forests under the Environment (Protection) Act, 1986, whichever are more stringent.</p>	<p>above for details regarding the same.</p> <p>Waste Management – APSEZ has adopted 5R concept for environmentally sound management of different types of solid & liquid wastes. Please refer below details about management of each type of waste.</p> <p>Non-Hazardous Solid Waste: A well-established system for segregation of dry & wet waste is in place. All wet waste (Organic waste) is being segregated & utilized for compost manufacturing and/or biogas generation for cooking purpose. The compost is further used by in house horticulture team for greenbelt development. Whereas dry recyclable waste is being sorted in various categories. Presently manual sorting is being done for sorting of different types of solid waste. Segregated recyclable materials such as Paper, Plastic, Cardboard, PET Bottles, and Glasses, etc. are then sent to respective recycling units, whereas remaining non-recyclable waste is bailed and sent to cement plant (M/s. Ambuja Cement Ltd., Kodinar) for Co-processing as RDF (Refused Derived Fuel).</p> <p>APSEZ, Mundra is certified for Zero Waste to Landfill management system (Certificate No.: CII/ZWL/2025/001) by Confederation of Indian Industry (CII). (valid up to 22.12.2027). The copy of certificate is attached as Annexure – 9.</p> <p>Hazardous & Other Waste:</p> <ul style="list-style-type: none"> • Bio medical waste generated from OHCs and Adani Hospital is being disposed at Common Bio Medical Waste Treatment Facility namely M/s. Distromed Kutch Services Pvt. Ltd., Bhuj. • E – Waste is being sold to GPCB registered recyclers namely M/s. Galaxy Recycling, Rajkot. • Used Batteries are being sold to GPCB registered recyclers namely M/s. Sabnam Enterprise, Kutch and M/s. S K Metal Industries, Rajkot. • Solid Hazardous Waste is being disposed through co-processing / incineration through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau, Safe Enviro Private Limited, Bharuch and/or cement industries of

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		<p>Ambuja Cement Ltd., Kodinar. Used/Waste Oil is being sold to GPCB authorized recyclers / re-processors namely M/s. Western India Petro Chem Ind - Bhavnagar, K Kasha Enterprises, Ahmedabad, Shana Oil Process, Ahmedabad & Jawrawala Petroleum, Ahmedaba. It is also being reused within organization for lubrication purpose.</p> <ul style="list-style-type: none"> Discarded drums / barrels are being sold to authorized decontamination facility i.e. M/s. Jawrawala Petroleum, Ahmedabad. It is also being reused within organization for filling hazardous waste. Solid hazardous waste i.e. Tank bottom sludge was being sold to authorized recycler namely M/s. Mundra Oil Pvt. Ltd., Mundra for recycling. Expired paint materials was being disposed by incineration through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau. Downgrade chemicals generated from cleaning of storage tanks / pipelines were being sold to authorized solvent recovery facilities namely M/s. Acquire Chemicals, Ankleshwar Slop Oil received from vessels is treated to separate water and oil particles in Oil Water Separator system. Separated oil from the same is being sold to authorized recycler / reprocessor namely M/s. Western India Petro Chem Ind - Bhavnagar, Aviation Corporation - Kutch & Aroma Petrochem – Bhavnagar and water is sent to ETP for further treatment. However, during the compliance period i.e. Oct'24 to Mar'25 there was no generation and disposal of used battery waste, Sludge & Filters contaminated with oil, Tank Bottom sludge, Asbestoses Waste, Glass wool Waste (Thermal Insulation Material), Downgrade Chemicals, Waste Oil and Expired Paint Material. Horticulture waste is collected from various green belt areas and it is using for making of manure and manure is being utilizing in horticulture purpose within plant premises. <p>Details of permissions / agreements of hazardous waste authorized vendors were submitted along with pervious half yearly EC Compliance Reports. And there is no further</p>

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		change. The following table summarizes the waste management practice (from Oct'24 to Mar'25) for different types of wastes at APSEZ:																																																																						
		<table><tr><th>Type of Waste</th><th>Waste Description</th><th>Quantity (MT)</th><th colspan="2">Disposal Method</th></tr><tr><td rowspan="5">Hazardous Waste</td><td>ETP/CETP Sludge</td><td>22.10</td><td colspan="2">Co-processing at cement industries</td></tr><tr><td>Oily Cotton Waste</td><td>41.43</td><td colspan="2">Co-processing at cement industries</td></tr><tr><td>Pig Waste</td><td>9.95</td><td colspan="2">Co-processing at cement industries</td></tr><tr><td>Used / Spent / Waste Oil</td><td>188.34</td><td colspan="2">Sell to registered recycler</td></tr><tr><td>Total</td><td>261.82</td><td colspan="2"></td></tr><tr><td rowspan="10">Non-Hazardous Waste</td><td>Glass Waste</td><td>13.64</td><td colspan="2">After recovery sent for recycling / Reuse within premises</td></tr><tr><td>Horticulture Waste</td><td>325.47</td><td colspan="2">Used for making of manure and utilize for horticulture purpose</td></tr><tr><td>Metal Scrap</td><td>1095.45</td><td colspan="2">After recovery sent for recycling / Reuse within premises</td></tr><tr><td>Organic / Food Waste</td><td>563.17</td><td colspan="2">Converted to Manure for Horticulture use / Biogas for cooking purpose</td></tr><tr><td>Paper Waste</td><td>19.91</td><td colspan="2">After recovery sent for recycling / Reuse within premises</td></tr><tr><td>Plastic Waste</td><td>86.46</td><td colspan="2">After recovery sent for recycling / Reuse within premises</td></tr><tr><td>RDF (Non Recyclable Waste)</td><td>191.42</td><td colspan="2">Co-processing at cement industries</td></tr><tr><td>Rubber Waste</td><td>339.14</td><td colspan="2">After recovery sent for recycling / Reuse within premises</td></tr><tr><td>Wooden waste</td><td>97.44</td><td colspan="2">After recovery sent for recycling / Reuse within premises</td></tr><tr><td>Total</td><td>2732.10</td><td colspan="2"></td></tr></table>				Type of Waste	Waste Description	Quantity (MT)	Disposal Method		Hazardous Waste	ETP/CETP Sludge	22.10	Co-processing at cement industries		Oily Cotton Waste	41.43	Co-processing at cement industries		Pig Waste	9.95	Co-processing at cement industries		Used / Spent / Waste Oil	188.34	Sell to registered recycler		Total	261.82			Non-Hazardous Waste	Glass Waste	13.64	After recovery sent for recycling / Reuse within premises		Horticulture Waste	325.47	Used for making of manure and utilize for horticulture purpose		Metal Scrap	1095.45	After recovery sent for recycling / Reuse within premises		Organic / Food Waste	563.17	Converted to Manure for Horticulture use / Biogas for cooking purpose		Paper Waste	19.91	After recovery sent for recycling / Reuse within premises		Plastic Waste	86.46	After recovery sent for recycling / Reuse within premises		RDF (Non Recyclable Waste)	191.42	Co-processing at cement industries		Rubber Waste	339.14	After recovery sent for recycling / Reuse within premises		Wooden waste	97.44	After recovery sent for recycling / Reuse within premises		Total	2732.10		
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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025			
		Other Waste			
			Bio Medical Waste	3.87	To approved CBWTF Site and registered recyclers
			E-Waste	13.01	Sell to registered recycler
			Total	16.88	
		Grand Total		3010.79	
iv	The Proponent shall obtain the requisite consents for discharge of effluents and emissions under the Water (Prevention and Control of pollution) Act, 1974 and the Air (Prevention and Control of pollution) Act, 1981 from the Gujarat Pollution Control Board before commissioning of the Project and copy of each of these shall be sent to this Ministry.	<p>Complied.</p> <p>All construction activities were carried out confirming to the existing rules and regulation and as per the CRZ notification.</p> <p>Please refer General condition no. i for permission granted from state pollution control board regarding the same.</p>			
v	The sand dunes, corals, and mangroves, if any, on the site shall not be disturbed in any way.	<p>Complied</p> <p>There are no sand dunes and corals at the project site. 1254 ha area identified as potential mangrove conservation is being conserved and there is no disturbance to the mangroves in this area.</p> <p>Please refer specific condition no i above for details regarding the same.</p>			
vi	A copy of the clearance letter will be marked to the concerned Panchayat / Local NGO, if any from whom any suggestions /representations has been received while processing the proposal.	<p>Complied.</p> <p>Copy of the clearance letter was marked to the concerned panchayats. A typical proof of the same submitted to Mundra village Panchayat on 21.03.2009 was submitted as a part of compliance report submission for the period Apr'16 to Sep'16.</p>			

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025																					
vii	<p>The funds earmarked for environment protection measures shall be maintained in a separate account and there shall be no diversion of these funds for any other purpose. A year wise expenditure on environmental safeguards shall be reported to this Ministry's Regional Office at Bhopal and the State Pollution Control Board.</p>	<p>Complied.</p> <p>Separate budget for the Environment protection measures is earmarked every year. All environment and horticulture activities are considered at corporate level and budget allocation is done accordingly. All the expenses are recorded in advanced accounting system of the organization.</p> <p>Budget for environmental management measures (including horticulture) for the FY 2024-25 is to the tune of INR 1340.21 lakh. Out of which, Approx. INR 1029.51 lakh are spent during the year FY 2024-25.</p> <p>Detailed breakup of the expenditures for the past 3 years is attached as Annexure - 10.</p> <p>Compliance report of EC conditions is uploaded regularly. A soft copy of last compliance report including results of monitoring data for the period of Apr'24 to Sep'24 was submitted through e-mail to Integrated Regional Office (IRO), MoEF&CC @ Gandhinagar, Zonal Office of CPCB @ Baroda, GPCB @ Gandhinagar & Gandhidham and Dept. of Forests & Env., Gandhinagar vide our letter dated 28.11.2024. The copy of the same is also available on our web site https://www.adaniports.com/ports-downloads as well as also uploaded on MoEF&CC Parivesh Portal. Details regarding the past six compliance report submissions are mentioned below:</p> <table border="1"> <thead> <tr> <th>Sr. no.</th><th>Compliance period</th><th>Date of submission</th></tr> </thead> <tbody> <tr> <td>1.</td><td>Oct'21 to Mar'22</td><td>30.05.2022</td></tr> <tr> <td>2.</td><td>Apr'22 to Sep'22</td><td>30.11.2022</td></tr> <tr> <td>3.</td><td>Oct'22 to Mar'23</td><td>30.05.2023</td></tr> <tr> <td>4.</td><td>Apr'23 to Sep'23</td><td>29.11.2023</td></tr> <tr> <td>5.</td><td>Oct'23 to Mar'24</td><td>29.05.2024</td></tr> <tr> <td>6.</td><td>Apr'24 to Sep'24</td><td>30.11.2024</td></tr> </tbody> </table>	Sr. no.	Compliance period	Date of submission	1.	Oct'21 to Mar'22	30.05.2022	2.	Apr'22 to Sep'22	30.11.2022	3.	Oct'22 to Mar'23	30.05.2023	4.	Apr'23 to Sep'23	29.11.2023	5.	Oct'23 to Mar'24	29.05.2024	6.	Apr'24 to Sep'24	30.11.2024
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viii	<p>Full support shall be extended to the Officers of this Ministry's Regional Office at Bhopal and the Officers of the Central and State Pollution Control Boards by the Project</p>	<p>Complied</p> <p>APSEZ is always extending full support to the regulatory authorities during their visit to the project site. All necessary documents are submitted as per the request of the visiting authorities.</p>																					

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
	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.	<p>Last visit of the Regional Office, GPCB was done on 25.11.2024 for West Port APSEZL has submitted the reply to the site visit report vide letter dated 04.12.2024. Acknowledgement copy of the same is attached as Annexure – 11.</p> <p>Last visit of Regional Office, GPCB was done on 31.01.2025 for Main port and APSEZL has submitted the reply report vide letter dated 04.02.2025. Acknowledgement copy of the same is attached as Annexure – 12.</p> <p>Inline to the compliance certification process of Environment Clearance condition of Waterfront Development Plan, RO, MoEF&CC Bhopal had visited the site on 27th & 28th January 2020 for compliance verification. APSEZ provided all requisite information and documents required by the Regional Officer MoEF&CC). During the said compliance verification visit and as per the compliance certification received, there was no non-compliance observed.</p> <p>Inline to the compliance certification process of Consent to Operates of existing facilities developed under Waterfront Development Plan, RO, GPCB, Gandhidham had visited the site on 17th March, 2021 for compliance verification. APSEZ provided all requisite information and documents required by the Regional Officer GPCB). During the said compliance verification visit and as per the compliance certification received, there was no non-compliance observed.</p> <p>Inline to the compliance of MoEF&CC Order dated 18th September, 2015, Joint Review Committee (JRC) comprising officials from various competent authorities visited the APSEZ, Mundra from 1st to 3rd September, 2021 to monitor the progress of implementation of the conditions stipulated in the order. APSEZ provided all requisite information and documents required by the JRC. As per the report received by MoEF&CC vide dated 01.12.2021, there was no non-compliance observed.</p> <p>Inline to the compliance certification process for getting Environment Clearance of Waterfront Development Plan, IRO-MoEF&CC Gandhinagar has lastly visited the site on 18th to</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
		20 th December, 2023 for compliance verification. APSEZ provided all requisite information and documents required by the Regional Officer MoEF&CC). During the said compliance verification visit and as per the compliance certification received, there was no non-compliance observed. Copy of the same was submitted during the compliance report submission for the period Oct'23 to Mar'24.
ix	In case of deviation or alteration in the Project including the implementing agency, a fresh reference shall be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection.	<p>Complied.</p> <p>LNG terminal was initially approved under the Waterfront Development Project. However, the same has been developed by GSPC LNG Ltd. for which, separate EC and CRZ clearance has already been obtained from MoEF&CC by them. Copy of the same was submitted along with compliance report submission for the period Oct'16 to Mar'17.</p> <p>LPG terminal was initially approved under the Waterfront Development Project of Adani Ports and SEZ Limited and the same has been developed by M/s. Mundra LPG Terminal Pvt. Ltd., which is 100% subsidiary of APSEZ. Details of the same were submitted along with half yearly compliance report for the period of Oct'17 to Mar'18.</p>
x	The Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Point noted and agreed.
xi	This Ministry or any other competent authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection which shall be complied with.	<p>Complied</p> <p>As part of the directions given by MoEF&CC vide order dated 18th Sep, 2015, following studies were proposed.</p> <ul style="list-style-type: none"> Bathymetry & Topography study, preparation of plan for protection of creeks/ mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary. A Regional Impact Assessment study to identify impacts of all the existing as well as proposed project activities in Mundra region.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
		Please refer Annexure B for further details regarding the mentioned studies.
xii	<p>The project proponent shall advertise at least in two local newspapers widely circulated in the region around the Project, one of which shall be in the vernacular language of the locality concerned informing that the Project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen at the website of the Ministry of Environment & Forest at http://www.envfor.nic.in. The advertisement shall be made within 7 days from the date of issue of the clearance letter and a copy of the same shall be forwarded to the Regional Office of this Ministry at Bhopal.</p>	<p>Complied.</p> <p>The original copy of the EC and CRZ clearance was obtained on 10.03.2009 and advertisement (containing informing that the EC and CRZ clearance is accorded to the proposed project and a copy of clearance letter is available with the SPCB and may also be seen at the website of MoEF&CC) was given in The Indian Express newspaper dated 18.03.2009. Copy of the same was submitted along with compliance report submission for the period Apr'16 to Sep'16.</p>
xiii	<p>The Project proponent shall inform the Regional Office at Bhopal as well as the Ministry the date of financial closure and final approval of the Project by the concerned authorities and the date of start of land development work.</p>	<p>Complied.</p> <p>APSEZ had informed the Regional Office of MoEF&CC at Bhopal as well as MoEF&CC, New Delhi regarding the date of financial closure and the date of start of land development work vide letter sent in August, 2009.</p>
xiv	<p>Any appeal against this environmental clearance shall lie with the National Environment Appellate</p>	<p>Point noted and agreed.</p> <p>This EC and CRZ clearance was challenged in National Environment Appellate Authority. In this matter, Order has</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions as per clearance letter	Compliance Status as on 31.03.2025
	Authority, if preferred, within period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.	also been passed in favour of APSEZ. Copy of the same was submitted along with compliance report submission for the period Oct'16 to Mar'17.
4.	The above mentioned stipulations will be enforced among others under the Water (Prevention & Control of Pollution) Act 1974, the Air (Prevention & Control of Pollution) Act 1981, the Environment (Protection) Act 1986, the Hazardous chemicals (Manufacture, Storage & 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. The project proponent shall ensure that the proposal complies with the provisions of the approved Coastal Zone Management Plan of Gujarat state and the supreme court's order dated 18 April, 1996 in the writ petition No. 664 of 1993 to the extent the same are applicable to this proposal.	<p>Point noted and Agreed</p> <p>APSEZ is being complied with all the conditions said rules and regulations mentioned in EC point no. 4.</p> <p>APSEZ has a valid insurance policy under PLI act 1991 as below.</p> <ol style="list-style-type: none"> 1. APSEZ – Liquid Terminal: Valid till 18.09.2025 2. Mundra LPG Terminal Pvt. Ltd.: Valid till 24.06.2025 <p>The copy of updated/renewed PLI policy of APSEZ – Liquid Terminal & Mundra LPG Terminal Pvt. Ltd is attached as Annexure - 13.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Compliance Status of CRZ Recommendation given by GCZMA for the Waterfront Development Project

ANNEXURE - A

CRZ Recommendation Compliance Report of WFDP

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Specific Conditions	Compliance Status as on 31.03.2025
Specific Conditions		
1	The provisions of the CRZ notification of 1991 and subsequent amendments issued from time to time shall be strictly adhered to by the MPSEZL. No activity in contradiction to the provisions of the CRZ Notification shall be carried out by the MPSEZL.	<p>Complied.</p> <p>All construction and operation activities are being carried out in line with the CRZ recommendation and permissions granted.</p>
2	All necessary permissions from different Government Departments/ agencies shall be obtained by the MPSEZL before commencing any activities.	<p>Complied.</p> <p>Necessary permissions from competent authority have been obtained before commencing any the activities.</p> <p>Please refer condition no. i & iv of General Conditions of the EC & CRZ Clearance above.</p>
3	All major creeks shall be protected and no reclamation shall be done in these creeks and entire development along the creek shall be done after carrying out detailed engineering with an objective of environmental protection including protection of all major creeks to ensure adequate free flow of water and drainage of rain water during rainy seasons.	<p>Complied.</p> <p>All major creeks within the APSEZ area are protected.</p> <p>Please refer specific condition no iii of the EC and CRZ clearance for details regarding this point.</p>
4	The project proponent shall conserve the 1254 ha. of area as committed and proposed in their master plan and shall carry out plantation of various mangrove species in the said area.	<p>Complied.</p> <p>Mangrove conservation area of 1254 Ha is conserved as proposed in the master plan.</p> <p>Please refer specific condition no i of the EC and CRZ clearance for details regarding this point.</p>
5	Massive mangroves plantation activity in at least 300 ha. area shall be carried out within a time frame of 5 years as committed by the project proponent. This would be in addition to the earlier commitment	<p>Complied.</p> <p>Mangrove plantation is already completed during the year 2012-13. Please refer specific condition no. vii of the EC and CRZ clearance for further details.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Specific Conditions	Compliance Status as on 31.03.2025
	for 1200 ha. of mangroves plantation.	
6	All major creeks shall be protected and no reclamation shall be done in these creeks and entire development along the creek shall be done after carrying out detailed engineering with an objective of environmental protection including protection of all major creeks to ensure adequate free flow of water and drainage of rain water during rainy seasons.	<p>Complied.</p> <p>No effluent or sewage is discharged in to the CRZ area.</p> <p>Please refer specific condition no xii of the EC and CRZ clearance for details regarding this point.</p>
7	All the recommendations and suggestions given by NIO in their Environment Impact Assessment report for conservation / protection and betterment of environment shall be implemented strictly by MPSEZL.	<p>Complied.</p> <p>Compliance report of environmental management plan and mitigation measures proposed as part of the EIA report is attached as Annexure - 14.</p>
8	The construction and operational activities as well as dredging and reclamation activities shall be carried out in such a way that there is no negative impact on mangroves and other coastal /marine habitat except the proposed approx. 63 ha of area for which the compensation (300 ha.) is proposed.	<p>Complied.</p> <p>All construction and operation activities as well as dredging and reclamation activities are being carried out as per the approvals.</p> <p>1254 ha area identified as mangrove conservation area is being conserved by APSEZ.</p> <p>Please refer specific condition no i of the EC and CRZ clearance for details regarding this point.</p>
9	The construction activities and dredging shall be carried out under the supervision/monitoring of the NIO or any such institute of repute.	<p>Complied.</p> <p>Construction activities are carried out as per EIA study carried out by NIO with all mitigative measures as suggested. Requisite permissions are taken from competent authorities such as GMB and GPCB. Site visits are being carried out by govt. officers from time to time to ensure compliance of the conditions stipulated in respective permissions. No capital dredging activities are carried out during the current compliance period.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Specific Conditions	Compliance Status as on 31.03.2025
		Please refer condition no. i, iv & viii of General Conditions of the EC & CRZ Clearance above.
10	The dredge material generated during capital dredging shall be used only for reclamation and that to be generated during maintenance dredging shall be disposed of at the place identified by NIO/CWPRS/WAPCOS through appropriate modeling and it shall be ensured that it does not create any negative impacts.	<p>Complied.</p> <p>Entire quantity of dredged material is used for reclamation activities only; no disposal is carried out in the sea. No capital dredging activities are carried out during the current compliance period.</p>
11	Necessary measures including the shore protection activities shall be undertaken to ensure that there are no erosion in surrounding area due to the proposed activities.	<p>Complied.</p> <p>All dredging and reclamation activities are carried out as per EC and CRZ Clearance.</p> <p>For further details regarding the shoreline change study for the Mundra region, please refer specific condition no v of the EC and CRZ clearance.</p>
12	The alignment of the jetties/berths and other structures shall be done after conducting the detailed modeling to ensure that there are no erosion and accretion in the region due to proposed activities.	<p>Complied.</p> <p>Detailed hydrodynamic modeling was carried out by NIO during preparation of the EIA report. All construction activities are being carried out as per the outcome/recommendations of the modeling report.</p> <p>However, a detailed shoreline change assessment study was also carried out. Please refer specific condition no v of the EC and CRZ clearance for further details.</p>
13	The MPSEZL shall contribute financially for any common study or project that may be proposed by this department for environment management / conservation / improvement for the Gulf of Kutchh.	<p>Complied.</p> <p>There are two studies prescribed by MoEF&CC. For further details regarding the same, please refer general condition no xi of the EC and CRZ clearance.</p>
14	The construction debris and /or any other type of waste shall not be disposed of into the sea, creek or in the CRZ areas. The construction is	<p>Complied.</p> <p>All construction and operation activities as well as dredging and reclamation activities are being carried</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Specific Conditions	Compliance Status as on 31.03.2025
	over and shall be disposed off in low lying areas in consultation with NIO, NEERI or any such institute of repute.	<p>out as per the EIA report prepared by NIO.</p> <p>The construction debris, if any, is being used for area development outside CRZ area. For details about management of other types of wastes, please refer general condition no. iii of the EC and CRZ clearance.</p>
15	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 labors.	<p>Compiled.</p> <p>Please refer general condition no ii of the EC and CRZ clearance for further details.</p>
16	The MPSEZL shall 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.	<p>Compiled.</p> <p>Disaster Management Plan is updated regularly and the updated DMP was submitted as a part of compliance report for the period Apr'16 to Sep'16.</p> <p>On Site Emergency Response Plan and Crisis Management Plan is in place and implemented. The updated (Aug'23) Onsite emergency plan was submitted during the compliance period Apr'23 to Sep'23.</p> <p>Oil spill contingency plan is in place to handle Tier 1 level oil spills considering different accident scenarios, and the vulnerable areas are identified, and mitigation plan is prepared.</p> <p>Oil spill contingency response plan is being updated on regular basis and the same was last updated on 30.07.2022 is in place and implemented. The updated Oil spill contingency response plan was submitted along with EC Compliance report for the period Apr'22 to Sep'22.</p> <p>For responding to oil spill, the Indian Coast Guard has developed the National Oil Spill Disaster Contingency Plan NOSDCP which has the approval</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Specific Conditions	Compliance Status as on 31.03.2025
		<p>of the Committee of Secretaries and has been in operation since 1996. Oil Spill Contingency Response Plan (OSCRP) prepared by APSEZ is in accordance with the NOSDCP.</p> <p>Latest Regional Level Pollution Response exercise "SWACHCHH SAMUDRA-NW 2024" was carried out by Indian Coast Guard on 14th - 15th OCT 2024 at Off Vadinar, Gujarat. All participants from various Oil Handling Agencies and Stakeholders (M/S Adani Port & SEZ, Mundra, Indian Oil Corporation LTD, Jamnagar, M/S Nayara Energy LTD VOTL, Vadinar, M/S Reliance Industries LTD, Sikka Jamnagar, M/S Essar Bulk Terminal, Salaya) were participated in this exercise. Details of the same is attached Annexure - 15.</p> <p>Mock drills are conducted regularly by APSEZ. Last Oil Spill Mock drill was conducted on 06.02.2025. The updated Oil Spill Mock Drill report is enclosed as Annexure - 16.</p>
17	The MPSEZL shall participate and contribute for the Vessel Traffic Management System to be developed for the Gulf of Kutchh being developed.	<p>Complied.</p> <p>A VTMS service for Gulf of Kutch is operated by Directorate General of Lighthouses and Lightships (DGLL), Govt. of India.</p> <p>APSEZ is practicing well defined traffic control procedure. Marine Control of APSEZ provides traffic update to vessels in Mundra Port Limit on VHF Channel- 77. Arrival and departure information in Gulf of Kutch is provided to VTMS information cell through an agent or directly by sending an e-mail to vtsmanagergulfofkutch@yahoo.com and vtsgok@yahoo.com.</p> <p>Mundra port has subscribed and taking VTMS feed from Kandla from link www.vts.gov.in.</p>
18	The MPSEZL shall bear the cost of external agency that may be appointed by this Department for supervision/monitoring of proposed	<p>Complied.</p> <p>There are two studies prescribed by MoEF&CC. For further details regarding the same, please refer</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Specific Conditions	Compliance Status as on 31.03.2025
	activities and the environmental impacts of the proposed activities.	general condition no xi of the EC and CRZ clearance.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Annexure – B **Compliance Status of** **MoEF & CC Order dated** **18.09.2015**

Based on the report submitted by Sunita Narain committee, MoEF&CC issued a Show Cause Notice (SCN) to APSEZ vide their letter dated 30.09.2013. APSEZ replied to the SCN vide letter dated 14.10.2013. Further, an order (containing 10 directions) was issued by MoEF&CC vide their letter dated 18.09.2015. Compliance to these 10 directions is mentioned below.

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Sr. No.	Condition	Compliance Status as on 31.03.2025
i	The proposal of extension of the validity of environmental clearance granted to the North Port vide letter dated 12.01.2009 will be considered separately at later stage.	<p>Point Noted & Complied</p> <p>After receipt of this order, so far APSEZ has not done any application to MoEF&CC for the proposed North port. The expansion of Waterfront Development plan has been proposed excluding North Port area.</p>
ii	Bocha island, ecologically sensitive geomorphological features and areas in the island and creeks around the island will be declared as conservation zone action plan for its conservation must be prepared. M/s. APSEZ should provide necessary financial assistance for this purpose.	<p>Complied</p> <p>This reply covers condition no ii, iv and v.</p> <p>Based on the MoEF&CC directions,</p> <ol style="list-style-type: none"> 1. APSEZ, vide letter dtd. 19th October 2015 had requested GCZMA, for consideration of project for finalization of ToR for NCSCM. 2. Project was considered on 28th GCZMA meeting, scheduled on 22nd April 2016, where ToR was discussed and agreed, upon. 3. APSEZ, vide its letter dtd. 25th April 2016, submitted the proposal to GCZMA along with Scope of work, as submitted by NCSCM. 4. Service Order was issued to NCSCM vide SO dtd. 29th Aug 2016. Cost of the study as per the NCSCM proposal was 315 Lakh and 100% of payment has already paid to NCSCM. 5. NCSCM has carried out number of site surveys during the period, February 2017 – April 2018 as per the defined scope 6. The study report was submitted to GCZMA (with a copy to MoEF&CC vide letter dated 04.06.2018) for their consideration and recommendation if any. 7. A reminder letter was submitted to GCZMA vide letter dated 4th Jan 2019. <p>Details of above chronology were submitted along with half yearly compliance report for the period of Apr'19 to Sep'19.</p>
iv	A comprehensive and integrated study and protection of creeks/ mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary, will be put in place. The plan will take note of all the conditions of approvals granted to all the project proponents in this area e.g. the reported case of disappearance of mangroves near navinal creek. The preservation of entire area to maintain the fragile ecological condition will be a part of the plan in relation to the creeks, mangrove conservation and conservation of bocha island up to baradimata and others.	
v	NCSCM will prepare the plan in consultation with NIOT, PP and GCZMA. In recognition of the fact that the existing legal	<p>The site survey carried out by NCSCM includes:</p> <ol style="list-style-type: none"> 1. Bathymetry survey of creeks 2. Topography survey of intertidal areas

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	<p>provisions under the E(P) Act 1986 do not provide for any authority to impose ERF by the government, the plan will be financed by the PP. the implementation will be carried out by GCZMA. The monitoring of the implementation will be carried by NCSCM.</p>	<ol style="list-style-type: none"> 3. Mangrove survey (health and area demarcation) 4. Sampling of soil and water for analysis of physico-chemical and biological parameters 5. Tide and currents data collection (including residence time of tidal water) 6. Focus Group Discussions with the community in the close vicinity of the project area <p>In addition to the site surveys, NCSCM has procured satellite images for analysis of mangrove cover.</p> <p>The data collected (through site surveys and analysis of satellite maps) was used as input for mathematical modelling. The modelling studies were carried out to understand the impacts of the development activities. Based on the outcome of the modelling studies the necessary conservation plan for protection of creeks and mangrove areas is prepared.</p> <p>Based on the final study report, outcome is summarized in to following points :</p> <ol style="list-style-type: none"> 1. There is no obstruction to any water stream (creeks / branches of creeks / rivers) 2. The mangrove cover in and around APSEZ was over 2596 ha. There was substantial growth in mangrove cover to the tune of 502 ha (comparison between 2011 and 2019) 3. Mundra has undergone substantial development during this tenure. Hence it can be interpreted that the infrastructure development has not left any adverse impacts on ecology. <p>Complied.</p> <p>Construction activities are completed and project is in operation phase.</p> <p>As part of the directions given by MoEF&CC vides order dated 18th Sep, 2015, following studies were conducted.</p> <ol style="list-style-type: none"> 3. NCSCM (MoEF&CC promoted Government Agency) study on comprehensive and integrated plan for preservation and conservation of mangroves and

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		<p>associated creeks in and around APSEZ in year 2016-17. The cost of said study was 3.15 Cr, which was incurred by APSEZ.</p> <p>As a part of mangrove conservation plan, APSEZ has done following activities.</p> <p>e. Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island through NCSCM, Chennai. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.</p> <p>f. Tidal observation in creeks in and around APSEZ – The cost of the said activity was INR 1.0 Lacs incurred by APSEZ.</p> <p>g. Algal & Prosopis removal from Mangrove area - The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure – 1.</p> <p>h. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 410.48 Lacs during FY 2024-25 which was incurred by APSEZ. This activity is being done on continuous basis as a part of CSR activity.</p> <p>Summary of Conservation of mangroves:</p> <table><tr><th rowspan="2">Mangrove mapping Year</th><th rowspan="2">Monitoring Agency</th><th rowspan="2">Mangrove cover total Area (Ha.)</th><th colspan="2">Mangrove cover area Increased</th></tr><tr><th>Hac.</th><th>%</th></tr><tr><td>2011</td><td rowspan="2">NCSCM</td><td>2094</td><td>-</td><td>-</td></tr><tr><td>2011 to 2016-17</td><td>2340</td><td>246</td><td>11.75%</td></tr><tr><td>2017 to 2019 till March</td><td>NCSCM</td><td>2596</td><td>256</td><td>10.94%</td></tr><tr><td>2019 to 2021 till March</td><td>GUIDE</td><td>2723</td><td>127</td><td>4.89%</td></tr><tr><td>Total</td><td></td><td>2723</td><td>629</td><td>--</td></tr></table> <p>Hence, overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%).</p>	Mangrove mapping Year	Monitoring Agency	Mangrove cover total Area (Ha.)	Mangrove cover area Increased		Hac.	%	2011	NCSCM	2094	-	-	2011 to 2016-17	2340	246	11.75%	2017 to 2019 till March	NCSCM	2596	256	10.94%	2019 to 2021 till March	GUIDE	2723	127	4.89%	Total		2723	629	--
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Sr. No.	Condition	Compliance Status as on 31.03.2025						
		As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.						
		<table><tr><th>Sr. No.</th><th>Recommendations</th><th>Compliance</th></tr><tr><td>1.</td><td>Mangrove mapping and monitoring in and around APSEZ</td><td><ul style="list-style-type: none">APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island.As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.94%.This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which also shows that the growth of mangroves in a progressive direction.Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019.The cost of the said study was INR 23.56 Lacs incurred by APSEZ.According to GUIDE Mangrove monitoring study report November 2023 (the report was submitted during the last compliance report submission Apr'23 to Sep'23), the distribution of mangroves in Kotadi, Baradi mata, Navinal, Bocha and Khari creeks as well as in the Bocha island was studied</td></tr></table>	Sr. No.	Recommendations	Compliance	1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none">APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island.As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.94%.This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which also shows that the growth of mangroves in a progressive direction.Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019.The cost of the said study was INR 23.56 Lacs incurred by APSEZ.According to GUIDE Mangrove monitoring study report November 2023 (the report was submitted during the last compliance report submission Apr'23 to Sep'23), the distribution of mangroves in Kotadi, Baradi mata, Navinal, Bocha and Khari creeks as well as in the Bocha island was studied
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				<p>using LISS IV satellite images for the duration of March 2019 to March 2021.The mangrove cover in the creeks in and around APSEZ showed a positive trend from March 2019 to March 2021, with an overall increase of 52.79 ha (1.9%) compared to the cover during the year 2019. The total mangrove cover during 2019 was 2670 ha which has increased to 2723 ha during the year 2021.</p> <ul style="list-style-type: none">Hence, overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%).The cost of the said study was INR 23.60 Lacs incurred by APSEZ. <p>Summary of Mangrove mapping and monitoring (from 2011 to 2021):</p> <table><tr><th rowspan="2">Mangrove mapping Year</th><th rowspan="2">Mangrove cover total Area (Ha.)</th><th colspan="2">Mangrove cover area Increased</th></tr><tr><th>Hac.</th><th>%</th></tr><tr><td>2011</td><td>2094</td><td>-</td><td>-</td></tr><tr><td>2011 to 2016-17</td><td>2340</td><td>246</td><td>11.75%</td></tr><tr><td>2017 to 2019 till March</td><td>2596</td><td>256</td><td>10.94%</td></tr><tr><td>2019 to 2021 till March</td><td>2723</td><td>127</td><td>4.89</td></tr><tr><td>Total</td><td>2723</td><td>629</td><td>--</td></tr></table>		Mangrove mapping Year	Mangrove cover total Area (Ha.)	Mangrove cover area Increased		Hac.	%	2011	2094	-	-	2011 to 2016-17	2340	246	11.75%	2017 to 2019 till March	2596	256	10.94%	2019 to 2021 till March	2723	127	4.89	Total	2723	629	--
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	2. Tidal observation in creeks in and around APSEZ			<ul style="list-style-type: none">APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal, Bocha and Khari creeks under the guidance of NCSCM.The observed tidal ranges indicate that the creeks experience normal tidal ranges, adequate for the growth of mangroves.The cost of the said activity was INR 1.0 Lacs.																											

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		3. Removal of Algal and Prosopis growth from mangrove areas	<ul style="list-style-type: none"> Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in some of the mangrove areas, which has been removed manually. The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure – 1.
		4. Awareness of mangroves importance in surrounding communities	<ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done awareness camps/activities created in the community regarding importance of mangroves. Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 15005 Cattels and hence enhancing cattle productivity. Dry Fodder 15,74,250 Kg Green – 51,66,805 Kg. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 410.48 Lacs during FY 2024-25, which was incurred by APSEZ. Grass Land development: 213 acres of gauchar land has been cleaned and allocated for Grass land development with strong Community Contribution and Mobilization. Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no any unauthorized persons allowed within coastal as well as mangrove areas. APSEZ has celebrated the International Day for the Conservation of the Mangrove Ecosystem with coordination of Adani Foundation from 24th to 26th July 2024 to raise awareness of the importance of mangrove ecosystems as "a unique, special and vulnerable

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				<p>ecosystem". The report for the same was submitted during the compliance report submission for the period Apr'24 to Sep'24. .</p> <ul style="list-style-type: none">Refer CSR report attached as Annexure – 2. <p>To comply with the GCZMA recommendations regarding mangrove monitoring at every 2 years, recently APSEZ has awarded the work order to NCSCM, Chennai vide order no. 4802055905, dated 24/09/2024 with cost 45.87 Lacs for mangrove mapping in and around APSEZ March 2021 to March 2023.</p> <p>NCSCM has conducted ground truthing during 5th to 7th Mar'25 & 22nd to 27th Apr'25 in and around our APSEZ area for mangrove mapping & study work has been completed. Final Mangrove mapping report is awaited from NCSCM.</p> <p>A Regional Impact Assessment study through Chola MS, Chennai (NABET accredited consultant) to identify impacts of all the existing as well as proposed project activities in Mundra region inline to ToR issued by GCZMA. The cost of said study was 1.3 Cr, which was incurred by APSEZ.</p>												
iii	The violations of specific condition of all the ECs and CRZ clearances, if any, will be examined and proceeded with the provisions of EP Act, 1986 independently.	<p>Complied</p> <p>During the said site visits from various regulatory authorities and as per the compliance certification received, there was no non-compliance observed.</p> <table><tr><th>Sr. No</th><th>Authority</th><th>Date of Visit</th><th>Purpose of Visit</th></tr><tr><td>1</td><td>RO, MoEF&CC, Bhopal</td><td>21st – 22nd Dec, 2016</td><td>EC Compliance Certification of WFDP</td></tr><tr><td>2</td><td>RO, MoEF&CC, Bhopal</td><td>3rd May, 2018</td><td>EC Compliance Certification of WFDP & MSEZ</td></tr></table>			Sr. No	Authority	Date of Visit	Purpose of Visit	1	RO, MoEF&CC, Bhopal	21 st – 22 nd Dec, 2016	EC Compliance Certification of WFDP	2	RO, MoEF&CC, Bhopal	3 rd May, 2018	EC Compliance Certification of WFDP & MSEZ
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		3	RO, MoEF&CC, Bhopal	3 rd & 4 th Sep, 2019	Compliance of the order of the Hon'ble HIGH COURT of Gujarat vide letter dated 22 nd Aug. 2019 w.r.t. compliance verification of MoEF&CC order dated 18 th Sep, 2015.
		4	RO, MoEF&CC, Bhopal	27 th & 28 th Jan, 2020	EC Compliance Certification of WFDP
		5	SPCB, Gandhinagar	17 th March, 2021	CC&A Compliance Certification of existing facilities developed under WFDP
		6	Joint Review Committee	1 st to 3 rd Sep, 2021	Compliance of the order of the Hon'ble HIGH COURT of Gujarat vide letter dated 22 nd Aug. 2019 w.r.t. compliance verification of MoEF&CC order dated 18 th Sep, 2015.
		7	IRO, MoEF&CC, Gandhinagar	18 th - 20 th Dec, 2023	EC Compliance Certification of WFDP. During the said compliance verification visit and as per the compliance certification received, there was no non-compliance observed. Copy of submitted CCR & action taken report w.r.t. certified compliance was submitted during the compliance report submission for the period Oct'23 to Mar'24.
		8	NIIST, Thiruvananthapuram	7 th & 8 th Apr-2024	EC Compliance verification site visit of

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						MSEZ for the period Apr'24 to Sep'24. Copy of EC compliance verification certificate is attached as Annexure - 17 .
		<p>It may also be noted that GPCB, Regional Office does regular site visit of APSEZ area and no non-compliance observed.</p> <p>Last visit of the Regional Office, GPCB was done on 25.11.2024 for West Port APSEZL has submitted the reply to the site visit report vide letter dated 04.12.2024. Acknowledgement copy is attached as Annexure - 11.</p> <p>Last visit of Regional Office, GPCB was done on 30.01.2025 for Main port and APSEZL has submitted the reply report vide letter dated 04.02.2025. Acknowledgement copy is attached as Annexure - 12.</p>				
vi	There will be no development in the area restricted by the High court of Gujarat. APSEZ shall abide by the outcome of the PIL 12 of 2011 and other relevant cases.	<p>Complied</p> <p>The order passed by Hon' ble high court in context of PIL 12 of 2011 vide dated 10th Nov 2011. Subject PIL has been disposed off by Hon'ble High Court vide their order dated 17.04.2015 and now there is no restriction on development in the subject area. The order reads as <i>"In view of the aforesaid discussion, we do not find any merit in this writ petition. This writ petition fails and is accordingly dismissed. No order as to cost."</i> Copy of the order was submitted along with half yearly EC Compliance report for the period Apr'18 to Sep'18.</p> <p>Considering the above status and in line to submission of compliance of all the directions under this order, this condition is closed.</p>				
vii	APSEZ will submit specific action plan to protect the livelihood of fishermen along with budget.	<p>Complied.</p> <p>Adani Foundation (AF) is the CSR arm of the Adani Group actively working for upliftment of the communities in the surroundings of various project sites of Adani Group. AF has prepared a specific action plan to protect livelihood of fishermen at Mundra.</p>				

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		<p>Various initiatives, as stated below are discussed in detail in the report namely "Silent Transformation of Fisher folk at Mundra". Said report also includes the information related to the planned expenses to the tune of approx. 13.5 Cr. INR for various initiatives for the next five years (2016 – 2021) (Budget details provided in Page No. 68 of report). Copy of the same is already submitted to MoEF&CC vide our letter dated 10.09.2016.</p> <p>Till, Mar'25 approx. 15.79 Cr. INR, has already been invested fisherfolk livelihood. Further, details regarding the expenditure incurred against the commitment are attached as Annexure - 18.</p> <p>APSEZ is carrying out various initiatives specific to the Fisherfolk community which includes:</p> <ul style="list-style-type: none"> • Educational Kit Support: 686 nos. • Fisherman Shelter Support: 273 nos. • Vehicle transportation Support: 1368 nos. • Cycle Support to high school students: 111 nos. • Scholarship Support: 648 nos. • Youth Employment: 494 nos. • Linkage with Fisheries Scheme: 195 nos. • Ramatotasav Community Engagement: 3534 nos. • Man-Days mangrove plantation: 56523 days <ul style="list-style-type: none"> • Vidya Deep Yojana Developing school preparedness programme and empowering balwadis at fisherfolk settlement Under this scheme, 4 balwadis at different settlements have been constructed. This programme includes nutrition food, hygiene, awareness of health, cleanliness, discipline, regularity and development of basic age appropriate conception • Youth employment: Our main objective is to offer sustainable employment opportunities to the local fishing community in APSEZ Mundra. We bridge the gap between industries and Fisherfolk youth by facilitating job placements. Acting as a bridge between industries and fisherfolk youth, the Adani Foundation facilitated job placements for 30 fisherfolk as RTG operators, in the HR department, and as supervisors in APSEZ companies. In the APSEZ area and colony, 45 fisherfolk youth have been offered professional painting roles. To ensure they are skilled for the role,

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		<p>they underwent comprehensive training in partnership with Asian Paints.</p> <ul style="list-style-type: none"> • Vidya Sahay Yojana – • Scholarship Support: All basic education supportive facilities have been created to promote education in the fisherfolk community. We are deeply committed to empowering the future of fisherfolk communities through education. To uplift financially challenged communities, we extended scholarships support of Rs. 3,58,765 to 35 students, enabling them to pursue higher secondary and technical education. • Education Kits Support: Equipping 88 fisherfolk students in HSC and Graduation with essential tools for academic success, including notebooks, guides, stationery and study bags, we empower them to pursue their education with no financial barriers. • Vehicle Transportation Facilities: Ensure seamless access to education for 121 school-going children from Modhva, Tragadi, and Zarpara Bandar Fisherfolk Students in reaching the nearest School, eliminating barriers to regular attendance. Additionally, personal cycle support to 5 fisherfolk students. Adani Vidya Mandir Children of the family with an income of salary less than 1.5 lac/annum are admitted. School focusses on nutrition food, uniform and other services to the children for free. • Fisherman Approach in SEZ After due consultative process, APSEZ has provided 7 fishermen access roads for to approach to the sea for fishing activity. • Machhimar Arogya Yojana The Fisher folk communities are disposed to several water and air abided diseased due to exposure to unhygienic working conditions. Frequently Special Healthcare Camps are organized at Vasahat. Our Mobile health care unit van regularly visit fisherfolk settlements. Awareness camp on Menstrual health: A menstrual health awareness camp was organized for 200+ women from the fishing communities of Modhva and Tragadi villages. • Machhimar Kaushalya Vardhan Yojana Based on need assessment a number of trades were introduced through the Adani Skill Development Centre in Mundra, where in fisher folk youth could join and get a number of technical and non-technical training • Machhimar Sadhan Sahay Yojana Fishing material support was provided by AF at Mundra as per the requests of Pagadiya fishermen. According to their needs, fishing nets, ropes, buoys, ice boxes, crates, weighing scales, anchors, solar lights etc., were provided. • Machhimar Awas Yojana Shelters, equipped with basic facilities of a toilet. and pure drinking water has been constructed for living while fishing and to provide a healthy and hygienic residence.

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		<ul style="list-style-type: none"> Machhimar Shudhh Jal Yojana This scheme of providing potable water has helped in reducing the drudgery of women and contributed largely towards general wellbeing. Potable water Distribution: Providing access of potable Drinking water Facilities to Nine fisherfolk vasahat on Daily bases, either By Water tanker or Linkage with Nearest Gram panchayat with daily water tanker support. ❖ Sughad Yojana Toilets for men and women are constructed at all three Vasahats. Infrastructure was accompanied with continuous awareness campaign on hygiene sanitation and use of toilets in particular. ❖ Machhimar Akshay kiran Yojana Solar street lights at each settlement have been installed. For fish landing shed and school extension room have been fitted with solar inverter allowing late evening video shows for awareness and fish sorting work at ease. ❖ Machhimar Suraksha Yojana Distance Alarm Transmission System – DATS' project was introduced in order to promote safety of the fishermen. Forced to be at sea to earn their livelihood puts the lives of many fishermen at risk. ❖ Machhimar Ajivika Uparjan Yojana Mangrove plantation in the area as means of alternate income generating activity for the fisher folk community during the non-fishing months. During the non-fishing months, the fishermen under usual circumstances were benefited by other alternate economic activity to sustain them. ❖ Bandar Svachhata Yojana Waste bins have been provided for proper collection and segregation of waste. <p>Further, APSEZ is actively working with local community around the project area and provides required support for their livelihood and other concerns through the CSR arm – Adani Foundation. Adani Foundation is working in main five persuasions as below.</p>

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		<div><div><div>❖ Education</div><div>❖ Community Health</div><div>❖ Rural Infrastructure</div><div>❖ Sustainability Livelihood</div><div>❖ Skill Development</div></div><div>Brief information about activities in the main five persuasions is mentioned below. Activities carried out for the same are summarized as below.</div><table><tr><th>Area</th><th>Activity</th></tr><tr><td>Community Health</td><td><div><div>❖ Mobile Heath Care Units and Rural Clinics</div><div><div>• 7 Rural Clinics</div><div>• 5 villages of Mundra & 2 village Mandvi block has benefited by rural clinic service.</div><div>• Total 23799 Patients Benefitted in FY 24-25 (direct & indirect) by Mobile van and rural clinic.</div><div>• Provided 52,063 medical health services.</div></div><div><div>❖ 45602 nos. patients have been supported for operations, OPD, IPD, Medicines and lab-test at Adani Hospital Mundra Pvt. Ltd.</div><div><div>❖ Financial Assistance for Critical Illness</div><div><div>• Understanding the burden of life-threatening diseases on economically weaker families, the Foundation provides financial support for patients suffering from heart, liver, kidney diseases, and cancer. In the current year alone, 45,602 patients from Mundra, Mandvi, and Anjar Blocks have received critical medical assistance at Adani Hospital, Mundra, in collaboration with Adani GK General Hospital, Bhuj.</div></div><div><div>❖ General Health Camp</div><div><div>• It aims to make quality healthcare accessible to underserved communities</div></div></div></div></div></div></td></tr></table></div>		Area	Activity	Community Health	<div><div>❖ Mobile Heath Care Units and Rural Clinics</div><div><div>• 7 Rural Clinics</div><div>• 5 villages of Mundra & 2 village Mandvi block has benefited by rural clinic service.</div><div>• Total 23799 Patients Benefitted in FY 24-25 (direct & indirect) by Mobile van and rural clinic.</div><div>• Provided 52,063 medical health services.</div></div><div><div>❖ 45602 nos. patients have been supported for operations, OPD, IPD, Medicines and lab-test at Adani Hospital Mundra Pvt. Ltd.</div><div><div>❖ Financial Assistance for Critical Illness</div><div><div>• Understanding the burden of life-threatening diseases on economically weaker families, the Foundation provides financial support for patients suffering from heart, liver, kidney diseases, and cancer. In the current year alone, 45,602 patients from Mundra, Mandvi, and Anjar Blocks have received critical medical assistance at Adani Hospital, Mundra, in collaboration with Adani GK General Hospital, Bhuj.</div></div><div><div>❖ General Health Camp</div><div><div>• It aims to make quality healthcare accessible to underserved communities</div></div></div></div></div></div>
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			<p>by providing free consultations and basic medical services.</p> <ul style="list-style-type: none"> Doctors conducted health check-ups, including blood pressure monitoring, respiratory assessments, and screening for seasonal illnesses. Patients were also provided with necessary medicines on the spot, ensuring timely treatment and care. Such camps play a vital role in promoting health awareness and addressing common health issues in rural areas where access to healthcare is limited. In the current year 1922 patients benefited through General Health Camp <p>❖ Specialty Health Camp</p> <ul style="list-style-type: none"> It organizes to support focused medical care to rural communities through consultations from specialists such as gynecologists, pediatricians, orthopedists, ophthalmologists, and physicians. The primary objective is to address critical health issues among women and children, particularly during pregnancy, to prevent maternal and infant mortality. Additionally, Specialty Health Camps are organized promptly in response to disease outbreaks in villages, ensuring quick medical support and controlling the spread of illnesses. . In the current year 3217 patients benefited through Specialty Health Camp. <p>❖ Eye Vision Care Initiative</p> <ul style="list-style-type: none"> This year, Adani Foundation, in collaboration with Vision Spring, has launched a comprehensive Eye Vision Care program to address uncorrected refractive errors and improve eye health in the community. The initiative focuses on students ("See to Learn"), SHG women ("See to Earn"), and APSEZ drivers ("See to Be Safe"), ensuring

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			<p>better education, livelihood, and road safety. It also promotes "Vision for All" across the community. It is a holistic eye care campaign starting from the process of registration to eyeglass dispensing, and cataract surgery support. In the current year 10,000 patients benefited through Eye Vision Care program.</p> <p>❖ Cataract-Free Mundra Initiative</p> <ul style="list-style-type: none"> To combat vision loss among the elderly, the Cataract-Free Mundra campaign has screened 567 individuals at the village level. Patients identified with cataracts are referred to GK General Hospital, Bhuj, for surgery, followed by post-operative care and follow-ups. This initiative has restored vision for many senior citizens, helping them regain independence and quality of life. In the current year 68 successful cataract operations through Cataract-Free Mundra campaign. <p>❖ Menstrual Hygiene Awareness Camps</p> <ul style="list-style-type: none"> Promoting health and dignity among adolescent girls and women, menstrual hygiene awareness camps are regularly organized in schools and community centers. These sessions focus on educating participants about menstrual health, hygiene practices, and breaking cultural taboos. Sanitary pads are also distributed to encourage proper menstrual care and improve overall health outcomes for women and girls. <p>❖ Medical Services Data from April 2024 to March - 2025:</p> <ul style="list-style-type: none"> Mobile Van – 11066 beneficiaries Rural Clinic – 2500 beneficiary Medical Support & Dialysis – 2733 beneficiary General Health Camp – 1922 beneficiary

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		<ul style="list-style-type: none"> • Specialty Health Camp – 3217 beneficiaries • Blood Donation Camp – 2902 beneficiary • Cataract Camp – 567 beneficiaries • Eye Vision Care – 10000 beneficiaries • Driver Health Check Up – 7156 beneficiaries <p>❖ Animal Husbandry:</p> <ul style="list-style-type: none"> • Fodder support to 24 Villages, benefiting 36808 cattle, Dry Fodder Support - 15,74,250 Kg & Green Fodder Support - 51,66,805 Kg • Under the Preventive Health Care program, the Foundation, in partnership with the Animal Husbandry Department, organizes regular cattle health camps across 24 villages. These camps provide veterinary check-ups, vaccinations, and treatments for common diseases. Life-saving vaccines, such as those for Foot-and-Mouth Disease (FMD) and Clostridial infections, help ensure long-term immunity and healthier livestock. Additionally, medicines and vaccines are supplied by the Foundation. • Cattle vaccinated -14,056 • Deworming tablet distributed – 1460 • Cattle benefited – 15000+
	Sustainable Livelihood – Fisher folk, Agriculture & Women	<p>➤ <u>WOMEN EMPOWERMENT:</u></p> <p>❖ Self Help Groups</p> <ul style="list-style-type: none"> • 88 Self Help Groups in coordination with National Rural Livelihood Mission. • 920+ Members • Over Rs.39 Lacs Saving Amount Corpus <p>❖ Job Sourcing - Govt</p> <ul style="list-style-type: none"> • 11 Women supported for application and process of Gram Rakshak Dal, Bank Sakhi, Bima Sakhi and Professional Resource Person. • Average income Rs.7500 Per Month <p>❖ Making SHG Self Reliant</p>

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		<ul style="list-style-type: none"> 16 SHG are making strides towards self-reliance. Various handicrafts, dry and fresh food making, stitching, tie and die etc. 175+ women - Monthly average income @ Rs.7000 of each member/Month <p>❖ Social Empowerment</p> <ul style="list-style-type: none"> 4 Livelihood Enhancement Training through RSETI Financial support for business set up Legal rights and domestic violence workshops Family counselling for Job Sourcing <p>❖ Job Sourcing - Private</p> <ul style="list-style-type: none"> Coordination for Job by Unnati Portal with Adani Group company companies, Britania, B Medical and Emphazer company 758 Women supported till date for job sourcing. Average income Rs.10,800 Per Month <p>❖ <u>"CHETNA" - INITIATIVE WITH GENDER DIVERSITY</u></p> <ul style="list-style-type: none"> Adani Foundation, in collaboration with Unnati Portal and Adani Solar, launched an initiative to provide equal opportunities for employment and self-development to women from Kutch. Till Now 614 women from Kutch are successfully employed at Adani Solar, marking a significant step towards their economic empowerment and fostering gender diversity in the workforce. <p>❖ <u>Highlights of the Work done by our SHG!</u></p> <ul style="list-style-type: none"> Sathwaro'24 - Powering Art, Empowering Artisans: 3 women SHGs from Adani Foundation Mundra participated in the prestigious Sathwaro Mela at the Belvedere Club, Ahmedabad, showcasing Mud Art, Bead Art, and Soof Art, along with two

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		<p>artisans specializing in Rabari and Doori work, achieving an impressive turnover of Rs.1,30,000/-.</p> <ul style="list-style-type: none"> • New Stitching Centre - Livelihood opportunities for local women: In Vandh Village, by providing advanced stitching and embroidery training, the new stitching center empowers women with skills and employment. Equipped with 11 modern machines, women are producing 5,000 bags, gaining financial independence and professional confidence. • Women empowerment initiative: Adani Foundation is empowering rural women through skill training, exposure visits, and SHG formation, enabling them to achieve financial independence and entrepreneurship. • Skill Training: Stone Dust Art Training Mud Art Training Beauty & wellness Training. 100+ Local women empowered • Exposure Visit: Visit to Welspun Stitching Centre for women to learn about stitching enterprises • New SHG Formation: <ul style="list-style-type: none"> ○ Madhav Saheli" a Food service SHG ○ "Gopinath Saheli" a Tailoring SHG ○ "Suidhaga" a Tailoring SHG • CELEBRATED INTERNATIONAL WOMEN'S DAY WITH 1,000 LAKHPATI DIDIS: <ul style="list-style-type: none"> • On 5th March, Adani Foundation celebrated the strength and resilience of women by marking International Women's Day with 1,000 Lakhpatti Didis. The event highlighted the Foundation's ongoing efforts to empower rural women through meaningful livelihood opportunities. • Over 614 women have been connected with job opportunities at Adani Solar, while 850+ women entrepreneurs

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		<p>received support to grow their businesses.</p> <p>❖ MENSTRUAL HYGIENE AWARENESS:</p> <ul style="list-style-type: none"> Adani Foundation is dedicated to educating and empowering rural girls and women from marginalized communities about menstrual health. We aim to break negative social stigmas around menstruation and improve their overall well-being. 61 Villages covered 8300+ School girls & women participated till now <p><u>EMPOWERING FISHERFOLK COMMUNITIES THROUGH EDUCATION:</u></p> <p>❖ PERSISTENT EFFORTS FOR FISHERMAN DEVELOPMENT:</p> <ul style="list-style-type: none"> Educational Kit Support – 686 beneficiaries Fisherman Shelter Support – 273 beneficiaries Vehicle transportation Support – 1368 beneficiaries Cycle Support to high school going students – 111 beneficiaries Scholarship Support – 648 beneficiaries Youth Employment – 494 beneficiaries Linkage with Fisheries Scheme – 195 beneficiaries Ramatotasav Community Engagement – 3534 beneficiaries Man-Days mangrove plantation - 56,523 beneficiaries <p>❖ Scholarship Support:</p> <ul style="list-style-type: none"> To uplift financially challenged communities, we extended scholarships support of Rs. 3,58,765 to 35 students, enabling them to pursue higher secondary and technical education.

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		<p>This support is helping break the cycle of poverty and create a brighter future for these students and their families.</p> <p>❖ Vehicle Transportation Facilities:</p> <ul style="list-style-type: none"> Ensure seamless access to education for 121 school-going children from Modhva, Tragadi, and Zarpara Bandar Fisherfolk Students in reaching the nearest School, eliminating barriers to regular attendance. Additionally, personal cycle support to 5 fisherfolk students. <p>❖ Job opportunity</p> <ul style="list-style-type: none"> Acting as a bridge between industries and fisherfolk youth, the Adani Foundation facilitated job placements for 30 fisherfolk as RTG operators, in the HR department, and as supervisors in APSEZ companies. In the APSEZ area and colony, 45 fisherfolk youth have been offered professional painting roles. To ensure they are skilled for the role, they underwent comprehensive training in partnership with Asian Paints. This initiative has enhanced their livelihoods and provided sustainable employment opportunities. <p>❖ Awareness camp on Menstrual health:</p> <ul style="list-style-type: none"> A menstrual health awareness camp was organized for 200+ women from the fishing communities of Modhva and Tragadi villages. The program focused on educating them about menstrual hygiene, PCOD, and menopause management. It promoted healthy practices, offered guidance on managing related health issues, and distributed sanitary products to support their overall well-being. <p>❖ Potable water Distribution:</p> <ul style="list-style-type: none"> Providing access of potable Drinking water Facilities to Nine fisherfolk vasahat on Daily bases, either By Water

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		<p>tanker or Linkage with Nearest Gram panchayat.</p> <ul style="list-style-type: none"> 5000+ Fisherfolk Population are getting benefit <p>➤ <u>SUSTAINABLE LIVELIHOOD - AGRICULTURE:</u></p> <p>❖ BIOGAS PROJECT</p> <ul style="list-style-type: none"> In our ongoing efforts to promote sustainable and eco-friendly farming practices, we have successfully registered 863 farmers from five different talukas in the Kutch district. Each registered farmer will receive financial support of ₹9,000 for the installation of biogas plants on their farms. This initiative aims to provide farmers with a renewable source of energy, reduce dependency on conventional fuels, and improve overall agricultural productivity. <p>• Benefits of Biogas:</p> <ul style="list-style-type: none"> Renewable Energy Source: Biogas is a sustainable and renewable energy source that reduces dependence on fossil fuels. Cost Savings: Farmers save on fuel expenses as biogas can be used for cooking, heating, and electricity generation. Waste Management: Biogas plants efficiently manage agricultural waste by converting it into useful energy. Environmental Impact: Biogas reduces greenhouse gas emissions, contributing to climate change mitigation. Soil Health: The by-product, known as digestate, is a nutrient-rich organic fertilizer that enhances soil fertility. Improved Livelihoods: Biogas provides farmers with additional income and energy security, improving their overall quality of life.

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		<ul style="list-style-type: none"> • Biogas benefit Key Highlights <ul style="list-style-type: none"> ○ Total Farmer Registered - 863 Farmers ○ Financial Support for each farmer - Rs. 9000 ○ Geographical coverage in Kutch - 6 Talukas ❖ DRIP IRRIGATION - ENHANCING LIVELIHOODS IN KUTCH: <ul style="list-style-type: none"> • The Drip Irrigation Initiative by Adani Foundation promotes efficient water use in farming by providing financial support to farmers for installing drip systems. It helps conserve water, improve crop yield, and encourage sustainable agriculture in Kutch. • In 2024-25, Adani Foundation supported sustainable water management in Kutch by Promoting drip irrigation across 490 villages in Abdasa, Lakhat, Mandvi, Mundra, and Nakhtrana talukas. Covering a total area of 2,074,53 hectares, the initiative benefited 1,041 farmers. This effort enhanced irrigation efficiency, boosted agricultural productivity, and contributed to water conservation and eco-friendly farming practices in the region. ❖ Natural Farming <ul style="list-style-type: none"> • As part of our commitment to sustainable agriculture, we have focused on promoting natural farming practices to conserve soil health and enhance environmental sustainability. • Till Date 2,275 Farmers trained in • Natural Farming • 226 Farmers successfully transformed to 100% Natural Farming • 857 Farmers linked with GOG to support cattle welfare scheme ❖ Green Carnival

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			<ul style="list-style-type: none"> Organized an annual Green Carnival, providing farmers with a dedicated marketplace to sell their organic produce directly to consumers. This event is hosted by our employee company and attracts many buyers interested in organic products. <p>❖ Sales Achievements</p> <ul style="list-style-type: none"> This year, the Green Carnival was a resounding success, with farmers selling a total of 16,241 kg of organically grown vegetables and fruits at the event. Achieved Rs. 6,49,640+ Total revenue.
		Education	<p>❖ Enriched reading corners to develop reading habits</p> <ul style="list-style-type: none"> Library books were issued twice a month, and a dedicated reading corner was established in each school to enhance accessibility. Additionally, over 1,000 books and various magazines were provided 2,09,640 Books issued between students <p>❖ Progressive Students: Strengthening foundational literacy, numeracy and skills</p> <ul style="list-style-type: none"> A total of 6,540 students from Class 3 to 7 were assessed in reading, writing, and math skills, with 2399 students identified as needing additional support. Targeted interventions helped 1,520 students successfully integrate into regular academic programs <p>❖ Utthan's Impact: A Data-Driven Overview of Utthan Initiatives</p> <ul style="list-style-type: none"> Distribution of sports kits, music kits, TLM kits, and stationery kits. to 12K+ Students

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		<ul style="list-style-type: none"> Value education is imparted through films that teach important life lessons and moral values to 1K+ Students Provide students to engage in fun and educational activities, fostering their holistic development. 8K+ students. Children toy foundation kit to 5k+ Students Building as Learning Aid (7K+ Students): BALA transforming school spaces into vibrant learning environments through creative artwork. Environmental Education Project: 80 Schools, 12000+ Students Adani Competitive Coaching Center: 27 School, 5000+ Students Oasis Reading workshop: 700+ Workshop. 20000+ Students Capacity building of teachers: 150 Teachers, 16000+ Hours ❖ Key finding of third-party assessment: <ul style="list-style-type: none"> The Utthan program assessment employed a quasi-experimental, mixed-methods design with pre- post comparisons and stratified random and purposive sampling to evaluate student outcomes, program impact, and sustainability. The sample included 288 intervention students, 96 non- intervention students, 53 Sahayak, 30 head teachers, 30 SMC members, 30 parents, and community members, with data collected through FGDs, SSIs, and KIIs. Univariate and bivariate analyses were conducted, and field notes were transcribed to identify themes. These themes were aligned with objectives and compared to past data to uncover discrepancies and analyze their causes. <ul style="list-style-type: none"> More than 90% of the students have achieved proficiency in reading, writing and numeracy skills in Utthan Schools. Utthan sahayak as catalyst: The introduction of Saha yaks (teacher

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			<p>assistants) ensures personalized student support and bridges gaps between schools and families, fostering greater parental involvement.</p> <ul style="list-style-type: none"> ○ Sahayak have mentioned improvements in their classroom management practices, strong parent and community management and understanding of student child development ○ 97% of students reported improved confidence in leadership and communication and 97% of students in Utthan schools have mentioned interest in attending school. ○ Teachers' capacity building: Comprehensive teacher training programs enhance instructional quality, equipping educators with tools to deliver FLN-focused curriculum effectively. ○ Community engagement through home visits and mothers' meetings, the project strengthens parental accountability and participation, directly influencing students' motivation and performance. <p>❖ Holistic Development & Achievements</p> <ul style="list-style-type: none"> • Academic and Institutional Developments: Board exam results showcased excellent student performance, with targeted remedial sessions introduced for continuous improvement. • The Housekeeping Training Program (May 28) emphasized cleanliness and hygiene maintenance among staff. • Teacher Development and Training: Teacher Capacity Building Program (June 6) enhanced instructional strategies and curriculum planning. • NABET Accreditation Training (June 12) ensured compliance with national educational standards.

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			<ul style="list-style-type: none"> • Technological Advancements: Inauguration of a New Computer Lab (Sept 27) enhanced digital learning opportunities. • AI and Google Gemini Training (Nov 16) prepared educators for modern teaching methodologies. • Cultural and Co- Curricular Activities: World Book Day (April 23) promoted reading culture through storytelling and book exhibitions. • International Yoga Day (June 21) emphasized mindfulness and physical wellness. • Student Achievements: SVS Science Exhibition (Oct 4): AVMB students won first place for their research on screen time and its impact. • District-Level Science Fair (Dec 9-10): Students represented Mundra Taluka with innovative projects. • Health and Safety Initiatives: Menstrual Hygiene Awareness Program (June 22) educated girls on personal health and wellness. • School-Wide Health Check-Up (July 8) ensured early detection of health concerns. ❖ Project Udaan - Inspiring Minds <ul style="list-style-type: none"> • About Project: Under this project, exposure tours are organized wherein school, college students, faculties, employees from corporates are given a chance to visit the Adani Group facilities. • Total 408 no. of Schools/Colleges/ Institutes participated. • Total 26346 no. of participants participated.
	Rural Infrastructure & Environmental Sustainability	➤	COMMUNITY INFRASTRUCTURE DEVELOPMENT PROJECTS & ITS BENEFICIARIES <ul style="list-style-type: none"> • Renovation of Aanganwadi, Goyarsama Village – 40 beneficiaries

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		<ul style="list-style-type: none"> Strengthening inclusivity and social upliftment through impactful support. ➤ INNOVATIVE ENVIRONMENTAL SOLUTIONS FOR SUSTAINABLE FUTURE: <ul style="list-style-type: none"> ❖ TERRESTRIAL BIODIVERSITY <ul style="list-style-type: none"> Project Adani Van: "Harit Paryavaran ki Ek Pahel" focuses on afforestation and community involvement, transforming barren lands into thriving forests with 88,303 plants, enhancing local biodiversity. ❖ COASTAL BIODIVERSITY <ul style="list-style-type: none"> The mangrove plantation project at the Luni coastal belt has created 162 hectares of dense mangrove forests, providing a new habitat for various species and showcasing the area's ecological richness. ❖ PLASTIC FREE ENVIRONMENT <ul style="list-style-type: none"> This initiative educates children about plastic pollution and promotes reducing, reusing, and recycling plastic to foster environmental responsibility. ❖ WATER CONSERVATION <ul style="list-style-type: none"> The SWAJAL project addresses groundwater depletion in Kutch by constructing rooftop rainwater harvesting systems, benefiting 1,660+ individuals and ensuring access to quality drinking water. ❖ SOLAR PROJECTS: <ul style="list-style-type: none"> Surya Ghar initiative provides sustainable energy solutions by installing solar panels, significantly reducing electricity costs and promoting environmental sustainability in rural communities. Adani Van – Harit Par yavaran ki Ek Pahel: Massive plantation drives to enhance green cover. Transformed

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		<p>barren lands into thriving forests, promoting sustainability.</p> <ul style="list-style-type: none"> • Biodiversity Enhancement: 78 bird species, 4 mammal species, 12 species of insects and reptiles. Significantly enhanced local biodiversity and ecological health. • Prakruti Rath Community- Led Green Initiatives: Distributed 53,886 saplings, enhancing green cover. Strengthened community connection to nature and empowered environmental stewardship. <p>Plantation Achievements: Total Plants: 88,303 across 35 acres Native Species: 70+ species planted.</p> <p>❖ Biodiversity Knowledge & Interpretation Center</p> <ul style="list-style-type: none"> • Biodiversity & Interpretation Center: The center is dedicated to educating, inspiring, and engaging the community in conserving Gujarat's rich biodiverse. • Nursery Development: A nursery of 10,000 mangrove seeds was established at the Luni site with the active participation of local fishermen. • Training Sessions: 30+ Employee Training on Biodiversity Conservation at Mundra Petrochem LTD. • Awareness Sessions: An awareness lecture was held at Adani Vidya Mandir, Bhadreswar, with 50+ students participating. • Workshop on Coastal Conservation: One-day workshop was held with participation of 200+ students of University. <p>❖ Nurturing A Plastic-free Generation</p> <ul style="list-style-type: none"> • Plastic Free Villages: <ul style="list-style-type: none"> ○ 2 villages & 8500 individuals targeted ○ 50+ local vendors, 70+ women in SHGs • Green School Project: <ul style="list-style-type: none"> ○ Covering 75+ Schools

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 31.03.2025
		<ul style="list-style-type: none"> ○ 12000+ Students ○ 32000+ Kg Single used plastic recycle at Zero Cost • Coastal Cleanup Day: ○ 200+ students and 80 Uthhan Sahayaks led to the successful cleanup of a 1 km stretch of Kashivishvnath Beach, Mandvi. <p><u>WATER CONSERVATION "SWAJAL PROJECT" ENHANCING RURAL WATER RESOURCES</u></p> <ul style="list-style-type: none"> ❖ Adani Foundation has undertaken significant water conservation initiatives to address water scarcity and improve water availability in rural areas. ❖ Through the creation of 737 various water structures, the project has increased water capacity by 5,400,735 cubic meters (CUM) and benefited 64,515 people. • Check Dam New/Renovation: <ul style="list-style-type: none"> ○ Structures: 29 ○ Water Capacity Increase: 1,072,332 CUM ○ Beneficiaries: 30,870 ○ Impact: Enhances water storage and irrigation. • Rainwater Harvesting Structures (RRWHS): <ul style="list-style-type: none"> ○ Structures: 330 ○ Water Capacity Increase: 3,300,000 CUM ○ Beneficiaries: 1,650 ○ Impact: Maximizes rainwater capture and usage. Rs. 10950 yearly saved/house • Pond Deepening: <ul style="list-style-type: none"> ○ Structures: 135 ○ Water Capacity Increase: 1,028,403 CUM ○ Beneficiaries: 18,350

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 31.03.2025	
			<ul style="list-style-type: none"> Impact: Improves water retention and availability. • Construction of Percolation Wells <ul style="list-style-type: none"> Structures: 26 Ground Water Recharge: Significant Beneficiaries: 3,000 Impact: Boosts groundwater levels and availability. Bore/Well Recharge Structures: 209 Ground Water Recharge: Significant Beneficiaries: 1,045 Impact: Enhances groundwater recharge and sustainability. • Construction of New Wells <ul style="list-style-type: none"> Structures: 8 Purpose: Drinking Water Beneficiaries: 9,600 Impact: Provides reliable drinking water sources <p><u>SURYA GHAR PROJECT - 100% SOLAR VILLAGE</u></p> <ul style="list-style-type: none"> Adani Foundation, through its CSR initiative, has launched the Surya Ghar Project to transform 2 villages into 100% solar-powered communities. This project aims to provide sustainable energy solutions, enhance energy access, reduce reliance on conventional power sources, and promote environmental sustainability while significantly lowering electricity costs for villagers. ❖ The project benefits 4,500+ people. ❖ Environmental Benefits <ul style="list-style-type: none"> Significant reduction in carbon footprint. Promotes clean, renewable energy. Serves as a replicable model for other rural communities
		Skill Development	➤ <u>ADANI SKILL DEVELOPMENT CENTER (ASDC)</u>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 31.03.2025																																	
		<ul style="list-style-type: none"> The Adani Skill Development Center (ASDC) in Bhuj and Mundra is dedicated to creating a future fueled by a skilled and empowered Indian workforce, driving economic growth. Focused on bridging the gap between industry demands and workforce capabilities, ASDC offers high-quality vocational training, fosters innovation, and promotes entrepreneurship. The center's impact is significant, with 887 students in Bhuj & Mundra, where 70% of participants are female, and 258 technical trainees already placed in diverse roles such as General Duty Assistant and Domestic Data Entry Operator etc. Six placement drives and 24 guest lectures have further supported career opportunities. In Mundra, courses like RTG Crane Operator, Tally with GST, and Beauty Therapist training have drawn strong participation, especially among women, resulting in 135 placements in beauty therapy alone. By equipping youth with relevant skills, facilitating job opportunities, and empowering women, ASDC plays a vital role in driving inclusive growth, promoting gender equality, and contributing to the region's economic progress. 																																	
		❖ ASDC - MUNDRA <table border="1"> <tr> <td>JOC (RTG Crane Operator)</td><td>00</td><td>140</td><td>140</td></tr> <tr> <td>DDEO</td><td>30</td><td>14</td><td>44</td></tr> <tr> <td>Tally with GST</td><td>01</td><td>00</td><td>01</td></tr> <tr> <td>Beauty Therapist</td><td>134</td><td>00</td><td>134</td></tr> <tr> <td>Painting/Drawing Training</td><td>06</td><td>09</td><td>15</td></tr> <tr> <td>German Language</td><td>02</td><td>00</td><td>02</td></tr> <tr> <td>Advance Excel</td><td>01</td><td>10</td><td>11</td></tr> <tr> <td>Mud Work</td><td>40</td><td>00</td><td>40</td></tr> </table>		JOC (RTG Crane Operator)	00	140	140	DDEO	30	14	44	Tally with GST	01	00	01	Beauty Therapist	134	00	134	Painting/Drawing Training	06	09	15	German Language	02	00	02	Advance Excel	01	10	11	Mud Work	40	00	40
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Status of the conditions stipulated in Environment and CRZ Clearance

Sr. No.	Condition	Compliance Status as on 31.03.2025			
			</		

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 31.03.2025
		<p>Please refer Annexure - 2 for full details of CSR activities carried out by Adani Foundation in the Mundra region. "The budget allocated for CSR activities for the financial year 2024-25 was INR 1,564.72 lakh and fully spent during FY 2024-25.</p> <p>Till Mar'25, Adani Foundation has done total expenditure of INR 188.41 Cr. for CSR activities in Kutch region since its inception.</p>
viii	APSEZ will voluntarily return the grazing land, if any, in their possession.	<p>Point noted.</p> <p>All lands are acquired through proper procedure prescribed by State Government. However, APSEZ has agreed for voluntarily giving land back to Zarpara village for the purpose of Gauchar. Land has been identified in the presence and confirmation of Gram Panchayat. Necessary procedure has been initiated by APSEZ vide its letter dated 09th Aug 2012 with concerned revenue authority with respect to surrender of gauchar land at village Zarpara. Same has been taken up by revenue department for necessary procedure of transfer and is under process. Details of the same were submitted along with half yearly compliance report for the period of Apr'19 to Sep'19.</p> <p>As per recommendations given in Joint Review Committee visit report dated 1st December 2021, APSEZ has been approached M/s. Indian Grassland and Fodder Research Institute (IGFRI), Jhansi to get the consultancy work for enhancing / upscaling the forage production in Gauchar Land at Zarpara in 400 acres. Proposal has been received from IGFRI was submitted along with half yearly compliance report for the period of Apr'22 to Sep'22.</p> <p>The officials of M/s. Indian Grassland and Fodder Research Institute (IGFRI), Jhansi have visited at proposed Gauchar Land development site at Zarpara village dated 8th to 10th May 2023 for site survey work and according to guidance & suggestion of IGFRI, APSEZ will start the work for developing the Gauchar Land. IGFRI has provided a site visit report with technical recommendations. Final Report with conclusion /</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 31.03.2025
		recommendations from IGFR and compliance report of its recommendation were submitted along with EC compliance report for the period Apr'23 to Sep'24.
ix	A regional strategic impact assessment report with a special focus on Mundra region will also be prepared. The cost towards these studies will also be borne by PP.	Complied
x.	In the subject matter of thermal power plant, the proposed regional strategic Impact assessment analysis will take In to account salinity aspect along with Its potential environmental Impact to suggest future corrective actions as well as the guiding tool on extension and addition of the capacities.	<p>This reply covers direction no ix and x.</p> <ol style="list-style-type: none"> 1. APSEZ vide its letter dtd. 24th Feb 2014 has submitted draft ToR for preparation of CIA report to GCZMA for their approval. 2. GCZMA vide its letter dtd. 19th Dec 2014, has approved ToR for CIA. 3. Based on the ToR finalized by GCZMA (as per the instructions of MoEF&CC) for carrying out regional impact assessment study, APSEZ awarded the work to NABET accredited consultant M/s. Choramandalam MS Risk Services Ltd. to carry out the studies, vide SO dtd 10th Feb 2016 as stated in these directions. 4. Primary baseline environmental monitoring data collection during March – June 2016 and published secondary data on various environmental attributes. have been considered for the study. 5. The study has been concluded and the final report was submitted to GCZMA and MoEF&CC for their consideration vide our letter dated 30.04.2018. 6. Reminder letter has been submitted to GCZMA for their comments and consideration vide letter dated 4th Jan 2019. <p>Details of above chronology were submitted along with half yearly compliance report for the period of Apr'19 to Sep'19.</p> <p>Total cost of the study is approx. INR 1.3 cr. which is financed by APSEZ.</p> <p>The stated study was carried out in following 3 phases.</p> <ul style="list-style-type: none"> • Baseline data collection and review of the past EIA reports and clearances issued to APSEZ. • Mathematical modelling and other technical studies for identification of potential impacts (for the year 2030) of the approved and existing project activities.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 31.03.2025
		<ul style="list-style-type: none"> Development of macro level EMP for the phase wise implementation of actionable points. <p>As part of the study, following modelling exercises / technical studies have been carried out to study the impacts on all environmental attributes:</p> <ul style="list-style-type: none"> Ambient air quality Marine (Hydrodynamic, Thermal & Salinity dispersion, Sediment transport) Noise level Traffic assessment Oil spill contingency plan Water resource and salinity ingress Land Use / Land Cover Socioeconomic, Regional infrastructure Waste management Ecology, Bio diversity and Fisheries Shoreline change assessment <p>Preparation of these reports require extensive use of modelling software and study of the available information / research reports to assess the impacts on individual attribute of environment. Based on the modelling outcomes and findings of the technical studies, a macro level environment management plan is prepared.</p> <p>Inline to the present stage of the project, APSEZ is already complying, as per Environment Management Plan and further recommendations, applicable to APSEZ as mentioned in the EMP, wrt Traffic Management Plan, Ground water quality management, Salinity ingress programme, Air and Noise quality Management, Surface and Marine water quality management, Ecology and Biodiversity Management, Solid & Hazardous waste management, Socio-economic Management and Shoreline Management, will be implemented in phase wise manner as per the progress of development within the boundary limits of APSEZ.</p> <p>The final CIA Report was prepared inline to the ToR by Chola MS and the same was submitted to the GCZMA on</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'24 To : Mar'25
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 31.03.2025
		<p>30.04.2018. Details of the same were submitted along with half yearly EC Compliance report for the period of Apr'18 to Sep'18. Presentation on the findings of the report was made to GCZMA committee on 4th October 2019 and after detailed discussion, authority has decided to constitute committee to discuss the details of the report further.</p> <p>Reminder Letter vide dated 07.09.2020 & 10.03.2021 submitted to the GCZMA, Gandhinagar for further directives to present the findings of the CIA report in detail. Details were submitted along with half yearly compliance report for the period of Oct'20 to Mar'21.</p> <p>Presentation done before GCZMA on 31.10.2021 and 16.02.2021 to discuss proposed EMP of CIA study in detail and way forward.</p> <p>GCZMA, Gandhinagar issued a letter to co-ordinate with various departments in the matter of CIA with Gujarat Pollution Control Board as Nodal Agency vide dated 12th July, 2022. APSEZ submitted the letter to GPCB for detailed deliberation and suitable action / way forward vide letter dated 20th July, 2022. The copy of acknowledgement was submitted along with half yearly compliance report for the period of Apr'22 to Sep'22.</p> <p>However, APSEZ is already complying with the Environment Management Plan (applicable to APSEZ) suggested in Cumulative Impact Assessment report. The detailed compliance, applicable to APSEZ is attached as Annexure -19.</p>

Annexure – 1

ALGAL REMOVAL WORK FROM MANGROVE AREAS

Creek area is regularly observed for checking algal encrustations. On the mangrove recruits & where the algal encrustation is found to be substantial, it is removed manually by deployment of required manpower. This operation is performed during the low tide conditions. The main object is to provide better growing condition for the growth of mangroves. Periodically, spread of *Prosopis* sp towards the mangrove areas is also observed as this species will compete with mangrove plants for growth.

Photographs of removal of algal encrustations:



Annexure – 2

Annual Report 2024-25

CSR Gujarat
Kutch - Dahej - Hazira

Adani Foundation
Adani House, Port Road, Mundra – Kutch 370 421
[info@adanifoundation.com] [www.adanifoundation.com]

CSR





Our Journey by



Mr. Rakshit Shah,
Executive
Director APSEZ

From Pledge to Progress Further,

"As your deed is so is your destiny. The larger an organization gets, the more power its deeds wield and the more power its deeds wield greater becomes its responsibility towards the larger society"

I am happy to share that Adani Foundation continued to make significant strides to elevate the sustainability of our CSR operations. This year We prioritize Livelihood enhancement to 2200+ women and supporting for Drip Irrigation to 1000+ Farmers. We raised the bar through our environmental initiatives, Water Conservation, Terrestrial and Coastal Biodiversity. We are also spreading awareness for reducing paper usage, Reducing emissions through firewood cooking, diesel free village drive at Surat district and increasing the green cover by planting trees. We enhanced the impact of our social initiatives by empowering women through Enhancing skill and Livelihood, increasing gender diversity and improving inclusivity. We are working for socio economic upliftment marginalized community i.e. Primitive Tribes at Bharuch and Surat district and fisherman at Kutchh district.

Our commitment to sustainable CSR operations has earned the trust of our stakeholders and contributed to our success. It has also helped us build a more resilient, sustainable and profitable business. I thank our Adani Foundation Team for their continued support and dedication to our commitment to sustainable CSR practices, as we remain focused on driving long-term value for our stakeholders, and the communities in which we operate.

With best wishes,

Rakshit Shah

CSK KUTCH

Environment Sustainability
Education
Sustainable Livelihood Development
Community Health
Community Infrastructure Development
Community Resource Centre
Swavlamban
Adani Skill Development Centre
Flood relief work
Employee volunteering program
AKBPTL Tuna
AGEL Khavda
AGEL Dayapar & Mandvi
Adani Cement Sanghi
Events
Awards & recognition
Publication
Case Study
Beneficiaries list

TABLE OF CONTENT

CSR DAHEJ

Education
Community Health
Sustainable Livelihood Development
Community Infrastructure Development
Employee volunteering program
Climate Action
Awards & recognition
Case Study
Beneficiaries list

CSR HAZIRA

Environment Sustainability
Education
Sustainable Livelihood Development
Community Health
Community Infrastructure Development
Events
Awards & recognition
VVIP & VIP Visits
Case Study
Beneficiaries list



CSR Kutch

Demographic Details

Block	Villages	No. of HHs	Population
Mundra	61 Village	35192	153179
Anjar	6 Villages	5350	28500
Nakhtrana	22 Villages	14093	36373
Lakhpat	20 Villages	8092	18976
Khavda	22 Villages	8450	35200
Rapar	3 Villages	345	12450
Mandvi	8 Villages	2780	14560
Abdasa	12 Villages	2415	9660

1. Adani Ports and SEZ Limited
2. Adani Power Mundra Limited
3. Adani Wilmar Limited
4. Adani Wilmar – Caster Limited
5. Kutchh Copper Limited
6. Mundra Solar PV Ltd
7. Mundra Petrochem Ltd
8. Adani Kandla Bulk Terminal Private Limited
9. Adani Solar Limited – Bitta, Abdasa
10. Adani Green Energy Limited – Nakhtrana
11. Adani Green Energy Limited - Khavda
12. Adani Energy Solution Limited – Rapar



Environment Sustainability

"Sustain the earth, sustain life"



CLIMATE ACTION

for Environmental
Sustainability

**ADANI
FOUNDATION'S
COMMITMENT
TO A GREENER
FUTURE**



In an era where environmental sustainability is paramount, our commitment to preserving and enhancing the natural world is reflected through our diverse projects. These initiatives not only address critical environmental challenges but also align with the United Nations Sustainable Development Goals (SDGs), ensuring a holistic approach to sustainable development. The Adani Foundation is dedicated to various environmental activities, working on different projects to foster a sustainable future.



Innovative Environmental Solutions for Sustainable future

Adani Foundation is dedicated to environmental sustainability through impactful initiatives that address critical challenges and align with SDGs. Comprehensive efforts in biodiversity conservation, pollution reduction, water conservation, and renewable energy are crucial for fostering a sustainable and environmentally conscious future.



TERRESTRIAL BIODIVERSITY

Project Adani Van: "Harit Paryavaran ki Ek Pahel" focuses on afforestation and community involvement, transforming barren lands into thriving forests with **88,303 plants**, enhancing local biodiversity.



COASTAL BIODIVERSITY

The mangrove plantation project at the Luni coastal belt has **created 162 hectares of dense mangrove forests**, providing a new habitat for various species and showcasing the area's ecological richness.



PLASTIC FREE ENVIRONMENT

This initiative educates children about plastic pollution and promotes reducing, reusing, and recycling plastic to foster environmental responsibility.



WATER CONSERVATION

The **SWAJAL project** addresses groundwater depletion in Kutch by constructing rooftop rainwater harvesting systems, benefiting 1,660+ individuals and ensuring access to quality drinking water.



SOLAR PROJECTS

Surya Ghar initiative provides sustainable energy solutions by installing solar panels, significantly reducing electricity costs and promoting environmental sustainability in rural communities.

Terrestrial Biodiversity Conservation

Adani Foundation is dedicated to terrestrial biodiversity conservation through comprehensive environmental initiatives. These efforts aim to enhance green cover, restore ecosystems, and promote community involvement in environmental stewardship. By focusing on large-scale afforestation and community-led green initiatives, the Foundation has significantly contributed to the ecological health and sustainability of various regions.

An overview of Adani Van:

Sr. No.	Year	Village	Acre	Total plants
1	2021-22	Nana Kapaya	2.5	5880
2	2022-23	Partappar	6	23388
3	2023-24	Rashapir	3	5350
4	2023-24	Moti Bhujpur	3	8000
5	2023-24	Desalpar	4	10000
6	2024-25	Nani Khakhar	2	800
7	2024-25	Dhrub	3	5150
8	2024-25	Nani Khakhar	2.5	7006
9	2024-25	Pipari	3	10005
10	2024-25	Borana	4	10304
11	2024-25	Khavda	1	1120
12	2024-25	Sanghi	1	1300
		12 Adani Van	35	88303



Adani Van – Harit Paryavaran ki Ek Pahel

Massive plantation drives to enhance green cover. Transformed barren lands into thriving forests, promoting sustainability.



Biodiversity Enhancement

78 bird species, 4 mammal species, 12 species of insects and reptiles. Significantly enhanced local biodiversity and ecological health.



Prakruti Rath: Community-Led Green Initiatives

Distributed 53,886 saplings, enhancing green cover. Strengthened community connection to nature and empowered environmental stewardship.



Plantation Achievements

Total Plants:

88,303 across 35 acres

Native Species:

70+ species planted



ADANI VAN



HABITAT CREATION

Mangrove plantation has successfully established a new habitat and ecosystem for numerous organisms.

BIODIVERSITY DOCUMENTATION

PhD students from various institutions have **documented over 65 species** from different phyla, showcasing the site's ecological richness.

MANGROVE PLANTATION

A total of **8,22,000 mangroves** have been planted, contributing significantly to coastal protection and biodiversity.

ENHANCED BIODIVERSITY

The project has increased the variety of species in the area, supporting a diverse range of flora and fauna.

COASTAL PROTECTION

Mangroves act as natural barriers against coastal erosion and storm surges, protecting the shoreline and nearby communities.

CARBON SEQUESTRATION

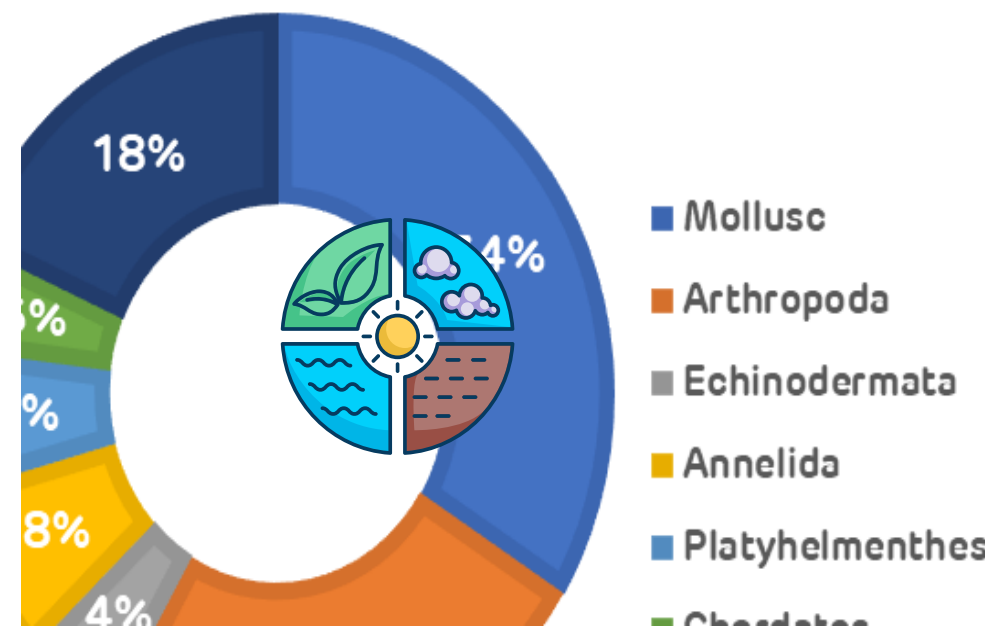
Mangroves play a crucial role in carbon sequestration, helping mitigate climate change by absorbing carbon dioxide from the atmosphere.



COASTAL BIODIVERSITY CONSERVATION

Since 2010, the Adani Foundation has been dedicated to enhancing coastal biodiversity through a mangrove plantation project at the Luni coastal belt. This initiative has resulted in the creation of **162 hectares of dense mangrove forests**, aimed at promoting ecological sustainability and creating new habitats.

CHIEF BIODIVERSITY CONTRIBUTION



Biodiversity Knowledge & Interpretation Center



Biodiversity & Interpretation Center

The center is dedicated to educating, inspiring, and engaging the community in conserving Gujarat's rich biodiverse.



Nursery Development

A nursery of 10,000 mangrove seeds was established at the Luni site with the active participation of local fishermen.



Training Sessions

30+ Employee Training on Biodiversity Conservation at Mundra Petrochem LTD.



Awareness Sessions

An awareness lecture was held at Adani Vidya Mandir, Bhadreshwar, with 50+ students participating.



Workshop on Coastal Conservation

One-day workshop was held with participation of 200+ students of University.





Nurturing A Plastic-free Generation

Adani Foundation is committed to creating a cleaner, plastic-free future through its "Plastic Free Environment" initiative. By focusing on the principles of reduce, reuse, and recycle, the foundation aims to educate children about the harmful effects of plastic pollution on ecosystems. This initiative empowers the younger generation to take proactive steps towards environmental stewardship, through community engagement and educational programs, the Adani Foundation is making significant strides in reducing plastic waste and promoting a healthier planet.

01



Plastic Free Villages

- 2 villages & 8500 individuals targeted
- 50+ local vendors, 70+ women in SHGs 325+ students were aware by sessions

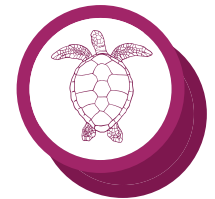
02



Green School Project

- Covering 75+ Schools
- 12000+ Students
- 32000+ Kg Single used plastic recycle at Zero Cost

03



Coastal Cleanup Day

- 200+ students and 80 Uthhan Sahayaks led to the successful cleanup of a 1 km stretch of Kashivishvnath Beach, Mandvi.

Water Conservation "Swajal Project" Enhancing Rural Water Resources

Adani Foundation has undertaken significant water conservation initiatives to address water scarcity and improve water availability in rural areas.

Through the creation of 737 various water structures, the project has increased water capacity by 5,400,735 cubic meters (CUM) and benefited 64,515 people. These efforts are crucial for sustainable water management, agricultural productivity, and community well-being.

Check Dam New/Renovation

- Structures: 29
- Water Capacity Increase: 1,072,332 CUM
- Beneficiaries: 30,870
- Impact: Enhances water storage and irrigation.



Pond Deepening

- Structures: 135
- Water Capacity Increase: 1,028,403 CUM
- Beneficiaries: 18,350
- Impact: Improves water retention and availability.



Rainwater Harvesting Structures (RRWHS)

- Structures: 330
- Water Capacity Increase: 3,300,000 CUM
- Beneficiaries: 1,650
- Impact: Maximizes rainwater capture and usage. Rs. 10950 yearly saved/house



Construction of Percolation Wells

- Structures: 26
- Ground Water Recharge: Significant
- Beneficiaries: 3,000
- Impact: Boosts groundwater levels and availability.



Bore/Well Recharge

- Structures: 209
- Ground Water Recharge: Significant
- Beneficiaries: 1,045
- Impact: Enhances groundwater recharge and sustainability.



Construction of New Wells

- Structures: 8
- Purpose: Drinking Water
- Beneficiaries: 9,600
- Impact: Provides reliable drinking water sources.





Surya Ghar Project 100% Solar Village

Adani Foundation, through its CSR initiative, has launched the **Surya Ghar Project to transform 2 villages into 100% solar-powered communities**. This project aims to provide sustainable energy solutions, enhance energy access, reduce reliance on conventional power sources, and promote environmental sustainability while significantly lowering electricity costs for villagers. **The project benefits 4,500+ people.**



Vision & Objectives

- Provide sustainable energy solutions for rural communities.
- Enhance energy access and reduce dependency on conventional power sources.
- Promote environmental sustainability and lower electricity costs.



Implementation & Impact

- Solar panels installed in 2 villages, ensuring 100% solar energy under PM Surya Ghar
- Transformed villages into models of sustainable living.



Financial Impact:

- Electricity bill reduced to Rs. 0 per household.
- Annual savings of Rs. 12,000 per household.
- **Total annual savings of Rs. 90 lakhs for 750 households.**



Environmental Benefits

- Significant reduction in carbon footprint.
- Promotes clean, renewable energy.
- Serves as a replicable model for other rural communities.



Education

“Empowering minds today
for a brighter Tomorrow”



Educational Excellence: Aligned with Adani Foundation's Vision

Project Utthan, an initiative by the Adani Foundation, is dedicated to transforming the educational landscape at the grassroots level. Aligned with the Adani Foundation's vision of fostering sustainable and integrated development, **Utthan aims to enhance the learning abilities and outcomes of students in government primary and high schools.** By adopting a holistic approach, the project addresses various aspects of education, including foundational literacy and numeracy, capacity building for teachers, and active parental engagement.

In line with the National Education Policy (NEP) 2020, Utthan emphasizes the development of cognitive skills, critical thinking, and problem-solving abilities among students. This year, the project has introduced several innovative programs to further its mission. These include **Vedica Maths and Abacus for improving mathematical literacy and logical thinking**, **School Cinema for value-based education**, and the **Children's Toy Foundation Kit to create a joyful learning environment**. Additionally, collaborations with **Secure Nature and Oasis** have been established to promote environmental education and foster a love for reading among students.

Through interactive teaching methods, activity-based learning, and digital resources, Utthan continues to make significant strides in improving educational standards and nurturing the holistic development of students. This commitment aligns with the NEP's vision of providing high-quality education to all, thereby contributing to character building and national development.



69 Primary Schools
12 High Schools

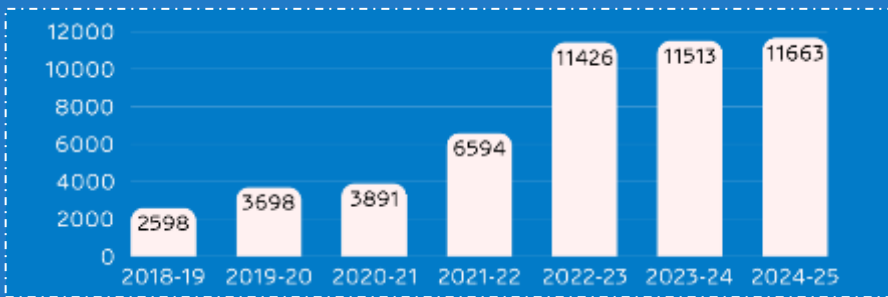


12,000+ 
student's life positively impacted

Utthan's Vision for the Future: Aligning with NEP, SDGs, & Impact Overview

Utthan is revolutionizing government primary education by transforming schools into vibrant centers of learning and development. Through innovative initiatives, Utthan introduces modern teaching methods, state-of-the-art facilities, and engaging co-curricular activities. By actively involving parents, especially mothers, as catalysts in this transformation, Utthan strengthens community bonds and enhances educational outcomes. **These efforts align with the National Education Policy (NEP) 2020 by promoting inclusive, equitable, and quality education, and support the Sustainable Development Goals (SDGs) by fostering lifelong learning opportunities and community engagement.**

Utthan Year wise students' strength



Objectives:



Mainstreaming progressive learners



Character building by Co-curriculum activity

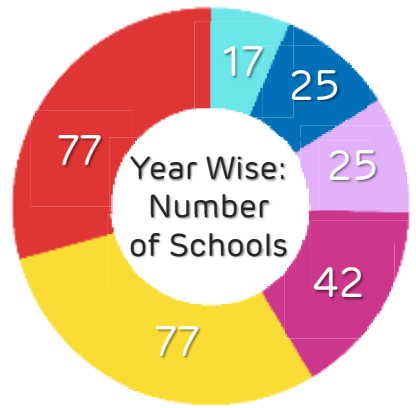


Creating joyful learning spaces

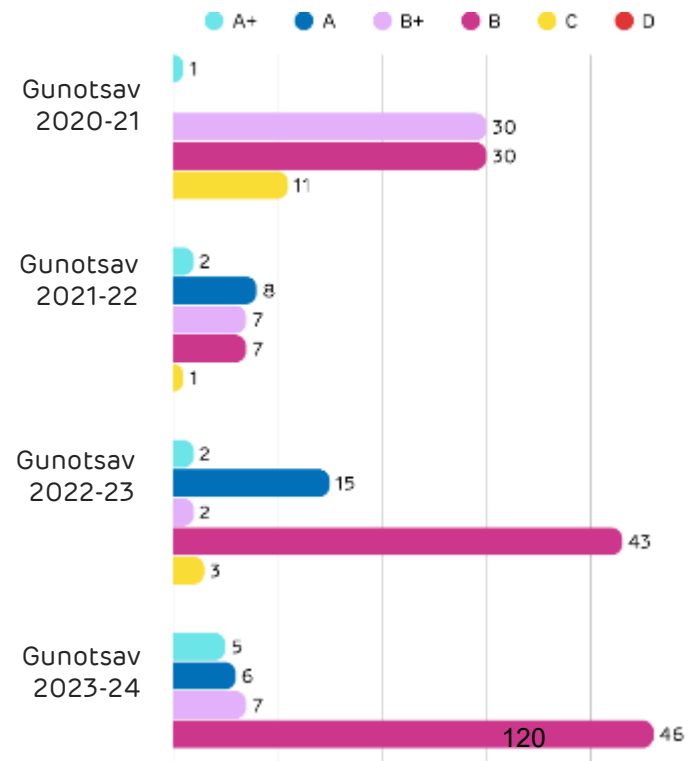


Mothers as catalyst in transformation

2018-19 2019-20
2020-21 2021-22
2022-23 2023-24



Number of Schools in Grades





Progressive learner

Teaching progressive learners involves using innovative approaches and activity-based learning to mainstream all students, focusing on foundational literacy and numeracy (FLN).



Library Activity

Conduct library activities on the first and third Saturdays of each month. To increase reading habits, we also planed reading workshops that foster a love for reading among students.



Competitive exam preparation

Prepare students for various competitive exams such as JNV, NMMS, PSE, CET, and Gyan Sadhana. Our efforts include raising awareness about these exams among the community and parents, ensuring students are well-prepared and supported.



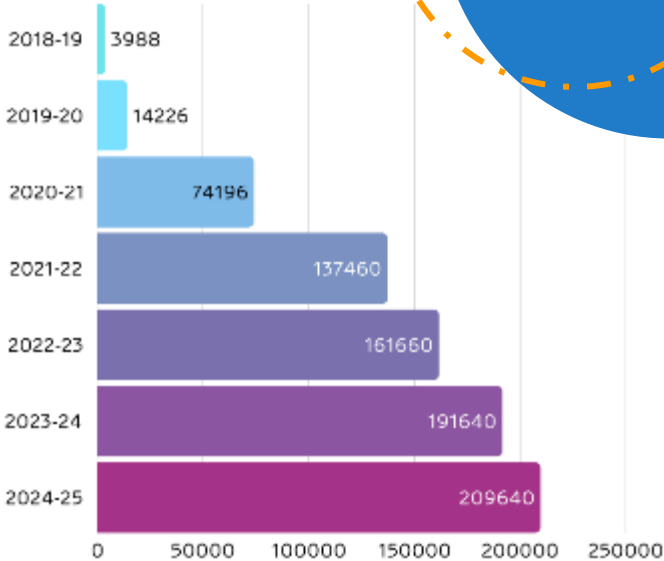
IT on Wheels

To enhance digital literacy, we introduce "IT On Wheels," a program designed to equip students with essential digital skills crucial for the 21st century. This initiative ensures that students are proficient in using technology, preparing them for future challenges.

Enriched reading corners to develop reading habits

Library books were issued twice a month, and a dedicated reading corner was established in each school to enhance accessibility. Additionally, over 1,000 books and various magazines were provided, and library activities and Oasis Book Reading Workshops were conducted regularly, enriching the reading experience and fostering a love for reading among students.

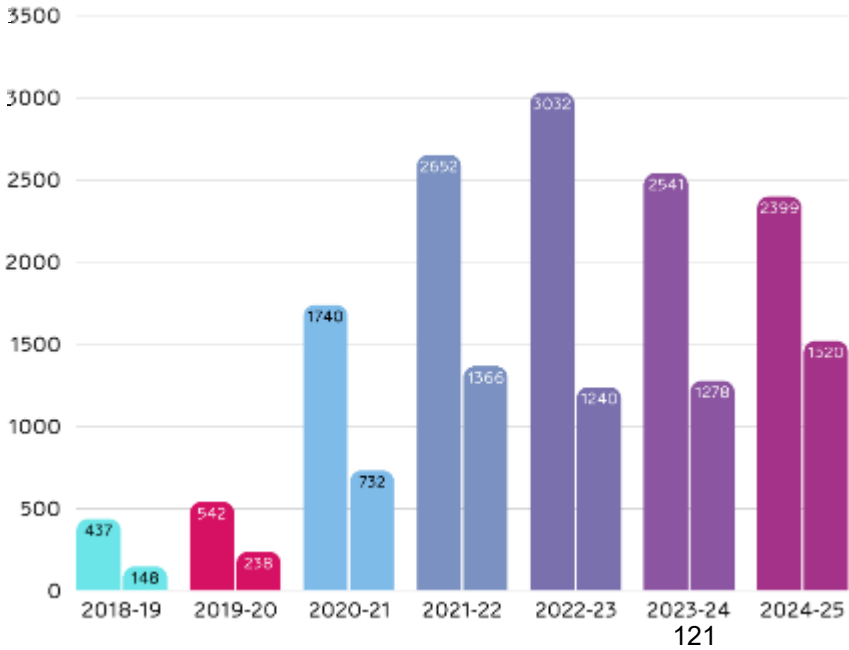
2,09,640
Books issued
between students



Progressive Students :Strengthening foundational literacy, numeracy and skills

A total of **6,540** students from Class 3 to 7 were assessed in reading, writing, and math skills, with **2399** students identified as needing additional support. Targeted interventions helped

1,520
students successfully
integrate into regular
academic programs



Utthan's Impact: A Data-Driven Overview of Utthan Initiatives



Environment Education Project

In collaboration with Secure Nature & Green School Competition to educate students about environmental conservation through hands-on activities and projects.

80
Schools
12000+
Students

Adani Competitive Coaching Center

Coaching for various competitive exams, helping students prepare effectively. This includes providing study materials, practice tests, and expert guidance.

27
Schools
5000+
Students

English as Third language

Promote English proficiency as a third language, equipping students with essential communication skills that are crucial for their future academic and professional success.

69
Schools
10000+
Students

Monthly Mother Meetings

Participation of over 18,750 mothers across 750+ meetings. held in the second week of every month, focus on sharing students' progress, engaging mothers through competitions, and providing support through home visits.

80
Schools
15000+
Students

Oasis Reading workshop

Utthan sahayak get training & conduct Oasis Reading Workshops to enhance students' reading habits. These workshops are designed to foster a love for reading through engaging activities and discussions.

700+
Workshop
20000+
Students

Capacity building of teachers

Throughout the year, we plan various training sessions, including special sahayak programs to enhance Vedic Math's and Abacus skills. We also encourage government teachers to participate in these programs

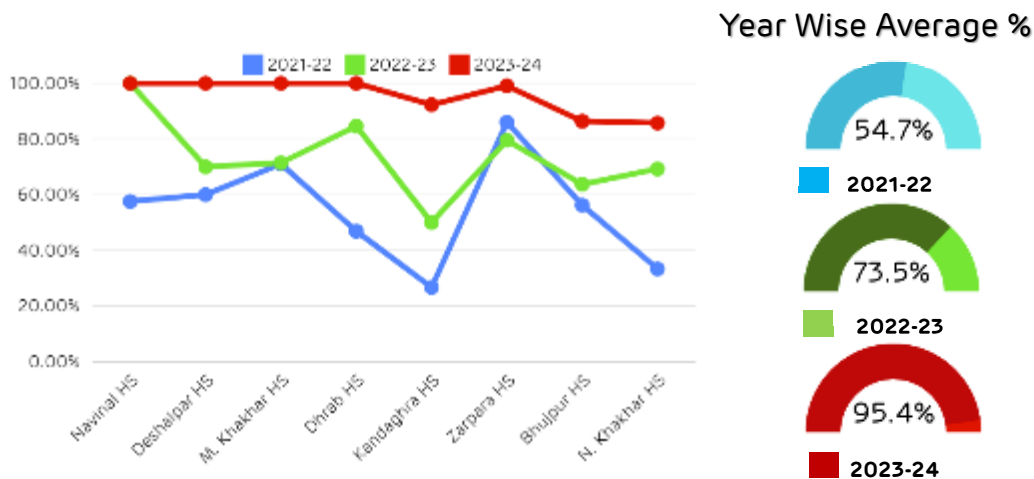
150
Teachers
16000+
Hours

High School Result Comparison

Utthan is dedicated to enhancing board results in high schools by implementing a comprehensive approach that includes both scholastic and co-scholastic activities. These initiatives focus on the holistic development of students, fostering self-growth and significantly improving academic performance.

Yearly Comparison of 10th Board result in 8 High School (HS)

Sr. No.	High School	2021-22	2022-23	2023-24
1	Navinal HS	58%	100%	100%
2	Deshalpar HS	60%	70%	100%
3	M. Khakhar HS	71%	72%	100%
4	Dhrab HS	47%	85%	100%
5	Kandaghra HS	27%	50%	92%
6	Zarpara HS	86%	80%	99%
7	Bhujpur HS	56%	64%	86%
8	N. Khakhar HS	33%	69%	86%



Enhancing Skills: Vedic Maths & Abacus Programs for Students

Implementation

- **Abacus program introduced in 58 primary schools.**
- **Vedic Mathematics program introduced in 8 high schools for class 9 students.**
- Fostered critical thinking and logical reasoning.

Student Participation

- **1,607 students** from classes 5-7 participated in the **Abacus program**.
- **1,302 students** from classes 8-9 participated in the **Vedic Mathematics** program.

Assessment & Certification

- All students completed Level 1 and received a certificate.
- Students who completed Level 2 were also recognized.

Program Impact

- Enhanced students' mathematical skills and problem-solving abilities.
- Increased student interest in mathematics.
- Sahayak participants received certificates, boosting their confidence and motivation.



Key finding of third-party assessment

The Utthan program assessment employed a quasi-experimental, mixed-methods design with pre-post comparisons and stratified random and purposive sampling to evaluate student outcomes, program impact, and sustainability. The sample included 288 intervention students, 96 non-intervention students, 53 Sahayak, 30 head teachers, 30 SMC members, 30 parents, and community members, with data collected through FGDs, SSIs, and KIIs. Univariate and bivariate analyses were conducted, and field notes were transcribed to identify themes. These themes were aligned with objectives and compared to past data to uncover discrepancies and analyze their causes.



More than 90% of the students have achieved proficiency in reading, writing and numeracy skills in Utthan Schools.



Utthan sahayak as catalyst: The introduction of Saha yaks (teacher assistants) ensures personalized student support and bridges gaps between schools and families, fostering greater parental involvement.



Sahayak have mentioned improvements in their classroom management practices, strong and parent and community management and understanding of student child development



97% of students reported improved confidence in leadership and communication and **97% of students in Utthan schools** have mentioned interest in attending school.



Teachers' capacity building : Comprehensive teacher training programs enhance instructional quality, equipping educators with tools to deliver FLN-focused curriculum effectively.



Community engagement through home visits and mothers' meetings, the project strengthens parental accountability and participation, directly influencing students' motivation and performance.



Adani Vidya Mandir, Bhadreshwar

Empowering Futures through Holistic Education

Adani Vidya Mandir, Bhadreshwar (AVMB) stands as a beacon of hope and excellence, dedicated to transforming the lives through free and quality education. Aligned with the principles of the National Education Policy (NEP) and the National Accreditation Board for Education and Training (NABET), AVMB is committed to fostering an inclusive and holistic learning environment. The 2024-25 academic year has been a testament to our unwavering dedication to the Sustainable Development Goals (SDGs), particularly Goal 4: Quality Education. AVMB has successfully integrated innovative programs, dynamic student engagement, and comprehensive support systems to ensure that every child receives the best possible education and opportunities for personal growth. These efforts reflect our mission to provide a nurturing environment where students can thrive academically, socially, and emotionally.



Holistic Development & Achievements

Academic and Institutional Developments

- Board exam results showcased excellent student performance, with targeted remedial sessions introduced for continuous improvement.
- The Housekeeping Training Program (May 28) emphasized cleanliness and hygiene maintenance among staff.

Teacher Development and Training

- Teacher Capacity Building Program (June 6) enhanced instructional strategies and curriculum planning.
- NABET Accreditation Training (June 12) ensured compliance with national educational standards.

Technological Advancements

- Inauguration of a New Computer Lab (Sept 27) enhanced digital learning opportunities.
 - AI and Google Gemini Training (Nov 16) prepared educators for modern teaching methodologies.



Cultural and Co-Curricular Activities

- World Book Day (April 23) promoted reading culture through storytelling and book exhibitions.
- International Yoga Day (June 21) emphasized mindfulness and physical wellness.

Student Achievements

- SVS Science Exhibition (Oct 4): AVMB students won first place for their research on screen time and its impact.
- District-Level Science Fair (Dec 9-10): Students represented Mundra Taluka with innovative projects.

Health and Safety Initiatives

- Menstrual Hygiene Awareness Program (June 22) educated girls on personal health and wellness.
- School-Wide Health Check-Up (July 8) ensured early detection of health concerns.

Empowering Minds & Building Futures at AVMB

Environmental and Community Initiatives



- World Mangrove Day (July 25) raised awareness about ecological conservation.
- Fortnight-Long Swachhagrah Drive (Sept 17-30) promoted cleanliness and sustainable habits.

Student Welfare and Community Engagement



- Educational Trips (Dec 3, Feb 18-19) provided real-world learning experiences.
- First Alumni Meet – SANGATH (Oct 26) strengthened ties with former students and inspired current learners.

Sports and Physical Education



- Inter-House Sports Competitions (Jan 3): Events like Kabaddi and Kho-Kho fostered teamwork and discipline.
- Khel Mahakumbh 3.0 (Jan 15): Over 77 students showcased athletic skills in multiple disciplines.

Special Recognitions and Awards



- Best Day-Boarding School Award (NSA 2024) recognized AVMB's commitment to quality education.
- Education Excellence Award (Feb 11) reinforced AVMB's role in empowering underprivileged students.

Teacher Development and Training



- Sanskarotsav Teachers' Training (Nov 12-14) focused on self-development and effective teaching strategies.
- Adobe Express Training (Jan 17) introduced teachers to digital learning tools.

Cultural and Co-Curricular Activities



- Ashadhi Bij Celebration (July 5) and Guru Purnima (July 19) reinforced cultural values.
- Kala Utsav and Kala Mahakumbh Competitions (Dec 6, 23, 24): Students excelled in music, painting, and performing arts.



AVMB: A Year of Outstanding Achievements



AVMB Under-14 and 17 teams both won the Mundra Taluka Level Kho-Kho competitions.



Rathod HardevSinh secured first place in the District Level Athletics Festival at the Taluka level.



A project from AVMB ranked first in the Science Fair at the SVC level and second at the CRC level.



At the QDC level, AVMB students achieved first place in Play Music, Singing, and Bal Kavi competitions.



At the BRC level, AVMB students won first place in Singing, Drawing, and the Group Song Competition



641 Students currently shaping their future through dedicated learning at the schoolents .



1171 students who have embarked on their journeys through AVMB





Udaan GET INSPIRED Inspiring Minds



adani
Foundation



Udaan Progress Report | Apr 23 - Feb 24 | Volume 2 | www.projectudaan.in

About Project

Udaan is a special project inspired by the life-changing story of Mr. Gautam Adani. As a child, he had visited the Kandla port in Gujarat, and after looking at the expanse of the port, he dreamt of having his own port one day. The rest is history. Under this project, exposure tours are organized wherein school, college students, faculties, employees from corporates are given a chance to visit the Adani Group facilities. Under this project, services are absolutely-free of cost for government schools.

Vision

To create a pool of inspired young minds for nation building at a global scale.

Mission

To motivate young students to dream big by exposing them to world-class industrial facilities.



Total no. of
Schools/Colleges/
Institutes

408

Total no. of
participants

26346





Sustainable Livelihood Projects

“Empowering hands, transforming lives”



SLD - Animal Husbandry

With decreasing rainfall and rising groundwater salinity, traditional farming faces serious challenges. To support farmers and livestock owners, the Adani Foundation has taken proactive steps to strengthen agriculture and animal husbandry in nearby villages.

PASHUDHAN INITIATIVE

This initiative focuses on two key areas:

1. Preventive Health Care
2. Fodder Support



PREVENTIVE HEALTH CARE

Under the Preventive Health Care program, the Foundation, in partnership with the Animal Husbandry Department, organizes regular cattle health camps across 24 villages. These camps provide veterinary check-ups, vaccinations, and treatments for common diseases. Life-saving vaccines, such as those for Foot-and-Mouth Disease (FMD) and Clostridial infections, help ensure long-term immunity and healthier livestock. Additionally, medicines and vaccines are supplied by the Foundation.

These efforts are helping protect livestock health, improve farmers' livelihoods, and build resilience in the community.



Vaccination Camp



14,056
Cattle vaccinated

1460
Deworming tablet distributed

15,000+
Cattle benefited

959
Cattle owner benefited

FODDER SUPPORT

The Adani Foundation's Fodder Support Program plays a crucial role in supporting nearby villages during harsh summers, droughts, and crop failures. To ensure livestock health and community well-being, we provide high-quality dry and green fodder to 24 villages.

Adani Foundation provides good quality dry and green fodder to 24 villages in our vicinity, covering 15,005 cattle of 1500+ Cattle owners.

Grass Land development:

AF converted 5 acres of desolated village common pastureland (Gauchar) into fertile and productive grassland in Zarpara village to transform into Fodder Sustain village with Community participation and responsibility for maintain and Monitoring.

Among that 5 acre of Gauchar land is fenced and sowed with Multispecies Green Fodder with Having Good nutritive value. More than 1500 Cattle will sustain with Improving quality and quantity of milk.



15,74,250kg
Dry Fodder

51,66,805kg
Green Fodder



15,005
Cattle benefited

1500+
Cattle owner benefited



SLD - Fisherfolk Community

Persistent efforts
for Fisherman development



686

Educational Kit
Support



111

Cycle Support
to high school
going students



273

Fisherman Shelter
Support



648

Scholarship
Support



195

Linkage with
Fisheries Scheme



1368

Vehicle transportation
Support



494

Youth
Employment



3534

Ramatotasav
Community
Engagement



56,523

Man-Days
mangrove
plantation



“Fisherfolk Community

holds great importance in Mundra, as they are an integral part of the coastal ecosystem and economy. Recognized as a marginalized group, we are committed to their holistic upliftment through various sustainable livelihood initiatives. Our interventions focus on enhancing their education, improving shelter and transportation facilities, supporting youth employment, and connecting them with government fisheries schemes. Through these continuous efforts, we aim to empower the fisherfolk community and ensure their socio-economic development.

Empowering Fisherfolk Communities through Education



Scholarship Support:

To uplift financially challenged communities, we extended scholarships support of **Rs. 3,58,765 to 35 students**, enabling them to pursue higher secondary and technical education. This support is helping break the cycle of poverty and create a brighter future for these students and their families.

Vehicle Transportation Facilities:

Ensure seamless access to education for **121 school-going children** from Modhva, Tragadi, and Zarpara Bandar Fisherfolk Students in reaching the nearest School, eliminating barriers to regular attendance. Additionally, personal **cycle support to 5 fisherfolk students**.



Education Kits Support:

Equipping **88 fisherfolk students** in HSC and Graduation with essential tools for academic success, including notebooks, guides, stationeries and study bags, we empower them to pursue their education with no financial barriers.

Job opportunity

Acting as a bridge between industries and fisherfolk youth, the Adani Foundation facilitated job placements for 30 fisherfolk as RTG operators, in the HR department, and as supervisors in APSEZ companies.

In the APSEZ area and colony, 45 fisherfolk youth have been offered professional painting roles. To ensure they are skilled for the role, they underwent comprehensive training in partnership with Asian Paints.

This initiative has enhanced their livelihoods and provided sustainable employment opportunities.

Awareness camp on Menstrual health:

A menstrual health awareness camp was organized for **200+ women** from the fishing communities of Modhva and Tragadi villages. The program focused on educating them about menstrual hygiene, PCOD, and menopause management. It promoted healthy practices, offered guidance on managing related health issues, and distributed sanitary products to support their overall well-being.



Potable water Distribution:

Providing access of potable Drinking water Facilities to Nine fisherfolk vasahat on Daily bases, either By Water tanker or Linkage with Nearest Gram panchayat.

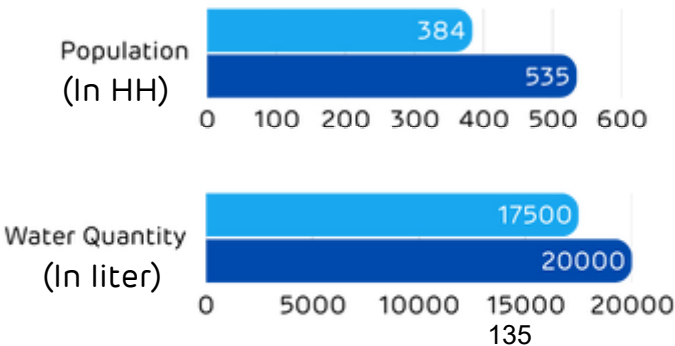


5000+ Fisherfolk Population are getting benefit which impact on their health and well-being

Daily Water Tanker Support:



- Luni Bandar
- Bavdi Bandar



SLD - Agriculture

BIOGAS PROJECT

In our ongoing efforts to promote sustainable and eco-friendly farming practices, we have successfully registered 863 farmers from five different talukas in the Kutch district. Each registered farmer will receive financial support of ₹9,000 for the installation of biogas plants on their farms. This initiative aims to provide farmers with a renewable source of energy, reduce dependency on conventional fuels, and improve overall agricultural productivity.



Benefits of Biogas:

Renewable Energy Source

Biogas is a sustainable and renewable energy source that reduces dependence on fossil fuels.

Cost Savings

Farmers save on fuel expenses as biogas can be used for cooking, heating, and electricity generation.

Waste Management

Biogas plants efficiently manage agricultural waste by converting it into useful energy.

Environmental Impact

Biogas reduces greenhouse gas emissions, contributing to climate change mitigation.

Soil Health

The by-product, known as digestate, is a nutrient-rich organic fertilizer that enhances soil fertility.

Improved Livelihoods

Biogas provides farmers with additional income and energy security, improving their overall quality of life.

Key Highlights

863 Farmers

Total Farmer
Registered

Rs. 9000

Financial
Support to each
farmer

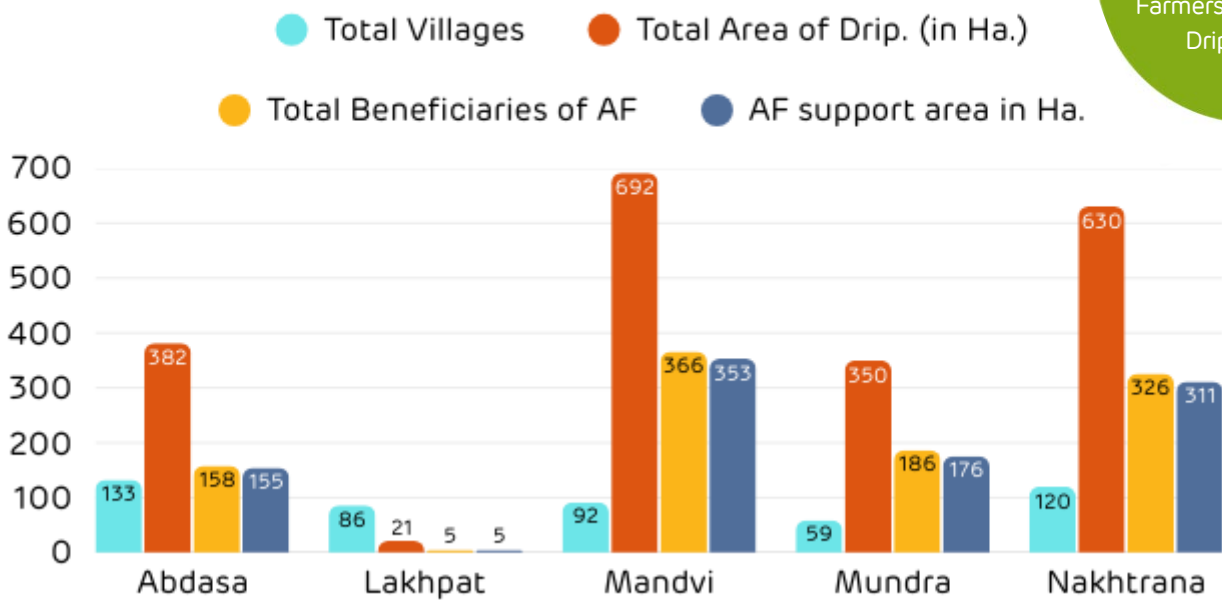
6 Talukas

Geographical
coverage in Kutch

DRIP IRRIGATION: ENHANCING LIVELIHOODS IN KUTCH

The Drip Irrigation Initiative by Adani Foundation promotes efficient water use in farming by providing financial support to farmers for installing drip systems. It helps conserve water, improve crop yield, and encourage sustainable agriculture in Kutch.

Adani Foundation's Drip Support in FY - 2024-25



1041
Farmers connect with
Drip Support

In 2024-25, Adani Foundation supported sustainable water management in Kutch by **Promoting drip irrigation across 490 villages in Abdasa, Lakhpatt, Mandvi, Mundra, and Nakhtrana talukas. Covering a total area of 2,074.53 hectares, the initiative benefited 1,041 farmers.** This effort enhanced irrigation efficiency, boosted agricultural productivity, and contributed to water conservation and eco-friendly farming practices in the region.

Natural Farming

As part of our commitment to sustainable agriculture, we have focused on promoting natural farming practices to conserve soil health and enhance environmental sustainability.

Till Date

2,275	226	857
Farmers trained in Natural Farming	Farmers successfully transformed to 100% Natural Farming	Farmers linked with GOG to support cattle welfare scheme



Green Carnival

Organized an annual Green Carnival, providing farmers with a dedicated marketplace to sell their organic produce directly to consumers. This event is hosted by our employee company and attracts many buyers interested in organic products.

Sales Achievements

This year, the Green Carnival was a resounding success, with farmers selling a total of **16,241 kg** of organically grown vegetables and fruits at the event.

Rs. 6,49,640+
Total revenue



SLD - Women Empowerment

The Adani Foundation places women's empowerment at the heart of its initiatives, focusing on skill development, entrepreneurship, and self-reliance. By providing training, essential materials, and market linkages, it creates opportunities for women to enhance their livelihoods. In collaboration with government programs, the foundation strengthens Self-Help Groups (SHGs), promoting savings and sustainable businesses. It also prioritizes women's health and hygiene through targeted awareness initiatives. This holistic approach fosters economic independence, social inclusion, and overall well-being among Women in its project areas.



Self Help Groups

- 88 Self Help Groups in coordination with National Rural Livelihood Mission.
- 920+ Members
- Over Rs.39 Lacs Saving Amount Corpus



Job Sourcing - Govt

- 11 Women supported for application and process of Gram Rakshak Dal, Bank Sakhi, Bima Sakhi and Professional Resource Person.
- Average income Rs.7500 Per Month



Making SHG Self Reliant

- 16 SHG are making strides towards self-reliance. Various handicraft, dry and fresh food making, stitching, tie and die etc.
- 175+ women - Monthly average income @ Rs.7000 of each member/Month



Social Empowerment

- 4 Livelihood Enhancement Training through RSETI
- Financial support for business set up
- Legal rights and domestic violence workshops
- Family counselling for Job sourcing



Job Sourcing - Private

- Coordination for Job by Unnati Portal with Adani Group company companies, Britannia, B Medical and Emphazer company
- 758 Women supported till date for job sourcing.
- Average income Rs.10,800 Per Month



Revenue of each SHG in FY 2024-25

Name of IG activity of SHG's/JLG/FPC's	Income 2023-24 (INR)	Cumulative income (INR)
Sonal Saheli	338700	3378700
Sanitary Pad Saheli	25,600	282,266
Tejasvi Saheli	149200	4,454,250
Umang Saheli	54300	291100
Madhav Saheli	39600	549200
Soof Saheli	92000	253000
Meghadhanush Saheli	458000	685090
Saheli Swa sahay Juth	105425	902850
Radhe Saheli	44500	924918
Shrddha Saheli	2600000	5179000
Chamunda Saheli	26900	1755700
Food Sister Sahlei	1755700	2640200
Jyot Saheli	44199	89199
Pantjanpir gau Saheli	467000	1058000
Total	6201124	13922443473

"CHETNA"

Initiative with gender diversity

The Adani Foundation, in partnership with Unnati Portal and Adani Solar, launched the "CHETNA" initiative, aimed at promoting gender diversity by creating equal opportunities for women from Kutch to pursue employment and personal development.

Understanding the cultural and social barriers faced by women in the region, the Foundation took proactive steps to mobilize and counsel potential women candidates. Special efforts were made to engage with their parents, addressing concerns and building trust to encourage families to support women's participation in interviews and formal employment. To ensure smooth onboarding, the Foundation also provided travel assistance and interview support. As a result of these focused efforts, today 614 women from Kutch are successfully employed at Adani Solar, marking a significant step towards their economic empowerment and fostering gender diversity in the workforce.

₹ 1.8 Lakhs/annum
12th pass candidates

₹ 2.16 Lakhs/annum
Graduate candidates

Technical Associates

614

Local
female
employees
in Adani
Solar from
Kutch



Highlights of the Work done by our SHG!

Sathwaro'24

Powering Art, Empowering Artisans

3 women SHGs from Adani Foundation Mundra participated in the prestigious Sathwaro Mela at the Belvedere Club, Ahmedabad, showcasing Mud Art, Bead Art, and Soof Art, along with two artisans specializing in Rabari and Doorri work, achieving an impressive turnover of **Rs.1,30,000/-**



New Stitching Centre

Livelihood opportunities for local women

In Vandh Village, by providing advanced stitching and embroidery training, the new stitching center empowers women with skills and employment. Equipped with 11 modern machines, women are producing 5,000 bags, gaining financial independence and professional confidence.

Women empowerment initiative

Adani Foundation is empowering rural women through skill training, exposure visits, and SHG formation, enabling them to achieve financial independence and entrepreneurship.

Skill Training

Stone Dust Art Training

Mud Art Training

Beauty & wellness Training

@ **100+** Local women empowered

Exposure Visit

Visit to Welspun Stitching Centre for women to learn about stitching enterprises

New SHG Formation

"**Madhav Saheli**" a Food service SHG

"**Gopinath Saheli**" a Tailoring SHG

"**Suidhaga**" a Tailoring SHG





MENSTRUAL HYGIENE AWARENESS

Adani Foundation is dedicated to educating and empowering rural girls and women from marginalized communities about menstrual health. We aim to break negative social stigmas around menstruation and improve their overall well-being.

61
Villages covered

8300+
School girls &
women participated
till now



CELEBRATED INTERNATIONAL WOMEN'S DAY WITH 1,000 LAKHPATI DIDIS

On 5th March, Adani Foundation celebrated the strength and resilience of women by marking International Women's Day with 1,000 Lakhpati Didis. The event highlighted the Foundation's ongoing efforts to empower rural women through meaningful livelihood opportunities. Over 614 women have been connected with job opportunities at Adani Solar, while 850+ women entrepreneurs received support to grow their businesses.

Women from across Kutch shared their inspiring journeys of transformation, made possible by the Foundation's initiatives.

The celebration was graced by 9 international ambassadors who applauded the impact of these programs. Chief Guest Manisha Chandra - IAS (Principal secretary, Rural Development) had given motivation speech. Ms. Ami Shah (Director, Adani Public school) had appreciated efforts of Adani foundation and Adani solar for supporting Rural women and opportunities to grow as a technical associates in Adani Solar Mundra.



Community Health

"A healthy community is a strong community"



Community Health

Good health is the foundation of a progressing community. In Kutch, the Adani Foundation is committed to improving healthcare access through partnerships with Adani G.K. General Hospital in Bhuj and Adani Hospital in Mundra.

For over a decade, we have supported communities with Mobile Health Care Units, Rural Clinics, and Ayushman Card linkages.

In response to rising cases of viral, kidney, and orthopedic diseases caused by salinity ingress, we have organized specialized health camps to provide treatment and raise awareness about prevention. By focusing on both preventive and curative healthcare, we strive to ensure long-term well-being and economic stability for the communities we serve.

Hospital 

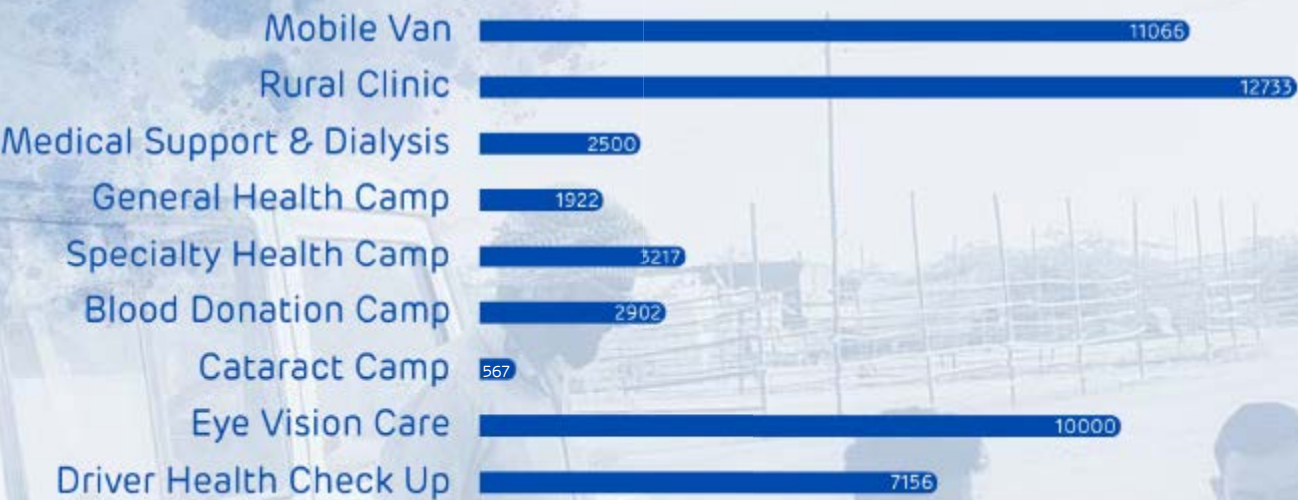
Rural Clinic 

Eye Vision Care 

Mobile Health Care Unit 



Our Service



Adani Hospital Mundra Pvt. Ltd.

OPD	IPD	TOTAL
43183	2419	45602



Mobile Health Care Unit

The Adani Foundation operates Mobile Health Care Units that provide essential healthcare services to 29 villages and 7 fishermen settlements in Kutch. These units are equipped with diagnostic tools for blood pressure, sugar testing, and ECG, along with 90+ lifesaving medicines. By offering affordable healthcare at just ₹20 per visit, the MHUs ensure that primary healthcare reaches even the most remote communities.

11,066
patients benefited



Rural Clinic Services

To enhance healthcare accessibility in rural areas, Rural Clinics have been set up in 5 villages of Mundra and 2 villages of Mandvi Block. These clinics offer regular medical consultations, basic treatments, and preventive care services. They play a crucial role in bringing consistent healthcare support to communities that otherwise have limited access to medical facilities.

12,733
patients benefited





Financial Assistance for Critical Illness

Understanding the burden of life-threatening diseases on economically weaker families, the Foundation provides financial support for patients suffering from heart, liver, kidney diseases, and cancer. In the current year alone, 45,602 patients from Mundra, Mandvi, and Anjar Blocks have received critical medical assistance at Adani Hospital, Mundra, in collaboration with Adani GK General Hospital, Bhuj.

45,602
patients benefited



General Health Camp

It aims to make quality healthcare accessible to underserved communities by providing free consultations and basic medical services. Doctors conducted health check-ups, including blood pressure monitoring, respiratory assessments, and screening for seasonal illnesses. Patients were also provided with necessary medicines on the spot, ensuring timely treatment and care. Such camps play a vital role in promoting health awareness and addressing common health issues in rural areas where access to healthcare is limited.

1922
patients benefited



Specialty Health Camp

It organizes to support focused medical care to rural communities through consultations from specialists such as gynecologists, pediatricians, orthopedists, ophthalmologists, and physicians. The primary objective is to address critical health issues among women and children, particularly during pregnancy, to prevent maternal and infant mortality. Additionally, Specialty Health Camps are organized promptly in response to disease outbreaks in villages, ensuring quick medical support and controlling the spread of illnesses.

3217
patients benefited





Eye Vision Care Initiative

This year, Adani Foundation, in collaboration with Vision Spring, has launched a comprehensive Eye Vision Care program to address uncorrected refractive errors and improve eye health in the community. The initiative focuses on students ("See to Learn"), SHG women ("See to Earn"), and APSEZ drivers ("See to Be Safe"), ensuring better education, livelihood, and road safety. It also promotes "Vision for All" across the community. It is a holistic eye care campaign starting from the process of registration to eyeglass dispensing, and cataract surgery support.

10,000
patients benefited



Menstrual Hygiene Awareness Camps

Promoting health and dignity among adolescent girls and women, menstrual hygiene awareness camps are regularly organized in schools and community centers. These sessions focus on educating participants about menstrual health, hygiene practices, and breaking cultural taboos. Sanitary pads are also distributed to encourage proper menstrual care and improve overall health outcomes for women and girls.



Cataract-Free Mundra Initiative

To combat vision loss among the elderly, the Cataract-Free Mundra campaign has screened 567 individuals at the village level. Patients identified with cataracts are referred to GK General Hospital, Bhuj, for surgery, followed by post-operative care and follow-ups. This initiative has restored vision for many senior citizens, helping them regain independence and quality of life.

68 successful
cataract operations





VisionSpring™
See well. Do well.

adani
Foundation

સ્પષ્ટ દૃષ્ટિ ઉજ્જવળ ભવિષ્ય

મફત આંખોનું સ્ક્રીનિંગ અને
ગુણવત્તાશીલ ચશ્મા

ફ્રી હેલ્થલાઈન **1800-1033-55**

ર થી શનિવાર સવારે 9:00 થી સાંજે 6:00

ને તમારો સરકારી ઓળખ પુરાવો સાથે



Facility Highlights of Burn Care Center

- 26 General Beds + 4 ICU Beds.
- Major & Minor OT (Operation Theatres).
- Dressing Room for burn wound management.
- 24x7 Emergency Services.
- Built as per Government District Hospital Standards.



22 LAKH
PEOPLE WILL BE
BENEFITED

**INCREASE THE
SURVIVAL RATES**



Burn & Intensive Care Unit – Adani GK General Hospital, Bhuj

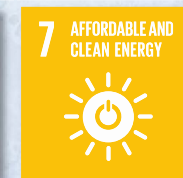
The Adani Foundation, with funding support from Mundra Petrochem Limited (MPL) and Kutch Copper Limited (KCL), has established Kutch's **first-ever Burn & Intensive Care Unit** at Adani GK General Hospital, Bhuj. This state-of-the-art facility addresses a critical healthcare gap in India's largest district, where no specialized burn care previously existed. The center offers immediate and affordable treatment for burn injuries and plastic surgeries, reducing the risk of infections and saving lives by eliminating the need for patients to travel long distances to cities like Ahmedabad or Mumbai.

It is a significant step toward strengthening healthcare infrastructure, benefiting over 22 lakh people in Kutch by providing timely, quality care and easing financial burdens on affected families.



Community Infrastructure Development

“Infrastructure that connects, empowers, and sustains”

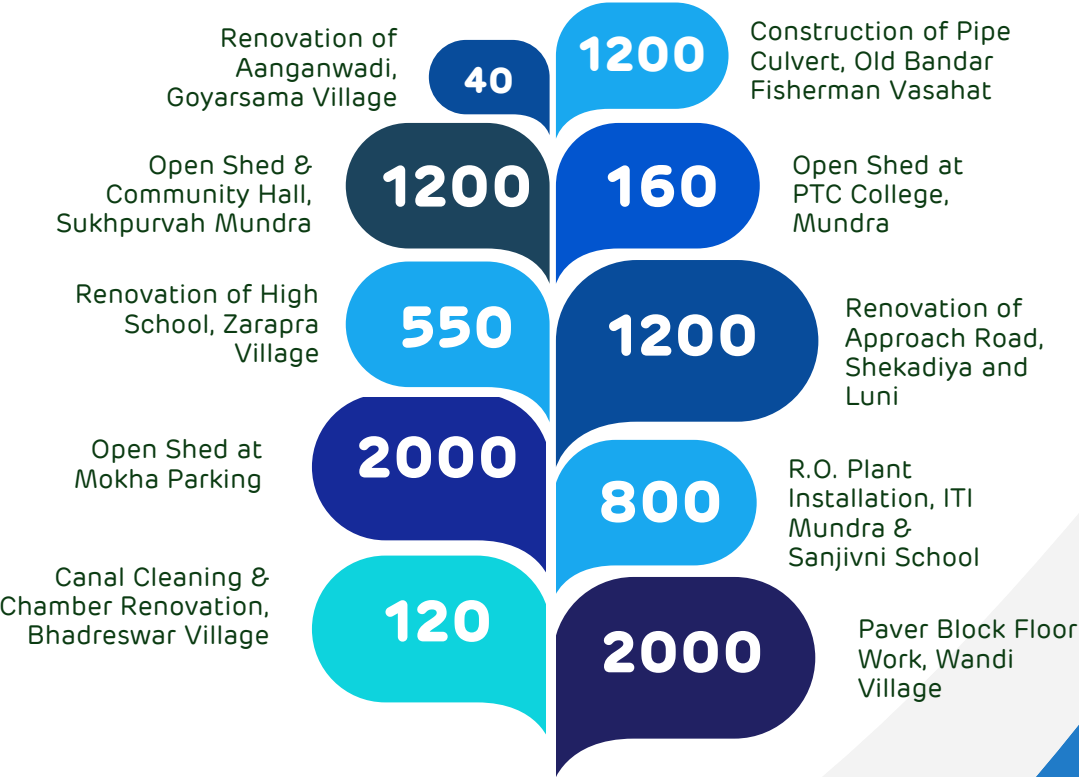


Community Infrastructure Development



The Adani Foundation has been actively engaged in enhancing community infrastructure through various civil development projects, significantly improving the quality of life for residents. Key initiatives include the renovation of educational facilities, the construction of community gathering spaces, and strategic water management solutions. Upgraded schools now provide better learning environments, while newly built community halls and open sheds serve as essential spaces for social and cultural gatherings. Water infrastructure improvements, such as pipe culverts, have mitigated flooding risks and enhanced accessibility. Additionally, the installation of R.O. plants in educational institutions ensures access to clean drinking water. These initiatives align with global sustainability goals, fostering long-term community resilience and inclusive development.

CID projects & its beneficiary's tree



CID - Key Community Infrastructure Developments



Educational Facility Renovations

- High School, Zarapra: 550 students benefited.
- Aanganwadi, Goyarsama: 40 students benefited.
- High School, Desalpar: 550 students benefited.
- Kasturba Girls Hostel, Desalpar: 150 girls benefited.

1290



Community Gathering Spaces

- Open Shed & Hall, Sukhpurvah Mundra: 1200 people benefited.
- Gathering Place, Wand: 2000 people benefited.
- Open Shed, Mokha Parking: 2000 people benefited.
- Open Shed, Tuna: 600 people benefited.

5800



Infrastructure Improvements

- Pipe Culvert, Old Bandar: 1200 people benefited.
- Box Culvert & CC Road, Zarpara: 12000 people benefited.
- Approach Road, Shekadiya & Luni: 1200 people benefited.
- Approach Road, Vadi Vistar: 800 farmers benefited.

15200



Water Management Projects

- Percolation Well, Mota Bhadiya: 80 farmers benefited.
- Percolation Bore Cleaning, GPVC Villages: 3150 farmers benefited.
- Pond Deepening & Road Cleaning, GPVC Villages: 6KM cleaned.

3230



Sanitation and Health Initiatives

- R.O. Plant, ITI Mundra & Sanjivni School: 800 students benefited.
- Toilet Block for Disabled, GPVC Villages: 5 families benefited.
- Painting & Office Work, CHC Mundra: 14600 people benefited.

15430

Community Resource Centre

The Community Resource Centre (CRC), located at the Adani Field Office in Baroi, serves as a vital bridge between government schemes and the beneficiaries who need them most. Functioning as a single-window solution, the CRC provides support for online applications and documentation, ensuring that eligible individuals can access various welfare schemes with ease.

Through the facilitation efforts of the Adani Foundation, a total of 2,334 beneficiaries are currently receiving aid under multiple government programs, including Widow Pension, Senior Citizen and Divyang Pension, and the Palak Mata Pita Scheme. This support results in a combined aid of Rs. 3.37 crore monthly.



Rs. 3.37 crore
monthly aid to
2,334
beneficiaries



Government Scheme Facilitation				
Sr. No	Scheme Detail	Gov. Support Rs/Month.	Total Beneficiaries	Total Amount per Month (INR)
1	Widow Pension	1250	762	24785100
2	Bal seva Ayog	2000	49	3430000
3	Divyang pension	1000	35	670000
5	Niradhar Pension	1000	160	4163000
6	Palak Mata Pita	3000	5	696000
7	Bus pas	Free ST	481	
8	Divyang Govt sadhan sahay	-	175	-
9	Divyang certificate	-	667	-
Total			2334	33744100

Swavlamban

"A step towards inclusivity"

'Mangal Seva' for Divyang Women

What is 'Mangal Seva' initiative?

On the auspicious occasion of Jeet Adani Sir's wedding, Adani Foundation launched Mangal Seva, a meaningful initiative aimed at empowering differently-abled married women. This transformative program is a reflection of the Foundation's commitment to inclusive and sustainable development.



Under this initiative, the Adani foundation has pledged annual financial assistance of ₹10 lakh to 500 married female divyangs.



₹10 lakh support to
500 female divyangs



Impact

- Ensuring a future of dignity, security, and stability for beneficiaries.
- Strengthening inclusivity and social upliftment through impactful support.

Advancing Sustainable Mobility: Electric Vehicle Initiative

Adani Foundation has introduced a highly advanced electric vehicle (New Motion Company) support program, a significant step towards sustainable and inclusive mobility.

Advance Electric vehicle support to 48 Divyangs



Livelihood tools support to divyangs

Independence, dignity, and sustainable income opportunities to 50 Divyangs

Through community outreach, 50 beneficiaries were identified and supported through electric tricycles, wheelchairs, and manual tricycles to enhance mobility, along with other livelihood support such as sewing machines, electrician kits, and handcarts to promote self-employment. Customized support ensured tools matched individual needs.



Till date endeavor

AF livelihood support to
1140+ Divyangs

Supported
2104 divyangs
in availing 3144
Government services



World Divyang Day Celebration - 2024



On the occasion of World Divyang Day, Adani Foundation celebrated the spirit of empowerment at the Swavlamban event held at Gujarat National Law University, Gandhinagar.

The Adani Foundation announced the **support of 1,152 technical kits to divyang students across all ITIs in Gujarat** and showcased its decade-long journey of supporting divyang individuals, particularly in Kutch. As part of this significant event, we also launched the book Swavalamban, which captures the entire journey of the Adani Foundation's initiatives for people with disabilities. The book also features the inspiring case studies of individuals who, with our support, have achieved financial self-sustainability.

Chief guest Bhanuben Babariya (Cabinet minister, Social Justice & Empowerment, Gujarat), along with other dignitaries, praised the Foundation's efforts.

Mr. Jeet Adani sir, Director of Adani Group, emphasized the group's unwavering dedication to empowering divyang persons through sustainable initiatives in areas like education, skill development, and livelihood opportunities.



ADANI SKILL DEVELOPMENT CENTER

The Adani Skill Development Center (ASDC) in Bhuj and Mundra is dedicated to creating a future fueled by a skilled and empowered Indian workforce, driving economic growth. Focused on bridging the gap between industry demands and workforce capabilities, ASDC offers high-quality vocational training, fosters innovation, and promotes entrepreneurship. **The center's impact is significant, with 887 students in Bhuj & Mundra, where 70% of participants are female, and 258 technical trainees already placed in diverse roles** such as General Duty Assistant and Domestic Data Entry Operator etc. Six placement drives and 24 guest lectures have further supported career opportunities. In Mundra, courses like RTG Crane Operator, Tally with GST, and Beauty Therapist training have drawn strong participation, especially among women, resulting in 135 placements in beauty therapy alone. By equipping youth with relevant skills, facilitating job opportunities, and empowering women, ASDC plays a vital role in driving inclusive growth, promoting gender equality, and contributing to the region's economic progress.



Catalysts of Change: Empowering Lives, Creating Opportunities



ASDC - MUNDRA

Course Name	Female	Male	Total
JOC (RTG Crane Operator)	00	140	140
DDEO	30	14	44
Tally with GST	01	00	01
Beauty Therapist	134	00	134
Painting/Drawing Training	06	09	15
German Language	02	00	02
Advance Excel	01	10	11
Mud Work	40	00	40
Dori Work	40	00	40
Total	254	173	427

ASDC - BHUJ

Course Name	Female	Male	Total
GDA	140	20	140
DL	07	00	07
EDP – Tie up with CED	40	05	45
Skill Up gradation	90	60	150
Domestic Data Entry Operator	61	01	62
First Aid	31	05	36
Total	369	91	460



Empowering Skills for a Brighter Future

01 RTG Crane Operation

Essential for port operations, ensuring safe and efficient cargo handling.

02

Data & Financial Management

Includes DDEO & Tally with GST, critical for accurate data management and financial compliance.

03

Skill Enhancement Programs

Encompasses all the above programs, ensuring a well-rounded skill set for various industries.

04

Personal Care and Safety

Covers Beauty Therapist and First Aid, important for personal care industry and essential safety knowledge.

05

Artistic and Craftsmanship Development

Includes Painting/Drawing Training, Mud Work, and Dori Work, enhancing creativity and traditional crafts.

06

Language and Software Proficiency

Covers German Language, Advance Excel, and EDP – Tie up with CED, boosting communication and technical skills.

Adani Foundation's Flood Relief Efforts in Mundra Taluka

In late August 2024, Gujarat faced severe flooding caused by a deep depression that intensified into Cyclonic Storm Asna. The Mundra region of Kutch was severely affected by this natural disaster. In response to the critical situation, the Adani Foundation initiated an extensive relief operation to support the communities in Mundra Taluka.



Emergency Food Aid

- 1,000 food packets distributed to stranded truck drivers in the APSEZ area.
- 500 food packets provided to 6 labor colonies, supporting workers and their families.
- 1,000 food packets delivered to the Sub-District Magistrate's office for the local population.
- 1,200 ration kits supplied to the Municipality of Mundra.



Health Care Support

- Medical camps organized to address flood-related health issues.
- 157 patients treated for skin diseases, fever, and cold in labor colonies and affected areas.
- Health awareness sessions conducted to prevent the spread of diseases.



Civil Work & Infrastructure Recovery

- Machinery and logistical support provided to the Municipality and Farmer groups.
- Assistance accelerated debris clearance and infrastructure restoration efforts.

The Adani Foundation's quick response and comprehensive relief efforts provided much-needed support to the people of Mundra Taluka, helping them recover from the devastation caused by the floods. Through food distribution, health care, and civil work, the foundation played a vital role in rebuilding the community.

Employee Volunteer Program

Caring for Thalassemia Children

On the occasion of the Adani Foundation's 28th anniversary, employees came together in a heartfelt gesture to support children battling thalassemia. As part of the Employee Volunteer Program, nutritional kits were distributed to **153 thalassemia patients** on August 11, 2024, bringing comfort and hope to these young fighters. This initiative highlights the power of collective compassion, with employees extending their care beyond the workplace to make a meaningful difference in the lives of vulnerable children.

The event was graced by Mr. Dipeshbhai Shroff (President, Kutch Navnirman Abhiyan) and Mr. Dilipbhai Deshmukh (Social Leader and Organ Donor), who applauded the spirit of volunteerism and community service demonstrated by Adani employees.



Annexure – 3

Legal Matters- Mudra: May 2025

S.No	Case Detail (No., Parties to the Case, Filed at and on)	Case Brief (Matter)	Last Status (As on 16.5.2025)	Current Status as on 16.5.2025	Obligation (if any)	Action Taken/Proposed	Remarks (Here we can mention the updates that happened during the intervening period. Depending upon what you need to disclose i.e. Comprehensively/brief))
1	<p>SLP 28788 of 2016 Pravinsinh Bhurabhai Chauhan Vs State of Gujarat & Others</p> <p>Petitioner 1. PRAVINSINGH BHURABHA CHAUHAN</p> <p>Respondent 2. State of Gujarat 3. APSEZ 4. MoEF&CC, New Delhi</p>	<ul style="list-style-type: none"> Public Interest Litigation was filed before the Hon'ble Gujarat High Court by Mr. Pravinsingh Bhurubha Chauhan alleging, presence of Sand dunes in the APSEZ project area. APSEZ has submitted its representation that no Sand dunes are present in the project area and 	Awaited (last listed on 14.9.2018)	Matter pending Hon'ble at Supreme Court.		<ul style="list-style-type: none"> APSEZ has already submitted as part of their submission to the Committee that there are no presence of "Sand dunes", in APSEZ area, inline to the authenticated maps & report available for this area. The Committee visited Mundra on January 3 & 4, 2018 and the core issues to be examined by the Committee were (i) whether sand dunes are allotted in the forest land and whether APSEZL has destroyed/disturbed 	

	5. MOC&I, New Delhi 6. Collector, Bhuj 7. Principal Secretary, Gujarat	<p>same was also verified during the site visit carried out by the Committee, constituted by Collector, Kutch on 25.07.2014 and by Regional Office of MoEF&CC, Bhopal on 25.09.2014.</p> <ul style="list-style-type: none"> Hon'ble High Court of Gujarat had dismissed the PIL filed by the Petitioner, vide their order dtd. 18.02.2015 stating that, "There is no need of constituting a new committee to look into the alleged violations as there is already a committee constituted by the ministry and a report by the same committee 				<p>them and (ii) whether measurement of land was wrongly done? The Sunita Narain committee filed its report in the Hon'ble Supreme Court of India on 14.9.2018.</p> <ul style="list-style-type: none"> The Committee heard representations from both the parties and concluded that the term "Dhuva" is not synonymous with shifting sand dune. The Committee concluded that there is no incontrovertible evidence that Mor Dhuva was a sand dune and it cannot be said that M/s. APSEZL violated any conditions of the Environmental Clearance. With regards to the issue of measurement of land, the Committee stated that there was no credible evidence to show that Mor Dhuva was not part of the allotment to APSEZ and all measurements were done appropriately. 	
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		<p>has also been submitted"</p> <ul style="list-style-type: none"> • Later on Special Leave Petition was filed in Supreme Court by the Petitioner vide dated 26.10.2015 against the above said order of the Hon'ble High Court of Gujarat • In view of above, Hon'ble Supreme Court vide their order dated 23.08.2017, had requested the earlier formed Sunita Narayan Committee to relook in to this matter and submit their report. • Committee had visited the site on 3/4.01.2018 and has submitted their detailed report 					
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		<p>to Hon'ble Supreme Court.</p> <ul style="list-style-type: none"> Further, based on the findings of the report, the subject land is not classified as Sand dune and therefore allegations are not correct. 					
2.	Kheti Vikas Seva Trust Vs Uol & Others CA 9124 of 2011 in WPPIL 12 of 2011	<ul style="list-style-type: none"> The writ petition has been dismissed by the Gujarat High Court on 17th April 2015. The Hon'ble Supreme Court of India on 18.3.2016 dismissed the appeal against the said order dated 17th April, 2015 of the Gujarat High Court. However, an application was filed by the petitioner 	N.A	Matter pending before Gujarat High Court (not listed since 2021)		<ul style="list-style-type: none"> The committee of Mr. Claude Alvaris, Mr. Subrata Maity and Deputy Conservator of Forest, Kachchh was appointed and the committee submitted its report on 7.6.2016. The committee suggested various measures like replanting of mangroves in 5333 ha area, GCZMA to re-examine the entire proposal of APSEZL in line with CRZ notification, measures to safeguard Bocha Island and annual uploading of satellite images by APSEZL. APSEZL has challenged the recommendations of the committee stating 	

		<p>alleging non-compliance of an order of the Gujarat HC dated 12th July 2011 prohibiting the cutting of mangroves and other forests during the pendency of the petition without permission of the state forest and environment department in relation to the writ petition. The said Writ Petition before the Gujarat High Court has been disposed of by common order dated 05.09.2022.</p> <ul style="list-style-type: none"> • Further, a Civil Application No. 1 of 2011 in CA 9124 of 2011 				<p>that it has exceeded its terms of reference and APSEZL has already done mangrove reforestation and is in compliance with the Environment Clearance dated 18.9.2015. the Sunita Narain Committee recommendations have already been captured in the EC conditions and the company is in compliance of the same.</p>	
--	--	--	--	--	--	--	--

		<p>was filed against APSEZ and APL for initiation of contempt proceedings.</p> <ul style="list-style-type: none"> • The court ordered the CA to be listed with another matter (WPPIL 121 of 2021) 					
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Annexure – 4

Details of Greenbelt Development at APSEZ, Mundra

	Total Green Zone Detail till Up to March 2025				
LOCATION	Area (In Ha.)	Trees (Nos.)	Palm (Nos.)	Shrubs (SQM)	Lawn (SQM)
SV COLONY	72.29	34920.00	7962.00	69696.00	100646.00
PORT & NON SEZ	81.61	149359.00	19220.00	75061.78	62966.38
SEZ	115.70	226120.00	20489.00	220583.60	28162.03
MITAP	2.47	8113.00	33.00	3340.00	4036.00
WEST PORT	104.29	248074.00	66816.00	24112.00	16369.00
AGRI PARK	8.94	17244.00	1332.00	5400.00	2121.44
SOUTH PORT	14.45	27530.00	3470.00	3882.00	3327.26
Samundra Township	58.26	63722.00	11834.00	23908.89	47520.07
Productive Farming (Vadala Farm)	0.00	0.00	0.00	0.00	0.00
TOTAL (APSEZL)	457.99	775082	131156	425984.27	265148.18
		906238.00			

Details of Mangrove Afforestation done by APSEZ

Sl. no.	Location	District	Area (Ha)	Duration	Species	Implementation agency
1	Mundra Port	Kutch	24	-	Avicennia marina	Dr. Maity, Mangrove consultant of India
2	Mundra Port	Kutch	25	-	Avicennia marina	Dr. Maity, Mangrove consultant of India
3	Luni/Hamirmora (Mundra,)	Kutch	160.8	2007 - 2015	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GUIDE, Bhuj
4	Kukadsar (Mundra)	Kutch	66.5	2012 - 2014	Avicennia marina	GUIDE, Bhuj
5	Forest Area (Mundra)	Kutch	298	2011 - 2013	Avicennia marina	Forest Dept, Bhuj
6	Jangi Village (Bhachau)	Kutch	50	2012 - 2014	Avicennia marina	GUIDE, Bhuj
7	Jakhau Village (Abdasa)	Kutch	310.6	2007-08 & 2011-13	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GUIDE, Bhuj
8	Sat Saida Bet	Kutch	255	2014-15 & 2016-17	Avicennia marina & Biodiversity	GUIDE, Bhuj
9	Dandi Village	Navsari	800	2006 - 2011	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GEC, Gandhinagar
10	Talaja Village	Bhavnagar	50	2011-12	Avicennia marina	Forest Dept, Talaja
11	Narmada Village	Bhavnagar	250	2014 - 2015	Avicennia marina	GEC, Gandhinagar
12	Malpur Village	Bharuch	200	2012-14	Avicennia marina	SAVE, Ahmedabad
13	Kantiyajal Village	Bharuch	50	2014-15	Avicennia marina	SAVE, Ahmedabad
14	Devla Village	Bharuch	150	210-16	Avicennia marina	SAVE, Ahmedabad
15	Village Tala Talav (Khambhat)	Anand	100	2015 - 2016	Avicennia marina	SAVE, Ahmedabad
16	Village Tala Talav (Khambhat)	Anand	38	2015 - 2016	Avicennia marina	GEC, Gandhinagar
17	Aliya Bet, Village Katpor (Hansot)	Bharuch	62	2017-18	Avicennia marina & Rhizophora spp.	GEC, Gandhinagar
18	Kukadsar- (Bhadeswar- Mundra)	Kutch	250	2021-22	Avicennia marina	Shreeji Enterprise, Amreli
19	Kukadsar- (Bhadeswar- Mundra)	Kutch	750	2022-23	Avicennia marina	Shreeji Enterprise, Amreli
20	Kukadsar- (Bhadeswar- Mundra)	Kutch	250	2023-24	Avicennia marina	Shreeji Enterprise, Amreli
Total			4140			

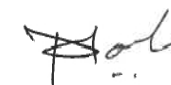
Annexure – 5

RESULTS OF STP OUTLET WATER

SR.N O.	TEST PARAMETERS	UNIT	WFDP WEST PORT STP OUTLET						GPCB Permissib le Limit	TEST METHOD
			Oct-24		Nov-24		Dec-24			
			09-10-2024	24-10-2024	13-11-2024	23-11-2024	05-12-2024	25-12-2024		
1.	pH @ 25 ° C	--	7.12	7.22	7.32	7.46	7.36	7.28	6.5 to 9	IS 3025 (Part-11):2022
2.	Total Suspended Solids	mg/L	20	18	18	16	18	20	100	APHA 24th Ed.2023,2540-D
3.	Biochemical Oxygen Demand (BOD) (5 days at 20 ° C)	mg/L	14	13	15.2	16.4	15.5	16.8	30	APHA 24th Ed.2023,5210-B
4.	Residual chlorine	mg/L	0.62	0.64	0.74	0.59	0.66	0.72	0.5 Min.	APHA 24th Ed.2023,4500-Cl-G
5.	Fecal Coliform	MPN Index/100 ml	60	70	50	60	60	70	1000	IS 3025 (Part-11):2022



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF STP OUTLET WATER

SR.NO.	TEST PARAMETERS	UNIT	WFDP WEST PORT STP OUTLET						GPCB Permissible Limit	TEST METHOD
			Jan-25		Feb-25		Mar-25			
			07-01-2025	24-01-2025	04-02-2025	18-02-2025	06-03-2025	18-03-2025		
1	pH @ 25 ° C	--	7.12	7.19	7.22	7.24	7.11	7.35	6.5 to 9	IS 3025(Part-11):2022
2	Total Suspended Solids	mg/L	14	18	16	18	14	14	100	APHA 24th Ed.2023,2540
3	Biochemical Oxygen Demand (BOD) (5 days at 20 ° C)	mg/L	15	16	14	15	15	16	30	APHA 24th Ed.2023,5210
4	Residual chlorine	mg/L	0.56	0.62	0.55	0.64	0.68	0.72	0.5 Min.	APHA 24th Ed.2023,4500-Cl-G
5	Total Nitrogen	mg/L	5.3	5.8	7.22	7.24	8.46	12.2	--	APHA 24th Ed.,2023,4500-B, C
6	Total Phosphorus	mg/L	1.6	1.4	16	18	8.5	5.2	--	APHA 24th Ed.,2023,4500-P, D
7	Fecal Coliform	MPN Index/100ml	50	60	60	70	50	60	1000	IS 3025 (Part-11):2022



Mr. Nilesh Patel
Sr. Chemist




Mr. Nitin Tandel
Technical Manager

RESULTS OF ETP OUTLET WATER

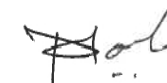
SR.NO.	TEST PARAMETERS	UNIT	LIQUID TERMINAL						GPCB Limit	TEST METHOD
			Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25		
			24-10-2024	25-11-2024	25-12-2024	24-01-2025	18-02-2025	06-03-2025		
1.	Colour	Pt. Co. Scale	40	50	40	40	40	40	100	IS 3025(Part 4):2021
2.	pH @ 27 ° C	--	7.64	7.28	7.14	7.22	7.34	7.42	6.5 to 8.5	IS 3025(Part 11):2022
3.	Temperature	°C	30	30	29	29	30	30.5	40	IS 3025(Part 9):2023
4.	Total Suspended Solid	mg/L	54	36	18	26	24	36	100	APHA 24th Ed.2023,2540 –D
5.	Total Dissolved Solids	mg/L	648	622	580	628	610	644	2100	APHA 24th Ed.2023,2540- C
6.	COD	mg/L	92.2	88.5	78.4	82.2	86.1	81.2	100	IS 3025(Part 58):2023
7.	BOD (3 days at 27 °C)	mg/L	27	26	23	25	26	24	30	IS 3025(Part 44):2023
8.	Chloride (as Cl) -	mg/L	242.2	262.2	302	280	294	274.5	600	IS 3025(Part 32):1988
9.	Oil & Grease	mg/L	BDL(MDL:2.0)	BDL(MDL:2.0)	BDL(MDL:4.0)	BDL(MDL:4.0)	BDL(MDL:4.0)	BDL(MDL:4.0)	10	IS 3025(Part 39):2021
10.	Sulphate (as SO ₄)	mg/L	42	48	52	26	32	42	1000	IS 3025(Part 24):2022
11.	Ammonical Nitrogen	mg/L	22.2	15.6	19.8	12.1	18.6	22.4	50	IS 3025(Part 34):1988,
12.	Phenolic Compound	mg/L	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	1	IS 3025(Part 43):2022
13.	Copper as Cu	mg/L	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	3	IS 3025(Part 42):1992
14.	Lead as Pb	mg/L	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	0.1	APHA 24th Ed.2023,3111-B

Continue...

SR.NO.	TEST PARAMETERS	UNIT	LIQUID TERMINAL						GPCB Limit	TEST METHOD
			Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25		
			24-10-2024	25-11-2024	25-12-2024	24-01-2025	18-02-2025	06-03-2025		
15.	Sulphide as S	mg/L	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	2	APHA 24th Ed.2023,4500 S ⁻² F
16.	Cadmium as Cd	mg/L	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	2	APHA 24th Ed.2023,3111-B
17.	Fluoride as F	mg/L	1.91	1.28	0.82	0.45	0.37	0.56	2	APHA 24th Ed.2023,4500 F, D
18.	Residual Chlorine	mg/L	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	0.5 Min.	APHA 24th Ed.2023,4500-Cl-G
19.	Percent Sodium	%	47.64	47.49	46.15	46.86	46.05	47.13	60	By Calculation
20.	Sodium Absorption ratio	--	3.20	3.2	3.3	3.4	3.1	2.9	26	By Calculation



Mr. Nilesh Patel
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Mr. Nitin Tandel
Technical Manager

MARINE WATER MONITORING SUMMARY REPORT

RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	2.7	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	2.5	BDL(MDL :1.0)	2.7	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	IS 3025(Part 11):2022
2.	Temperature	°C	7.04	6.73	6.9	6.8	6.82	6.72	6.75	6.65	6.81	6.71	6.66	6.57	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	35.65	36.71	35.74	36.51	36.02	36.74	36.12	36.81	36.18	36.88	36.22	36.94	APHA 24th Ed., 2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	2.42	2.1	2.32	2.93	2.74	2.58	2.9	2.74	2.74	2.58	2.58	2.26	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	0.391	0.348	0.379	0.31	0.413	0.391	0.348	0.304	0.326	0.304	0.304	0.283	By Calculation
7.	Oil & Grease	mg/L	3.39	3.32	2.59	2.32	3.39	3.26	3.9	3.8	3.59	3.48	3.64	3.53	IS 3025 (Part 39):2021
8.	Nitrate as NO ₃	μmol/L	1.37	1.26	1.16	1.05	1.37	1.26	1.05	BDL(MDL :0.4)	1.37	1.16	1.16	1.05	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	6.201	5.768	5.289	5.56	6.543	6.231	7.148	6.844	6.656	6.364	6.524	6.073	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO ₄	μmol/L	34820	35760	34620	35420	34840	35510	35130	35720	35140	35746	35160	35780	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	μmol/L	28.3	16.2	20.2	8.1	24	8	20.1	16.1	32	20	28.6	16.3	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	μg/L	2.7	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	2.5	BDL(MDL :1.0)	2.7	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	7.04	6.73	6.9	6.8	6.82	6.72	6.75	6.65	6.81	6.71	6.66	6.57	IS 3025(Part 16):2023
15.	COD	mg/L	35.65	36.71	35.74	36.51	36.02	36.74	36.12	36.81	36.18	36.88	36.22	36.94	IS 3025(Part 58):2023

Continue...

RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	3.06	3.26	3.07	3.24	3.06	3.28	3.07	3.27	3.06	3.26	3.07	3.27	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	7	1.55	8	1.59	9	1.57	8	1.55	7	1.54	6	1.55	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	114	91	112	92	113	91	112	91	114	92	112	91	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	Coscinodiscus	Odontella	Nitzschia	Biddulphia	Nitzschia	Biddulphia	Thalassiothrix	Dinophysis	Thalassiothrix	Dinophysis	Thalassiothrix	Dinophysis	APHA (24th Ed. 2023)10200A-G
			Diploneis	Rhizosolenia	Diploneis	Rhizosolenia	Pinnularia	Rhizosolenia	Surirella	Pinnularia	Surirella	Pinnularia	Biddulphia	Pinnularia	
			Rhizosolenia	Coscinodiscus	Rhizosolenia	Coscinodiscus	Rhizosolenia	Coscinodiscus	Navicula	Thalassiothrix	Navicula	Thalassiothrix	Navicula	Thalassiothrix	
			Dinophysis	Grammatophora	Dinophysis	Grammatophora	Dinophysis	Grammatophora	Thalassiosira	Grammatophora	Nitzschia	Grammatophora	Nitzschia	Grammatophora	
			Thalassionema	Thalassiosira	Biddulphia	Navicula	Biddulphia	Navicula	Skeletonema	Ceratium	Skeletonema	Ceratium	Skeletonema	Ceratium	
B Zooplankton															
1	Abundance(Population)	noX103/100 m3	65		66		67		65		66		64		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Crustacean Larvae		Oikoplura		Oikoplura		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		
			Egg(Fish and Shrimps)		Pinnularia		Pinnularia		Oikoplura		Oikoplura		Oikoplura		
			Copepods		Copepods		Copepods		Copepods nauplii		Copepods nauplii		Copepods nauplii		
			Crustacean		Copepods nauplii		Copepods nauplii		Crustacean		Crustacean		Crustacean		
			Bivalve Larvae		Thalassionema		Thalassionema		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		
3	Total Biomass	ml/100 m³	13.66		13.65		13.66		13.67		13.68		13.67		

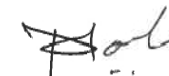
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RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C	Microbiological														
1	Total Bacterial Count	CFU/ml	112		114		112		111		112		114		APHA 24 th Ed.2023,9215-C
2	Total Coliform	/100ml	14		13		12		13		12		13		APHA 24 th Ed.2023,9222-B
3	Ecoli	/100ml	9		8		9		8		87		88		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24 th Ed.2023,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.48	0.44	0.48	0.46	0.49	0.44	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	532.5	542.3	535.3	540.6	562.1	542.5	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.91	3.88	3.92	3.96	3.95	3.98	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	135.2	142.3	146.2	142.4	148.6	152.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	684.2	702.5	686	702.2	690.8	650.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.12	3.94	3.95	3.98	3.91	3.88	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	48.62	44.25	42.3	44.5	46.2	42.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	52.21	46.35	44.6	48.6	52.1	54.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	111.4	102.5	110.5	114.5	120.5	106.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.41	2.24	2.22	2.29	2.11	1.86	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

Continue...

RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
D	Benthic Organisms								
1	Macrobenthos	--	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	APHA (24th Ed. 2023)10500
			<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	
			<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Amphipods</i>	<i>Gastropods</i>	<i>Gastropods</i>	
			<i>Amphipods</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	
2	MeioBenthos	--	<i>Herpectacoids</i>	<i>Gastropods</i>	<i>Herpectacoids</i>	<i>Turbellarians</i>	<i>Turbellarians</i>	<i>Turbellarians</i>	
			<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	
3	Population	no/m ²	366	367	368	367	368	367	



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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.11	8.01	8.09	7.94	8.15	7.99	8.17	8.03	8.15	8.04	8.18	8.08	IS 3025(Part 11):2022
2.	Temperature	°C	29.9	29.8	29.8	29.7	29.7	29.6	29.6	29.5	29.7	29.6	29.8	29.7	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	128	102	142	114	132	102	142	114	130	116	124	106	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.6	BDL(MDL :1.0)	2.5	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	2.6	BDL(MDL :1.0)	2.7	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.84	6.53	6.7	6.6	6.62	6.52	6.45	6.35	6.71	6.5	6.57	6.37	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.64	36.88	35.28	36.65	35.42	36.72	35.56	36.81	35.67	36.84	35.72	36.89	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO ₃	µmol/L	2.26	1.94	2.76	2.59	3.23	3.06	3.39	3.06	3.23	3.06	3.06	2.9	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.261	0.239	0.379	0.276	0.37	0.348	0.413	0.391	0.456	0.413	0.413	0.391	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	3.42	3.32	2.32	1.56	3.42	3.39	4.01	3.9	3.74	3.64	3.64	3.59	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO ₄	µmol/L	1.26	1.16	1.37	1.26	1.58	1.47	1.16	BDL(MDL :0.4)	1.05	BDL(MDL :0.4)	1.16	BDL(MDL :0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	5.941	5.499	5.459	4.426	7.02	6.798	7.813	7.351	7.426	7.113	7.113	6.881	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35810	36550	35640	36120	35550	36080	35840	36240	35910	36264	36010	36310	IS 3025(Part 16):2023
15.	COD	mg/L	32.4	20.2	24.2	12.1	27.9	12	32.1	20.1	36	24	32.7	20.4	IS 3025(Part 58):2023

Continue...

RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M	
A	Phytoplankton														
1.	Chloroph yll	mg/m³	2.97	2.67	2.98	2.68	2.97	2.69	2.98	2.68	2.97	2.67	2.96	2.66	APHA (24th Ed. 2023)10200A-G
2.	Phaeophy tin	mg/m³	2.05	2.03	2.06	2.03	2.07	2.04	2.06	2.03	2.07	2.02	2.06	2.01	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	93	148	92	147	91	148	92	147	91	145	92	144	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	Thalass iothrix	Pinnula ria	Thalass iothrix	Pinnula ria	Dinoph ysis	Pinnula ria	Navicul a	Thalass iothrix	Surirell a	Thalass iothrix	Surirell a	Thalass iothrix	APHA (24th Ed. 2023)10200A-G
			Surirell a	Biddulp hia	Surirell a	Biddulp hia	Surirell a	Biddulp hia	Skeleto nema	Surirell a	Pinnula ria	Surirell a	Pinnula ria	Surirell a	
			Navicul a	Navicul a	Navicul a	Navicul a	Nitzschi a	Navicul a	Rhizoso lenia	Navicul a	Rhizoso lenia	Navicul a	Melosir a	Navicul a	
			Thallas siosira	Rhizoso lenia	Cyclotel la	Rhizoso lenia	Cyclotel la	Rhizoso lenia	Dinoph ysis	Thallas siosira	Dinoph ysis	Thallas siosira	Dinoph ysis	Thallas siosira	
			Skeleto nema	Skeleto nema	Skeleto nema	Thallas siosira	Skeleto nema	Thallas siosira	Thalass ionema	Skeleto nema	Thalass ionema	Skeleto nema	Thalass ionema	Skeleto nema	
Zooplankton															
1	Abudance (Populati on)	noX10 3/ 100 m3	44		43		44		43		42		41		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Crustacean Larvae		Crustacean Larvae		Crustacean Larvae		
			Copepods		Oikoplura		Nitzschia		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		
			Copepods nauplii		Copepods nauplii		Copepods nauplii		Copepods		Copepods		Copepods		
			Crustacean		Crustacean		Pinnularia		Crustacean		Crustacean		Copepods nauplii		
			Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		
3	Total Biomass	ml/10 0 m³	15.2		15.1		15.2		15.2		15.1		15.2		

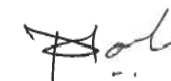
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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C	Microbiological														
1	Total Bacterial Count	CFU/ml	124		126		128		127		128		130		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	35		36		35		36		37		37		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	13		12		11		10		11		13		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.52	0.48	0.52	0.48	0.41	0.48	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	602.2	582.4	594.2	602.8	596.2	580.3	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.92	3.84	3.86	3.89	4.04	3.92	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	144.3	135.2	142.3	146.7	138.4	142.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	702.4	672.4	682.6	694.3	702.5	680.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.11	3.87	4.01	4.06	4.11	4.06	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	42.25	48.65	49.36	50.34	48.2	44.1	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	42.65	51.35	52.3	48.36	46.9	44.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	122.5	106.5	110.4	113.4	118.4	104.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	1.95	2.02	2.12	2.09	2.14	1.96	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

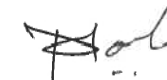
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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
D			Benthic Organisms						
1	Macrobenthos	--	<i>Decapods Larvae</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	APHA (24th Ed. 2023)10500
			<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	
			<i>Amphipods</i>	<i>Amphipods</i>	<i>Gastropods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	
			<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Amphipods</i>	<i>Amphipods</i>	
2	MeioBenthos	--	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Decapods Larvae</i>	<i>Herpectacoids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	
			<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	
3	Population	no/m ²	302	303	301	302	301	302	



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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.21	7.98	8.18	8.03	8.27	8.09	8.23	8.04	8.19	8.09	8.22	8.05	IS 3025(Part 11):2022
2.	Temperature	°C	30	29.9	29.9	29.8	29.8	29.7	29.7	29.6	29.8	29.7	29.7	29.6	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	134	106	102	88	110	92	124	88	118	96	126	98	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.8	BDL(MDL: 1.0)	2.7	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.94	6.73	6.8	6.7	6.72	6.62	6.65	6.55	6.71	6.6	6.57	6.47	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.29	36.54	35.33	36.12	35.42	36.22	35.62	36.38	35.74	36.52	35.79	36.64	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO ₃	µmol/L	2.58	2.26	2.67	2.41	2.42	2.26	3.23	2.9	3.55	3.23	3.39	3.06	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.37	0.326	0.475	0.365	0.326	0.304	0.37	0.326	0.435	0.391	0.456	0.435	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	3.42	3.26	2.62	2.58	3.59	3.53	3.85	3.8	4.06	3.95	3.8	3.74	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO ₄	µmol/L	1.16	1.05	1.26	1.16	1.26	1.05	1.37	1.26	1.47	1.26	1.37	1.26	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.37	5.846	5.765	5.355	6.336	6.094	7.45	7.026	8.045	7.571	7.646	7.235	APHA 24th Ed.2023,4500 NH3
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35230	36610	35290	36080	35430	36140	35524	36180	35540	36218	35460	36180	IS 3025(Part 16):2023
15.	COD	mg/L	24.3	12.1	16.1	4	20	8	24.1	12	28	16	24.5	12.3	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.42	2.45	2.44	2.47	2.43	2.46	2.42	2.47	2.41	2.48	2.42	2.47	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.66	1.43	1.67	1.42	1.65	1.41	1.66	1.42	1.65	1.41	1.66	1.42	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	156	96	155	97	154	96	155	97	154	98	155	97	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	Pinnularia	Coscino discus	Pinnularia	Coscino discus	Pinnularia	Coscino discus	Melosira	Cyclotella	Melosira	Cyclotella	Melosira	Cyclotella	APHA (24th Ed. 2023)10200A-G
			Biddulphia	Pinnularia	Biddulphia	Pinnularia	Biddulphia	Pinnularia	Pinnularia	Pinnularia	Pinnularia	Pinnularia	Pinnularia	Pinnularia	
			Navicula	Rhizosolenia	Navicula	Rhizosolenia	Navicula	Rhizosolenia	Skeletonema	Skeletonema	Rhizosolenia	Skeletonema	Rhizosolenia	Skeletonema	
			Thalassiosira	Dinophysis	Thalassiosira	Dinophysis	Thalassiosira	Dinophysis	Thalassiosira	Thalassiosira	Thalassiosira	Thalassiosira	Thalassiosira	Thalassiosira	
			Skeletonema	Thalassionema	Skeletonema	Thalassionema	Skeletonema	Thalassionema	Thalassionema	Thalassionema	Thalassionema	Thalassionema	Thalassionema	Thalassionema	
Zooplankton															
1	Abundance (Population)	noX10³/ 100 m³	43		41		43		41		42		43		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Copepods		Copepods		Rhizosolenia		Crustacean		Crustacean		Crustacean		
			Copepods nauplii		Copepods nauplii		Crustacean Larvae		Copepods nauplii		Copepods nauplii		Copepods nauplii		
			Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Crustacean Larvae		Crustacean Larvae		Crustacean Larvae		
			Crustacean		Pinnularia		Oikoplura		Crustacean		Crustacean		Egg(Fish and Shrimps)		
		Bivalve Larvae		Bivalve Larvae		Thalassionema		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae			
3	Total Biomass	ml/100 m³	15.4		15.3		15.1		15.1		15.3		15.4		

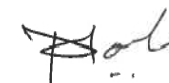
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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTOM	SURFACE	BOTTO M	SURFACE	BOTTO M			
C			Microbiological												
1	Total Bacterial Count	CFU/m l	134		136		137		136		138		140		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100m l	31		32		33		31		32		33		APHA 24thEd.2023, 9222-B
3	E.coli	/100m l	20		21		22		21		20		22		IS :15185:2016
4	Enterococcus	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:200 2
5	Salmonella	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:201 6
6	Shigella	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHASLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
1.	Organic Matter	%	0.54	0.58	0.62	0.58	0.55	0.58	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	624.2	610.2	611.4	590.5	608.4	598.5	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.95	3.82	3.86	3.94	3.97	4.08	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	143.5	132.4	134.2	128.4	113.5	124.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	546.5	542.2	544.3	536.4	498.6	510.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.05	3.95	3.98	4.08	4.12	3.82	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	35.94	36.25	37.2	38.4	42.44	40.39	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	38.24	34.22	34.35	35.26	36.28	37.88	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	124.3	108.5	112.4	118.4	122.2	120.21	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.11	1.98	2.03	2.14	2.09	2.14	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

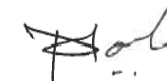
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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHASLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
D			Benthic Organisms						
1	Macrobenthos	--	Polychates	Polychates	Amphipods	Gastropods	Gastropods	Decapods Larvae	APHA (24th Ed. 2023)10500
			Gastropods	Gastropods	Gastropods	Isopods	Isopods	Isopods	
			Isopods	Isopods	Isopods	Amphipods	Amphipods	Amphipods	
			Sipunculids	Sipunculids	Sipunculids	Sipunculids	Sipunculids	Sipunculids	
2	MeioBenthos	--	Herpectacoids	Herpectacoids	Herpectacoids	Polychates	Polychates	Foraminiferan	
			Polychates	Polychates	Polychates	Herpectacoids	Herpectacoids	Herpectacoids	
3	Population	no/m ²	298	296	298	297	295	294	



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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.22	8.06	8.21	8.02	8.22	8.06	8.16	8	8.21	8.04	8.24	8.09	IS 3025(Part 11):2022
2.	Temperature	°C	30	29.9	29.8	29.7	29.7	29.6	29.6	29.5	29.7	29.6	29.6	29.5	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	122	104	116	94	106	88	128	114	122	108	132	114	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	2.7	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	7.04	6.84	6.9	6.8	6.82	6.72	6.75	6.55	6.91	6.71	6.76	6.57	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.88	36.74	35.64	36.74	35.71	36.81	35.89	36.98	36.02	37.11	36.12	37.18	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO ₃	µmol/L	2.1	1.77	3.45	2.59	3.39	3.23	3.23	2.9	3.39	3.06	3.23	2.9	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.196	0.174	0.431	0.328	0.391	0.37	0.435	0.391	0.391	0.37	0.456	0.413	APHA 24th Ed.2023,4500NO2B
10.	Ammonical Nitrogen as NH ₃	µmol/L	3.32	3.26	2.84	2.62	3.69	3.64	4.11	4.06	4.22	4.11	3.95	3.9	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO ₄	µmol/L	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	1.26	1.16	1.47	1.37	1.05	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	5.616	5.204	6.721	5.538	7.471	7.24	7.775	7.351	8.001	7.54	7.636	7.213	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35590	36720	35160	35920	35240	36100	35610	36210	36642	36228	36320	36710	IS 3025(Part 16):2023
15.	COD	mg/L	28.3	16.2	20.2	8.1	24	12	28.1	16.1	32	20	28.6	16.3	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.34	3.1	2.33	3.2	2.36	3.1	2.35	3.2	2.36	3.1	2.37	3.2	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.4	5	2.3	6	2.2	7	2.1	8	2.2	9	2.1	8	
3.	Cell Count	No. x 10³/L	157	87	158	88	157	89	156	88	157	87	156	88	
4	Name of Group Number and name of group species of each group	--	Coscino discus	Surirella	Surirella	Surirella	Coscino discus	Surirella	Thalassiosira	Coscino discus	Thalassiosira	Coscino discus	Thalassiosira	Coscino discus	APHA (24th Ed. 2023)10200A-G
			Diploneis	Biddulphia	Diploneis	Biddulphia	Diploneis	Biddulphia	Melosira	Diploneis	Melosira	Diploneis	Melosira	Diploneis	
			Rhizosolenia	Navicula	Thalassiothrix	Coscino discus	Skeletonema	Coscino discus	Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	
			Dinophysis	Thalassiosira	Navicula	Thalassiosira	Navicula	Thalassiosira	Rhizosolenia	Dinophysis	Rhizosolenia	Dinophysis	Rhizosolenia	Dinophysis	
			Thalassionema	Skeletonema	Thalassionema	Skeletonema	Thalassionema	Skeletonema	Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	
Zooplankton															
B															
1	Abundance (Population)	noX10³/ 100 m³	37		38		39		38		37		36		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Oikoplura		Oikoplura		Copepods nauplii		Copepods nauplii		Copepods nauplii		Copepods nauplii		
			Copepods nauplii		Rhizosolenia		Rhizosolenia		Crustacean Larvae		Crustacean Larvae		Egg(Fish and Shrimps)		
			Crustacean Larvae		Crustacean Larvae		Egg(Fish and Shrimps)		Oikoplura		Oikoplura		Oikoplura		
			Crustacean		Crustacean		Crustacean		Bivalve Larvae		Bivalve Larvae		Copepods nauplii		
		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		Oikoplura		Oikoplura		Oikoplura			
3	Total Biomass	ml/100 m³	14.26		14.27		14.26		14.25		14.26		14.27		

Continue...

RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	102		103		104		103		102		104		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	42		43		44		42		41		40		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	11		12		11		12		11		12		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:200 2
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:201 6
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.46	0.43	0.51	0.48	0.42	0.46	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	544.6	541.3	562.2	544.6	562.3	550.2	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	4.06	3.99	4.02	4.08	4.01	4.09	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	144.5	151.2	142.3	148.6	139.8	146.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	512.4	524.3	530.4	518.6	512.2	521.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.91	3.97	4.03	3.92	3.98	4.06	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	45.6	44.2	45.8	44.2	48.6	44.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	42.8	49.8	50.6	46.8	48.2	52.36	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	152.3	142.6	148.6	438.5	444.2	435.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.22	2.02	2.11	1.86	1.88	1.96	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

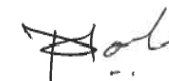
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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
D	Benthic Organisms								
1	Macrobenthos	--	Foraminiferan	Amphipods	Amphipods	Sipunculids	Sipunculids	Sipunculids	APHA (24th Ed. 2023)10500
			Gastropods	Gastropods	Gastropods	Decapods Larvae	Decapods Larvae	Decapods Larvae	
			Isopods	Isopods	Isopods	Polychates	Polychates	Polychates	
			Sipunculids	Sipunculids	Turbellarians	Isopods	Isopods	Foraminiferan	
2	MeioBenthos	--	Herpectacoids	Herpectacoids	Herpectacoids	Turbellarians	Gastropods	Gastropods	
			Polychates	Turbellarians	Decapods Larvae	Herpectacoids	Herpectacoids	Herpectacoids	
3	Population	no/m ²	307	306	305	304	303	302	



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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.14	7.98	8.21	8.03	8.14	7.98	8.19	8.01	8.24	8.11	8.19	8.03	IS 3025(Part 11):2022
2.	Temperature	°C	30.1	29.9	29.8	29.7	29.7	29.6	29.6	29.5	29.7	29.6	29.6	29.5	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	132	110	124	104	136	112	126	108	132	112	126	108	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27oC)	mg/L	2.9	BDL(MDL: 1.0)	2.5	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	2.6	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.84	6.63	6.7	6.6	6.62	6.52	6.65	6.45	6.6	6.5	6.47	6.37	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.12	36.33	35.19	36.48	35.28	36.52	35.44	36.66	35.56	36.71	35.42	36.74	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO3	µmol/L	2.74	2.42	2.8	2.37	2.9	2.74	3.23	2.9	3.71	3.39	3.55	3.39	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO2	µmol/L	0.283	0.239	0.259	0.189	0.304	0.261	0.348	0.326	0.391	0.37	0.37	0.348	APHA 24th Ed.2023,4500NO2 B
10.	Ammonical Nitrogen as NH3	µmol/L	3.74	3.59	4.05	3.83	3.74	3.69	4.11	4.01	3.95	3.85	4.11	4.06	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO4	µmol/L	1.05	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.16	1.05	1.05	BDL(MDL: 0.4)	1.16	1.05	1.37	1.26	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.763	6.249	7.109	6.389	6.944	6.691	7.688	7.236	8.051	7.61	8.03	7.798	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	34840	35980	34560	35230	34620	35180	34980	35640	35060	35710	35140	35742	IS 3025(Part 16):2023
15.	COD	mg/L	16.2	12.1	8.1	4	12	8	16.1	12	20	16	16.3	12.3	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.11	3.16	3.12	3.15	3.13	3.14	3.12	3.13	3.11	3.12	3.12	3.13	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.2	1.21	2.1	1.21	2.2	1.22	2.1	1.21	2.2	1.22	2.1	1.23	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	124	112	123	113	124	112	123	113	122	112	121	113	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	Diploneis	Navicula	Diploneis	Navicula	Navicula	Navicula	Navicula	Pinnularia	Navicula	Pinnularia	Navicula	Pinnularia	APHA (24th Ed. 2023)10200A-G
			Rhizosolenia	Skeletonema	Rhizosolenia	Skeletonema	Biddulphia	Skeletonema	Biddulphia	Biddulphia	Biddulphia	Biddulphia	Biddulphia	Rhizosolenia	
			Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	Nitzschia	Navicula	Nitzschia	Navicula	Odontella	Dinophysis	
			Cyclotella	Dinophysis	Cyclotella	Biddulphia	Cyclotella	Biddulphia	Cyclotella	Thalassiosira	Cyclotella	Thalassiosira	Cyclotella	Coscinodiscus	
			Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	Pleurosigma	Skeletonema	Pleurosigma	Skeletonema	Pleurosigma	Skeletonema	
B Zooplankton															
1	Abundance (Population)	noX10³/ 100 m³	52		51		52		51		52		51		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Copepods nauplii		Nitzschia		Nitzschia		Crustacean Larvae		Crustacean Larvae		Crustacean Larvae		
			Crustacean Larvae		Crustacean Larvae		Crustacean Larvae		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		
			Oikoplura		Oikoplura		Oikoplura		Copepods		Copepods		Copepods nauplii		
			Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		Crustacean		Crustacean		Crustacean		
			Oikoplura		Oikoplura		Oikoplura		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		
3	Total Biomass	ml/100 m³	14.11		14.12		14.11		14.12		14.11		14.12		

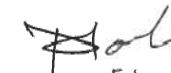
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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	142		144		144		143		144		148		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	30		31		32		31		32		31		APHA 24 th Ed.2023, 9222-B
3	E.coli	/100ml	16		17		18		17		16		17		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24 th Ed.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
1.	Organic Matter	%	0.42	0.48	0.44	0.48	0.52	0.56	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	608	612.2	602	586	594.2	612.3	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.99	4.06	4.02	3.86	4.05	4.11	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	142.6	135.6	144.2	136	142.2	140.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	574.2	602.2	610.8	596.5	614.2	610.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.16	4.03	4.06	3.74	3.86	4.01	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.82	42.1	48.6	46.2	42.5	44.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	42.9	44.8	52.4	54.3	51.2	55.9	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	124.3	131.2	142.6	140.5	124.6	103.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.16	2.18	2.09	2.11	2.02	1.75	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

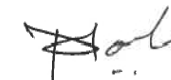
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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
D			Benthic Organisms						
1	Macrobenthos	--	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	APHA (24th Ed. 2023)10500
			<i>Polychates</i>	<i>Sipunculids</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Gastropods</i>	
			<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	
			<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	
2	MeioBenthos	--	Decapods Larvae	Decapods Larvae	Foraminiferan	Polychates	Herpectacoids	<i>Herpectacoids</i>	
			<i>Herpectacoids</i>	<i>Gastropods</i>	<i>Herpectacoids</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Polychates</i>	
3	Population	no/m ²	306	307	308	307	306	307	



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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.05	7.86	8.17	7.98	7.98	7.86	8.26	8.04	8.18	8.06	8.24	8.11	IS 3025(Part 11):2022
2.	Temperature	°C	29.9	29.8	29.8	29.7	29.7	29.6	29.6	29.5	29.7	29.6	29.6	29.5	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	118	90	108	94	114	98	109	86	120	96	118	99	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.8	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	3	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	7.04	6.73	6.9	6.8	6.82	6.72	6.65	6.55	6.81	6.71	6.66	6.57	APHA 24th Ed.,2023,4500-O, B
6.	Salinity	ppt	35.72	36.47	35.64	36.25	35.76	36.35	35.82	36.44	35.74	36.48	35.65	36.49	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO ₃	μmol/L	3.06	2.74	3.23	2.59	3.06	2.9	2.74	2.42	3.23	3.06	3.55	3.23	APHA 24th Ed.,2023,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.348	0.326	0.293	0.259	0.283	0.261	0.326	0.304	0.348	0.326	0.391	0.37	APHA 24th Ed.,2023,4500NO2B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.85	3.74	3.97	3.84	3.64	3.59	3.9	3.8	4.16	4.06	3.95	3.9	APHA 24th Ed.,2023,4500-NH3 B
11.	Phosphates as PO ₄	μmol/L	1.16	BDL(MDL: 0.4)	1.16	1.05	1.16	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	APHA 24th Ed.,2023,4500-P, D
12.	Total Nitrogen	μmol/L	7.258	6.806	7.493	6.689	6.983	6.751	6.966	6.524	7.738	7.446	7.891	7.5	APHA 24th Ed.,2023,4500 NH3
13.	Petroleum Hydrocarbon	μg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th Ed.,2023,5520 F
14.	Total Dissolved Solids	mg/L	35470	36240	35410	36320	35520	36140	35850	36320	35890	36356	35924	36380	IS 3025(Part 16):2023
15.	COD	mg/L	20.2	16.2	12.1	8.1	16	12	20.1	16.1	24	20	20.4	16.3	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.06	2.7	3.07	2.6	3.08	2.7	3.07	2.6	3.06	2.7	3.07	2.6	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.7	1.77	2.6	1.78	2.7	1.77	2.6	1.78	2.7	1.77	2.6	1.76	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	91	121	92	122	91	121	92	122	91	123	92	122	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	Nitzschia	Thalassiothrix	Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	Diploneis	Coscinodiscus	Diploneis	Coscinodiscus	Diploneis	Coscinodiscus	APHA (24th Ed. 2023)10200A-G
			Pinnularia	Surirella	Pinnularia	Surirella	Odontella	Surirella	Rhizosolenia	Diploneis	Rhizosolenia	Diploneis	Rhizosolenia	Diploneis	
			Odontella	Navicula	Dinophysis	Navicula	Dinophysis	Navicula	Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	
			Dinophysis	Thalassiosira	Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	Thalassiothrix	Dinophysis	Thalassiothrix	Dinophysis	Thalassiothrix	Dinophysis	
			Surirella	Skeletonema	Surirella	Skeletonema	Cyclotella	Skeletonema	Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	Cyclotella	Thalassionema	
B Zooplankton															
1	Abundance (Population)	noX10³/ 100 m³	41		44		43		42		41		42		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Nitzschia		Nitzschia		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		
			Pinnularia		Pinnularia		Coscinodiscus		Oikoplura		Oikoplura		Oikoplura		
			Odontella		Odontella		Odontella		Copepods nauplii		Copepods nauplii		Copepods nauplii		
			Dinophysis		Dinophysis		Dinophysis		Crustacean		Crustacean		Crustacean		
			Surirella		Surirella		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		
3	Total Biomass	ml/100 m³	16.58		16.57		16.58		16.57		16.58		16.59		

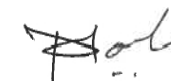
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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	94		96		98		99		98		96		APHA 24 th Ed.2023,9215-C
2	Total Coliform	/100ml	24		26		27		26		27		26		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	13		11		12		11		12		11		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.24	8.08	8.18	8.01	8.06	7.85	8.11	7.95	8.17	7.99	8.14	7.96	IS 3025(Part 11):2022
2.	Temperature	°C	30	29.9	29.9	29.8	29.8	29.7	29.7	29.6	29.8	29.7	29.7	29.6	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	128	98	116	84	122	80	128	86	124	104	132	112	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.4	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	2.6	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	7.04	6.84	6.9	6.8	6.82	6.72	6.85	6.65	6.91	6.71	6.76	6.57	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.55	36.62	35.62	36.74	35.74	36.82	35.83	36.94	35.75	36.97	35.78	37.02	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO ₃	μmol/L	3.23	2.9	3.02	2.59	2.74	2.42	3.06	2.9	2.9	2.58	3.23	3.06	APHA 24th Ed.2023,4500 NO3-
9.	Nitrite as NO ₂	μmol/L	0.348	0.326	0.276	0.215	0.304	0.283	0.391	0.37	0.413	0.37	0.391	0.37	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.95	3.8	3.79	3.36	3.8	3.74	3.9	3.74	4.11	4.01	4.16	4.06	APHA 24th Ed.2023,4500-NH ₃
11.	Phosphates as PO ₄	μmol/L	1.16	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	1.16	1.05	1.37	1.16	1.05	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	μmol/L	7.528	7.026	7.086	6.165	6.844	6.443	7.351	7.01	7.423	6.96	7.781	7.49	APHA 24th Ed.2023,4500 NH ₃
13.	Petroleum Hydrocarbon	μg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35120	36250	34830	35640	35090	35840	35420	36204	35440	36340	35390	36388	IS 3025(Part 16):2023
15.	COD	mg/L	20.2	12.1	12.1	4	16	8	20.1	12	24	16	20.4	12.3	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
	PARAMETERS		SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.3	3.12	3.2	3.14	3.1	3.12	3.2	3.11	3.1	3.12	3.2	3.11	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.7	1.6	1.8	1.38	1.7	1.8	1.6	1.7	1.7	1.6	1.6	1.7	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	114	107	113	109	114	107	113	106	112	107	113	106	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	Odentella	Cyclotella	Odentella	Cyclotella	Odentella	Cyclotella	Nitzschia	Diploneis	Nitzschia	Diploneis	Nitzschia	Diploneis	APHA (24th Ed. 2023)10200A-G
			Rhizosolenia	Pinnularia	Rhizosolenia	Pinnularia	Rhizosolenia	Pinnularia	Grammatophora	Rhizosolenia	Grammatophora	Rhizosolenia	Grammatophora	Rhizosolenia	
			Coscinodiscus	Skeletonema	Coscinodiscus	Skeletonema	Coscinodiscus	Skeletonema	Diploneis	Nitzschia	Diploneis	Nitzschia	Diploneis	Nitzschia	
			Grammatophora	Thalassiosira	Grammatophora	Thalassiosira	Grammatophora	Thalassiosira	Thalassiothrix	Cyclotella	Thalassiothrix	Cyclotella	Thalassiothrix	Grammatophora	
			Thalassiosira	Thalassionema	Thalassiosira	Thalassionema	Thalassiosira	Thalassionema	Pleurosigma	Pleurosigma	Pleurosigma	Pleurosigma	Pleurosigma	Pleurosigma	
B Zooplankton															
1	Abundance(Population)	noX10³/ 100 m³	32		31		32		31		32		30		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Coscinodiscus		Coscinodiscus		Odontella		Oikoplura		Oikoplura		Oikoplura		
			Diploneis		Egg(Fish and Shrimps)		Egg(Fish and Shrimps)		Copepods nauplii		Copepods nauplii		Egg(Fish and Shrimps)		
			Rhizosolenia		Rhizosolenia		Rhizosolenia		Crustacean Larvae		Crustacean Larvae		Crustacean Larvae		
			Dinophysis		Bivalve Larvae		Bivalve Larvae		Crustacean		Crustacean		Crustacean		
			Thalassionema		Thalassionema		Thalassionema		Bivalve Larvae		Bivalve Larvae		Bivalve Larvae		
3	Total Biomass	ml/100 m³	14.77		14.76		14.77		14.76		14.77		14.78		

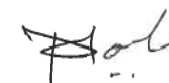
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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	92		94		10		11		12		16		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	12		13		14		13		12		14		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	11		12		11		10		11		11		IS :15185:2016
4	Enterococcus	/100ml	6		5		6		5		6		5		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24 SEDIMENT	Nov-24 SEDIMENT	Dec-24 SEDIMENT	Jan-25 SEDIMENT	Feb-25 SEDIMENT	Mar-25 SEDIMENT	TEST METHOD
1.	Organic Matter	%	0.51	0.48	0.52	0.46	0.51	0.56	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	578.6	602.4	610.8	598.4	618.4	620.3	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	4.12	4.15	4.09	4.12	4.1	4.11	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	138.5	132.2	138.4	146.2	134.6	142.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	602.5	594.2	576.2	608.4	588.5	602.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.11	3.89	3.48	3.69	3.88	4.03	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.6	42.2	38.9	42.2	44.6	45	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	54.2	52.4	49.9	45.8	48.9	48.1	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	134	124.2	120.3	115.2	124.3	116.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.38	2.12	2.09	2.14	2.16	1.95	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

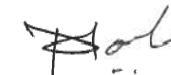
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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	TEST METHOD
D			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1	Macrobenthos	--	<i>Polychates</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	APHA (24th Ed. 2023)10500
			<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	
			<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Sipunculids</i>	
			<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	
2	MeioBenthos	--	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	
			<i>Turbellarians</i>	<i>Turbellarians</i>	<i>Turbellarians</i>	<i>Turbellarians</i>	<i>Turbellarians</i>	<i>Turbellarians</i>	
3	Population	no/m ²	365	364	366	367	368	367	



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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.17	7.99	8.24	8.04	8.33	8.12	8.34	8.06	8.27	8.11	8.21	8.02	IS 3025 (Part 11):2022
2.	Temperature	°C	29.9	29.8	29.8	29.7	29.7	29.6	29.6	29.5	29.7	29.6	29.8	29.7	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	136	120	132	114	144	128	126	102	122	110	118	104	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.6	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	3.4	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.94	6.73	6.8	6.7	6.72	6.62	6.55	6.45	6.6	6.5	6.47	6.37	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.75	36.81	35.81	36.74	36.08	37.2	36.14	37.35	36.21	37.12	36.34	37.14	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025 (Part 39):2021
8.	Nitrate as NO ₃	μmol/L	3.39	3.06	3.36	2.8	3.23	3.06	3.71	3.55	3.55	3.23	3.39	3.23	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.283	0.261	0.328	0.276	0.326	0.283	0.456	0.435	0.435	0.413	0.413	0.391	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.8	3.69	3.62	3.32	3.69	3.64	4.01	3.9	4.27	4.16	4.27	4.11	APHA 24th Ed. 2023,4500- NH ₃ B
11.	Phosphates as PO ₄	μmol/L	BDL(MDL: 0.4)	BDL(MDL: 0.4)	1.26	1.16	1.05	BDL(MDL: 0.4)	1.58	1.37	1.16	BDL(MDL: 0.4)	1.16	1.05	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	μmol/L	7.473	7.011	7.308	6.396	7.246	6.983	8.176	7.885	8.255	7.803	8.073	7.731	APHA 24th Ed. 2023,4500 NH ₃ - B
13.	Petroleum Hydrocarbon	μg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35460	36710	35190	35960	35210	35850	35490	36310	35410	36280	35480	36310	IS 3025(Part 16):2023
15.	COD	mg/L	20.2	16.2	12.1	8.1	16	12	20.1	16.1	24	20	20.4	16.3	IS 3025(Part 58):2023

Continue...

RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTO M	SURFACE	BOTTO M	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTO M	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.8	2.7	2.7	2.6	2.6	2.7	2.5	2.6	2.6	2.7	2.7	2.8	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.6	1.5	2.7	1.6	2.5	1.5	2.4	1.4	2.3	1.3	2.4	1.2	
3.	Cell Count	No. x 10³/L	131	119	132	120	133	122	132	121	131	122	132	123	
4	Name of Group Number and name of group species of each group	--	Dinophy sis	Navicula	Odentell a	Cyclotell a	Cyclotell a	Surirella	Odentell a	Nitzschia	Odentell a	Nitzschia	Odentell a	Nitzschia	
			Pinnulari a	Skeleton ema	Rhizosol enia	Pinnulari a	Pinnulari a	Skeleton ema	Rhizosol enia	Pinnulari a	Rhizosol enia	Pinnulari a	Rhizosol enia	Pinnulari a	
			Thalassi othrix	Rhizosol enia	Coscinod iscus	Skeleton ema	Thalassi othrix	Rhizosol enia	Coscinod iscus	Odontell a	Coscinod iscus	Odontell a	Coscinod iscus	Odontell a	
			Gramma tophora	Dinophy sis	Gramma tophora	Thallassi osira	Rhizosol enia	Cyclotell a	Gramma tophora	Dinophy sis	Gramma tophora	Dinophy sis	Pleurosi gma	Dinophy sis	
			Ceratiu m	Thalassi onema	Thallassi osira	Thallassi onema	Ceratiu m	Thallassi onema	Thallassi osira	Surirella	Thallassi osira	Surirella	Thallassi osira	Surirella	

B															
Zooplankton															
1	Abudance(Populat ion)	noX103/ 100 m3	35		34		33		32		33		31		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Diploneis		Diploneis		Diploneis		Decapoda		Decapoda		Decapoda		
			Rhizosolenia		Rhizosolenia		Rhizosolenia		Copepods		Copepods		Oikoplura		
			Nitzschia		Nitzschia		Nitzschia		Crustacean Larvae		Crustacean Larvae		Crustacean Larvae		
			Thalassiothrix		Coscinodiscus		Coscinodiscus		Crustacean		Crustacean		Bivalve Larvae		
			Pleurosigma		Pleurosigma		Pleurosigma		Oikoplura		Oikoplura		Oikoplura		
3	Total Biomass	ml/100 m³	15.24		15.23		15.22		15.21		15.22		15.21		

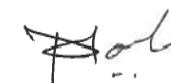
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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	232	234	236	235	234	234	APHA 24 th Ed.2023,9215 -C						
2	Total Coliform	/100ml	42	41	42	41	42	41	APHA 24thEd.2023, 9222-B						
3	E.coli	/100ml	30	33	34	33	32	31	IS :15185:2016						
4	Enterococcus	/100ml	12	11	12	11	12	11	IS:15186:200 2						
5	Salmonella	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS:15187:201 6						
6	Shigella	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	APHA 24thEd.2023, 9260-E						
7	Vibrio	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS: 5887 (Part V):1976						



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.21	8.03	8.12	7.95	8.26	8.09	8.21	8.05	8.24	8.08	8.19	8.04	IS 3025 (Part 11):2022
2.	Temperature	°C	30	29.9	29.8	29.7	29.7	29.6	29.6	29.5	29.7	29.6	29.8	29.7	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	122	90	110	88	114	90	138	110	132	118	126	104	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.7	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	3.2	BDL(MDL :1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	7.04	6.84	6.9	6.8	6.82	6.72	6.75	6.65	6.81	6.71	6.66	6.57	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.72	36.58	35.62	36.54	35.94	36.82	36.08	37.21	36.14	37.02	36.25	37.14	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025 (Part 39):2021
8.	Nitrate as NO ₃	µmol/L	2.74	2.42	3.45	2.8	3.39	3.23	3.55	3.39	3.87	3.71	3.71	3.55	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.413	0.37	0.345	0.276	0.348	0.326	0.413	0.37	0.478	0.456	0.37	0.348	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	3.9	3.8	3.28	3.1	3.59	3.53	4.06	3.9	4.27	4.16	4.22	4.16	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO ₄	µmol/L	1.37	1.16	1.16	1.05	1.26	1.16	1.26	BDL(MDL :0.4)	1.58	1.47	1.47	1.37	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.053	6.59	7.075	6.176	7.328	7.086	8.023	7.66	8.618	8.326	8.3	8.058	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35460	36140	35510	36140	35430	36100	35760	36420	35680	36450	35720	36520	IS 3025(Part 16):2023
15.	COD	mg/L	24.3	20.2	16.1	12.1	20	16	24.1	20.1	28	24	24.5	20.4	IS 3025(Part 58):2023

Continue...

RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
	PARAMETERS		SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.2	2.3	2.3	2.2	2.4	2.1	2.3	2.1	2.2	2.2	2.1	2.1	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.16	1.48	1.17	1.47	1.18	1.46	1.17	1.47	1.18	1.48	1.19	1.49	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	78	133	77	132	76	131	77	132	78	131	77	132	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	Ceratiu m	Melosira	Ceratiu m	Rhizosol enia	Surirella	Rhizosol enia	Skeleton ema	Odentell a	Skeleton ema	Odentell a	Skeleton ema	Odentell a	APHA (24th Ed. 2023)10200A-G
			Pinnulari a	Dinophy sis	Pinnulari a	Dinophy sis	Pinnulari a	Dinophy sis	Gramma tophora	Rhizosol enia	Gramma tophora	Rhizosol enia	Gramma tophora	Rhizosol enia	
			Odontell a	Skeleton ema	Odontell a	Skeleton ema	Gramma tophora	Skeleton ema	Nitzschia	Coscinod iscus	Nitzschia	Coscinod iscus	Nitzschia	Coscinod iscus	
			Thalassi othrix	Thallassi osira	Thalassi othrix	Thallassi osira	Thalassi othrix	Thallassi osira	Thalassi othrix	Gramma tophora	Thalassi othrix	Gramma tophora	Coscinod iscus	Pinnulari a	
			Thallassi osira	Thallassi onema	Thallassi osira	Melosira	Rhizosol enia	Melosira	Pleurosi gma	Thallassi osira	Pleurosi gma	Thallassi osira	Pleurosi gma	Thallassi osira	
Zooplankton															
1	Abudance (Populati on)	noX103/ 100 m3	72		73		72		71		72		71		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		Nitzschia		Nitzschia		Nitzschia		Copepods		Copepods		Copepods		
			Grammatophora		Grammatophora		Grammatophora		Oikoplura		Oikoplura		Oikoplura		
			Diploneis		Diploneis		Egg(Fish and Shrimps)		Crustacean Larvae		Crustacean Larvae		Crustacean Larvae		
			Thalassiothrix		Thalassiothrix		Thalassiothrix		Crustacean		Crustacean		Crustacean		
	Pleurosigma		Pleurosigma		Pleurosigma		Bivalve Larvae		Bivalve Larvae		Egg(Fish and Shrimps)				
3	Total Biomass	ml/100 m³	14.56		14.57		14.58		14.57		14.56		14.57		

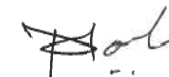
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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO	TEST PARAMETER S	UNIT	Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	256	51	260	262	264	266	APHA 24 th Ed.2023,9215 -C						
2	Total Coliform	/100ml	52	43	52	51	50	52	APHA 24thEd.2023, 9222-B						
3	E.coli	/100ml	42	33	41	40	41	40	IS :15185:2016						
4	Enterococcus	/100ml	32	Absent	34	33	34	33	IS:15186:2002						
5	Salmonella	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS:15187:2016						
6	Shigella	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	APHA 24thEd.2023, 9260-E						
7	Vibrio	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS: 5887 (Part V):1976						



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

Results of Ambient Air Quality Monitoring

Name of Location		West Port – West Basin Main Gate						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
1.	03-10-2024	65.48	27.73	23.85	26.41	0.63	--	NOT DETECTED
2.	07-10-2024	68.42	28.53	24.63	28.48	0.62	3.89	NOT DETECTED
3.	10-10-2024	66.39	27.53	23.74	27.49	0.66	3.96	NOT DETECTED
4.	14-10-2024	70.46	31.23	24.91	28.52	0.72	4.12	NOT DETECTED
5.	17-10-2024	74.38	33.26	25.43	29.68	0.74	4.29	NOT DETECTED
6.	21-10-2024	72.49	30.84	24.8	28.63	0.69	4.15	NOT DETECTED
7.	24-10-2024	75.49	33.36	25.97	29.76	0.73	4.31	NOT DETECTED
8.	28-10-2024	73.12	31.39	25.11	28.88	0.67	4.24	NOT DETECTED
9.	31-10-2024	70.83	30.52	24.38	28.13	0.64	4.1	NOT DETECTED
10.	04-11-2024	74.26	31.61	23.83	27.11	0.68	4.16	NOT DETECTED
11.	07-11-2024	76.38	32.75	24.68	28.14	0.7	4.37	NOT DETECTED
12.	11-11-2024	71.53	31.38	25.47	29.73	0.67	4.24	NOT DETECTED
13.	14-11-2024	74.75	35.42	26.28	30.81	0.74	4.45	NOT DETECTED
14.	18-11-2024	76.21	37.15	27.89	31.37	0.76	4.61	NOT DETECTED
15.	21-11-2024	72.53	34.85	25.41	29.64	0.71	4.37	NOT DETECTED

Continue...

Name of Location		West Port – West Basin Main Gate						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
16.	25-11-2024	75.17	36.14	26.19	30.32	0.75	4.49	NOT DETECTED
17.	28-11-2024	73.82	33.91	25.38	29.46	0.7	4.31	NOT DETECTED
18.	02-12-2024	76.37	34.15	26.49	30.37	0.77	4.36	NOT DETECTED
19.	05-12-2024	80.37	37.25	29.11	33.57	0.81	4.47	NOT DETECTED
20.	09-12-2024	74.82	32.69	25.36	29.15	0.74	4.32	NOT DETECTED
21.	12-12-2024	77.64	34.79	27.34	31.83	0.76	4.4	NOT DETECTED
22.	16-12-2024	82.36	36.28	30.19	34.1	0.83	4.54	NOT DETECTED
23.	19-12-2024	79.64	34.98	28.42	32.63	0.79	4.42	NOT DETECTED
24.	23-12-2024	81.27	37.46	29.38	33.26	0.81	4.6	NOT DETECTED
25.	26-12-2024	77.46	35.35	26.47	30.56	0.76	4.49	NOT DETECTED
26.	30-12-2024	80.41	36.77	28.16	32.73	0.78	4.56	NOT DETECTED
27.	02-01-2025	78.25	32.61	27.42	32.11	0.87	--	NOT DETECTED
28.	06-01-2025	73.41	29.83	24.79	29.53	0.93	3.84	NOT DETECTED
29.	09-01-2025	70.64	28.51	23.98	27.85	0.85	3.71	NOT DETECTED
30.	13-01-2025	72.92	29.43	24.75	29.41	0.97	3.64	NOT DETECTED

Continue...

Name of Location		West Port – West Basin Main Gate						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
31.	16-01-2025	76.56	31.78	26.42	31.26	0.9	3.8	NOT DETECTED
32.	20-01-2025	80.37	33.64	28.24	33.69	0.96	3.94	NOT DETECTED
33.	23-01-2025	75.81	30.48	26.77	31.53	0.91	3.72	NOT DETECTED
34.	27-01-2025	72.38	28.74	24.35	29.74	0.82	3.67	NOT DETECTED
35.	30-01-2025	74.63	31.26	26.19	31.87	0.87	3.77	NOT DETECTED
36.	03-02-2025	74.48	30.14	25.73	30.45	0.81	3.62	NOT DETECTED
37.	06-02-2025	77.85	33.65	27.24	32.83	0.78	3.76	NOT DETECTED
38.	10-02-2025	72.37	29.19	25.14	29.88	0.75	3.7	NOT DETECTED
39.	13-02-2025	75.94	31.42	26.84	31.27	0.82	3.8	NOT DETECTED
40.	17-02-2025	82.36	35.47	28.66	32.35	0.87	3.84	NOT DETECTED
41.	20-02-2025	80.16	34.13	26.58	31.17	0.8	3.76	NOT DETECTED
42.	24-02-2025	76.42	31.26	25.63	30.46	0.77	3.71	NOT DETECTED
43.	27-02-2025	79.64	33.75	26.19	31.27	0.87	3.82	NOT DETECTED
44.	03-03-2025	76.63	31.48	24.93	29.12	0.79	3.77	NOT DETECTED
45.	06-03-2025	79.16	32.73	25.38	30.64	0.84	3.84	NOT DETECTED

Continue...

Name of Location		West Port – West Basin Main Gate						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
46.	10-03-2025	74.36	29.83	23.69	27.94	0.72	3.7	NOT DETECTED
47.	13-03-2025	76.17	30.28	24.49	29.35	0.77	3.79	NOT DETECTED
48.	17-03-2025	80.81	34.56	26.31	31.28	0.81	3.83	NOT DETECTED
49.	20-03-2025	74.15	28.97	23.74	27.69	0.74	3.75	NOT DETECTED
50.	24-03-2025	77.58	30.21	25.84	30.26	0.78	3.81	NOT DETECTED
51.	27-03-2025	82.37	34.72	27.53	31.67	0.82	3.89	NOT DETECTED
52.	31-03-2025	79.16	31.63	26.48	29.88	0.75	3.72	NOT DETECTED
Permissible Value as per NAAQMS		100.0	60.0	80.0	80.0	2.0	---	5.0
Test Method		IS - 5182, Part- 23	UERL/AIR/ SOP/11	IS - 5182, Part - 2	IS - 5182, Part - 6	IS - 5182, Part - 10	Gas analyzer	IS – 5182, Part – 11



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Ambient Air Quality Monitoring

Name of Location		West Port – Horti Culture						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
1.	03-10-2024	70.21	32.48	22.43	25.83	0.65	--	NOT DETECTED
2.	07-10-2024	68.75	31.24	22.81	26.12	0.67	2.62	NOT DETECTED
3.	10-10-2024	73.28	33.69	23.46	27.35	0.7	2.71	NOT DETECTED
4.	14-10-2024	76.47	34.61	24.38	28.61	0.73	2.79	NOT DETECTED
5.	17-10-2024	81.26	36.19	25.93	29.81	0.77	2.88	NOT DETECTED
6.	21-10-2024	78.64	35.82	24.63	28.58	0.75	2.8	NOT DETECTED
7.	24-10-2024	75.49	34.32	23.89	27.54	0.7	2.76	NOT DETECTED
8.	28-10-2024	77.64	35.29	24.36	28.29	0.73	2.86	NOT DETECTED
9.	31-10-2024	80.13	36.41	25.96	29.88	0.78	2.94	NOT DETECTED
10.	04-11-2024	78.53	35.21	25.15	29.32	0.73	2.71	NOT DETECTED
11.	07-11-2024	75.49	33.58	23.97	27.43	0.8	2.63	NOT DETECTED
12.	11-11-2024	77.84	34.92	25.41	28.64	0.7	2.75	NOT DETECTED
13.	14-11-2024	81.26	37.64	27.43	31.26	0.81	2.84	NOT DETECTED
14.	18-11-2024	84.63	39.16	28.24	32.1	0.83	2.96	NOT DETECTED
15.	21-11-2024	77.46	35.46	25.37	30.28	0.75	2.86	NOT DETECTED

Continue...

Name of Location		West Port – Horti Culture						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
16.	25-11-2024	80.63	37.52	27.11	31.37	0.82	2.94	NOT DETECTED
17.	28-11-2024	78.15	35.46	26.08	30.82	0.77	2.83	NOT DETECTED
18.	02-12-2024	80.14	37.31	27.12	31.83	0.82	2.9	NOT DETECTED
19.	05-12-2024	83.27	38.94	28.65	33.26	0.87	3.12	NOT DETECTED
20.	09-12-2024	80.46	36.28	26.86	30.79	0.8	2.93	NOT DETECTED
21.	12-12-2024	78.19	34.25	25.14	30.21	0.77	2.84	NOT DETECTED
22.	16-12-2024	75.63	33.29	24.39	29.63	0.73	2.77	NOT DETECTED
23.	19-12-2024	80.72	36.42	26.37	31.91	0.82	2.82	NOT DETECTED
24.	23-12-2024	82.47	37.52	27.49	30.58	0.85	2.94	NOT DETECTED
25.	26-12-2024	79.64	35.13	26.55	30.61	0.78	2.81	NOT DETECTED
26.	30-12-2024	81.54	36.85	28.74	32.16	0.83	2.88	NOT DETECTED
27.	02-01-2025	82.48	39.31	28.46	33.17	0.87	--	NOT DETECTED
28.	06-01-2025	84.10	40.83	31.73	36.32	0.93	3.29	NOT DETECTED
29.	09-01-2025	80.47	37.28	27.35	32.47	0.84	3.18	NOT DETECTED
30.	13-01-2025	83.91	41.11	29.98	33.85	0.87	3.14	NOT DETECTED

Continue...

Name of Location		West Port – Horti Culture						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
31.	16-01-2025	78.64	35.83	26.41	31.36	0.81	2.94	NOT DETECTED
32.	20-01-2025	81.36	36.57	28.49	33.25	0.85	3.07	NOT DETECTED
33.	23-01-2025	84.36	38.87	31.75	36.47	0.90	3.19	NOT DETECTED
34.	27-01-2025	82.82	36.78	29.82	34.36	0.83	3.10	NOT DETECTED
35.	30-01-2025	79.94	34.53	27.46	33.54	0.78	2.97	NOT DETECTED
36.	03-02-2025	79.53	35.81	25.38	29.41	0.78	2.86	NOT DETECTED
37.	06-02-2025	82.45	37.47	28.18	32.46	0.83	2.94	NOT DETECTED
38.	10-02-2025	77.59	36.13	26.95	29.53	0.75	2.75	NOT DETECTED
39.	13-02-2025	80.65	40.63	27.47	31.26	0.81	2.82	NOT DETECTED
40.	17-02-2025	84.63	42.39	30.71	34.14	0.88	2.96	NOT DETECTED
41.	20-02-2025	82.38	41.72	29.14	33.18	0.84	2.88	NOT DETECTED
42.	24-02-2025	78.97	37.58	27.64	31.36	0.75	2.8	NOT DETECTED
43.	27-02-2025	81.46	39.13	28.47	31.52	0.79	2.86	NOT DETECTED
44.	03-03-2025	81.35	38.49	28.13	33.26	0.82	2.96	NOT DETECTED
45.	06-03-2025	76.48	35.71	26.84	31.53	0.73	2.82	NOT DETECTED

Continue...

Name of Location		West Port – Horti Culture						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
46.	10-03-2025	80.37	36.69	27.35	32.49	0.78	2.9	NOT DETECTED
47.	13-03-2025	83.15	39.46	30.17	35.03	0.85	3.1	NOT DETECTED
48.	17-03-2025	81.92	38.14	29.23	34.62	0.8	2.97	NOT DETECTED
49.	20-03-2025	78.46	35.24	27.57	32.14	0.75	2.81	NOT DETECTED
50.	24-03-2025	82.65	37.83	28.64	34.1	0.82	2.85	NOT DETECTED
51.	27-03-2025	84.59	40.15	30.61	35.73	0.87	2.94	NOT DETECTED
52.	31-03-2025	81.25	36.73	27.52	32.38	0.84	2.88	NOT DETECTED
Permissible Value as per NAAQMS		100.0	60.0	80.0	80.0	2.0	---	5.0
Test Method		IS - 5182, Part- 23	UERL/AIR/ SOP/11	IS - 5182, Part - 2	IS - 5182, Part - 6	IS - 5182, Part - 10	Gas analyzer	IS – 5182, Part – 11



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Ambient Air Quality Monitoring

Name of Location		WEST PORT - PMC OFFICE						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
1.	03-10-2024	73.29	27.83	24.39	28.83	0.67	--	NOT DETECTED
2.	07-10-2024	76.12	29.73	25.36	29.53	0.72	3.62	NOT DETECTED
3.	10-10-2024	80.53	32.41	25.96	30.81	0.81	3.7	NOT DETECTED
4.	14-10-2024	74.38	28.47	24.38	29.11	0.7	3.78	NOT DETECTED
5.	17-10-2024	76.83	30.58	25.74	29.53	0.74	3.83	NOT DETECTED
6.	21-10-2024	82.36	33.67	26	30.85	0.81	4.03	NOT DETECTED
7.	24-10-2024	77.53	32.47	25.93	29.16	0.77	3.86	NOT DETECTED
8.	28-10-2024	75.91	29.87	24.63	28.94	0.71	3.73	NOT DETECTED
9.	31-10-2024	78.42	31.37	25.73	29.48	0.74	3.79	NOT DETECTED
10.	04-11-2024	77.52	30.63	24.15	29.24	0.76	3.87	NOT DETECTED
11.	07-11-2024	80.63	32.24	26.83	31.64	0.86	3.95	NOT DETECTED
12.	11-11-2024	82.37	34.19	28.42	33.64	0.91	4.16	NOT DETECTED
13.	14-11-2024	79.18	31.74	25.48	30.75	0.83	3.87	NOT DETECTED
14.	18-11-2024	83.48	33.91	27.98	32.75	0.88	3.98	NOT DETECTED
15.	21-11-2024	81.91	32.36	27.29	31.62	0.81	3.82	NOT DETECTED

Continue...

Name of Location		WEST PORT - PMC OFFICE						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
16.	25-11-2024	78.46	31.65	26.17	30.89	0.78	3.75	NOT DETECTED
17.	28-11-2024	80.31	33.72	27.83	31.25	0.84	3.91	NOT DETECTED
18.	02-12-2024	82.71	35.62	28.13	32.83	0.87	3.86	NOT DETECTED
19.	05-12-2024	78.64	31.48	25.47	29.35	0.80	3.71	NOT DETECTED
20.	09-12-2024	80.36	33.25	27.13	31.36	0.83	3.77	NOT DETECTED
21.	12-12-2024	76.91	30.85	25.13	28.98	0.75	3.64	NOT DETECTED
22.	16-12-2024	79.42	32.63	26.95	30.25	0.79	3.74	NOT DETECTED
23.	19-12-2024	81.56	34.92	27.53	31.72	0.83	3.82	NOT DETECTED
24.	23-12-2024	84.13	37.1	29.71	34.15	0.86	3.87	NOT DETECTED
25.	26-12-2024	82.36	35.14	27.36	31.57	0.82	3.75	NOT DETECTED
26.	30-12-2024	84.29	36.82	29.68	33.84	0.87	3.89	NOT DETECTED
27.	02-01-2025	84.73	37.12	27.81	30.46	0.90	--	NOT DETECTED
28.	06-01-2025	81.64	35.75	25.58	29.43	0.84	3.85	NOT DETECTED
29.	09-01-2025	83.49	37.52	29.13	32.51	0.87	3.97	NOT DETECTED
30.	13-01-2025	77.36	33.93	24.82	28.39	0.77	3.47	NOT DETECTED

Continue...

Name of Location		WEST PORT - PMC OFFICE						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
31.	16-01-2025	80.13	34.84	25.69	30.18	0.81	3.59	NOT DETECTED
32.	20-01-2025	84.13	37.42	29.54	33.27	0.86	3.77	NOT DETECTED
33.	23-01-2025	82.46	36.35	26.41	30.64	0.78	3.52	NOT DETECTED
34.	27-01-2025	79.77	34.91	25.64	28.49	0.8	3.45	NOT DETECTED
35.	30-01-2025	82.57	35.64	27.12	31.78	0.85	3.62	NOT DETECTED
36.	03-02-2025	81.64	35.39	26.84	30.13	0.84	3.64	NOT DETECTED
37.	06-02-2025	84.38	38.92	29.32	32.65	0.91	3.78	NOT DETECTED
38.	10-02-2025	82.73	36.28	28.46	31.73	0.87	3.71	NOT DETECTED
39.	13-02-2025	78.48	34.52	25.89	29.62	0.79	3.6	NOT DETECTED
40.	17-02-2025	80.83	36.26	27.53	31.57	0.81	3.67	NOT DETECTED
41.	20-02-2025	82.47	37.1	28.17	31.82	0.9	3.75	NOT DETECTED
42.	24-02-2025	84.37	39.85	30.64	33.36	0.95	3.89	NOT DETECTED
43.	27-02-2025	81.29	37.42	29.31	32.59	0.92	3.81	NOT DETECTED
44.	03-03-2025	80.37	36.13	27.82	31.27	0.79	3.76	NOT DETECTED
45.	06-03-2025	82.48	37.83	28.51	33.06	0.85	3.83	NOT DETECTED

Continue...

Name of Location		WEST PORT - PMC OFFICE						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
46.	10-03-2025	78.93	35.19	25.32	29.51	0.77	3.71	NOT DETECTED
47.	13-03-2025	80.15	36.48	27.15	31.38	0.81	3.79	NOT DETECTED
48.	17-03-2025	82.38	37.85	28.49	31.17	0.86	3.88	NOT DETECTED
49.	20-03-2025	85.16	39.14	30.11	34.31	0.88	3.96	NOT DETECTED
50.	24-03-2025	79.12	35.41	26.89	30.62	0.8	3.81	NOT DETECTED
51.	27-03-2025	76.58	34.92	25.77	29.13	0.75	3.74	NOT DETECTED
52.	31-03-2025	80.71	36.47	27.36	31.25	0.82	3.85	NOT DETECTED
Permissible Value as per NAAQMS		100.0	60.0	80.0	80.0	2.0	---	5.0
Test Method		IS - 5182, Part- 23	UERL/AIR/ SOP/11	IS - 5182, Part - 2	IS - 5182, Part - 6	IS - 5182, Part - 10	Gas analyzer	IS - 5182, Part - 11



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Ambient Air Quality Monitoring

Name of Location		LPG Terminal Substation						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
1.	03-10-2024	64.38	28.71	20.74	23.58	0.72	--	NOT DETECTED
2.	07-10-2024	67.63	29.78	21.32	25.2	0.76	3.73	NOT DETECTED
3.	10-10-2024	63.93	28.56	20.54	23.57	0.74	3.68	NOT DETECTED
4.	14-10-2024	66.48	30.46	21.26	24.47	0.75	3.7	NOT DETECTED
5.	17-10-2024	71.59	32.47	23.52	26.81	0.8	3.76	NOT DETECTED
6.	21-10-2024	74.36	33.64	24.43	27.56	0.83	3.81	NOT DETECTED
7.	24-10-2024	72.17	32.24	23.61	26.18	0.77	3.78	NOT DETECTED
8.	28-10-2024	76.59	34.68	24.88	27.36	0.81	3.86	NOT DETECTED
9.	31-10-2024	75.16	33.42	24.15	27.63	0.78	3.82	NOT DETECTED
10.	04-11-2024	72.46	30.78	22.37	26.15	0.8	3.79	NOT DETECTED
11.	07-11-2024	75.62	31.46	23.15	27.63	0.86	3.88	NOT DETECTED
12.	11-11-2024	78.82	33.46	25.83	29.37	0.82	3.91	NOT DETECTED
13.	14-11-2024	81.54	36.11	26.77	31.16	0.91	3.98	NOT DETECTED
14.	18-11-2024	76.49	34.51	25.63	29.38	0.88	3.82	NOT DETECTED
15.	21-11-2024	74.38	33.26	24.37	28.63	0.83	3.76	NOT DETECTED

Continue...

Name of Location		LPG Terminal Substation						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
16.	25-11-2024	70.42	31.79	22.97	26.48	0.79	3.72	NOT DETECTED
17.	28-11-2024	73.28	33.91	24.12	29.38	0.84	3.81	NOT DETECTED
18.	02-12-2024	75.17	34.83	23.47	27.15	0.83	3.8	NOT DETECTED
19.	05-12-2024	78.45	36.11	24.13	28.38	0.89	3.93	NOT DETECTED
20.	09-12-2024	82.36	38.1	26.59	30.42	0.86	3.99	NOT DETECTED
21.	12-12-2024	77.82	35.71	23.94	27.54	0.8	3.86	NOT DETECTED
22.	16-12-2024	80.24	36.58	25.73	30.55	0.84	3.91	NOT DETECTED
23.	19-12-2024	83.91	38.25	27.19	31.27	0.91	3.96	NOT DETECTED
24.	23-12-2024	79.65	35.27	24.35	29.11	0.87	3.86	NOT DETECTED
25.	26-12-2024	75.17	33.48	23.92	27.31	0.77	3.78	NOT DETECTED
26.	30-12-2024	77.31	34.23	25.88	30.36	0.82	3.85	NOT DETECTED
27.	02-01-2025	81.52	35.13	28.36	31.84	1.00	--	NOT DETECTED
28.	06-01-2025	78.65	34.21	26.14	30.11	0.95	3.73	NOT DETECTED
29.	09-01-2025	75.49	31.48	25.73	28.57	0.89	3.67	NOT DETECTED
30.	13-01-2025	71.28	29.84	23.58	27.12	0.83	3.58	NOT DETECTED

Continue...

Name of Location		LPG Terminal Substation						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
31.	16-01-2025	74.84	31.56	24.79	27.8	0.88	3.64	NOT DETECTED
32.	20-01-2025	79.48	33.58	27.69	30.52	0.93	3.75	NOT DETECTED
33.	23-01-2025	76.17	31.79	25.37	28.46	0.85	3.69	NOT DETECTED
34.	27-01-2025	80.83	34.71	28.52	31.64	0.97	3.79	NOT DETECTED
35.	30-01-2025	74.38	32.1	25.32	28.56	0.90	3.72	NOT DETECTED
36.	03-02-2025	79.54	31.83	26.39	29.15	0.87	3.76	NOT DETECTED
37.	06-02-2025	75.37	30.13	24.68	27.27	0.81	3.8	NOT DETECTED
38.	10-02-2025	78.64	33.11	25.53	28.76	0.85	3.71	NOT DETECTED
39.	13-02-2025	71.26	28.63	23.91	26.48	0.79	3.67	NOT DETECTED
40.	17-02-2025	74.37	29.63	24.79	27.51	0.83	3.72	NOT DETECTED
41.	20-02-2025	68.54	28.42	23.57	27.11	0.78	3.68	NOT DETECTED
42.	24-02-2025	72.54	29.75	24.46	28.07	0.85	3.74	NOT DETECTED
43.	27-02-2025	75.82	30.54	26.91	29.64	0.89	3.81	NOT DETECTED
44.	03-03-2025	76.83	30.61	25.74	30.02	0.84	3.78	NOT DETECTED
45.	06-03-2025	80.42	34.37	28.64	32.45	0.9	3.84	NOT DETECTED
46.	10-03-2025	78.64	31.58	27.41	30.95	0.77	3.73	NOT DETECTED

Name of Location		LPG Terminal Substation						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
47.	13-03-2025	75.15	29.94	26.57	30.16	0.75	3.67	NOT DETECTED
48.	17-03-2025	81.37	33.52	28.85	32.36	0.86	3.79	NOT DETECTED
49.	20-03-2025	78.12	31.91	27.25	31.57	0.81	3.75	NOT DETECTED
50.	24-03-2025	69.84	29.35	24.98	29.32	0.75	3.7	NOT DETECTED
51.	27-03-2025	72.53	30.32	25.37	29.82	0.84	3.73	NOT DETECTED
52.	31-03-2025	76.42	32.56	27.21	31.75	0.89	3.8	NOT DETECTED
Permissible Value as per NAAQMS		100.0	60.0	80.0	80.0	2.0	---	5.0
Test Method		IS - 5182, Part- 23	UERL/AIR/ SOP/11	IS - 5182, Part - 2	IS - 5182, Part - 6	IS - 5182, Part - 10	Gas analyzer	IS - 5182, Part - 11



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Ambient Air Quality Monitoring

Name of Location		Adani Guest House				
Sr. No.	Date of Monitoring	Parameter with Results				
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
1.	03-10-2024	58.51	16.85	11.73	14.12	NOT DETECTED
2.	07-10-2024	61.38	17.62	12.14	14.75	--
3.	10-10-2024	63.27	18.41	12.94	16.11	--
4.	14-10-2024	60.37	17.24	11.73	15.31	--
5.	17-10-2024	67.88	19.74	13.47	16.05	--
6.	21-10-2024	64.38	18.64	12.53	15.65	--
7.	24-10-2024	66.15	19.47	13.38	16.12	--
8.	28-10-2024	70.71	20.37	14.03	16.78	--
9.	31-10-2024	67.63	19.25	13.42	15.89	--
10.	04-11-2024	65.39	18.86	13.11	16.37	--
11.	07-11-2024	67.28	19.35	14.18	17.52	--
12.	11-11-2024	64.31	18.48	13.24	16.84	--
13.	14-11-2024	67.38	20.13	14.47	17.15	--
14.	18-11-2024	65.28	19.12	13.41	16.37	--
15.	21-11-2024	63.29	17.75	12.36	15.61	--

Continue...

Name of Location		Adani Guest House				
Sr. No.	Date of Monitoring	Parameter with Results				
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
16.	25-11-2024	66.48	19.57	14.31	17.57	--
17.	28-11-2024	64.89	18.85	12.74	15.83	--
18.	02-12-2024	63.94	17.73	12.85	16.49	--
19.	05-12-2024	65.83	18.27	13.21	17.83	--
20.	09-12-2024	69.24	18.98	14.29	18.53	--
21.	12-12-2024	71.42	20.58	14.91	18.86	--
22.	16-12-2024	67.58	18.11	13.68	17.36	--
23.	19-12-2024	64.35	17.83	12.71	16.37	--
24.	23-12-2024	70.49	20.14	14.63	18.12	--
25.	26-12-2024	67.3	18.74	13.89	17.35	--
26.	30-12-2024	69.77	19.25	14.72	18.21	--
27.	02-01-2025	72.63	21.35	15.68	19.27	NOT DETECTED
28.	06-01-2025	75.49	22.61	16.13	20.53	--
29.	09-01-2025	68.57	20.53	14.38	18.62	--
30.	13-01-2025	70.52	21.47	15.29	19.88	--
31.	16-01-2025	65.48	18.79	13.65	17.31	--

Name of Location		Adani Guest House				
Sr. No.	Date of Monitoring	Parameter with Results				
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
32.	20-01-2025	68.19	19.87	14.2	18.47	--
33.	23-01-2025	73.27	21.53	15.72	19.69	--
34.	27-01-2025	67.65	18.76	14.11	18.73	--
35.	30-01-2025	70.81	20.93	15.14	19.58	--
36.	03-02-2025	69.52	18.15	13.84	17.37	--
37.	06-02-2025	65.48	17.64	12.93	16.74	--
38.	10-02-2025	71.38	18.79	14.11	17.58	--
39.	13-02-2025	74.28	20.35	15.27	19.58	--
40.	17-02-2025	67.64	17.58	13.74	17.27	--
41.	20-02-2025	72.47	20.14	14.52	18.76	--
42.	24-02-2025	76.49	21	15.39	19.35	--
43.	27-02-2025	70.81	19.38	14.1	17.95	--
44.	03-03-2025	72.36	19.73	14.68	18.31	--
45.	06-03-2025	75.46	21.38	15.63	19.56	--
46.	10-03-2025	70.91	18.43	14.57	18.38	--
47.	13-03-2025	73.28	19.96	14.88	19.11	--

Name of Location		Adani Guest House				
Sr. No.	Date of Monitoring	Parameter with Results				
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
48.	17-03-2025	76.49	21.85	16.12	20.53	--
49.	20-03-2025	72.37	20.18	15.75	19.64	--
50.	24-03-2025	68.56	18.74	14.65	18.27	--
51.	27-03-2025	72.93	22.01	15.28	19.69	--
52.	31-03-2025	70.24	20.58	14.97	18.63	--
Permissible Value as per NAAQMS		100.0	60.0	80.0	80.0	2.0
Test Method		IS - 5182, Part- 23	UERL/AIR/ SOP/11	IS - 5182, Part - 2	IS - 5182, Part - 6	IS - 5182, Part - 10



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Ambient Air Quality Monitoring

Name of Location		CT-4 RMU-2						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
1.	03-10-2024	70.41	24.22	17.65	20.97	0.60	--	NOT DETECTED
2.	07-10-2024	72.38	24.95	18.06	22.24	0.63	3.68	NOT DETECTED
3.	10-10-2024	75.48	26.15	19.14	23.51	0.62	3.74	NOT DETECTED
4.	14-10-2024	78.74	28.45	19.88	23.93	0.67	3.79	NOT DETECTED
5.	17-10-2024	74.39	26.37	18.54	22.48	0.65	3.72	NOT DETECTED
6.	21-10-2024	76.59	27.79	19.36	23.41	0.68	3.81	NOT DETECTED
7.	24-10-2024	81.26	29.19	20.58	24.72	0.72	3.87	NOT DETECTED
8.	28-10-2024	77.64	28.37	19.93	23.32	0.67	3.80	NOT DETECTED
9.	31-10-2024	75.24	26.44	18.26	21.57	0.68	3.82	NOT DETECTED
10.	04-11-2024	76.29	26.83	19.14	23.31	0.69	3.78	NOT DETECTED
11.	07-11-2024	78.63	27.28	19.93	23.78	0.71	3.83	NOT DETECTED
12.	11-11-2024	80.64	28.13	20.58	24.63	0.76	3.89	NOT DETECTED
13.	14-11-2024	84.38	30.62	22.13	26.48	0.82	3.96	NOT DETECTED
14.	18-11-2024	82.47	29.63	21.15	25.24	0.78	3.91	NOT DETECTED
15.	21-11-2024	75.47	26.39	19.28	23.74	0.73	3.81	NOT DETECTED

Continue...

Name of Location		CT-4 RMU-2						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
16.	25-11-2024	79.75	27.48	20.26	24.35	0.79	3.90	NOT DETECTED
17.	28-11-2024	76.18	26.91	19.74	23.19	0.71	3.84	NOT DETECTED
18.	02-12-2024	78.16	27.53	21.87	25.43	0.74	3.81	NOT DETECTED
19.	05-12-2024	81.35	28.74	22.46	27.11	0.78	3.89	NOT DETECTED
20.	09-12-2024	83.29	30.61	23.75	27.94	0.84	3.97	NOT DETECTED
21.	12-12-2024	77.45	27.49	21.36	25.17	0.75	3.82	NOT DETECTED
22.	16-12-2024	75.47	26.89	20.07	24.58	0.72	3.76	NOT DETECTED
23.	19-12-2024	78.52	28.69	21.4	25.55	0.76	3.80	NOT DETECTED
24.	23-12-2024	81.48	31.34	23.63	27.19	0.81	3.85	NOT DETECTED
25.	26-12-2024	75.37	27.53	19.97	24.48	0.73	3.77	NOT DETECTED
26.	30-12-2024	77.19	28.32	20.41	26.13	0.77	3.82	NOT DETECTED
27.	02-01-2025	80.53	31.48	23.61	27.17	0.85	--	NOT DETECTED
28.	06-01-2025	76.49	28.53	22.28	25.83	0.77	3.87	NOT DETECTED
29.	09-01-2025	74.92	27.73	21.69	26.14	0.75	3.76	NOT DETECTED
30.	13-01-2025	78.59	29.17	23.42	27.26	0.80	3.92	NOT DETECTED
31.	16-01-2025	81.64	31.75	25.48	29.06	0.84	4.12	NOT DETECTED

Name of Location		CT-4 RMU-2						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
32.	20-01-2025	84.38	33.51	26.3	30.64	0.87	4.18	NOT DETECTED
33.	23-01-2025	79.47	28.64	23.14	27.53	0.78	3.97	NOT DETECTED
34.	27-01-2025	82.37	31.78	24.57	28.49	0.84	4.07	NOT DETECTED
35.	30-01-2025	84.39	32.91	26.37	30.72	0.90	4.16	NOT DETECTED
36.	03-02-2025	83.16	32.75	26.38	31.29	0.91	3.97	NOT DETECTED
37.	06-02-2025	80.73	30.82	23.84	28.61	0.84	3.89	NOT DETECTED
38.	10-02-2025	82.37	31.58	24.14	29.46	0.81	3.84	NOT DETECTED
39.	13-02-2025	77.95	28.64	23.91	27.87	0.79	3.80	NOT DETECTED
40.	17-02-2025	81.38	32.16	25.12	30.45	0.85	3.94	NOT DETECTED
41.	20-02-2025	79.64	30.24	24.86	28.74	0.82	3.84	NOT DETECTED
42.	24-02-2025	84.63	34.85	26.57	31.65	0.90	3.92	NOT DETECTED
43.	27-02-2025	81.05	32.48	25.62	30.18	0.86	3.87	NOT DETECTED
44.	03-03-2025	80.91	30.83	28.13	32.46	0.85	4.13	NOT DETECTED
45.	06-03-2025	84.36	33.57	30.24	34.83	0.94	4.27	NOT DETECTED
46.	10-03-2025	78.37	29.96	28.74	33.15	0.81	4.03	NOT DETECTED
47.	13-03-2025	81.63	30.98	29.64	32.89	0.88	4.15	NOT DETECTED

Name of Location		CT-4 RMU-2						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
48.	17-03-2025	83.29	34.57	31.51	35.64	0.92	4.23	NOT DETECTED
49.	20-03-2025	85.91	36.21	34.01	38.46	0.97	4.37	NOT DETECTED
50.	24-03-2025	81.63	34.79	30.27	34.68	0.84	4.20	NOT DETECTED
51.	27-03-2025	83.37	36.13	32.41	36.32	0.89	4.12	NOT DETECTED
52.	31-03-2025	84.89	32.42	33.56	37.54	0.85	4.26	NOT DETECTED
Permissible Value as per NAAQMS		100.0	60.0	80.0	80.0	2.0	---	5.0
Test Method		IS - 5182, Part- 23	UERL/AIR/ SOP/11	IS - 5182, Part - 2	IS - 5182, Part - 6	IS - 5182, Part - 10	Gas analyzer	IS – 5182, Part – 11



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Noise Level Monitoring

Location Name		West Port – West Basin Main Gate					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		21-10-2024	21-11-2024	19-12-2024	20-01-2025	20-02-2025	20-03-2025
1	06:00 to 07:00	63.7	62.2	61.8	61.3	60.7	61.2
2	07:00 to 08:00	66.3	64.9	63.4	62.9	61.9	62.7
3	08:00 to 09:00	62.5	61.8	65.3	64.7	65.4	63.4
4	09:00 to 10:00	68.1	67.4	66.2	65.4	64.8	63.8
5	10:00 to 11:00	65.9	66.5	64.3	66.3	66.3	61.5
6	11:00 to 12:00	67.7	67.3	65.8	64.5	65.7	63.7
7	12:00 to 13:00	65.6	66.2	64.5	66.8	64.2	66.3
8	13:00 to 14:00	64.2	65.8	67.1	65.1	64.8	65.3
9	14:00 to 15:00	67.5	67.3	65.4	66.4	65.4	63.2
10	15:00 to 16:00	68.5	68.4	67.6	67.8	66.1	65.8
11	16:00 to 17:00	63.8	65.3	65.2	64.3	65.3	66.4
12	17:00 to 18:00	66.5	65.8	67.4	65.7	63.2	62.6
13	18:00 to 19:00	62.6	64.1	65.2	64.5	65.6	66.7
14	19:00 to 20:00	65.9	64.3	65.8	64.3	63.8	64.5
15	20:00 to 21:00	63.5	62.9	63.4	64.9	60.7	63.8
16	21:00 to 22:00	63.2	63.4	63.2	62.7	60.6	58.6
Day Time		<75 dB (A)					

Location Name		West Port – West Basin Main Gate					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) – Night Time					
		21-10-2024	21-11-2024	19-12-2024	20-01-2025	20-02-2025	20-03-2025
1	22:00 to 23:00	62.3	61.1	62.6	63.1	60.7	61.2
2	23:00 to 24:00	60.8	62.3	64.2	62.5	61.3	63.5
3	24:00 to 01:00	62.4	61.8	61.6	63.4	61.7	62.3
4	01:00 to 02:00	64.5	63.5	63.4	62.4	63.8	63.4
5	02:00 to 03:00	63.2	61.9	64.4	61.9	62.5	60.8
6	03:00 to 04:00	61.9	63.4	62.8	60.4	63.1	61.3
7	04:00 to 05:00	58.5	60.3	63.1	62.4	61.8	62.3
8	05:00 to 06:00	61.8	59.6	61.5	60.5	58.7	59.5
Night Time		<70 dB (A)					
Test Method		IS: 9989 : 1981					



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Noise Level Monitoring

Location Name		West Port – Horti Culture					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		24-10-2024	25-11-2024	23-12-2024	23-01-2025	24-02-2025	24-03-2025
1	06:00 to 07:00	64.5	64.1	63.5	63.5	63.2	63.8
2	07:00 to 08:00	65.4	64.8	65.8	64.7	63.5	65.2
3	08:00 to 09:00	68.2	67.5	66.4	65.9	67.5	66.8
4	09:00 to 10:00	66.7	68.7	67.7	66.1	66.3	65.4
5	10:00 to 11:00	64.3	66.9	65.4	64.3	65.4	67.5
6	11:00 to 12:00	65.9	67.4	68.3	66.8	67.2	66.7
7	12:00 to 13:00	68.2	67.2	66.8	67.5	65.4	67.3
8	13:00 to 14:00	67.5	68.6	66.3	64.7	66.3	66.5
9	14:00 to 15:00	64.3	65.7	64.8	65.2	64.3	65.1
10	15:00 to 16:00	67.4	66.4	67.3	66.4	65.1	64.8
11	16:00 to 17:00	67.1	68.3	65.4	65.7	63.4	64.7
12	17:00 to 18:00	64.8	66.4	65.3	66.3	65.8	65.1
13	18:00 to 19:00	66.5	65.3	64.3	65.4	64.1	63.2
14	19:00 to 20:00	64.8	62.8	64.7	62.7	64.6	62.9
15	20:00 to 21:00	61.3	64.5	63.2	62.4	63.8	64.7
16	21:00 to 22:00	61.8	62.1	64.1	63.6	61.7	60.5
Day Time		<75 dB (A)					

Location Name		West Port – Horti Culture					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time					
		24-10-2024	25-11-2024	23-12-2024	23-01-2025	24-02-2025	24-03-2025
1	22:00 to 23:00	61.8	59.3	60.4	62.8	62.5	63.1
2	23:00 to 24:00	63.4	60.7	61.3	64.8	63.8	62.3
3	24:00 to 01:00	65.7	64.3	63.5	62.4	64.2	63.4
4	01:00 to 02:00	63.4	65.1	65.5	64.8	62.4	62.8
5	02:00 to 03:00	64.8	63.2	62.8	64.2	64.5	63.5
6	03:00 to 04:00	63.2	64.8	63.4	63.8	62.3	63.4
7	04:00 to 05:00	61.4	62.1	61.3	63.1	63.7	61.3
8	05:00 to 06:00	62.3	61.4	59.9	61.7	61.2	59.7
Night Time		<70 dB (A)					

Test Method	IS: 9989 : 1981
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Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Noise Level Monitoring

Location Name		WEST PORT - PMC OFFICE					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		28-10-2024	28-11-2024	26-12-2024	27-01-2025	27-02-2025	27-03-2025
1	06:00 to 07:00	62.4	61.8	61.4	59.2	57.8	58.4
2	07:00 to 08:00	64.3	62.4	63.5	60.5	61.4	60.5
3	08:00 to 09:00	67.4	64.3	63.9	61.4	63.2	64.2
4	09:00 to 10:00	68.8	65.8	64.3	65.8	62.8	64.7
5	10:00 to 11:00	66.5	67.8	65.3	62.5	64.7	66.2
6	11:00 to 12:00	68.2	64.1	66.7	64.7	65.8	65.3
7	12:00 to 13:00	69.3	68.7	65.4	65.4	64.2	66.4
8	13:00 to 14:00	68.5	65.3	67.3	66.3	65.7	64.3
9	14:00 to 15:00	67.4	68.9	66.5	66.7	66.4	65.9
10	15:00 to 16:00	65.3	64.6	68.2	64.6	64.2	65.3
11	16:00 to 17:00	65.5	66.9	65.4	68.2	61.3	63.1
12	17:00 to 18:00	65.7	64.3	66.7	64.5	63.3	64.5
13	18:00 to 19:00	67.2	63.6	65.4	63.2	62.7	64.8
14	19:00 to 20:00	64.9	65.7	63.2	65.9	62.3	60.8
15	20:00 to 21:00	63.9	64.1	65.1	64.7	59.3	62.3
16	21:00 to 22:00	62.5	64.3	63.5	61.4	58.1	59.2
Day Time		<75 dB (A)					

Location Name		WEST PORT - PMC OFFICE					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time					
		28-10-2024	28-11-2024	26-12-2024	27-01-2025	27-02-2025	27-03-2025
1	22:00 to 23:00	61.3	61.8	62.2	60.3	61.3	61.8
2	23:00 to 24:00	60.5	62.4	63.6	62.4	60.9	62.3
3	24:00 to 01:00	60.8	61.5	64.1	63.5	61.5	60.5
4	01:00 to 02:00	62.5	63.8	62.3	61.3	61.8	63.4
5	02:00 to 03:00	63.8	62.4	64.3	63.4	63.2	62.5
6	03:00 to 04:00	60.4	61.9	60.8	62.5	60.7	60.2
7	04:00 to 05:00	62.4	61.2	63.4	61.8	59.4	60.7
8	05:00 to 06:00	58.7	59.1	61.7	62.4	61.6	60.2
Day Time		<70 dB (A)					

Test Method	IS: 9989 : 1981
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Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Noise Level Monitoring

Location Name		LPG Terminal Substation					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		17-10-2024	18-11-2024	16-12-2024	16-01-2025	17-02-2025	17-03-2025
1	06:00 to 07:00	64.2	63.5	63.4	62.8	63.1	63.4
2	07:00 to 08:00	63.8	62.8	65.1	66.3	62.5	63.2
3	08:00 to 09:00	66.7	64.5	63.7	65.3	63.8	64.5
4	09:00 to 10:00	65.2	67.1	65.5	65.8	66.6	65.2
5	10:00 to 11:00	67.1	68.4	67.1	65.3	64.5	65.8
6	11:00 to 12:00	65.8	66.5	65.4	66.2	66.3	65.4
7	12:00 to 13:00	64.5	67.8	66.7	65.4	65.7	64.5
8	13:00 to 14:00	67.3	66.3	65.7	67.4	65.3	66.8
9	14:00 to 15:00	66.8	65.7	64.5	64.7	65.8	64.5
10	15:00 to 16:00	63.1	65.1	63.2	64.3	67.2	67.1
11	16:00 to 17:00	65.8	62.8	64.5	65.7	66.4	65.6
12	17:00 to 18:00	68.1	64.9	66.7	66.2	64.7	64.3
13	18:00 to 19:00	64.8	65.8	67.2	65.7	63.9	64.2
14	19:00 to 20:00	65.3	66.1	65.4	65.3	66.4	65.7
15	20:00 to 21:00	63.9	65.2	63.2	62.8	63.2	62.3
16	21:00 to 22:00	62.3	62.7	61.9	61.2	63.3	61.8
Day Time		<75 dB (A)					

Location Name		LPG Terminal Substation					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) – Night Time					
		17-10-2024	18-11-2024	16-12-2024	16-01-2025	17-02-2025	17-03-2025
1	22:00 to 23:00	59.8	60.5	63.3	62.5	63.1	61.8
2	23:00 to 24:00	61.9	59.5	61.3	63.7	62.5	61.3
3	24:00 to 01:00	60.8	60.4	62.8	61.8	63.2	63.4
4	01:00 to 02:00	62.4	61.3	64.5	63.5	64.5	64.5
5	02:00 to 03:00	63.7	62.6	63.8	64.5	63.1	62.8
6	03:00 to 04:00	61.3	61.5	61.3	64.3	61.8	60.5
7	04:00 to 05:00	60.3	61.8	62.4	63.2	63.7	61.3
8	05:00 to 06:00	58.3	59.4	60.7	61.7	61.3	60.8
Night Time		<70 dB (A)					

Test Method	IS: 9989 : 1981
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Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Noise Level Monitoring

Location Name		Adani Guest House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		16-10-2024	23-11-2024	18-12-2024	18-01-2025	18-02-2025	14-03-2025
1	06:00 to 07:00	61.6	61.2	59.8	57.5	58.8	57.5
2	07:00 to 08:00	63.8	62.8	60.7	59.3	61.3	59.4
3	08:00 to 09:00	64.9	63.7	62.4	61.3	60.4	60.3
4	09:00 to 10:00	63.4	65.7	67.5	60.8	59.7	62.4
5	10:00 to 11:00	62.1	63.8	64.3	62.4	64.7	63.7
6	11:00 to 12:00	64.5	65.9	66.2	65.7	63.5	64.8
7	12:00 to 13:00	64.7	66.4	64.8	64.3	62.3	64.2
8	13:00 to 14:00	62.8	63.8	65.7	65.8	64.8	65.7
9	14:00 to 15:00	65.4	64.2	62.6	61.4	63.8	64.5
10	15:00 to 16:00	64.8	64.3	65.1	64.2	66.1	66.6
11	16:00 to 17:00	63.9	65.1	64.3	65.7	64.5	65.8
12	17:00 to 18:00	63.6	64.2	63.9	62.7	64.7	66.3
13	18:00 to 19:00	64.7	62.8	65.2	64.3	65.3	64.1
14	19:00 to 20:00	62.8	63.8	61.7	60.8	63.7	64.5
15	20:00 to 21:00	60.2	61.3	60.8	61.4	60.8	62.3
16	21:00 to 22:00	59.9	58.6	59.4	58.7	58.2	58.3
Day Time		<75 dB (A)					

Location Name		Adani Guest House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) – Night Time					
		16-10-2024	23-11-2024	18-12-2024	18-01-2025	18-02-2025	14-03-2025
1	22:00 to 23:00	58.8	57.3	57.6	57.2	57.6	58.3
2	23:00 to 24:00	59.4	59.1	58.4	57.8	58.2	59.1
3	24:00 to 01:00	64.3	60.5	63.2	59.4	60.4	59.5
4	01:00 to 02:00	62.3	62.4	60.5	61.1	59.4	62.3
5	02:00 to 03:00	63.6	61.8	62.4	63.6	61.3	60.6
6	03:00 to 04:00	61.2	60.3	61.8	60.5	62.3	59.7
7	04:00 to 05:00	60.5	61.8	62.3	61.3	60.7	61.2
8	05:00 to 06:00	58.3	58.2	59.2	58.7	57.9	58.5
Night Time		<70 dB (A)					

Test Method	IS: 9989 : 1981
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Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Noise Level Monitoring

Location Name		CT-4 RMU-2					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		19-10-2024	26-11-2024	21-12-2024	21-01-2025	22-02-2025	18-03-2025
1	06:00 to 07:00	62.3	62.6	64.1	63.8	63.2	63.1
2	07:00 to 08:00	64.5	61.9	64.3	65.4	66.2	64.5
3	08:00 to 09:00	65.4	63.5	62.8	66.8	64.8	65.7
4	09:00 to 10:00	66.1	64.8	65.6	64.8	65.7	65.3
5	10:00 to 11:00	64.7	67.5	67.8	65.2	67.4	66.2
6	11:00 to 12:00	65.6	67.3	65.4	67.8	67.2	66.5
7	12:00 to 13:00	66.2	68.4	67.5	67.2	65.4	67.4
8	13:00 to 14:00	67.2	64.2	66.9	66.4	65.7	66.2
9	14:00 to 15:00	65.4	65.7	64.3	65.8	63.4	64.9
10	15:00 to 16:00	66.9	68.4	66.9	65.7	65.1	65.7
11	16:00 to 17:00	65.4	66.7	65.2	67.3	66.8	66.2
12	17:00 to 18:00	66.2	64.3	66.4	65.9	66.2	65.4
13	18:00 to 19:00	64.3	65.8	67.8	65.2	63.5	65.2
14	19:00 to 20:00	64.7	62.6	64.3	63.5	64.5	62.4
15	20:00 to 21:00	63.5	65.3	62.8	64.1	63.4	64.5
16	21:00 to 22:00	63.1	62.9	63.1	61.5	62.6	61.8
Day Time		<75 dB (A)					

Location Name		CT-4 RMU-2					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) – Night Time					
		19-10-2024	26-11-2024	21-12-2024	21-01-2025	22-02-2025	18-03-2025
1	22:00 to 23:00	62.3	61.9	61.3	62.5	61.8	61.5
2	23:00 to 24:00	63.5	64.2	63.2	62.4	63.6	63.2
3	24:00 to 01:00	66.4	64.8	61.8	63.7	64.7	63.9
4	01:00 to 02:00	64.3	65.1	64.7	62.5	63.2	64.7
5	02:00 to 03:00	65.8	63.8	62.7	64.5	62.8	64.2
6	03:00 to 04:00	64.3	62.7	63.5	63.1	63.5	62.4
7	04:00 to 05:00	62.1	63.4	61.3	60.8	61.5	60.5
8	05:00 to 06:00	61.5	61.5	60.4	61.4	61.1	60.8
Night Time		<70 dB (A)					

Test Method	IS: 9989 : 1981
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Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Stack Monitoring

Sr. No.	Parameter	Unit	Mar – 2025		GPCB LIMIT	Method of Test
			D.G.Set No. S-1 (1500 KVA)	D.G.Set No. S-2 (1500 KVA)		
			27-03-2025	27-03-2025		
1	Particulate Matter	mg/Nm ³	23.71	25.11	150	IS 11255 (Part - 1)
2	Sulfur Dioxide as SO ₂	ppm	18.75	18.21	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	27.42	24.74	50	IS 11255 (Part - 7)



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Sr. No.	Parameter	Unit	Mar-25	GPCB LIMIT	Method of Test
			D.G. Set-1 (2000 KVA)		
			27-03-2025		
1	Particulate Matter	mg/Nm3	32.11	150	IS 11255 (Part - 1)
2	Sulphur Dioxide	ppm	14.32	100	IS 11255 (Part - 2)
3	Oxide of Nitrogen	ppm	27.5	50	IS 11255 (Part - 7)
4	Carbon Monoxide	mg/Nm3	4.8	--	UERL/AIR/SOP/18
5	Non Methyl Hydro Carbon	ppm	Not Detected	--	UERL/AIR/SOP/27



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Minimum Detection Limit			
Ambient Air Quality Monitoring			
Sr. No.	Test Parameter	Unit	MDL
1	Particulate Matter (PM10)	µg/m ³	5 µg/m ³
2	Particulate Matter (PM10)	µg/m ³	5 µg/m ³
3	Sulphur Dioxide (SO ₂)	µg/m ³	4 µg/m ³
4	Nitrogen Dioxide (NO ₂)	µg/m ³	5 µg/m ³
5	Carbon Monoxide (CO)	mg/m ³	0.01 mg/m ³
6	Ammonia (NH ₃)	µg/m ³	5 µg/m ³
7	Ozone (O ₃)	µg/m ³	5 µg/m ³
8	Lead (Pb)	µg/m ³	0.5 µg/m ³
9	Nickle (Ni)	ng/m ³	1 ng/m ³
10	Arsenic (As)	ng/m ³	1 ng/m ³
11	Benzene	µg/m ³	1µg/m ³
12	Benzo(o)Pyrene	ng/m ³	0.1 ng/m ³
14	Hydro Carbon	µg/m ³	1 µg/m ³
Stack Emission Monitoring			
Sr. No.	Test Parameter	Unit	MDL
1	Suspended particulate matter	mg/Nm ³	2 mg/Nm ³
2	Sulphur Dioxide SOX	mg/Nm ³	4 mg/Nm ³
3	Oxides of Nitrogen NOX	mg/Nm ³	5 mg/Nm ³

STP Outlet			
Sr. No.	Test Parameter	Unit	MDL
1	pH @ 25 ° C	--	2
2	Total Suspended Solids	mg/L	4
3	Biochemical Oxygen Demand (BOD) (5 days at 20 ° C)	mg/L	1
4	Residual chlorine	mg/L	0.1
5	Fecal Coliform	MPN/100	<2

ETP Outlet			
Sr. No.	Test Parameter	Unit	MDL
1	Colour	Pt. Co. Scale	5
2	pH @ 27 ° C	--	2
3	Temperature	0c	5
4	Total Suspended Solids	mg/L	4
5	Total Dissolved Solids	mg/L	4
6	COD	mg/L	2
7	BOD (3 days at 27 °C)	mg/L	1
8	Chloride (as Cl) -	mg/L	1
9	Oil & Grease	mg/L	4
10	Sulphate (as SO ₄)	mg/L	1
11	Ammonical Nitrogen	mg/L	5
12	Phenolic Compound	mg/L	0.1
13	Copper as Cu	mg/L	0.05
14	Lead as Pb	mg/L	0.01
15	Sulphide as S	mg/L	0.05
16	Cadmium as Cd	mg/L	0.003
17	Fluoride as F	mg/L	0.2
18	Residual Chlorine	mg/L	0.1
19	Percent Sodium	%	--
20	Sodium Absorption ratio	--	--

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ISO 9001 : 2015
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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

M/s. Adani Power Limited, Mundra

Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: October - 2024

Name of Location

: Village - Siracha

ID No.

: **URA/ID/A-24/10/001**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/10/2024	60.3	30.3	15.3	17.4	--	--
2.	04/10/2024	52.0	26.8	12.8	14.9	--	--
3.	08/10/2024	65.9	32.2	16.3	20.2	--	--
4.	11/10/2024	60.3	27.5	14.1	17.6	--	--
5.	15/10/2024	53.1	21.1	13.9	16.1	18.5	BDL
6.	18/10/2024	58.9	28.5	11.5	14.6	--	--
7.	22/10/2024	54.5	25.1	14.2	16.9	--	--
8.	25/10/2024	61.3	28.2	16.4	18.5	--	--
9.	29/10/2024	56.7	25.6	17.1	18.1	--	--
Average		58.1	27.3	14.6	17.1	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀ – IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : October - 2024

Name of Location : Village – Kandagara

ID No. : URA/ID/A-24/10/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/10/2024	58.4	24.1	11.1	15.9	--	--
2.	04/10/2024	62.0	31.4	12.1	16.0	--	--
3.	08/10/2024	66.0	34.9	15.7	19.9	--	--
4.	11/10/2024	54.2	24.3	13.6	16.7	--	--
5.	15/10/2024	52.8	28.9	16.5	21.2	19.3	BDL
6.	18/10/2024	68.9	35.3	14.4	18.3	--	--
7.	22/10/2024	57.5	29.3	13.6	17.8	--	--
8.	25/10/2024	54.3	26.0	15.2	18.9	--	--
9.	29/10/2024	49.7	21.8	16.1	18.3	--	--
Average		59.3	28.4	14.3	18.1	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM– IS: 5182 (Part 4), 1999, PM₁₀– IS: 5182 (Part 23), 2006, PM_{2.5}– Guidelines by CPCB (Vol-1), SO₂– IS: 5182 (Part 2), 2001, NO_x– IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

: **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: October - 2024

Name of Location

: Village - Wandh

ID No.

: **URA/ID/A-24/10/003**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/10/2024	64.0	29.0	14.3	17.2	--	--
2.	04/10/2024	70.0	33.1	17.2	20.2	--	--
3.	08/10/2024	51.2	24.0	16.4	17.7	--	--
4.	11/10/2024	73.0	30.6	14.0	16.3	--	--
5.	15/10/2024	50.9	25.2	15.9	21.2	20.5	BDL
6.	18/10/2024	76.6	34.5	13.7	15.8	--	--
7.	22/10/2024	58.7	31.1	18.6	20.4	--	--
8.	25/10/2024	65.6	32.1	15.9	19.1	--	--
9.	29/10/2024	71.6	37.5	15.7	17.9	--	--
Average		64.6	30.8	15.7	18.4	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : October - 2024

Name of Location : Nr.20 MLD Plant

ID No. : **URA/ID/A-24/10/004**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	21/10/2024	70.5	26.3	16.4	23.7	22.7	BDL
Average		70.5	26.3	16.4	23.7	22.7	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : October - 2024

Name of Location : Nr. Shantiniketan - 1

ID No. : **URA/ID/A-24/10/005**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	21/10/2024	61.7	22.4	12.3	17.6	20.5	BDL
Average		61.7	22.4	12.3	17.6	20.5	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

**UniStar Environment &
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MoEF&CC Environmental Laboratory under
EPA ,1986) as 04.11.2024 to 18.10.2027

QCI-NABET Accredited EIA
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ISO 9001 : 2015
Certified Company

ISO 45001 : 2018
Certified Company

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

M/s. Adani Power Limited, Mundra

Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: November - 2024

Name of Location

: Village - Siracha

ID No.

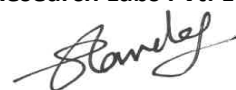
: **URA/ID/A-24/11/001**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/11/2024	58.8	33.3	11.6	15.4	--	--
2.	05/11/2024	63.6	22.7	16.5	22.2	--	--
3.	08/11/2024	54.5	29.1	13.4	16.2	--	--
4.	12/11/2024	60.4	31.7	13.7	17.2	17.4	BDL
5.	15/11/2024	53.0	21.1	16.3	20.6	--	--
6.	19/11/2024	55.8	29.0	10.8	14.7	--	--
7.	22/11/2024	61.0	32.9	14.5	17.3	--	--
8.	26/11/2024	59.9	26.4	15.7	20.8	--	--
9.	29/11/2024	58.2	28.4	13.2	17.9	--	--
Average		58.4	28.3	14.0	18.0	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀ – IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

**UniStar Environment &
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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : November - 2024

Name of Location : Village – Kandagara

ID No. : URA/ID/A-24/11/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/11/2024	66.1	30.2	12.1	16.2	--	--
2.	05/11/2024	53.8	29.2	18.6	24.6	--	--
3.	08/11/2024	52.8	23.0	17.7	21.4	--	--
4.	12/11/2024	55.7	27.1	13.2	18.7	18.2	BDL
5.	15/11/2024	63.4	35.2	12.5	16.1	--	--
6.	19/11/2024	64.4	26.9	11.6	15.7	--	--
7.	22/11/2024	73.1	33.3	19.4	22.3	--	--
8.	26/11/2024	56.0	29.4	15.3	21.6	--	--
9.	29/11/2024	59.7	25.6	14.1	17.3	--	--
Average		60.5	28.9	14.9	19.3	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM– IS: 5182 (Part 4), 1999, PM₁₀– IS: 5182 (Part 23), 2006, PM_{2.5}– Guidelines by CPCB (Vol-1), SO₂– IS: 5182 (Part 2), 2001, NO_x– IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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MoEF&CC Environmental Laboratory under
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ISO 9001 : 2015
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ISO 45001 : 2018
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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

: **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: November - 2024

Name of Location

: Village - Wandh

ID No.

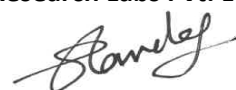
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Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/11/2024	68.0	31.7	14.1	15.7	--	--
2.	05/11/2024	74.5	39.5	22.4	25.5	--	--
3.	08/11/2024	64.1	32.4	17.6	21.1	--	--
4.	12/11/2024	58.9	28.3	16.3	19.3	23.8	BDL
5.	15/11/2024	60.1	25.5	14.9	20.7	--	--
6.	19/11/2024	60.4	27.4	12.7	15.2	--	--
7.	22/11/2024	65.2	36.4	13.6	17.5	--	--
8.	26/11/2024	71.5	39.9	15.6	22.1	--	--
9.	29/11/2024	61.5	34.5	18.3	23.7	--	--
Average		64.9	32.8	16.2	20.1	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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MoEF&CC Environmental Laboratory under
EPA ,1986) as 04.11.2024 to 18.10.2027

QCI-NABET Accredited EIA
Consultant Organization

GPCB Recognized Environmental
Auditor (Schedule-11)

ISO 9001 : 2015
Certified Company

ISO 45001 : 2018
Certified Company

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : November - 2024

Name of Location : Nr.20 MLD Plant

ID No. : **URA/ID/A-24/11/004**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	26/11/2024	67.3	24.8	15.2	21.4	26.8	BDL
Average		67.3	24.8	15.2	21.4	26.8	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

**UniStar Environment &
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MoEF&CC Environmental Laboratory under
EPA ,1986) as 04.11.2024 to 18.10.2027

QCI-NABET Accredited EIA
Consultant Organization

GPCB Recognized Environmental
Auditor (Schedule-11)

ISO 9001 : 2015
Certified Company

ISO 45001 : 2018
Certified Company

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : November - 2024

Name of Location : Nr. Shantiniketan - 1

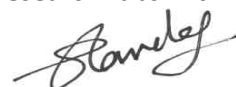
ID No. : **URA/ID/A-24/11/005**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	27/11/2024	59.7	20.5	13.6	18.5	23.4	BDL
Average		59.7	20.5	13.6	18.5	23.4	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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GPCB Recognized Environmental
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ISO 9001 : 2015
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ISO 45001 : 2018
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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

M/s. Adani Power Limited, Mundra

Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: December - 2024

Name of Location

: Village - Siracha

ID No.

: **URA/ID/A-24/12/001**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/12/2024	63.8	31.0	18.1	24.7	--	--
2.	06/12/2024	49.5	27.3	16.1	21.7	--	--
3.	10/12/2024	52.0	23.8	13.9	18.2	--	--
4.	13/12/2024	61.4	34.1	11.7	14.9	--	--
5.	17/12/2024	57.9	27.3	16.7	22.5	--	--
6.	20/12/2024	57.5	30.0	14.5	18.4	15.4	BDL
7.	24/12/2024	58.8	25.6	15.9	19.4	--	--
8.	27/12/2024	58.7	28.2	16.1	20.6	--	--
9.	31/12/2024	64.1	33.0	14.5	19.3	--	--
Average		58.2	28.9	15.3	20.0	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀ – IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : December - 2024

Name of Location : Village – Kandagara

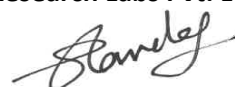
ID No. : URA/ID/A-24/12/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/12/2024	66.1	34.8	15.2	20.2	--	--
2.	06/12/2024	57.0	31.7	17.2	20.8	--	--
3.	10/12/2024	46.0	25.7	16.5	22.4	--	--
4.	13/12/2024	66.5	31.7	18.3	23.7	--	--
5.	17/12/2024	68.2	34.3	13.0	17.1	--	--
6.	20/12/2024	54.5	25.0	13.7	18.4	16.3	BDL
7.	24/12/2024	50.4	24.6	16.5	22.5	--	--
8.	27/12/2024	65.5	30.9	14.7	19.5	--	--
9.	31/12/2024	58.8	22.7	17.5	24.3	--	--
Average		59.2	29.0	15.8	21.0	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM– IS: 5182 (Part 4), 1999, PM₁₀– IS: 5182 (Part 23), 2006, PM_{2.5}– Guidelines by CPCB (Vol-1), SO₂– IS: 5182 (Part 2), 2001, NO_x– IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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ISO 9001 : 2015
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ISO 45001 : 2018
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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : December - 2024

Name of Location : Village - Wandh

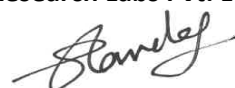
ID No. : **URA/ID/A-24/12/003**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/12/2024	55.3	32.3	12.4	16.8	--	--
2.	06/12/2024	60.3	29.7	17.3	23.9	--	--
3.	10/12/2024	66.4	34.7	14.2	17.8	--	--
4.	13/12/2024	60.6	31.0	19.8	25.1	--	--
5.	17/12/2024	74.6	39.2	16.0	21.3	--	--
6.	20/12/2024	63.4	32.5	13.5	16.2	26.9	BDL
7.	24/12/2024	57.4	28.0	15.6	20.4	--	--
8.	27/12/2024	65.7	33.7	18.8	22.5	--	--
9.	31/12/2024	69.5	37.6	15.2	17.8	--	--
Average		63.7	33.2	15.9	20.2	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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GPCB Recognized Environmental
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ISO 9001 : 2015
Certified Company

ISO 45001 : 2018
Certified Company

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : December - 2024

Name of Location : Nr.20 MLD Plant

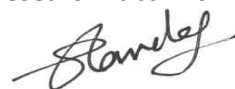
ID No. : URA/ID/A-24/12/004

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	26/12/2024	68.9	27.9	16.8	24.8	31.2	BDL
Average		68.9	27.9	16.8	24.8	31.2	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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GPCB Recognized Environmental
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ISO 9001 : 2015
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ISO 45001 : 2018
Certified Company

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : December - 2024

Name of Location : Nr. Shantiniketan - 1

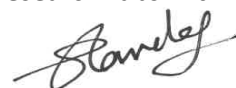
ID No. : URA/ID/A-24/12/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	26/12/2024	62.4	23.5	15.2	20.7	25.7	BDL
Average		62.4	23.5	15.2	20.7	25.7	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

M/s. Adani Power Limited, Mundra

: Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: January - 2025

Name of Location

: Village - Siracha

ID No.

: **URA/ID/A-25/01/001**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/01/2025	55.7	29.4	16.7	21.5	--	--
2.	07/01/2025	65.7	24.8	17.9	23.8	--	--
3.	10/01/2025	63.2	27.8	18.5	24.2	--	--
4.	13/01/2025	52.8	29.9	15.7	20.7	--	--
5.	17/01/2025	69.4	32.7	16.2	21.5	--	--
6.	21/01/2025	48.8	24.3	18.1	23.2	18.5	BDL
7.	24/01/2025	61.2	27.5	16.5	20.7	--	--
8.	28/01/2025	54.5	23.8	14.3	21.6	--	--
9.	31/01/2025	59.1	28.2	16.2	22.5	--	--
Average		57.3	27.6	16.7	22.2	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀ – IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

**UniStar Environment &
Research Labs Pvt. Ltd.**



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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : January - 2025

Name of Location : Village – Kandagara

ID No. : URA/ID/A-25/01/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/01/2025	66.1	30.2	14.1	19.8	--	--
2.	07/01/2025	54.4	29.2	16.5	22.5	--	--
3.	10/01/2025	44.8	23.0	15.2	20.3	--	--
4.	13/01/2025	55.7	27.1	17.5	21.5	22.3	BDL
5.	17/01/2025	64.8	35.2	16.3	22.6	--	--
6.	21/01/2025	54.4	26.9	15.1	19.2	--	--
7.	24/01/2025	63.1	33.3	17.5	23.1	--	--
8.	28/01/2025	56.0	29.4	18.2	24.5	--	--
9.	31/01/2025	51.4	25.6	16.5	21.6	--	--
Average		56.7	28.9	16.3	21.7	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM– IS: 5182 (Part 4), 1999, PM₁₀– IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂– IS: 5182 (Part 2), 2001, NO_x– IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : January - 2025

Name of Location : Village - Wandh

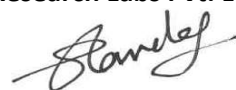
ID No. : **URA/ID/A-25/01/003**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/01/2025	59.8	31.9	19.5	24.2	--	--
2.	07/01/2025	76.8	28.9	18.1	23.5	--	--
3.	10/01/2025	64.1	26.5	17.8	24.5	--	--
4.	13/01/2025	67.1	36.3	18.2	21.8	28.7	BDL
5.	17/01/2025	60.3	23.2	19.8	24.5	--	--
6.	21/01/2025	59.5	30.4	20.5	23.8	--	--
7.	24/01/2025	55.9	29.4	17.4	22.3	--	--
8.	28/01/2025	68.6	32.9	16.3	21.5	--	--
9.	31/01/2025	58.8	27.5	17.1	22.4	--	--
Average		63.4	29.7	18.3	23.2	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : January - 2025

Name of Location : Nr.20 MLD Plant

ID No. : URA/ID/A-25/01/004

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	20/01/2025	64.7	25.2	18.9	22.6	33.7	BDL
Average		64.7	25.2	18.9	22.6	33.7	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : January - 2025

Name of Location : Nr. Shantiniketan - 1

ID No. : URA/ID/A-25/01/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	20/01/2025	59.6	20.4	14.2	19.5	26.8	BDL
Average		59.6	20.4	14.2	19.5	26.8	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5}- Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

M/s. Adani Power Limited, Mundra

: Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: February - 2025

Name of Location

: Village - Siracha

ID No.

: **URA/ID/A-25/02/001**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/02/2025	63.2	29.9	14.8	19.3	--	--
2.	07/02/2025	49.8	22.7	16.2	21.8	--	--
3.	11/02/2025	67.1	25.6	15.3	20.6	15.4	BDL
4.	14/02/2025	53.1	22.4	18.1	24.1	--	--
5.	18/02/2025	61.9	21.1	17.5	22.8	--	--
6.	21/02/2025	50.1	29.0	15.3	20.5	--	--
7.	25/02/2025	60.8	32.0	13.8	18.2	--	--
8.	28/02/2025	54.5	23.8	15.2	19.8	--	--
Average		57.6	25.8	15.8	20.9	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

**UniStar Environment &
Research Labs Pvt. Ltd.**



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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : February - 2025

Name of Location : Village – Kandagara

ID No. : URA/ID/A-25/02/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/02/2025	62.5	27.9	17.8	23.3	--	--
2.	07/02/2025	51.5	30.0	20.3	26.7	--	--
3.	11/02/2025	51.1	25.3	18.5	23.9	20.2	BDL
4.	14/02/2025	55.6	28.9	15.8	20.6	--	--
5.	18/02/2025	69.6	37.7	17.4	23.8	--	--
6.	21/02/2025	72.3	35.3	16.2	21.4	--	--
7.	25/02/2025	44.3	23.6	19.7	25.2	--	--
8.	28/02/2025	59.0	29.4	16.4	22.7	--	--
Average		58.2	29.8	17.8	23.5	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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Research Labs Pvt. Ltd.



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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : February - 2025

Name of Location : Village - Wandh

ID No. : URA/ID/A-25/02/003

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/02/2025	69.8	29.1	17.5	23.7	--	--
2.	07/02/2025	75.2	21.4	16.3	21.4	--	--
3.	11/02/2025	64.1	21.1	21.8	27.8	25.2	BDL
4.	14/02/2025	57.1	19.7	19.1	24.5	--	--
5.	18/02/2025	60.8	26.9	22.5	29.1	--	--
6.	21/02/2025	59.5	35.8	21.7	26.5	--	--
7.	25/02/2025	65.9	30.7	18.4	23.9	--	--
8.	28/02/2025	63.3	32.9	20.5	24.7	--	--
Average		64.5	27.2	19.7	25.2	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : February - 2025

Name of Location : Nr.20 MLD Plant

ID No. : **URA/ID/A-25/02/004**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	24/02/2025	70.1	29.4	20.4	25.3	33.7	BDL
Average		70.1	29.4	20.4	25.3	33.7	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

**UniStar Environment &
Research Labs Pvt. Ltd.**



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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : February - 2025

Name of Location : Nr. Shantiniketan - 1

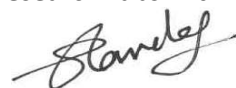
ID No. : URA/ID/A-25/02/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	24/02/2025	63.7	22.9	15.9	21.3	27.3	BDL
Average		63.7	22.9	15.9	21.3	27.3	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client

M/s. Adani Power Limited, Mundra

: Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring

: March - 2025

Name of Location

: Village - Siracha

ID No.

: URA/ID/A-25/03/001

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/03/2025	57.9	20.8	16.3	20.9	--	--
2.	07/03/2025	43.8	34.0	19.1	24.3	--	--
3.	11/03/2025	72.4	30.2	17.4	22.7	18.7	BDL
4.	14/03/2025	52.5	22.5	18.9	24.2	--	--
5.	18/03/2025	49.5	23.9	22.4	27.1	--	--
6.	21/03/2025	42.0	33.2	20.7	24.8	--	--
7.	25/03/2025	59.1	27.2	16.3	22.4	--	--
8.	28/03/2025	70.4	23.8	19.5	25.2	--	--
Average		56.0	26.9	18.8	24.0	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182,Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



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Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : March - 2025

Name of Location : Village – Kandagara

ID No. : URA/ID/A-25/03/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/03/2025	58.4	29.7	18.8	22.7	--	--
2.	07/03/2025	56.1	23.9	23.2	28.1	--	--
3.	11/03/2025	63.4	27.4	20.5	25.6	23.9	BDL
4.	14/03/2025	58.2	22.5	17.1	23.2	--	--
5.	18/03/2025	50.6	17.3	22.8	27.8	--	--
6.	21/03/2025	62.1	22.6	20.3	25.3	--	--
7.	25/03/2025	60.7	27.1	15.9	21.3	--	--
8.	28/03/2025	57.1	23.2	18.5	24.7	--	--
Average		58.3	24.2	19.6	24.8	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : March - 2025

Name of Location : Village - Wandh

ID No. : URA/ID/A-25/03/003

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/03/2025	57.8	28.2	19.3	23.5	--	--
2.	07/03/2025	55.7	25.2	22.1	26.4	--	--
3.	11/03/2025	61.1	23.6	25.3	29.2	28.9	BDL
4.	14/03/2025	52.8	22.2	23.8	26.7	--	--
5.	18/03/2025	49.7	26.6	18.6	23.9	--	--
6.	21/03/2025	66.5	34.4	21.4	26.3	--	--
7.	25/03/2025	72.0	34.6	24.8	29.6	--	--
8.	28/03/2025	69.8	35.5	19.6	25.3	--	--
Average		60.7	28.8	21.9	26.4	--	--

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



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Monthly Average Report
AMBIENT AIR MONITORING

Name and Address of Client : **M/s. Adani Power Limited, Mundra**
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : March - 2025

Name of Location : Nr.20 MLD Plant

ID No. : **URA/ID/A-25/03/004**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg / m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	19/03/2025	67.6	25.9	15.2	22.4	30.2	BDL
Average		67.6	25.9	15.2	22.4	30.2	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

**UniStar Environment &
Research Labs Pvt. Ltd.**



(Authorized Signatory)

Monthly Average Report

AMBIENT AIR MONITORING

Name and Address of Client : M/s. Adani Power Limited, Mundra
Village: Tunda & Siracha,
Tal. Mundra, Dist.: Kutch.
GUJARAT – 370 435.

Month of Monitoring : March - 2025

Name of Location : Nr. Shantiniketan - 1

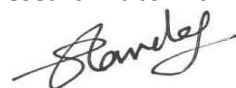
ID No. : URA/ID/A-25/02/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	19/03/2025	61.7	22.4	12.3	17.6	24.2	BDL
Average		61.7	22.4	12.3	17.6	24.2	BDL

Remark: Calibrated equipment & instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: SPM – IS: 5182 (Part 4), 1999, PM₁₀-IS: 5182 (Part 23), 2006, PM_{2.5}- IS - 5182, Part-24, SO₂ – IS: 5182 (Part 2), 2001, NO_x – IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb, O₃: IS – 5182 (Part 9) 2009, Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

MARINE MONITORING REPORT

December 2024 - March 2025



Submitted to

Adani Power Ltd. (APL), Mundra

Village Tunda & Sirach

Taluka Mundra

District Kutch- 370 435

Gujarat

Prepared By:

M/s. UniStar Environment and Research Labs. Pvt. Ltd.

215 - Royal Arcade, Near GIDC Office, Char Rasta, Vapi,

District Valsad - 396 195

Gujarat

PREFACE

Adani Power Ltd., Mundra (APL, Mundra) is coal-based Thermal Power plant located near village Tunda and Siracha, Taluka Mundra District Kutch, Gujarat. with capacity of 4620 MW in Phased manner. Currently, APL is a largest coal based Thermal power plant in private sector in INDIA. APL-Mundra has commissioned the first supercritical 660 MW unit (Phase III) in the country. This is also the World's First supercritical technology project to have received the 'Clean Development Mechanism (CDM) Project' certification from United Nations Framework Convention on Climate Change (UNFCCC). Currently, the total power production capacity of the APL-Mundra has increased to 4620 MW.

APL-Mundra has engaged **M/s. UniStar Environment and Research Labs Pvt. Ltd., Vapi** to **carry out the** seasonal Marine Monitoring Study along with the seawater intake and outfall (discharge) channels of APL-Mundra plant. This marine monitoring study involved the assessment of Physio-chemical parameters at the earlier prescribed locations. The distribution and diversity of marine flora and fauna were assessed through water sampling from sub-tidal regions. Furthermore, the distribution of the benthic community was evaluated from the sediment samples collected along the sub-tidal and inter-tidal regions. The overall objective of this study is to monitor the status of prevailing ecology along the intake and discharge (outfall) channels, in terms of water and sediment quality through assessment of physico-chemical parameters and marine biota. This marine monitoring report provides a comprehensive analysis of the data obtained through a monitoring study undertaken during post-monsoon (December 2024) and pre-monsoon (March 2025) seasons.

Date:

M/S. UniStar Environment and Research Labs Pvt. Ltd.

White House, Char Rasta,

Vapi-396 191

Approved by



Mr. Jaivik Tandel
(Authorized By)

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1. INTRODUCTION

1.1 OVERVIEW

Adani Power Limited (APL-Mundra) is an imported coal-based thermal power plant located near village Tunda and Siracha, Taluka Mundra, District Kutch, Gujarat, India. APL-Mundra is the largest single location private coal-based power plant in India. The capacity of APL-Mundra plant is 4620 MW, and it comprises of 9 units with 4 units of 330 MW (Phase I and II) and 5 units of 660MW (Phase III and IV). The 330 MW units are based on subcritical technology and the 660 MW units are based on supercritical technology. APL-Mundra has created history by synchronizing the first super-critical technology-based 660 MW generating unit. This is not only the first super-critical generating unit in the country but also the fastest project implementation ever by any power developer in the country. The Power plant is situated within “Adani Port Special Economic Zone LTD.” APSEZL, closed to the sea but out of CRZ area. The sea is perennial source of cooling water & other utility for the power plant.

M/S. UniStar Environment and Research Labs Pvt. Ltd., Vapi, India have carried out the routine Marine Monitoring Study in the vicinity of the APL-Mundra Mundra plant during the post-monsoon (27th-28th December 2024) and pre-monsoon (7th-8th December 2024) seasons. The sampling was carried out along the integrated sea intake channel (2 stations) and at vicinity of discharge/outfall channel water mixing region (2 stations). These integrated intake and outfall channels were developed and maintained by Adani Port and SEZ (APSEZ). One station was situated in between these two locations. This assessment involves the collection of Physico-chemical parameters from 5 subtidal locations (Table 1). The distribution and diversity of marine microflora (phytoplankton and pigments) and fauna (zooplankton) were assessed from water samples collected from 5 subtidal stations (Table 1). The assemblage of the macrobenthic community was studied from 5 sub-tidal and 3 inter-tidal stations. The present report presents a detailed account of the results observed during the Marine Monitoring Study at the vicinity of the APL-Mundra during post-(December 2024) and pre-monsoon (March 2025) seasons.

1.2 OBJECTIVES

- a) To analyses the physico-chemical seawater parameter for understanding the water quality in the study area.
- b) Evaluation of the prevailing status of marine biota through the quantitative and qualitative analysis of marine flora (phytoplankton and pigments) and fauna (zooplankton and macrobenthos).
- c) To recommend adequate marine environmental management measures.

2. STUDY PROGRAM

2.1 STUDY PERIOD

The field investigations were carried out on 27th-28th December 2024 (post-monsoon season) and 7th-8th March 2025 (pre-monsoon season). The sampling strategy was planned in such a manner as to get a detailed characteristic of the marine environment of the study area. Sampling and analysis for the marine environment have been carried out by **M/s. UniStar Environment and Research Labs Pvt. Ltd, Vapi, India.**

2.2 SAMPLING LOCATIONS

Sampling was carried out at 5 subtidal stations and 3 intertidal transects along with the sea intake and outfall channels. Out of 5 subtidal stations, 2 were in the sea intake channel, 2 along the discharge mixing (outfall channel) region and remaining 1 in between these two locations. One intertidal station was located along the sea intake channel and 2 were along the discharge region. The detailed geographic coordinates of sampling stations are given in Table 1 and Figure 1.1.

Table 1: Geographic coordinates, water, and sediment parameters at the subtidal sampling stations, APL-Mundra during December 2024 and March 2025.

Station	Station code	Locations	Coordinates		Water Depth (in m)	
1	St-1	Intake point	22°48'30.50"N	69°32'57.84"E	3.8	3.6
2	St-2	Mouth of intake point	22°47'07.20"N	69°32'06.50"E	4.4	4.1
3	St-3	West port area	22°45'27.70"N	69°34'50.63"E	4.8	5.0
4	St-4	Outfall area	22°44'40.56"N	69°36'26.61"E	3.6	3.9
5	St-5	Outfall area	22°45'12.60"N	69°36'44.54"E	3.4	3.8

Table 2: Geographic coordinates, water, and sediment parameters at the intertidal sampling stations, APL-Mundra during December 2024 and March 2025.

Station	Station code	Tide Level	Coordinates		December 2024		March 2025	
					Intertidal exposed area	Sediment texture	Intertidal exposed area	Sediment texture
I	IT-1 (HW)	High Tidewater level	22°47'07.55" N	69°32'16.91" E	4.0 m	Silty sand	4.0 m	Silty sand
	IT-1 (LW)	Low Tide water level	22°47'06.38" N	69°32'11.62" E		Silty sand		Silty sand
II	IT-2 (HW)	High Tidewater level	22°45'58.72" N	69°34'35.41" E	3.8 m	Silty Sandy	3.7 m	Silty Sandy
	IT-2 (LW)	Low Tidewater level	22°45'57.74" N	69°34'35.05" E		Silty sand		Silty sand
III	IT-3 (HW)	High Tidewater level	22°44'52.21" N	69°36'41.64" E	3.9 m	Sandy	4.2 m	Sandy
	IT-3 (LW)	Low Tidewater level	22°44'51.23" N	69°36'39.28" E		Sandy		Sandy



Figure 1: Map of the study area illustrating the subtidal and intertidal sampling stations.

2.3 SAMPLING STRATEGY

2.3.1 Sampling frequency

A sampling at the subtidal stations was carried out during the flood to ebb tides. Surface and bottom water samples were collected in duplicate for assessing water quality and marine biota. Intertidal samples were collected in duplicate during low tide at each transect.

2.3.2 Sampling methodology

For estimation of Physico-chemical parameters and marine flora (phytoplankton and pigments), subsurface samples were collected using the Niskin water sampler (5 L capacity) with a mechanism for closing at the desired depth. Surface water samples were collected using a clean polyethylene bucket. Phytoplankton samples were collected in clean polyethylene bottles (1 L) fitted with inert cap liners and preserved with 4% Lugol's iodine solution. For pigment analysis, water samples were stored in clean, dark polyethylene cans (5 L). Chemical parameters samples were collected in polyethylene or glass bottles. Samples for phenol were collected in polyethylene or glass bottles and Petroleum Hydrocarbon samples collected in glass bottles. Dissolve oxygen (DO) and Biological Oxygen Demand (BOD) samples were collected in glass BOD bottles. The temperature was measured on the field with a calibrated thermometer. Analysis of other parameters was carried out in the laboratory.

For zooplankton, oblique hauls were made using Heron Tranter net attached with calibrated flow meter. Samples were stored in clean polyethylene bottles (0.5 L) and fixed with 5% formaldehyde.

For the analysis of macrobenthos, subtidal sediment samples were collected using a Van Veen grab covering an area of 0.04 m². Intertidal samples were collected using a metal quadrant. Samples were sieved with a 500 μ metal sieve and preserved with Rose Bengal-formalin solution and stored in plastic zip-lock bags.

2.4 SAMPLE ANALYSIS METHODS

2.4.1 Physico-chemical parameter:

Samples were analysed by using different analytical methods for estimations of Temperature, Turbidity, PH, Suspended Solid (SS), Salinity, DO, BOD, COD, Phosphate, Total nitrogen, Nitrite, Nitrate, Phenols and PHc. The samples collected during the field visit were brought to the laboratory for further analysis of physico-chemical parameters. The standard methods used for the analysis of water quality parameters are given in Table 3a, b.

2.4.2 Sediment Quality parameters:

Sediment texture, Petroleum Hydrocarbon (PHc), Phosphorus, Organic Carbon, Aluminium, Iron, Chromium, Nickel, Zinc, Lead, Copper, Cobalt, Cadmium, Mercury, Arsenic. The standard methods used for the analysis of each parameter.

2.4.3 Biological parameters:

2.4.3a Phytoplankton:

The Lugol's preserved samples were allowed to settle for 48-72 hrs. The identification and enumeration of phytoplankton cells were carried out under a compound microscope using the Sedgwick Rafter slide. Species were identified to the genus level.

2.4.3b Phytoplankton pigments:

For the estimation of Chlorophyll *a* (Chl *a*) and Pheophytin, a known volume of field-collected water sample was filtered through Whatman glass microfiber filters (GF/F). Then filter paper was macerated in 90% acetone and stored overnight in the dark at 4°C. For estimation of Chl *a* fluorescence of the extract was measured using Turner Fluorometer. For pheophytin fluorescence was measured after acidification with 0.1 N HCl.

2.4.3c Zooplankton:

Formalin preserved sample was divided into 4 equal portions using the Folsom Plankton Splitter. One portion of the samples was used to determine biomass using the volume displacement method. Another portion was used for enumeration and identification of (25-50%) faunal composition.

For the quantification of zooplankton, 4-5 ml of the sample was taken in a zooplankton counting chamber. The identification was carried out under Stereomicroscope. The zooplankton were identified at the group level.

2.4.3d Benthos:

For enumeration and identification of the macrobenthos, the organisms were handpicked using forceps and a paintbrush. After sorting, organisms were preserved in 10% formalin. Identification of the organisms was done to the group level under a stereomicroscope.

3 WATER QUALITY MONITORING

3.1 RESULT OF PHYSICO-CHEMICAL WATER PARAMETER ANALYSIS

The monsoonal influx plays an important role in controlling the variation in the physico-chemical characteristic. Surface and bottom water temperatures observed in the study area were in a range between 24.4°C to 25.4°C in December 2024 (Table 3a) and 25.5°C to 26.3°C during March 2025 (Table 3b). The water temperature generally varied in accordance with the prevailing air temperature, tidal activity, and seasonality. The pH of the water is generally buffering effect, influenced by the freshwater and anthropogenic discharge from land. The observed pH in the study area was in the range of 7.9 to 8.2 in December 2024 and 7.9 to 8.1 during March 2025. Seawater turbidity is the cloudiness caused by large numbers of individual particles such as very fine clay and minute marine organisms. This also varies seasonally due to intrusion of land runoff and/or sediment resuspension. The turbidity was in a range between 0.1 to 5 NTU in December and 0.1 to 1 NTU during March. The suspended solids generally constitute silt and clay eroded from the land or shore erosions and suspension of the benthic layers from the seabed. Anthropogenic discharges also contribute to suspended solids in the form of contaminants such as oil and solid waste in a polluted area. On a seasonal basis, high TSS in seawater could be observed during the active monsoon season. In the study area, TSS was 26.0 to 104 mg/L during December 2024 and 41.2 to 84 mg/L during March 2025. Salinity is an indicator of (saline or freshwater) water masses intrusion within the region. The salinity of seawater may vary with the riverine or inland influx, rains, or evaporation in the region. The salinity variation during the present sampling was 35.8 to 36.5 in December 2024 and 35.9 to 37.2 during March 2025.

High DO level is an indication of good oxidizing conditions in an aquatic environment. In unpolluted waters equilibrium is maintained through oxygen production during photosynthesis, dissolution from the atmosphere, consumption by the respiration and decay of organic matter in order the DO levels kept close to or above saturation value. The DO level of the study area was varied from 3.8 to 5.2 mg/L in December 2024 and 5.8 to 6.5 mg/L during March 2025. The average DO value was 4.3 mg/L (in December) and 6.1 (in March), which indicates the oxygenated conditions in the study region. BOD is generally indicating the effective consumption of oxidizable matter in that water body. The industrial effluents contain high BOD levels. Thus, high BOD is also an indication of the intrusion of industrial polluted effluent into natural waters. BOD levels in the study area were varied from 2.4 to 4.3 mg/L in December 2024 and 2.6 to 3.9 mg/L during March 2025. Dissolved phosphorus and nitrogen compounds serve as the nutrients for phytoplankton growth. The high nutrient concentrations in the seawater generally could be attributed to the

anthropogenic and industrial influx. This could lead to further eutrophication and further deterioration of the pristine ecosystem. In the present study, Phosphate concentration was range from 0.1 to 0.3 $\mu\text{mol/L}$ in December 2024 and 0.2 to 0.3 $\mu\text{mol/L}$ in March 2025. Nitrate concentration was range from 2.9 to 4.8 $\mu\text{mol/L}$ during December 2024 and 2.3 to 3.9 $\mu\text{mol/L}$ in March 2025. Nitrite concentration was range from 0.2 to 0.9 $\mu\text{mol/L}$ in December 2024 and 0.5 to 0.8 $\mu\text{mol/L}$ in March 2025. The Phenol compounds and PHc were not detected in the present investigation.

Table 3a: Water quality parameters reported during December 2024.

Sr. No.	Parameters	St-1		St-2		St-3		St- 4		St-5		Test Method Permissible
		S	B	S	B	S	B	S	B	S	B	
PHYSICAL QUALITY												
1	pH @ 25°C	8.2	8.2	8.2	7.9	8.2	8.0	8.2	8.0	8.2	8.0	IS 3025(Part 11)1983
2	Temperature (°C)	25.2	24.4	25.2	24.6	24.9	24.4	25.1	24.6	25.4	24.8	IS 3025(Part 9)1984
3	Turbidity (NTU)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	5	1	IS 3025(Part 10)1984
CHEMICAL QUALITY												
1	Total Suspended Solids (mg/l)	74	90	48	64	46	30	26	66	62	104	APHA 24th Ed.,2023,2540- D
2	Salinity	35.8	36.2	36.1	36.3	35.8	36.2	36.1	36.5	36.2	36.3	By Calculation
3	Dissolved Oxygen (mg/l)	4.2	4	5.2	4.7	4.6	3.9	4.2	3.8	4.6	3.9	APHA 24th Ed.,2023,4500-O, B
4	Biochemical Oxygen Demand (BOD) (mg/l)	4.3	2.4	2.8	2.6	3.1	2.6	3.2	3	2.7	3.5	IS 3025(Part 44)1993Amd.01
5	Sulphate as SO ₄ (mg/l)	1952	2122	1909	2232	1871	2221	1962	2129	1732	1956	APHA 24th Ed.,2023,4500- SO ₄ E
6	Ammonical Nitrogen (μmol/l)	1.2	0.8	1.6	2.1	2.2	0.5	0.5	1.1	1.2	1.1	APHA 24th Ed.,2023,4500- NH ₃ B
7	Total Nitrogen (μmol/l)	9.5	10.8	6.3	8.3	6.8	9.1	7.4	11.2	9.8	11.8	By Calculation
8	PO ₄ ³⁻ -P (μmol/l)	0.2	0.23	0.31	0.2	0.13	0.11	0.16	0.12	0.17	0.19	APHA 24th Ed.,2023,4500 –P,D
9	(NO ₃ ⁻ -N) (μmol/l)	3.6	4.3	3.9	4.8	3.7	4.2	3.9	4.0	2.9	4.8	APHA 24th Ed.,2023,4500 NO ₃ -B
10	(NO ₂ ⁻ -N) Nitrite (μmol/l)	0.4782	0.2608	0.9129	0.6521	0.9564	0.7825	0.81	0.6086	0.2174	0.4565	APHA 24th Ed.,2023,4500 NO ₂ B
11	Phenol (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part 43):2020
12	PHc (ppb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th ED,2023,5520 F

Note: St= Station
 S=Surface; B=Bottom
 BDL = Below Detection Limit and N.D. = Not detectable
 BDL(MDL:0.01)
 Turbidity= 0.1=1 to 10 NTU; 1=10 to 40 NTU; 5=40-100 NTU

Table 3b: Water quality parameters reported during March 2025.

Sr. No.	Parameters	St-1		St-2		St-3		St- 4		St-5		Test Method Permissible
		S	B	S	B	S	B	S	B	S	B	
PHYSICAL QUALITY												
1	pH @ 25°C	8	8.06	8.05	8.1	7.9	7.8	7.9	7.9	7.9	8	IS 3025(Part 11)1983
2	Temperature (°C)	26.3	25.9	26.1	25.8	26.1	25.6	26.1	25.5	26.2	25.7	IS 3025(Part 9)1984
3	Turbidity (NTU)	1	0.1	1	1	0.1	0.1	0.1	1	0.1	1	IS 3025(Part 10)1984
CHEMICAL QUALITY												
1	Total Suspended Solids (mg/l)	53.8	65.6	56	70.3	41.2	54.4	72.4	84	61.8	73.5	APHA 24th Ed.,2023,2540- D
2	Salinity	36.2	36.7	35.9	36.4	36.6	36.8	36.9	37	36.8	37.2	By Calculation
3	Dissolved Oxygen (mg/l)	6.5	6	6.4	5.8	6.3	5.8	6	6.3	5.9	6.2	APHA 24th Ed.,2023,4500-O, B
4	Biochemical Oxygen Demand (BOD) (mg/l)	3.9	3	3.2	2.6	3.1	3	3.4	3.5	2.8	3.3	IS 3025(Part 44)1993Amd.01
5	Sulphate as SO ₄ (mg/l)	2040	2124	1993	2238	1857.8	1988.5	2162	2212.6	1912.6	2102.4	APHA 24th Ed.,2023,4500- SO ₄ E
6	Ammonical Nitrogen (µmol/l)	0.6	1.1	0.9	1.3	0.8	0.8	1.2	1.6	0.5	0.6	APHA 24th Ed.,2023,4500- NH ₃ B
7	Total Nitrogen (µmol/l)	8.6	10.2	7.3	9.6	6.2	8.9	6.7	10.5	8.1	10.6	By Calculation
8	PO ₄ ³⁻ -P (µmol/l)	0.28	0.32	0.29	0.34	0.36	0.22	0.28	0.34	0.31	0.37	APHA 24th Ed.,2023,4500 –P,D
9	(NO ₃ ⁻ -N) (µmol/l)	2.3	2.5	2.3	3	3.1	2.8	2.5	3	3.9	2.8	APHA 24th Ed.,2023,4500 NO ₃ -B
10	(NO ₂ ⁻ -N) Nitrite (µmol/l)	0.6	0.82	0.52	0.73	0.63	0.8	0.53	0.73	0.51	0.78	APHA 24th Ed.,2023,4500 NO ₂ B
11	Phenol (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part 43):2020
12	PHc (ppb)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th Ed.,2023,5520 F

Note: St= Station
S=Surface; B=Bottom
BDL = Below Detection Limit and N.D. = Not detectable
BDL (MDL:0.01)
Turbidity= 0.1=1 to 10 NTU; 1=10 to 40 NTU; 5=40-100 NTU

4 SEDIMENT QUALITY MONITORING

The sediment quality at different sampling stations was analysed only during March 2024 sampling. The results are presented in Table 4. The sediment in the subtidal region was mainly composed of silty sand to loamy sand. The Aluminium was not detected on the surface sediments of subtidal stations. The highest Cobalt content was recorded within range from 1.2 mg/kg (at St-4) to 5.9 mg/kg (St-1). At St-3, the highest Copper content (14.0 mg/kg) was recorded, whereas the lowest was detected at St-1 (3.2 mg/kg). The Zinc content was ranged from 19.2 mg/kg (St-1) to 36.5 mg/kg (St-4). The phosphorus content was ranged from 280.3 mg/kg to 374.2 mg/kg. Organic carbon content was ranged within 0.3 % to 0.4 %. The Chromium content of marine sediment was ranged from 12.1 mg/kg to 14.0 mg/kg. The highest chromium content was recorded as 14.0 mg/kg at St-1. The highest Nickel content (20.5 mg/kg) was recorded at St-2 and lowest (18.3 mg/kg) at St-1. In the subtidal region, the highest Manganese content was recorded at St-4 (93.3 mg/kg). The Iron content was higher at St-4 (4843.9 mg/kg) and lower at St-1 (3208.5 mg/kg). The PHc, Arsenic and Mercury was not detected in the sediments during this study.

Table 4: Subtidal sediment quality parameters.

No.	Parameters	SUBTIDAL SEDIMENT QUALITY (g/kg)					Test Method Permissible
		St-1	St-2	St-3	St- 4	St-5	
1	Texture	Silty clay	Silty sand	Silty sand	Silty clay	Silty clay	--
2	Aluminium as Al%	ND	N.D.	N.D.	N.D.	N.D.	Spectrophotometric Method
3	Cobalt as Co($\mu\text{g/g}$)	5.9	4.1	5.42	1.24	2.51	EPA 3050B :1996/7000B :2007
4	Copper as Cu($\mu\text{g/g}$)	3.2	11.9	14.0	13.2	13.4	EPA 3050B :1996/7000B :2007
5	Zinc as Zn	19.2	20.8	25.9	27.9	36.5	EPA 3050B :1996/7000B :2007
6	Mercury($\mu\text{g/g}$)	BDL	BDL	BDL	BDL	BDL	EPA 7471A Method
7	Phosphorous (Total)($\mu\text{g/g}$)	312.1	342.6	374.2	280.3	302.5	IS 10158B (Stannous Chloride Method)
8	C(Org.) %	0.4	0.3	0.32	0.4	0.4	IS: 2720 (Part 22):1972
9	Chromium($\mu\text{g/g}$)	14.01	12.1	13.4	13.1	13.2	EPA 3050B :1996/7000B :2007
10	Nickel($\mu\text{g/g}$)	18.3	20.5	19.8	19.8	19.5	EPA 3050B :1996/7000B :2007
11	Manganese	89.2	52.6	84.7	93.3	79.4	EPA 3050B :1996/7000B :2007
12	Iron	3208.5	3514.3	3882.7	4843.9	4072.8	EPA 3050B :1996/7000B :2007
13	PHc($\mu\text{g/g}$)	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 24th ED,2023,5520 F
14	Arsenic($\mu\text{g/g}$)	BDL	BDL	BDL	BDL	BDL	EPA 1998, SW-846, Method 7061A 1992

Note: St= Station

BDL= Below Detectable Limit and N.D. = Not detectable

BDL (MDL: 0.05)

5 BIOLOGICAL PARAMETERS (BIODIVERSITY STUDY)

Marine ecosystems are subject to a multitude of direct human pressures, such as overexploitation, eutrophication, pollution, and species introductions. These stressors can have synergistic effects on marine ecosystems, altering its functioning. Anthropogenic involvements constantly compromise the health of the marine ecosystem by disturbing the ecological balance. Hence the assessment of the biotic components along with abiotic factors is an integral part of environmental assessment and monitoring study. During the present investigation at APL-Mundra, the abundance and distribution of marine organisms (plankton and benthos) were studied as part of routine environmental monitoring.

5.1 PLANKTONIC FORMS

The name plankton is derived from the Greek word “planktons”, meaning “wanderer” or “drifter”. While some forms of plankton are capable of independent movement and can swim up to several hundred meters in a single day, their position is primarily determined by currents in the body of water they inhabit. As per definition, organisms classified as "plankton" are unable to resist ocean currents. Plankton is primarily divided into two broad functional groups i.e., Phytoplankton and Zooplankton.

5.1.1 Phytoplankton

Phytoplankton are microscopic, single-celled photosynthetic organisms that live suspended in all water niches, including oceans, freshwater, and marine niche. Like the terrestrial ecosystem where plants are an integral part of the ecosystem, phytoplankton play key role in the biogeochemistry of the oceans. As they are dependent on sunlight for energy, they mostly inhabit the euphotic zone. Therefore, they are responsible for production of half of the atmosphere’s oxygen and more than half of the primary production in the oceans. There are many species of phytoplankton, each of which has a characteristic shape, size, and function. Marine species of phytoplankton grow abundantly in oceans around the world and are the foundation of the marine food chain. Marine phytoplankton are the producing (autotrophic) component in the ocean. There are fourteen classes of phytoplankton. Each class of phytoplankton contains unique attributes in size, cell structure, nutrients, and function.

5.1.2 Zooplankton:

Zooplankton occupies second position in the food web of the marine niche. They are the primary consumer’s organisms and generally feed on phytoplankton or small, microscopic group of organisms for they are nutritional needs. They are incapable of making their own food from sun-

light or inorganic compounds, and feed on organisms or the remains of other organisms to get the energy necessary for survival.

5.2 SIGNIFICANCE OF PHYTO- AND ZOOPLANKTONS

Phytoplankton are vital to marine ecosystems. They are producers, or autotrophs, that form the foundation of most marine food webs. As photosynthetic organisms, they can convert solar energy into chemical energy and store it in form of sugars. They are responsible for half of the photosynthetic activity on the planet. The significance of zooplanktons is found in their role of transferring biological production from phytoplankton to large organisms in the marine food web and the seafloor. The microscopic protozoan, tunicates, copepods, and other crustaceans graze upon many phytoplankton species. These in turn become food for other animals further linking the food web. Therefore, variability in reproduction of copepods would affect the survival of young fish that feeds on them.

Table 5: Test methods for phytoplankton and zooplankton analysis.

Sr. no.	Test performed	Method
1	Phytoplankton	APHA, Edition 24 th , Part 10000, 10200 F
2	Chlorophyll <i>a</i> and Pheophytin	APHA, Edition 24 th , Part 10000, 10200 H (with some modification)
3	Zooplankton	APHA, Edition 24 th , Part 10000, 10200 G
4	Macro benthos	APHA, Edition 24 th , Part 10000, 10500 A-10500 D

5.3 PHYTOPLANKTON DIVERSITY:

Phytoplankton sampling was carried out at 5 stations. At each station, water samples were collected from surface and bottom waters. During the sampling period the phytoplankton population in the coastal waters of APL-Mundra, was more diverse during the post-monsoon season (December 2024) than pre-monsoon (March 2025) (Table 6). However, the overall phytoplankton abundance was more during post-monsoon than the pre-monsoon season. The detailed species percentage composition reported during both sampling period is given in Annexure I and II. In December 2024, the phytoplankton community was represented with a total of 41 phytoplankton genera belonging to diatoms (35 genera) and dinoflagellates (6 genera). Overall, 37 phytoplankton genera representing diatoms (31 genera) and dinoflagellate (6 genera) reported during March 2025

sampling. Diatoms Species belonged to *Amphora* sp., *Amphiprora* sp., *Asterionella* sp., *Bacillaria* sp., *Chaetoceros* sp., *Corethron* sp., *Coscinodiscus* sp., *Cyclotella* sp., *Cylindrotheca* sp., *Cymbella* sp., *Diploneis* sp., *Ditylum* sp., *Fragilaria* sp., *Guinardia* sp., *Lauderia* sp., *Leptocylindrus* sp., *Licmophora* sp., *Lithodesmium* sp., *Navicula* sp., *Nitzschia* sp., *Odontella* sp., *Pinnularia* sp., *Pleurosigma* sp., *Pseudo-nitzschia* sp., *Rhizosolenia* sp., *Streptotheca* sp., *Thalassiosira* sp., *Thalassiothrix* sp., and *Thalassionema* sp. were common during both sampling period. Total 4 dinoflagellate genera i.e., *Ceratium*, *Prorocentrum*, *Protoperidinium* and *Scrippsiella* sp. were common during both December 2024 and March 2025 samplings.

The phytoplankton abundance in the study region was higher during the 156.6 to 395.2 cells x 10² L⁻¹ during December 2024 as compared to March 2025 (ranged from 163.2 to 323.2 cells x 10² L⁻¹). In December 2024, the highest phytoplankton abundance was observed at St-5 in the surface (395.2 cells x 10² L⁻¹). The lowest phytoplankton abundance (156.6 cells x 10² L⁻¹) was observed at St-2 in surface water. During March 2025, phytoplankton abundance was higher at St-5 in surface water (323.2 cells x 10² L⁻¹) and lowest at St-3 bottom water (163.2 cells x 10² L⁻¹). The diatom genera, *Rhizosolenia* (up to 44.8 cells x 10² L⁻¹) during December 2024 (Annexure I), whereas in March 2025, *Coscinodiscus* (up to 38.4 cells x 10² L⁻¹) was also predominant along with *Navicula* (up to 33.6 cells x 10² L⁻¹) (Annexure II). The study shows that the marine water around was enriched with the diverse phytoplankton population during the sampling period.

Table 6: Different marine biological parameters (phytoplankton abundance, Chlorophyll *a*, Pheophytin concentrations) reported from the marine waters of APL-Mundra, during December 2024 and March 2025.

Parameter	Sampling period	Sampling Stations									
		St-1	St-1	St-2	St-2	St-3	St-3	St-4	St-4	St-5	St-5
		S	B	S	B	S	B	S	B	S	B
Phytoplankton (cells x 10 ² L ⁻¹)	December 2024	189.9	297.6	156.6	262.4	235.4	178.9	241.0	265.6	395.2	315.2
	March 2025	225.6	176.0	254.4	163.2	192.0	168.0	224.0	172.8	323.2	228.8
Chlorophyll <i>a</i> (µg/L)	December 2024	1.8	2.3	1.9	1.7	2.2	1.5	1.7	1.9	1.6	2.0
	March 2025	2.0	1.6	1.7	1.9	1.8	1.6	1.9	1.6	2.1	1.7
Phaeophytin (µg/L)	December 2024	0.8	0.9	0.8	0.8	0.9	0.6	0.7	0.8	0.7	0.9
	March 2025	0.7	0.9	0.8	0.8	0.7	0.9	0.6	0.9	1.0	0.9



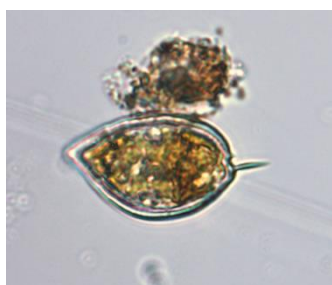
Chaetoceros sp.



Chaetoceros sp.



Coscinodiscus sp.



Prorocentrum sp.



Odontella sp.



Pleurosigma sp.

Figure 2: Microphotographs of phytoplankton reported in the coastal waters of APL-Mundra, during December 2024 and March 2025.

5.4 PHYTOPLANKTON PIGMENTS (CHLOROPHYLL *a* AND PHEOPHYTIN):

Marine phytoplankton contains essential as well as accessory pigments like that of terrestrial plants. Phytoplankton pigments capture sunlight. The resulting photosynthesis and its products, especially the oxygen and organic compounds, all rely on the light energy captured by the different phytoplankton pigments. Chlorophyll *a* is the major pigment for light harvesting, and plays a significant role in photosynthesis and photoprotection, by extending the light collection window and protecting the cell from the damage of high irradiance levels or high ultraviolet light exposure.

Algal chlorophyll forms a series of degradation products upon degradation. In addition to Chlorophyll the naturally occurring pigments in algal cells. The nature of these degradation products depends on which part of the chlorophyll molecule is affected. As chlorophyll degrades, the initial step is either the loss of the magnesium from the centre of the molecule or the loss of the phytol tail. This results in the formation of the molecule, phaeophytin. Depending on the parent molecule several distinct molecules like phaeophytins, chlorophyllides, and pheophorbides can be produced. Thus, in addition to Chlorophyll *a* filtered seawater contains colour degradation products of phytoplankton pigments.

5.4a CHLOROPHYLL *a* AND PHAEOPHYTIN CONCENTRATIONS

The phytoplankton biomass distribution expressed in terms of Chlorophyll *a* (Chl-*a*) and Pheophytin at selected stations in the coastal region of APL-Mundra, is presented in Table 6. Overall, Chl-*a* concentration was more during the December 2024 (1.5 to 2.3 µg/L) than the March 2025. In December 2024, the highest Chl-*a* (2.3 µg/L) was observed at bottom waters of St-1. In March 2025, the Chl-*a* concentrations in the study region were ranged from 1.6 µg/L to 2.1 µg/L. The Pheophytin content was ranged from 0.6 µg/L to 1.0 µg/L.

The variations observed between the surface and bottom waters could be due to several natural biological variability. The concentration of Pheophytin is a measure of the dead cells and is an indirect indicator of biotic and abiotic stress conditions of the algae leading to a deterioration of Chl-*a*. The ratio from concentrations of Chl-*a* and Pheophytin in an aquatic ecosystem suggests a balance between the growth and mortality of phytoplankton life. In healthy environments, ratios of Chl-*a* to Pheophytin generally exceed 1.1. In the present study, this ratio was ranged from 1.8 to 2.9. The Chl-*a* and Pheophytin ratio showed marginally elevated levels in the surface waters as compared to the bottom waters. Overall, the ratios of Chl-*a* and Pheophytin concentration in the study region were generally high (>1), indicating that the appropriate conditions prevailed for the phytoplankton growth.

5.5 ZOOPLANKTON DIVERSITY:

Zooplankton standing stock in terms of population and biomass revealed substantial spatial and temporal variation (Table 7). Zooplankton population was more abundant during December 2024 (8.6 to 12.7 nos.×10³/100 m³) to than March 2025 (6.3 to 12.8 nos.×10³/100 m³). In December 2024, the maximum zooplankton population (12.7 nos.×10³/100 m³) and biomass (2.2 ml/ 100 m³) were recorded at St-4. The lowest zooplankton population (8.6 nos.×10³/100 m³) and biomass (1.6 ml/100 m³) (Figure 4) were observed at St-3. During March 2025, the maximum zooplankton population observed at St-5 (12.8 nos. ×10³/100 m³), whereas highest biomass (1.8 ml/ 100 m³) was reported at St-1.

Overall, Copepods (60.3 to 62.4 %) and copepod nauplii (20.3 to 21.1 %) dominated the zooplankton assemblage during both sampling periods (Figure 3). Other zooplankton groups such as brachyuran crab larvae, anomuran crab larvae, decapod (shrimps), fish and shellfish eggs, fish larvae, gastropod larvae, chaetognaths, polychaete larvae, siphonophore, ostracods, Oikopleura, Amphipods and Lucifer were also reported at various concentrations. Different groups of identified zooplankton groups are represented in Annexure III.

Table 7: Density and biomass of various zooplankton and macrobenthos groups in the coastal waters at the APL-Mundra during December 2024 and March 2025.

Parameter	Sampling period	Sampling Stations				
		St-1	St-2	St-3	St-4	St-5
Zooplankton						
Population (nos.× 10 ³ /100 m ³)	December 2024	9.6	8.7	8.6	12.7	10.8
	March 2025	9.7	8.5	6.3	9.2	12.8
Biomass (ml./100 m ³)	December 2024	1.9	1.8	1.6	2.2	2.5
	March 2025	1.8	1.1	0.8	1.7	0.9
Macrobenthos						
Total abundance (nos./m ²)	December 2024	725	855	655	960	870
	March 2025	620	590	720	890	690
Biomass (g/m ²)	December 2024	1.7	1.3	1.4	2.0	1.8
	March 2025	1.8	1.5	2.1	2.3	1.9

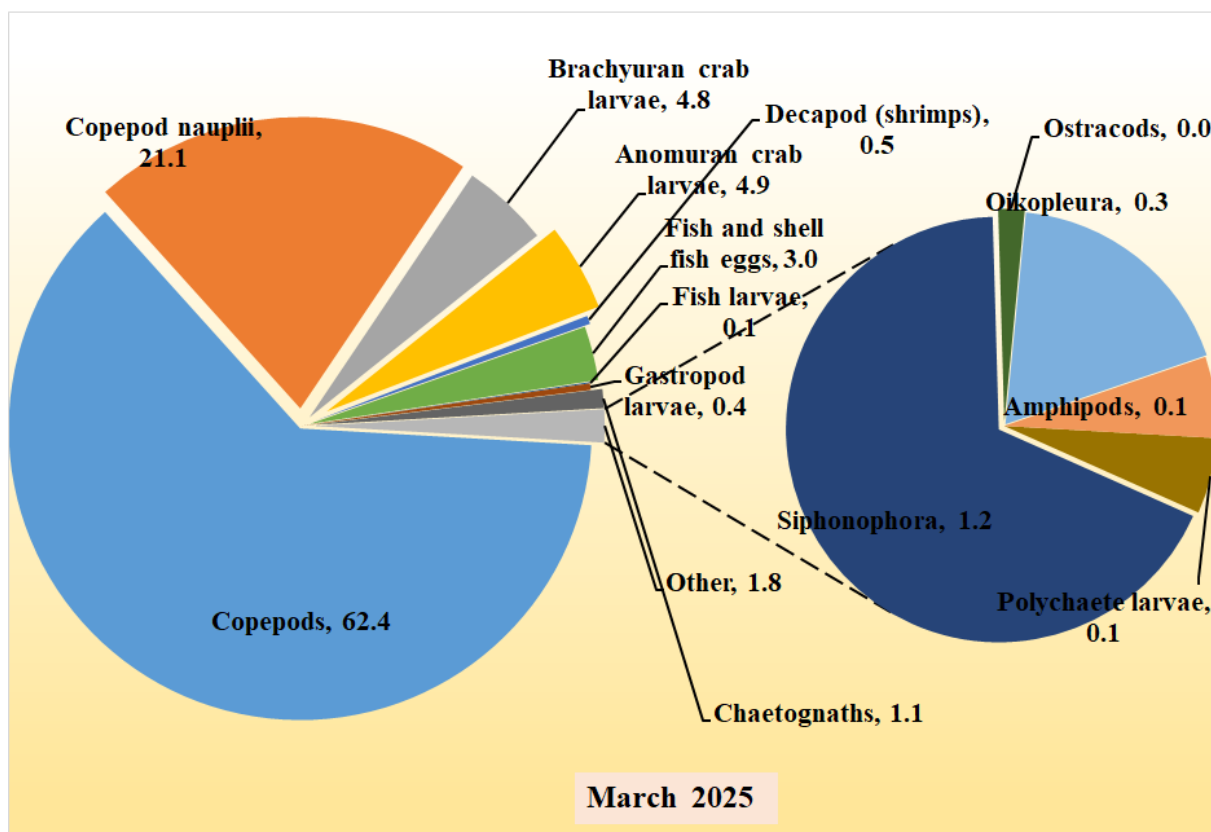
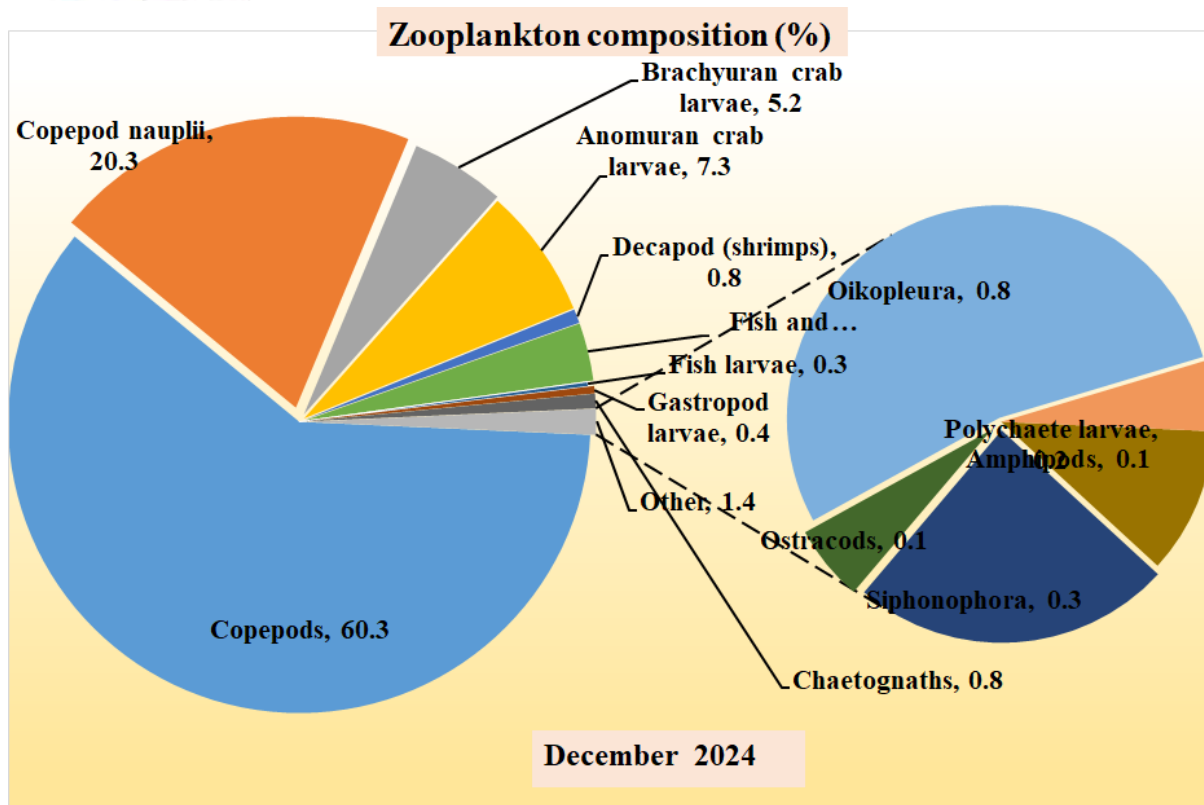


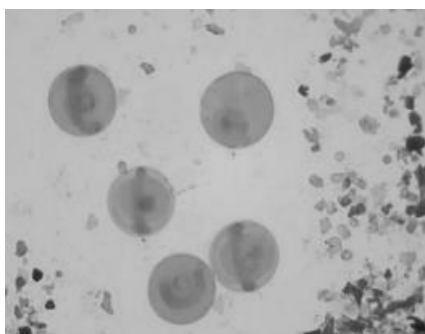
Figure 3: Composition (%) of zooplankton groups reported from the marine waters of APL-Mundra during December 2024 and March 2025.



Fish Larvae



Copepod



Fish eggs



Crab larvae

Figure 4: Microphotographs of zooplankton reported along the APL-Mundra coast during December 2024 and March 2025.

5.6 Macrobenthic fauna

The benthic zone is the lowest ecological zone of a water body which usually involves the sediments at the seafloor. The benthic environment is divided into distinctive ecological zones based on depth, seafloor topography, and vertical gradients of physical parameters. These are the supralittoral, littoral, sublittoral, bathyal, abyssal, and hadal zones. The number of phyla and species of benthic animals exceeds those of pelagic species, at least partly because of the greater physical variety of benthic habitats. Benthic animals are separated into infaunal and epifaunal species, depending upon whether they live within sediments or on the surface of the seafloor, respectively. Size categories of the zoobenthos consist of the larger macrofauna (>1.0 mm), the small meiofauna which is characteristically found in sand and mud, and the microfauna which is made up mostly of protozoans.

Benthic organisms are morphologically different from those planktonic organisms. Many are adapted to live on the substrate (bottom). In benthic habitats, they can be considered dominant creatures. These organisms adapted to deep-water pressure so cannot survive in the upper parts of

the water column. Since light does not penetrate very deep ocean water, the benthic organisms often depend on the organic matter falling from the upper water column as their main energy source. This dead and decaying matter sustains the benthic food chain. The most benthic organisms are scavengers or detritivores. These organisms under being relatively stationary, are constantly exposed to changes undergoing in overlying water, and hence, respond very well to aquatic pollution. The macro benthos population is very sensitive to environmental perturbation and is highly influenced by the physicochemical characteristics of water, the nature of the substratum, food, predation, and other factors. The density of benthic invertebrates also fluctuates widely with the changes in the season.

5.6.1 Significance of macrobenthic organisms

The biomass of macrobenthic organisms in estuaries and coastal embayment is often high. It declines if communities affected by prolonged periods of poor water quality especially when anoxia and hypoxia are common. Burrowing and tube-building by deposit-feeding benthic organisms (bioturbation) help to mix the sediment and enhance the decomposition of organic matter. Nitrification and denitrification are also enhanced because a range of oxygenated and anoxic micro-habitats are created. For example, the area of oxic-anoxic boundaries and the surface area available for diffusive exchange are increased by tube-building macrobenthos. The loss of benthic suspension-feeders can further enhance turbidity levels because these organisms filter suspended particles including planktonic algae, and they enhance sedimentation rates through bio deposition (i.e., voiding of their wastes and unwanted food). Changes in the macro fauna (and flora) cause changes in nutrient storage pools. Macro fauna is also important constituents of fish diets and thus are an important link for transferring energy and nutrients between trophic levels, also driving pelagic fish and crustacean production. For these reasons, the benthic organisms are extremely important indicators of environmental change.

5.6.2 Benthic Diversity

5.6.2a Subtidal region:

The macrobenthic population study revealed large spatiotemporal variation with the benthic population during the study period. Overall, more macrobenthos abundance and biomass were reported at subtidal stations than at intertidal stations. The macrobenthic abundance and biomass were more during the December 2024 than the March 2025 sampling. In December 2024, the macrobenthos density ranged from 725 no./m² to 960 nos./m² at sampling stations (Table 7). The biomass of the macrobenthic community in the study region was ranged from 1.4 g/ m² to 2.0 g/ m²

in the study region. The maximum abundance and biomass of benthic microorganisms was reported at St-4 (960 nos./m² and 2.0 g/m²). During March 2025, the macrobenthos density was ranged from 590 to 890 nos./m². The macrobenthic biomass was ranged from 1.5 to 2.3 g/ m².

In species composition (Annexure IV), Polychaete species (Phylum Annelida) belonging to the family Paraonidae, Pilargidae, Capitillidae, Cossuridae, Glyceridae, Ciratullidae, Nephthyida, Nereidae, Lumbriconeridae, Spionidae were abundant contributing ~71% to macrobenthic population during December 2024. In March 2025, polychaete species contributed ~82.3% to macrobenthic population (Annexure IV). Overall, the presence of Polychaete, Amphipods, and Nemerteans suggest the availability of food organisms for benthic predators in the area. The macrobenthic population reported during both studies reveals that the large spatial-temporal variation with the benthic population could be due to the change in bottom substratum.

5.6.2b Intertidal region

The sandy substratum with low organic matter affects the occurrence of the macrobenthic community in the intertidal region. In December 2024, the highest biomass was measured (0.09 g/m² to 0.4 g/m²) in the intertidal region. The highest density of macrobenthic organisms was reported at station IT-2 (LW) (256 nos./m²), whereas the lowest density was reported at Station IT-1 (HW) (116 nos./m²). During March 2025, the macrobenthic biomass was ranged from (0.08 to 0.5 g/m²). At IT-1 (LW) the higher macrobenthic population (122 nos./m²) and biomass (0.5 g/m²) was reported. No macrobenthic community was observed at St-3 (HW and LW) may be due to sandy sediment during both sampling periods. In species composition (Annexure V), Polychaete species dominated the macrobenthic population in the intertidal region.



Polychaete sp.



Amphipod sp.

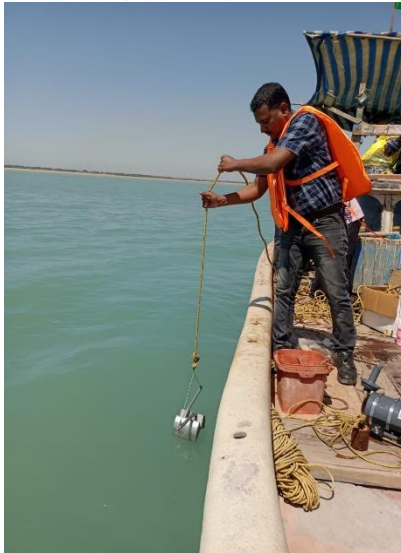
Figure 5: Microphotographs of macrobenthic organisms observed in the sediment samples collected in the vicinity of APL-Mundra during December 2024 and March 2025.

In the present study, a diverse population of planktonic and benthic organisms was observed along the integrated seawater intake and outfall channels developed by the APSEZ. The seasonally varying environmental conditions drives the biotic population changes in the region. The planktonic and benthic population was more abundant and diverse during the post-monsoon sampling (December 2024) than the pre-monsoon period (March 2025). Overall, the enriched and diversified plankton population reported during both sampling seasons highlights the favourable water conditions supports their growth. The abiotic and biotic parameters reported in the present seasonal study did not differ adversely from the initial baseline marine monitoring study.

The present study emphasizes that the diverse planktonic and benthic populations could support the local fish population, especially along the Outfall Channel. This observation can be supported by our contemporary fish bioassay study. In the bioassay study the fish species, *Mugil cephalus* had a 90% survival rate within the outfall water. The fishes for this bioassay study were collected from Kotdi Creek. The 90% survival of *M. cephalus* population in bioassay study and the enriched marine biota near outfall channel emphasises that the abiotic characteristics, mainly temperature of discharge water does not have the adverse biological impact. The systematically designed 11 km-long outfall channel facilitates the cooling of discharged outfall water. Likewise, an aqueduct constructed over the Kotdi Creek avoids the advection of outfall water and ease the natural flow of Kotdi Creek water as per the compliance condition.

Table 8: Names of the Marine Monitoring Team Members

Sr. No.	Name of Person
1.	Mr. Vijay Thanki (Env. Chemist)
2.	Mr. Pravin Singh (Env. Chemist)
3.	Ms. Ayushi Rathod (Env. Microbiologist)
4.	Mr. Bhavin Patel (Env. Engineer)
5.	Dr. Sushant Sanaye (Marine Biologist)



PHOTOGRAPHS OF DIFFERENT TYPES OF SAMPLING

Annexures I: Phytoplankton composition (%) at different sampling stations in the coastal waters of APL-Mundra during December 2024.

Phytoplankton genera	Sampling stations									
	St-1	St-1	St-2	St-2	St-3	St-3	St-4	St-4	St-5	St-5
	S	B	S	B	S	B	S	B	S	B
Diatoms										
<i>Amphora</i> sp.	0.5	-	1.1	0.6	0.9	1.2	0.4	0.6	1.2	1.0
<i>Amphiprora</i> sp.	0.9	0.5	0.8	-	0.9	0.6	0.4	0.6	1.2	1.0
<i>Asterionella</i> sp.	2.4	2.2	1.5	1.2	1.4	0.6	1.2	0.6	2.0	1.0
<i>Bacillaria</i> sp.	1.4	1.1	2.7	3.0	1.4	1.2	1.7	1.8	4.0	3.6
<i>Bacteriastrium</i> sp.	0.9	0.5	2.3	1.2	1.9	1.2	1.7	1.2	3.6	3.0
<i>Chaetoceros</i> spp.	0.9	0.5	2.3	1.2	1.9	1.7	1.7	1.2	3.6	3.0
<i>Corethron</i> sp.	0.9	1.1	1.1	0.6	0.9	0.6	0.8	0.6	1.2	1.0
<i>Coscinodiscus</i> sp.	12.3	8.6	9.2	7.3	8.9	8.7	10.4	7.8	8.5	7.1
<i>Cyclotella</i> spp.	1.4	1.6	0.4	-	0.5	0.6	1.2	1.2	2.8	2.5
<i>Cylindrotheca</i> sp.	1.9	1.6	0.8	0.6	1.4	1.2	0.4	1.2	0.4	0.5
<i>Cymbella</i> sp.	0.9	0.5	1.1	1.2	0.5	0.6	0.8	1.2	-	0.5
<i>Diploneis</i> sp.	0.9	1.1	0.8	0.6	1.4	1.2	0.8	0.6	0.8	1.0
<i>Ditylum</i> sp.	5.7	9.7	1.9	11.0	7.5	1.7	9.1	6.0	3.2	4.6
<i>Fragilaria</i> spp.	1.4	1.1	1.1	0.6	0.5	0.6	0.8	1.2	1.6	1.0
<i>Guinardia</i> sp.	1.4	1.1	1.5	0.6	1.4	1.2	0.8	0.6	1.2	1.5
<i>Gyrosigma</i> sp.	0.5	1.1	1.9	3.7	1.4	1.7	1.7	1.8	2.4	2.0
<i>Hemialus</i> sp.	0.9	0.5	0.4	-	0.9	0.6	0.8	1.2	2.0	1.5
<i>Lauderia</i> sp.	1.9	1.6	1.5	1.2	2.3	1.7	1.7	1.8	1.6	1.0
<i>Leptocylindrus</i> sp.	8.1	5.9	11.1	11.0	8.4	6.4	6.6	8.4	6.5	9.1
<i>Licmophora</i> sp.	4.3	3.2	7.3	6.7	7.0	7.0	7.5	6.0	4.9	4.1
<i>Lithodesmium</i> sp.	1.4	1.1	0.4	1.2	0.5	0.6	1.2	1.2	0.8	1.0
<i>Navicula</i> spp.	1.4	1.1	0.8	0.6	1.4	1.7	2.5	3.0	1.6	1.5
<i>Nitzschia</i> spp.	0.9	0.5	0.8	1.2	1.4	1.2	2.9	2.4	2.4	1.5
<i>Melosira</i> sp.	3.3	2.2	3.4	3.7	5.1	4.7	2.9	3.0	3.2	3.0
<i>Odontella</i> sp.	1.4	1.1	1.5	1.8	1.9	2.3	2.1	1.8	2.4	2.0
<i>Pinnularia</i> sp.	5.2	4.8	5.4	6.1	8.4	8.7	8.3	9.0	5.7	5.1
<i>Planktoniella</i> sp.	1.4	1.1	1.1	0.6	1.9	1.7	0.8	0.6	1.2	1.0
<i>Pleurosigma</i> spp.	1.4	0.5	1.1	1.2	1.4	1.7	1.2	1.2	1.2	0.5
<i>Pseudo-nitzschia</i> spp.	3.8	3.8	4.2	4.3	3.7	5.2	6.6	6.0	4.5	5.1
<i>Rhizosolenia</i> sp.	13.7	12.9	11.5	9.8	10.7	10.5	10.8	11.4	11.3	10.7
<i>Synedra</i> sp.	1.4	0.5	1.5	1.2	1.4	1.2	0.8	0.6	0.8	1.0
<i>Thalassionema</i> spp.	6.6	15.6	7.7	4.9	5.6	10.5	3.7	7.2	6.1	8.1
<i>Thalassiosira</i> spp.	3.8	5.4	6.1	6.7	2.8	4.7	2.1	1.8	4.5	4.1
<i>Thalassiothrix</i> spp.	2.4	2.2	1.9	2.4	-	2.3	1.2	3.0	-	1.5
<i>Triceratium</i> sp.	-	1.1	1.1	-	1.4	1.7	-	-	-	1.0

Dinoflagellates										
<i>Dinophysis</i> sp.	-	-	0.4	-	-	0.6	-	-	-	-
<i>Amphidinium</i> sp.	-	-	-	-	0.9	-	-	-	-	-
<i>Ceratium</i> sp.	-	0.5	-	0.6	-	-	0.4	0.6	-	-
<i>Prorocentrum</i> spp.	0.9	1.1	-	0.6	-	0.6	0.8	-	0.4	1.0
<i>Protoperidinium</i> spp.	0.9	0.5	-	-	-	-	0.8	-	0.8	0.5
<i>Scrippsiella</i> spp.	-	0.5	-	0.6	-	-	-	1.2	-	1.0

Note: S=surface; B=bottom; St=station

Annexures II: Phytoplankton composition (%) at different sampling stations in the coastal waters of APL-Mundra during March 2025.

Phytoplankton genera	Sampling stations									
	St-1	St-1	St-2	St-2	St-3	St-3	St-4	St-4	St-5	St-5
	S	B	S	B	S	B	S	B	S	B
Diatoms										
<i>Amphora sp.</i>	0.5	-	1.1	0.6	0.9	1.2	0.4	0.6	1.2	1.0
<i>Amphiprora sp.</i>	0.9	0.5	0.8	-	0.9	0.6	0.4	0.6	1.2	1.0
<i>Asterionella sp.</i>	2.4	2.2	1.5	1.2	1.4	0.6	1.2	0.6	2.0	1.0
<i>Bacillaria sp.</i>	1.4	1.1	2.7	3.0	1.4	1.2	1.7	1.8	4.0	3.6
<i>Bacteriastrum sp.</i>	0.9	0.5	2.3	1.2	1.9	1.2	1.7	1.2	3.6	3.0
<i>Chaetoceros sp.</i>	0.9	0.5	2.3	1.2	1.9	1.7	1.7	1.2	3.6	3.0
<i>Corethron sp.</i>	0.9	1.1	1.1	0.6	0.9	0.6	0.8	0.6	1.2	1.0
<i>Coscinodiscus sp.</i>	12.3	8.6	9.2	7.3	8.9	8.7	10.4	7.8	8.5	7.1
<i>Cyclotella sp.</i>	1.4	1.6	0.4	-	0.5	0.6	1.2	1.2	2.8	2.5
<i>Cylindrotheca sp.</i>	1.9	1.6	0.8	0.6	1.4	1.2	0.4	1.2	0.4	0.5
<i>Cymbella sp.</i>	0.9	0.5	1.1	1.2	0.5	0.6	0.8	1.2	-	0.5
<i>Diploneis sp.</i>	0.9	1.1	0.8	0.6	1.4	1.2	0.8	0.6	0.8	1.0
<i>Ditylum sp.</i>	5.7	9.7	1.9	11.0	7.5	1.7	9.1	6.0	3.2	4.6
<i>Fragilaria sp.</i>	1.4	1.1	1.1	0.6	0.5	0.6	0.8	1.2	1.6	1.0
<i>Guinardia sp.</i>	1.4	1.1	1.5	0.6	1.4	1.2	0.8	0.6	1.2	1.5
<i>Gyrosigma sp.</i>	0.5	1.1	1.9	3.7	1.4	1.7	1.7	1.8	2.4	2.0
<i>Hemialus sp.</i>	0.9	0.5	0.4	-	0.9	0.6	0.8	1.2	2.0	1.5
<i>Lauderia sp.</i>	1.9	1.6	1.5	1.2	2.3	1.7	1.7	1.8	1.6	1.0
<i>Leptocylindrus sp.</i>	8.1	5.9	11.1	11.0	8.4	6.4	6.6	8.4	6.5	9.1
<i>Licmophora sp.</i>	4.3	3.2	7.3	6.7	7.0	7.0	7.5	6.0	4.9	4.1
<i>Lithodesmium sp.</i>	1.4	1.1	0.4	1.2	0.5	0.6	1.2	1.2	0.8	1.0
<i>Navicula spp.</i>	1.4	1.1	0.8	0.6	1.4	1.7	2.5	3.0	1.6	1.5
<i>Nitzschia spp.</i>	0.9	0.5	0.8	1.2	1.4	1.2	2.9	2.4	2.4	1.5
<i>Melosira sp.</i>	3.3	2.2	3.4	3.7	5.1	4.7	2.9	3.0	3.2	3.0
<i>Odontella sp.</i>	1.4	1.1	1.5	1.8	1.9	2.3	2.1	1.8	2.4	2.0
<i>Pinnularia sp.</i>	5.2	4.8	5.4	6.1	8.4	8.7	8.3	9.0	5.7	5.1
<i>Planktoniella sp.</i>	1.4	1.1	1.1	0.6	1.9	1.7	0.8	0.6	1.2	1.0
<i>Pleurosigma spp.</i>	1.4	0.5	1.1	1.2	1.4	1.7	1.2	1.2	1.2	0.5
<i>Pseudo-nitzschia sp.</i>	3.8	3.8	4.2	4.3	3.7	5.2	6.6	6.0	4.5	5.1
<i>Rhizosolenia sp.</i>	13.7	12.9	11.5	9.8	10.7	10.5	10.8	11.4	11.3	10.7
<i>Synedra sp.</i>	1.4	0.5	1.5	1.2	1.4	1.2	0.8	0.6	0.8	1.0
<i>Thalassionema sp.</i>	6.6	15.6	7.7	4.9	5.6	10.5	3.7	7.2	6.1	8.1
<i>Thalassiosira sp.</i>	3.8	5.4	6.1	6.7	2.8	4.7	2.1	1.8	4.5	4.1
<i>Thalassiothrix sp.</i>	2.4	2.2	1.9	2.4	-	2.3	1.2	3.0	-	1.5
<i>Triceratium sp.</i>	-	1.1	1.1	-	1.4	1.7	-	-	-	1.0

Dinoflagellates										
<i>Dinophysis sp.</i>	-	-	0.4	-	-	0.6	-	-	-	-
<i>Amphidinium sp.</i>	-	-	-	-	0.9	-	-	-	-	-
<i>Ceratium sp.</i>	-	0.5	-	0.6	-	-	0.4	0.6	-	-
<i>Prorocentrum sp.</i>	0.9	1.1	-	0.6	-	0.6	0.8	-	0.4	1.0
<i>Protoperdinium sp.</i>	0.9	0.5	-	-	-	-	0.8	-	0.8	0.5
<i>Scrippsiella sp.</i>	-	0.5	-	0.6	-	-	-	1.2	-	1.0

Note: S=surface; B=bottom; St=station

Annexures III: Composition (%) of various zooplankton groups in the coastal waters at the APL-Mundra during December 2024 and March 2025.

Zooplankton Groups	Sampling period									
	December 2024					March 2025				
	St-1	St-2	St-3	St-4	St-5	St-1	St-2	St-3	St-4	St-5
Copepods	54.1	58.7	68.0	62.3	58.2	61.9	60.7	53.3	65.4	70.8
Copepod nauplii	20.2	23.6	18.1	19.1	20.8	16.2	24.6	25.3	21.3	18.1
Brachyuran crab larvae	7.0	4.9	4.2	4.7	5.5	7.5	4.0	5.0	3.6	4.2
Anomuran crab larvae	10.9	7.7	3.7	6.1	7.9	6.4	3.6	6.8	5.0	2.5
Decapod (shrimps)	1.2	0.6	0.8	0.6	0.7	0.5	0.4	0.9	0.2	0.3
Fish and shellfish eggs	3.7	2.0	1.7	5.0	3.6	2.7	3.1	4.7	2.4	2.1
Fish larvae	0.6	0.2	0.2	-	0.3	-	0.2	-	-	0.1
Gastropod larvae	0.4	0.2	0.8	0.3	0.3	0.7	0.6	0.3	-	0.3
Chaetognaths	1.4	0.6	0.8	0.7	0.5	1.6	0.8	1.4	0.8	0.6
Polychaete larvae	-	0.2	0.4	-	0.2	-	0.4	-	-	0.1
Siphonophora	0.2	0.4	-	0.4	0.7	1.3	1.1	2.1	1.0	0.6
Ostracods	-	0.2	0.2	-	-	0.2	-	-	-	-
Oikopleura	0.6	0.6	0.8	0.7	1.0	0.7	0.2	0.3	0.2	0.3
Amphipods	-	-	0.2	-	0.2	0.2	0.4	-	-	-

Annexures IV: Composition (%) of macrobenthos community in the subtidal region at APL-Mundra during December 2024 and March 2025.

Taxa	Sampling period									
	December 2024					March 2025				
	St-1	St-2	St-3	St-4	St-5	St-1	St-2	St-3	St-4	St-5
Phylum Annelida										
Paraonidae	31	36.3	37.4	22.9	27.6	30.6	25.4	34.7	22.7	26.1
Pilargidae	5.5	-	4.6	2.6	3.4	9.7	3.4	5.6	4.5	-
Capitillidae	6.9	2.9	13.7	6.8	6.9	-	6.8	9.7	13.6	10.1
Cossuridae	8.3	14	7.6	5.2	5.7	8.1	6.8	5.6	-	8.7
Glyceridae	-	5.8	-	-	-	11.3	5.1	6.9	5.7	10.1
Ciratullidae	6.9	2.3	4.6	5.2	4.6	-	8.5	4.2	4.5	-
Nephtyidae	5.5	3.5	3.1	8.3	10.3	9.7	-	5.6	5.7	7.2
Nereidae	9.7	9.4	9.2	5.2	10.3	6.5	8.5	8.3	10.2	11.6
Lumbriconeridae	4.1	3.5	3.1	15.6	11.5	8.1	-	-	6.8	10.1
Spionidae	8.3	8.2	6.1	7.3	6.9	-	11.9	5.6	6.8	-
Phylum Nemertea										
Nemertea	-	-	-	-	1.1	1.6	1.7	-	4.5	2.9
Phylum Mollusca										
Bivalvia	5.5	-	3.1	5.2	3.4	1.6	5.1	1.4	3.4	4.3
Gastropoda	5.5	8.2	3.1	6.3	5.7	6.5	10.2	5.6	5.7	4.3
Phylum Arthropoda										
Amphipoda	2.8	3.5	4.6	4.2	2.3	4.8	3.4	2.8	3.4	1.4
Isopoda	-	2.3	-	5.2	-	1.6	3.4	4.2	2.3	2.9

Annexures V: Composition (%) of intertidal macrobenthos along APL-Mundra during December 2024 and March 2025.

Faunal groups	Sampling period											
	December 2024						March 2025					
	IT-1 (HW)	IT-1 (LW)	IT-2 (HW)	IT-2 (LW)	IT-3 (HW)	IT-3 (LW)	IT-1 (HW)	IT-1 (LW)	IT-2 (HW)	IT-2 (LW)	IT-3 (HW)	IT-3 (LW)
Phylum Annelida												
Polychaetes	69.0	73.5	61.9	71.9	-	-	50.8	45.9	46.7	48.1	-	-
Phylum Nemertea												
Nemertea	-	-	-	3.1	-	-	-	6.6	3.3	-	-	-
Phylum Mollusca												
Bivalve	3.4	5.9	2.4	6.3	-	-	13.6	9.8	10.0	11.1	-	-
Gastropoda	3.4	4.4	4.8	6.3	-	-	6.8	3.3	6.7	7.4	-	-
Phylum Arthropoda												
Amphipoda	24.1	7.4	14.3	6.3	-	-	20.3	13.1	16.7	14.8	-	-
Isopoda	-	8.8	16.7	6.3	-	-	8.5	21.3	16.7	18.5	-	-

(Note: LW=low water during low tide; HW=high water during high tide; St=Station)

AMBIENT AIR QUALITY MONITORING RESULTS -- 2024-25

October2024														
Village : Siracha					Village : Kandagara					Village : wandh				
Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx
10/1/2024	60.3	30.3	15.3	17.4	10/1/2024	58.4	24.1	11.1	15.9	10/1/2024	64.0	29.0	14.3	17.2
10/4/2024	52.0	26.8	12.8	14.9	10/4/2024	62.0	31.4	12.1	16.0	10/4/2024	70.0	33.1	17.2	20.2
10/8/2024	65.9	32.2	16.3	20.2	10/8/2024	66.0	34.9	15.7	19.9	10/8/2024	51.2	24.0	16.4	17.7
10/11/2024	60.3	27.5	14.1	17.6	10/11/2024	54.2	24.3	13.6	16.7	10/11/2024	73.0	30.6	14.0	16.3
10/15/2024	53.1	21.1	13.9	16.1	10/15/2024	62.8	28.9	16.5	21.2	10/15/2024	50.9	25.2	15.9	21.2
10/18/2024	58.9	28.5	11.5	14.6	10/18/2024	68.9	35.3	14.4	18.3	10/18/2024	76.6	34.5	13.7	15.8
10/22/2024	54.5	25.1	14.2	16.9	10/22/2024	57.5	29.3	13.6	17.8	10/22/2024	58.7	31.1	18.6	20.4
10/25/2024	61.3	28.2	16.4	18.5	10/25/2024	54.3	26.0	15.2	18.9	10/25/2024	65.6	32.1	15.9	19.1
10/29/2024	56.7	25.6	17.1	18.1	10/29/2024	49.7	21.8	16.1	18.3	10/29/2024	71.6	37.5	15.7	17.9
Min	52.0	21.1	11.5	14.6	Min	49.7	21.8	11.1	15.9	Min	50.9	24.0	13.7	15.8
Max	65.9	32.2	17.1	20.2	Max	68.9	35.3	16.5	21.2	Max	76.6	37.5	18.6	21.2
Avg	58.1	27.3	14.6	17.1	Avg	59.3	28.4	14.3	18.1	Avg	64.6	30.8	15.7	18.4

November2024														
Village : Siracha					Village : Kandagara					Village : wandh				
Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx
11/1/2024	58.8	33.3	11.6	15.4	11/1/2024	66.1	30.2	12.1	16.2	11/1/2024	68.0	31.7	14.1	15.7
11/5/2024	63.6	22.7	16.5	22.2	11/5/2024	53.8	29.2	18.6	24.6	11/5/2024	74.5	39.5	22.4	25.5
11/8/2024	54.5	29.1	13.4	16.2	11/8/2024	52.8	23.0	17.7	21.4	11/8/2024	64.1	32.4	17.6	21.1
11/12/2024	60.4	31.7	13.7	17.2	11/12/2024	55.7	27.1	13.2	18.7	11/12/2024	58.9	28.3	16.3	19.3
11/15/2024	53.0	21.1	16.3	20.6	11/15/2024	63.4	35.2	12.5	16.1	11/15/2024	60.1	25.5	14.9	20.7
11/19/2024	55.8	29.0	10.8	14.7	11/19/2024	64.4	26.9	11.6	15.7	11/19/2024	60.4	27.4	12.7	15.2
11/22/2024	61.0	32.9	14.5	17.3	11/22/2024	73.1	33.3	19.4	22.3	11/22/2024	65.2	36.4	13.6	17.5
11/26/2024	59.9	26.4	15.7	20.8	11/26/2024	56.0	29.4	15.3	21.6	11/26/2024	71.5	39.9	15.6	22.1
11/29/2024	58.2	28.4	13.2	17.9	11/29/2024	59.7	25.6	14.1	17.3	11/29/2024	61.5	34.5	18.3	23.7
Min	53.0	21.1	10.8	14.7	Min	52.75857	23.04965	11.6	15.7	Min	58.9	25.5	12.7	15.2
Max	63.6	33.3	16.5	22.2	Max	73.1	35.2	19.4	24.6	Max	74.5	39.9	22.4	25.5
Avg	58.4	28.3	14.0	18.0	Avg	60.5	28.9	14.9	19.3	Avg	64.9	32.8	16.2	20.1

December2024														
Village : Siracha					Village : Kandagara					Village : wandh				
Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx
12/3/2024	63.8	31.0	18.1	24.7	12/3/2024	66.1	34.8	15.2	20.2	12/3/2024	55.3	32.3	12.4	16.8
12/6/2024	49.5	27.3	16.1	21.7	12/6/2024	57.0	31.7	17.2	20.8	12/6/2024	60.3	29.7	17.3	23.9
12/10/2024	52.0	23.8	13.9	18.2	12/10/2024	46.0	25.7	16.5	22.4	12/10/2024	66.4	34.7	14.2	17.8
12/13/2024	61.4	34.1	11.7	14.9	12/13/2024	66.5	31.7	18.3	23.7	12/13/2024	60.6	31.0	19.8	25.1
12/17/2024	57.9	27.3	16.7	22.5	12/17/2024	68.2	34.3	13.0	17.1	12/17/2024	74.6	39.2	16.0	21.3
12/20/2024	57.5	30.0	14.5	18.4	12/20/2024	54.5	25.0	13.7	18.4	12/20/2024	63.4	32.5	13.5	16.2
12/24/2024	58.8	25.6	15.9	19.4	12/24/2024	50.4	24.6	16.5	22.5	12/24/2024	57.4	28.0	15.6	20.4
12/27/2024	58.7	28.2	16.1	20.6	12/27/2024	65.5	30.9	14.7	19.5	12/27/2024	65.7	33.7	18.8	22.5
12/31/2024	64.1	33.0	14.5	19.3	12/31/2024	58.8	22.7	17.5	24.3	12/31/2024	69.5	37.6	15.2	17.8
Min	49.5	23.8	11.7	14.9	Min	46.0	22.7	13.0	17.1	Min	55.3	28.0	12.4	16.2
Max	64.1	34.1	18.1	24.7	Max	68.2	34.8	18.3	24.3	Max	74.6	39.2	19.8	25.1
Avg	58.2	28.9	15.3	20.0	Avg	59.2	29.0	15.8	21.0	Avg	63.7	33.2	15.9	20.2

January2025														
Village : Siracha					Village : Kandagara					Village : wandh				
Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx
1/3/2025	55.7	29.4	16.7	21.5	1/3/2025	66.1	30.2	14.1	19.8	1/3/2025	59.8	31.9	19.5	24.2
1/7/2025	50.7	24.8	17.9	23.8	1/7/2025	54.4	29.2	16.5	22.5	1/7/2025	76.8	28.9	18.1	23.5
1/10/2025	63.2	27.8	18.5	24.2	1/10/2025	44.8	23.0	15.2	20.3	1/10/2025	64.1	26.5	17.8	24.5
1/13/2025	52.8	29.9	15.7	20.7	1/13/2025	55.7	27.1	17.5	21.5	1/13/2025	67.1	36.3	18.2	21.8
1/17/2025	69.4	32.7	16.2	21.5	1/17/2025	64.8	35.2	16.3	22.6	1/17/2025	60.3	23.2	19.8	24.5
1/21/2025	48.8	24.3	18.1	23.2	1/21/2025	54.4	26.9	15.1	19.2	1/21/2025	59.5	30.4	20.5	23.8
1/24/2025	61.2	27.5	16.5	20.7	1/24/2025	63.1	33.3	17.5	23.1	1/24/2025	55.9	29.4	17.4	22.3
1/28/2025	54.5	23.8	14.3	21.6	1/28/2025	56.0	29.4	18.2	24.5	1/28/2025	68.6	32.9	16.3	21.5
1/31/2025	59.1	28.2	16.2	22.5	1/31/2025	51.4	25.6	16.5	21.6	1/31/2025	58.8	27.5	17.1	22.4
Min	48.8	23.8	14.3	20.7	Min	44.8	23.0	14.1	19.2	Min	55.9	23.2	16.3	21.5
Max	69.4	32.7	18.5	24.2	Max	66.1	35.2	18.2	24.5	Max	76.8	36.3	20.5	24.5
Avg	57.3	27.6	16.7	22.2	Avg	56.7	28.9	16.3	21.7	Avg	63.4	29.7	18.3	23.2

February2025														
Village : Siracha					Village : Kandagara					Village : wandh				
Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx
2/4/2025	63.2	29.9	14.8	19.3	2/4/2025	62.5	27.9	17.8	23.3	2/4/2025	69.8	29.1	17.5	23.7
2/7/2025	49.8	22.7	16.2	21.8	2/7/2025	51.5	30.0	20.3	26.7	2/7/2025	75.2	21.4	16.3	21.4
2/11/2025	67.1	25.6	15.3	20.6	2/11/2025	51.1	25.3	18.5	23.9	2/11/2025	64.1	21.1	21.8	27.8
2/14/2025	53.1	22.4	18.1	24.1	2/14/2025	55.6	28.9	15.8	20.6	2/14/2025	57.1	19.7	19.1	24.5
2/18/2025	61.9	21.1	17.5	22.8	2/18/2025	69.6	37.7	17.4	23.8	2/18/2025	60.8	26.9	22.5	29.1
2/21/2025	50.1	29.0	15.3	20.5	2/21/2025	72.3	35.3	16.2	21.4	2/21/2025	59.5	35.8	21.7	26.5
2/25/2025	60.8	32.0	13.8	18.2	2/25/2025	44.3	23.6	19.7	25.2	2/25/2025	65.9	30.7	18.4	23.9
2/28/2025	54.5	23.8	15.2	19.8	2/28/2025	59.0	29.4	16.4	22.7	2/28/2025	63.3	32.9	20.5	24.7
Min	49.8	21.1	13.8	18.2	Min	44.3	23.6	15.8	20.6	Min	57.1	19.7	16.3	21.4
Max	67.1	32.0	18.1	24.1	Max	72.3	37.7	20.3	26.7	Max	75.2	35.8	22.5	29.1
Avg	57.6	25.8	15.8	20.9	Avg	58.2	29.8	17.8	23.5	Avg	64.5	27.2	19.7	25.2

Mar'2025														
Village : Siracha					Village : Kandagara					Village : wandh				
Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx	Date	PM10	PM2.5	SOx	NOx
3/4/2025	57.9	20.8	16.3	20.9	3/4/2025	58.4	29.7	18.8	22.7	3/4/2025	57.8	28.2	19.3	23.5
3/7/2025	43.8	34.0	19.1	24.3	3/7/2025	56.1	23.9	23.2	28.1	3/7/2025	55.7	25.2	22.1	26.4
3/11/2025	72.4	30.2	17.4	22.7	3/11/2025	63.4	27.4	20.5	25.6	3/11/2025	61.1	23.6	25.3	29.2
3/14/2025	52.5	22.5	18.9	24.2	3/14/2025	58.2	22.5	17.1	23.2	3/14/2025	52.8	22.2	23.8	26.7
3/18/2025	49.5	23.9	22.4	27.1	3/18/2025	50.6	17.3	22.8	27.8	3/18/2025	49.7	26.6	18.6	23.9
3/21/2025	42.0	33.2	20.7	24.8	3/21/2025	62.1	22.6	20.3	25.3	3/21/2025	66.5	34.4	21.4	26.3
3/25/2025	59.1	27.2	16.3	22.5	3/25/2025	60.7	27.1	15.9	21.3	3/25/2025	72.0	34.6	24.8	29.6
3/28/2025	70.4	23.8	19.5	25.2	3/28/2025	57.1	23.2	18.5	24.7	3/28/2025	69.8	35.5	19.6	25.3
Min	42.0	20.8	16.3	20.9	Min	50.6	17.3	15.9	21.3	Min	49.7	22.2	18.6	23.5
Max	72.4	34.0	22.4	27.1	Max	63.4	29.7	23.2	28.1	Max	72.0	35.5	25.3	29.6
Avg	56.0	26.9	18.8	24.0	Avg	58.3	24.2	19.6	24.8	Avg	60.7	28.8	21.9	26.4

Annexure – 6



ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board, Kutch West
Katira Commercial Complex-1, First Floor
Near Income Tax office, Manglam Char rasta ,Sanskar
nagar,
BHUJ - 370 001

Sample ID:461642 - Analysis Completion:06/12/2024

Ports and harbour, jetties and dredging operations / LAB Inward :
8967

TEST REPORT

Test Report No. : 8967

Date: 06/12/2024

1. Name of the Customer : Adani Ports & Special Economic Zone Ltd. (WFDP-West Port) - 35427
2. Address : Navinal Island,,Mundra,
Mundra-370421, Taluka : Mundra, District : Kutch East, GIDC : MPSEZ
3. Nature of Sample : REP-Representative/Grab, (Insp Type : APP-On Application)
4. Sample Collected By : B.M.Dolasiya, SO
5. Quantity of Sample Received : 5 lit
6. Code No. of the Sample : 461642
7. Date & Time of Collection & Inwarding : 25/11/2024 , (1705 to 1705) & 30/11/2024
8. Date of Start & Completion of Analysis : 30/11/2024 & 06/12/2024
9. Sampling Point : From final outlet of STP ~
10. Flow Details (Remarks) :
11. Mode of Disposal : On land for plantation & gardening
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 24 & pH Range on pH Strip :7 to 8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Colourless
15. Water Consumption & W.W.G (KLPD) : Ind :45000.000 , Dom :5000.000 & Ind :0.000 , Dom :4000.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	24
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2017	1 – 14 pH value As or	7.12
3	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	14
4	Fecal Coliform	MPN/100 ml	2.9221 E APHA 23rd Edition IS 1622-1981	<1.8 to >1600 MPN/10	N.A.
5	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	5

Laboratory Remarks : Freezing By:474-r.o_474 Dt.: 06/12/2024

J.D.Patil, SO

Field Observation :

Note : 1. * - These parameters are NOT covered under the scope of NABL.

2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23rd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure – 7



**ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE**

**Gujarat Pollution Control Board, Kutch West
Katira Commercial Complex-1, First Floor
Near Income Tax office, Manglam Char rasta ,Sanskar
nagar,
BHUJ - 370 001**

Sample ID:476434 - Analysis Completion:11/02/2025

**Ports and harbour, jetties and dredging operations / LAB Inward :
9067**

TEST REPORT

Test Report No. : 9067

Date: 14/02/2025

- | | |
|---|--|
| 1. Name of the Customer | : Adani Ports & Special Economic Zone Ltd. - 17739 |
| 2. Address | : 169/P,AT-NAVINAL ISLAND,MUNDRA, KUTCH
Mundra-370421, Taluka : Mundra, District : Kutch East, GIDC : MPSEZ |
| 3. Nature of Sample | : REP-Representative/Grab, (Insp Type : APP-On Application) |
| 4. Sample Collected By | : S. S. Chauhan, DEE |
| 5. Quantity of Sample Received | : 5 lit |
| 6. Code No. of the Sample | : 476434 |
| 7. Date & Time of Collection & Inwarding | : 30/01/2025 , (1800 to 1800) & 03/02/2025 |
| 8. Date of Start & Completion of Analysis | : 03/02/2025 & 11/02/2025 |
| 9. Sampling Point | : From final outlet of ETP ~ |
| 10. Flow Details (Remarks) | : ---- |
| 11. Mode of Disposal | : On land for plantation & gardening within the premises |
| 12. Ultimate Receiving Body | : onland for irrigation. |
| 13. Temperature on Collection | : 29 & pH Range on pH Strip :7 to 8 on pH strip |
| 14. Carboys Nos for | : W-2 & Color & Appearance :Colourless |
| 15. Water Consumption & W.W.G (KLPD) | : Ind :1304.110 , Dom :370.000 & Ind :90.310 , Dom :263.000 |

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	29
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2017	1 – 14 pH value As or	7.03
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 23rd edi. 2017	2 - to 99 Hazen & 1-50	5.0
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	496
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	10
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standar	1 - 2000 mg/l.	0.56
7	Percent Sodium	%Na	IS11624-1986(Reaffirmed 2009)	0.01 – 100%.	28
8	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	230
9	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	80
10	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2C	5.0- 50000 mg/l	25
11	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	<1.0
12	Phenolic Compounds	mg/l	4 Amino Antipyrine method without Chloroform Extra	0.1 – 50 mg/l	BDL
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	<5.0
14	Sodium Absorption Ratio(SAR)	SAR	IS11624-1986(Reaffirmed 2009)	1 – 50 v Meq/L	1.8

Laboratory Remarks : approve By:325-h.o_325 Dt.: 14/02/2025

S. R Parmar

Field Observation :

Note : 1. * - These parameters are NOT covered under the scope of NABL.

- The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
- The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
- Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
- Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23rd Edition by APHA.
- Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure – 8



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,

GANDHINAGAR - 382010,

(T) 079-23232152

CCA-Amendment

(WH-141598)

No. PC/CCA-KUTCH- 39(9)/ GPCB ID-17739/

Date: 30/04/2025

To,
M/s. Adani Ports & Special Economic Zone Limited,
Plot no. 169/P,
AT: Navinal Island, Mundra,
Tal: Mundra, Dist: Kutch - 370 421.

SUB: Amendment in the consolidated consent & Authorization of the Board.

REF: 1) CCA issued by this office vide order no- **AWH- 117045** dated 14/02/2022 valid up to 20/11/2026.

2) EC to CTE vide order dated **18/06/2021**.

3) Your CCA Amendment Application Inward ID No. **326438** dated **30/01/2025**.

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- 117045** dated 14/02/2022 vide order no. GPCB/CCA-KUTCH-39(7)/ID-17739/625051 dated 09/03/2022.

The Board has right to review and amend the conditions of the said CCA and its amendment orders. Now, considering your application for CCA amendment inward ID No. **326438** dated **30/01/2025**, the said CCA order is amended as below:

1. The order shall be read as CCA amendment Order No.: WH- 141598 Date of Issue: 04/04/2025, valid up to 20/11/2026.

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

2. The consent shall be valid up to **20/11/2026** for the use of outlet for the discharge of treated effluent and emission due to operation of industrial plant manufacturing following items/ products:

Sr. No.	Product	Existing as per CCA dated 14/02/2022	Total after CCA-Amendment
1.	General Cargo Handling	112.8 MMTPA	42 MMTPA regularizing in line with existing port capacity
2.	Dry Cargo Handling		
3.	Liquid Cargo (Chemical/ products) POC	5 MMTPA	20 MMTPA
4.	Container Terminal Handling Operation	5.7 Million TEUs/Annum	7.8 Million TEUs/Annum

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

1. There shall be no change in existing quantity of fuel consumption, flue gas emission & process gas emission stacks, due to CTE-Amendment.
2. Industry shall comply with Environment Clearance granted by MoEF vide letter no. 10-47/2008-IA-(I) dated 13/08/2024.
3. Industry shall comply with CRZ Clearance granted by MoEF & CC vide letter no. 10-24/2019-IA-III dated 19/01/2019.
4. No ground water shall be withdrawal without prior permission from CGWA as per Hon'ble NGT order.
5. Unit shall obtain fresh water from valid source have permission of the competent authority.
6. Industry shall renew Public Liability Insurance Policy time to time & submit a copy of the same to this office.
7. Industry shall manage Solid Wastes generated from industrial activities as per Solid Waste Management Rules-2016 (solid waste as defined in Rule-3(46)).

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

- 3.1 Source of Water: -Sea water through desalination & GWIL.
- 3.2 There shall be no change in existing quantity of industrial water consumption (1254.11 KL/Day), & industrial waste water generation (90.31 KL/Day), due to CCA-Amendment.
- 3.3 There shall be no change in existing quantity of domestic water consumption (375 KL/Day), & industrial waste water generation (265 KL/Day), due to CCA-Amendment.
- 3.4 The quantity of the fresh water consumption for gardening purpose shall not exceed 388 KL/Day, due to CCA- Amendment.
- 3.5 Industry shall operate Effluent Treatment Plant (ETP) adequately so that treated industrial & domestic 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 27o 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 %
Phenolic Compounds	1 mg/L
Sulphides	5.0 mg/L
Sodium Absorption Ratio	26

79



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,

GANDHINAGAR - 382010,

(T) 079-23232152

- 3.6 Treated effluent confirming to above standards shall be discharged on land for gardening / plantation purpose within premises.
- 3.7 Industry shall provide fixed pipeline network with flow meter for even distribution of treated effluent and maintain its record.
- 3.8 Domestic effluent shall be treated into ETP along with industrial effluent.
- 3.9 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.

4. The condition no. 5.1 & 5.2 of the said CCA is amended as below:


5.1 Authorization order no. **WH-141598** Date of issue: 04/04/2025.

5.2 **M/s. Adani Port & Special Economic Zone Limited** is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, treatment, storage, transport of hazardous waste on the premises situated at Plot no. 169/P, At: Navinal Island, Mundra, Tal: Mundra, Dist: Kutch;

Sr. No.	Waste	Quantity per Annum		Schedule & Category	Facility
		Existing	After CCA-Amendment		
1.	Used Oil	360 MT	367 MT	I-5.1	Collection, storage, Transportation, and disposal to registered recycler or reuse within premises as lubricant.
2.	Waste residue containing oil/oily rags	150 MT	156 MT	I-33.2	Collection, storage, transportation and disposal by co-processing at cement industries & / or CHWIF site.
3.	Discarded Drums & Containers	16 MT	26 MT	I-33.3	Collection, storage, transportation and disposal by selling out to authorised decontaminator.

5. Rest of conditions of Consolidated Consent & Authorization (CC&A) order No: AWH-117045 issued vide this office letter no. GPCB/CCA-KUTCH-39(7)/ID-17739/625051 dated 09/03/2022 shall remain unchanged and industry shall comply with the same judicially.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD


(T. C. Patel)
Unit Head

Page 3 of 3

Clean Gujarat Green Gujarat

Website : <https://gpcb.gujarat.gov.in>



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

**CCA-Amendment
(WH-139724)**

No. PC/CCA-KUTCH- 582(5)/ GPCB ID-35427/852009

Date: 24/01/2025

To,
M/s. Adani Port & Special Economic Zone Ltd., (WFDP-West Port)
Survey no. 141,
Navinal Island, Mundra,
Tal: Mundra, Dist: Kutch- 370 421.

- SUB :** Amendment in the consolidated consent & Authorization of the Board.
REF : 1) CCA issued by this office vide order no- **AWH- 113458** dated **28/06/2021** valid up to 01/02/2027.
2) Obtain deemed CTE vide order dated **19/05/2020**.
3) Your CCA Amendment Application Inward ID No. **320886** dated **07/11/2024**.

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)-1986 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- 113458** vide order no. PC/CCA-KUTCH-582(4)/ ID-35427/ 595234 dated 16/07/2021.

The Board has right to review and amend the conditions of the said CCA and its amendment orders. Now, considering your application for CCA amendment inward ID No. 320886 dated 07/11/2024, the said CCA order is amended as below:

1. The order shall be read as CCA amendment Order No.: WH- 139724 Date of Issue: 16/01/2025, valid up to 01/02/2027.
2. The condition no. 2 of the said CCA is amended as below:
2. The consent shall be valid up to **01/02/2027** for the use of outlet for the discharge of treated effluent and emission due to operation of industrial plant manufacturing following items/ products:

Sr. No.	Product	Existing as per CCA dated 28/06/2021	Total quantity after CCA-Amendment
1.	Dry Cargo Handling	6,00,00,000 MTA	60 MMTPA
2.	Liquid Cargo (including Chemicals, POL Products, all class A, B, C Petroleum Products, toxic & non hazardous chemicals/ liquid)		5 MMTPA
3.	Desalination Plant	47 MLD	80 MLD

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GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,

GANDHINAGAR - 382010,

(T) 079-23232152

- 3.9 Treated domestic effluent conforming to above standard shall be discharged on land for gardening and plantation purpose within premises only. In no case waste water shall be discharged outside premises.
- 3.10 Industry shall provide fixed pipeline network with flow meter for even distribution of treated domestic effluent and maintain its record.
- 3.11 Disposal system for storm water shall be provided separately. In no circumstances storm water shall be mixed with the industrial effluent.
4. The condition no. 5.1 & 5.2 of the said CCA is amended as below:
- 5.1 Authorization order no. WH- 139724 Date of issue: 16/01/2025.
- 5.2 M/s. Adani Port & Special Economic Zone Ltd., is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, treatment, storage, transport of hazardous waste on the premises situated at Survey no. 141, Navinal Island, Mundra, Tal: Mundra, Dist: Kutch;

Sr. No.	Waste	Quantity		Schedule & Category	Facility
		Existing	After CCA- Amendment		
1.	Used Oil	238 MT	240 MT	I-5.1	Collection, storage, transportation and disposal by selling out to registered recycler.
2.	Discarded Drums & Containers	26 MT	28 MT	I-33.1	Collection, storage, transportation and disposal by selling out to authorised decontaminator.
3.	Contaminated cotton waste rags or other cleaning material	32 MT	31 MT	I-33.2	Collection, storage, transportation and co-processing plant or CHWIF site.
4.	Spent ion exchange resin	--	5 MT	I-35.2	

5. Rest of conditions of Consolidated Consent & Authorization (CC&A) order No: AWH-113458 issued vide this office letter no. PC/CCA-KUTCH-582(4)/ ID-35427/ 595234 dated 16/07/2021 shall remain unchanged and industry shall comply with the same judicially.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(T. C. Patel)
Unit Head

Annexure – 9



Certificate of Validation

Zero Waste to Landfill Achievement

Presented to

Mundra Port

Adani Ports and Special Economic Zone Ltd
At & Post –Mundra, Gujarat–370405, India

This is to certify that **Mundra Port** has successfully achieved the **Zero Waste to Landfill (ZWL) Platinum – Class I Rating** by demonstrating outstanding leadership in waste management practices through:

- *Waste Diversion Rate: Attaining a diversion rate of 99.61% from landfill through the adoption and implementation of the 5R principles — Reduce, Reuse, Repurpose, Recycle, and Recover.*
- *Sustained Commitment: Maintaining ongoing compliance through participation in annual surveillance audits to ensure conformance and adherence to ZWL principles.*

**ZERO
WASTE
TO LANDFILL**



Seema Arora
Deputy Director General
Confederation of Indian Industry

Certificate Issued on: 03 May 2025

Certificate No.: CII/ZWL/2025/001

Validity of Certification: *From 23 December 2024 to 22 December 2027*

Initial Certification: TUV/ZWLMS/2021/Adani Ports/0501

This certification is awarded based on the evidence submitted and verified during the assessment period. The certified organization bears sole responsibility for the accuracy of submitted data and for maintaining ongoing compliance. For detailed terms of certification, audit findings, and evaluation methodology, please refer to the attached Annexure.

Annexure – 10

Cost of Environmental Protection Measures

Sr. No.	Activity	Cost incurred (INR in Lacs)			Budgeted Cost (INR in Lacs)
		2022 – 23	2023 – 24	2024 – 25	2024 – 25
1.	Environmental Study / Audit and Consultancy	7.32	22.67	40.46	27
2.	Legal & Statutory Expenses	12.32	8.60	17.37	13
3.	Environmental Monitoring Services	15.32	13.37	17.27	19.20
4.	Hazardous / Non-Hazardous Waste Management & Disposal	104.035	130.11	122.46	172.40
5.	Environment Days Celebration and Advertisement / Business development	2.53	3.42	1.85	4.00
6.	Treatment and Disposal of Bio-Medical Waste	2.29	2.28	2.39	2.28
7.	Mangrove Plantation, Monitoring & Conservation	35.0	15	0	0
8.	Other Horticulture Expenses	956	904	570	831
9.	O&M of Sewage Treatment Plant and Effluent Treatment Plant (including STP, ETP of Port & SEZ & Common Effluent Treatment Plant)	141.33	186.94	164.31	195.41
10.	Expenditure of Environment Dept. (Apart from above head)	90.136	80.39	93.40	75.92
Total		1366.28	1366.78	1029.51	1340.21

Annexure – 11

APSEZL/EnvCell/2024-25/084

Date: 04/12/2024

To
The Regional Officer,
Regional Office GPCB (Kutch-East)
Gandhidham, 370201.

Sub : Submission of compliance to observation/suggestion/instruction made by GPCB officials during inspection.

Reference : GPCB Inspection dated 25.11.2024, PCB ID: 35427.

Respected Sir,

With reference to the above-mentioned subject, Adani Ports and Special Economic Zone Limited (APSEZ) is hereby submitting the compliance status/ response against observations/ remarks given during your official visit dated 25th Nov, 2024 as below:

Sr. No.	Point	Our Response / Compliance status
1.	Point No. 1	<ul style="list-style-type: none"> Self-ignition/ smoldering in Coal cargo occurs due to grade and quality of coal which is being imported. However, best practices for coal handling is being adopted and implemented within port. Water sprinkling/ dust suppression activity is being done at regular frequency on coal heap and operational area and the same was observed by GPCB officials during site visit. Nevertheless, we have adopted the following routine activities to prevent a smoldering of coal. <ul style="list-style-type: none"> ➤ Regular basis Dry cargo and fire team vigilance for smoldering and immediate cooling. ➤ Regular water sprinkling within the coal stack yard to combat the fire. ➤ Compressing of the coal heap with mechanized system to avoid voids causing regeneration of smoldering. ➤ Fast evacuation of Coal from port premises. ➤ Internal reshuffling of coals to prevent regeneration of smoldering. <p>Photographs of water sprinkling / firefighting activities are attached as Annexure – 1.</p> <ul style="list-style-type: none"> APSEZ has an adequate firefighting system such as sprinklers, hydrants, wet riser system, dry riser system, water bowser, water monitor, etc. for effective firefighting at coal yard. APSEZ is also in progress to renovate DSS with automation system (approx. 40% work completed). The same will be helpful to prevent the spontaneous ignition in coal more effectively.
2.	Point No. 2	APSEZ will commence operation of 33 MLD Desalination Plant after obtaining requisite permissions from the board and the same will be intimated to your good office once commenced.
3	Point No. 3	APSEZ will commence handling of liquid cargo after obtaining requisite permissions from the board and the same will be intimated to your good office once commenced.

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Adani House, Fax +91 2838 25 51110
PO Box No. 1 info@adani.com
Mundra, Kutch 370 421 www.adani.com
Gujarat, India
CIN: L63090GJ1998PLC034182

Registered Office: Adani Corporate House, Shantigram, Nr. Vaishno Devi Circle, S.G. Highway, Khodiyar, Ahmedabad – 382421, Gujarat, India

Annexure – 12

APSEZL/EnvCell/2024-25/094

Date: 04/02/2025

To,
The Regional Officer,
Regional Office (Kutch-East),
 Gujarat Pollution Control Board,
 Gandhidham, 370201.

Sub : Submission of compliance to observation/suggestion/instruction made by GPCB officials during inspection.

Reference : GPCB Inspection letter dated 30.01.2025, PCB ID: 17739.

Respected Sir,

With reference to the aforementioned subject, Adani Ports and Special Economic Zone Limited (APSEZL) hereby submits the compliance details and responses concerning your observations and remarks as outlined below:

Sr. No.	Inspection Remarks	Compliance
1.	To comply the conditions of Environmental Clearance.	APSEZL has recently been granted the Environment & CRZ Clearance Order by the Ministry of Environment, Forest and Climate Change (MoEF&CC) on date 13.08.2024, for the "Expansion of Waterfront Development Plan (WFDP)" at Mundra. APSEZL is complying with the stipulated conditions in accordance with the granted order on 13.08.2024. The EC & CRZ Compliance Report for the period from April 2024 to September 2024 was submitted to the respective government bodies via email dated 30.11.2024 and was also uploaded to the "Parivesh Portal" of MoEF&CC. Acknowledgement copy of Parivesh Portal is attached as Annexure - 1 .
2.	To submit the details production, water consumption, wastewater generation, fuel consumption, hazardous waste generation & disposal for last three months.	Details of cargo handling, water consumption, wastewater generation, fuel consumption, and hazardous waste generation and disposal for the past three months (Oct-2024 to December-2024) are attached as Annexure - 2 .

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 info@adani.com
 www.adani.com

Adani Ports and Special Economic Zone Ltd
 Adani House,
 PO Box No. 1
 Mundra, Kutch 370 421
 Gujarat, India

- GPCB Inspection Visit Report dated 30.01.2025 uploaded in XGN on 04/02/2025 20:06:10 from IP No: 172.16.31.15.
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Registered Office: Adani Corporate House, Shantigram, Nr. Vaishno Devi Circle, S.G. Highway, Khodiyar, Ahmedabad – 382421, Gujarat, India

Kindly consider our compliance against the given written instructions dated 30th January 2025 and acknowledge the same.

Thank you
Yours Faithfully,

For, Adani Ports and Special Economic Zone Limited

Bhagwat Swaroop Sharma
Head – Environment

Encl: As above

Copy to:

The Unit Head,
GPCB – Head Office,
Paryavaran Bhavan Sector 10 A,
Gandhi Nagar 382010.

Adani Ports and Special Economic Zone Ltd
Adani House,
PO Box No. 1
Mundra, Kutch 370 421
Gujarat, India
Tel +91 2838 25 5000
Fax +91 2838 25 51110
info@adani.com
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- GPCB Inspection Visit Report dated 30/01/2025 uploaded in XGN on 04/02/2025 20:06:10 from IP No: 172.16.31.15.

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Registered Office: Adani Corporate House, Shantigram, Nr. Vaishno Devi Circle, S.G. Highway, Khodiyar, Ahmedabad – 382421, Gujarat, India

Annexure – 13



Bajaj Allianz General Insurance Company Ltd.
Bajaj Allianz House, Airport Road, Yerawada, Pune - 411006
PUBLIC LIABILITY INSURANCE POLICY POLICY SCHEDULE
UIN: IRDAN113RP0021V01200102

Policy issuing office and Correspondence address for communication by policyholder for claim, service request, notice, summons, etc. :

4th Floor, Turquoise, Nr. Panchvati Circle, C.G Road, Ellis-bridge, Ahmedabad-380006 Phone No :079-26432000

Policy No.	OG-25-2202-3301-00000028		
Product	PUBLIC LIABILITY INSURANCE POLICY		
Period of Insurance	From 00:01:00 25-JUN-24 To 24-JUN-25 Midnight	Policy Issued On	18-JUL-24
Co-Insurance Details	Own Share: 100%		
Insured Name	MUNDRA LPG TERMINAL PRIVATE LIMITED		
Insured Address	56, SHRIMALI SOCIETY, NAVARANGPURA, , PO Area - NAVARANGPURA, AHMEDABAD, AHMEDABAD, GUJARAT,, AHMEDABAD, GUJARAT - 380009		
Bank Details :	No Details	No Details	
GSTIN / UIN	24AANCA7329N1Z6	Place of Supply/State Code/Name	24 - Gujarat
Company GST No :	24AABCB5730G1Z3	Invoice No :	429060757/1
Company PAN :	AABCB5730G		

Description	Sum Insured (Rs)
Aggregate Limit of Indemnity during the Policy Period.	20,00,00,000.00

Additional** Loading @	0 %
Additional Discount@	0 %
Base Premium	21,667.00
Special Discount	0
Net Premium	21,667.00
Terrorism** Surcharge	0.0
Stamp Duty	
State GST (9%)	1,950.00
Central GST (9%)	1,950.00
Final Premium	25,567.00

*** All Premium figures are in Rupee.

On specific request and subject to terms and conditions, record of information exchange will be made available.

As per the GST regulations, the amount of GST will not be refunded if the policy / endorsement is cancelled after 30th September of the next financial year.

I/We hereby declare that though our aggregate turnover in any preceding financial year from 2017-18 onwards is more than the aggregate turnover notified under sub-rule (4) of rule 48, we are not required to prepare an invoice in terms of the provisions of the said sub-rule.

Scope of Cover	As per the policy wording attached.
Risk Covered	PUBLIC LIABILITY INSURANCE [CLAIM MADE BASIS]
Special Perils	Extensions:-Designated Premises Endorsement,AOG peril extension,72 hrs sudden & accidental pollution T/J - India,Transportation liability extension T/J India sub limited to INR 10,000,000 per claim in aggregate
Special Exclusions	Exclusions:-Absolute PI claims,Losses arising out while handling cargoes/property of third party/customer,Damage to Hull/ship/marine vessel/port vessels,No Cover for liability arising out of bodily injury to any person working on the site if engaged by principal/ contractors/ sub-contractors
Subject to Clauses	Deductible:-INR 200,000 for each and every claim. Rest of Extensions:- Claims series clause,Additional Insured Extension as per Contract,Waiver of subrogation clause wherever required by the contract,Terrorism Extension - Territory & Jurisdiction- India Only,Control group clause,Contractors, subcontractors and agents endorsement,ERP 90 days,Non-cancellation clause except non-payment of premium,Care, Custody and Control Liability Extension sub limited to INR 5,000,000 per claim and in aggregate, Primary and Non-contributory subject to no other insurance policy covering the same risk.
Warranties	Limit of Indemnity:- AGGREGATE LIMIT OF INDEMNITY DURING THE POLICY PERIOD INR 200,000,000,LIMIT OF INDEMNITY DURING THE POLICY PERIOD INR 50,000,000 PER CLAIM AND INR 200,000,000 IN AGGREGATE. Rest of Exclusions:- No Cover for damage to any property belonging to Principal/ Contractors/ Sub Contractors or any property being worked upon by Principal/ Contractors/ Subcontractors or on their behalf.No cover for property being worked upon by the principal or their contractor/sub contractors,Exclusion for any direct and indirect loss as a result of infectious diseases or contagious disease Including but not limited to diseases arising out of coronaviruses,Absolute cyber loss exclusion clause,Others as per policy wordings,Non Affirmative Cyber Exclusion Clause - IUA 09 82,Conditions:-Sanctions / Embargo Clause: No insurer shall be deemed to provide cover and no insurer shall be liable to pay any claim or provide any benefit hereunder to the extent that the provision of such cover,payment of such claim or provision of such benefit would expose thatinsurer to any sanction, prohibition or restriction under United Nations resolutions or the trade or economic sanctions, laws or regulations of the European Union, United States of America and/or any other applicable national economic



or trade sanction law or regulations, Iran Risk Clause: This policy does not provide any cover, and does not include any liability to pay any claim or provide any benefit hereunder, in respect of any risk related to Iran, unless such risk is specifically disclosed and agreed in writing by the insurer

Special Conditions

Retroactive date :13/06/2022. Estimated Turnover : 1,381 Crores. Territory :India and Jurisdiction :Worldwide Including USA/Canada.

Comments

Insureds Business:- Mundra LPG Revenue INR 1,381 Crores

Bank RM Employee Code : N

Business Occupancy : Others

Business Description : Mundra LPG

Broker Code 10006994	Channel Name : BR
Broker Name : ACE INS. BROKERS PVT. LTD.	
Contact No : 0/23352628	
Email -	

Premium Collection Details [Receipt No/Collection No/Amount] 2202-03873112 / 412407883 / Rs. 25,567.00 ,

*** If Premium paid through Cheque, the Policy is void ab-initio in case of dishonour of Cheque

*** This policy is subject to the standard policy wordings, warranties and conditions applicable for this product in addition to any specific warranty or condition attached

For & On Behalf of Bajaj Allianz General Insurance Company Ltd.

Authorized Signatory
Printed , Signed and Executed at Pune



This document is digitally signed, hence counter signature / stamp is not required

Regd Office : Bajaj Allianz House,Airport Road, Yerwada Pune-411006 (India), A Company incorporated under Indian Companies Act, 1956 and licensed by Insurance Regulatory and Development Authority of India [IRDA] vide Reg No.113, Corporate Identification Number U66010PN2000PLC015329.

Consolidated Stamp Duty of Rs. 0.50/- paid for insurance policy stamps vide Order No. CSD/17/2023/4571 dated 10-NOV-23 of General Stamp Office, Mumbai, India.

Principal Location : 4th Floor, Turquoise, Nr. Panchvati Circle, C.G Road, Ellisbridge, Ahmedabad - 380006 PH:079-26432000 | Services Accounting Code : 997139 - Other non-life insurance services (excluding reinsurance services). No reverse charge is payable on these services.

In case of any claim, please contact our 24 Hour Call centre at 1800-102-5858 (Toll Free) / 91-020-30305858 (chargeable, add area code before this number in case of mobile call) or email us at 'Bagichelp@bajajallianz.co.in'.

412407883/-/10006994/-/-

Prefix your area code if you are calling from a Mobile Device.

A Company incorporated under Indian Companies Act, 1956 and licensed by Insurance Regulatory and Development Authority of India [IRDA] vide Reg No.113, Corporate Identification Number U66010PN2000PLC015329.

Generated by anand rai09

Quotation No : QU-25-2202-3301-00000062

October 03, 2024

Adani Ports And Special Economic Zone Limited

Adani House Near Mithakhali Six Roads, Navrangpura
Ahmedabad Ahmedabad Gujarat 380009 Ahmedabad,
Ahmedabad, Gujarat-380009
8655631664

Dear Customer,

Sub: Public Liability Insurance Policy No: 3133204931878902000

We thank you for having preferred us for your *Insurance* requirements. We at HDFC ERGO General Insurance believe "**Insurance**" as not only to be an assurance to indemnify in the event of unfortunate circumstances, but one that signifies protection and support, which you can count on when you need it most.

The Insurance Policy enclosed herewith is a written agreement providing confirmation of our responsibility towards you that puts insurance coverage into effect against stipulated perils.

Please note that the policy has been issued based on the information contained in the proposal form and / or documents received from you or your representative / broker.

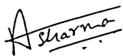
Name of the Intermediary: Ace Insurance Brokers Pvt Ltd
Intermediary Code: 21037952

Where the proposal form is not received, information obtained from you or your representative /broker, whether orally or otherwise, is captured in the policy document.

If you wish to contact us in reference to your existing policy and /or other general insurance solutions offered by us, you may write to our correspondence address as mentioned below. Alternatively, you may visit our website www.hdfcergo.com. To enable us to serve you better, you are requested to quote your Policy Number in all correspondences.

Thanking you once again for choosing HDFC ERGO General Insurance Company Limited and looking forward to many more years of association.

Yours sincerely,



Authorised Signatory

Public Liability Insurance Policy

SCHEDULE

Policy No: 3133204931878902000

Item 1.	Insured	:	Adani Ports And Special Economic Zone Limited
Item 2.	Producer	:	Ace Insurance Brokers Pvt Ltd
Item 3.	Financial Interest	:	Not Applicable
Item 4.	Mailing address of the Insured	:	Adani House Near Mithakhali Six Roads, Navrangpura Ahmedabad Ahmedabad Gujarat 380009 Ahmedabad, Ahmedabad, Gujarat, 380009.
Item 5.	Pan Card Number	:	
Item 6.	Business	:	Pipelines
Item 7.	Policy Period	:	From 00:01 hours : 19 September 2024 To (Midnight) : 18 September 2025
Item 8.	Retroactive Date	:	19/09/2022
Item 9.	Premium	:	Rs. 4,720.00
Item 10.	Premium & Coverage Statement	:	Refer to Page 2
	10.1 Premium Computation		
	10.2 Insurance Limits & Excess		
Item 11.	Clauses, Conditions & Warranties :		

Form Number	Form Name	Effective Date	Date Issued
PL-02-0002	Policy Schedule	19 September 2024	03 October 2024
PL-02-0001	Insurance contract	19 September 2024	03 October 2024
GC-01-0001	Act of God	19 September 2024	03 October 2024
75-02-0090	Consequential Loss Exclusion	19 September 2024	03 October 2024
CW-02-0005	Underground Services Warranty	19 September 2024	03 October 2024
PL-02-0004	Additional Insured -Designated Person Or Organisation	19 September 2024	03 October 2024
PL-02-0009	Limitation To Designated Premises Or Project	19 September 2024	03 October 2024
xx-xx-xxx8	Absolute Asbestosis exclusion	19 September 2024	03 October 2024
xx-xx-xxx9	War And Civil War Exclusion Clause NMA 464	19 September 2024	03 October 2024
PL -02-0035	Failure to Supply Exclusion	19 September 2024	03 October 2024
xx-xx-xx10	Russia, Belarus and Ukraine Exclusion	19 September 2024	03 October 2024
xx-xx-xx11	Exclusion PFAS	19 September 2024	03 October 2024
xx-xx-xx12	Arbitration Opted : No	19 September 2024	03 October 2024
xx-xx-xxx7	Endorsement - Special condition	19 September 2024	03 October 2024
xx-xx-xxx2	Condition : No Cover for damage to any property of Insured and /or their Contractors and /or their Subcontractors.	19 September 2024	03 October 2024
xx-xx-xxx3	Condition : No cover for the bodily injury of the employees of SSNNL and/or their Contractors and/or their Subli-Contractors.	19 September 2024	03 October 2024
xx-xx-xxx4	Condition : No cover for liability arising out of property damage to Surrounding Property belonging to Principal and/or their Contractors	19 September 2024	03 October 2024

xx-xx-xxx5	Condition : No cover for Offshore liability	19 September 2024	03 October 2024
xx-xx-xxx6	Exclusion - Subaqueous work	19 September 2024	03 October 2024
xx-xx-xxx1	Defense cost included within the limit of liability	19 September 2024	03 October 2024

Subject otherwise to terms and conditions of Public Liability Insurance Policy.

Signed for and on behalf of HDFC ERGO General Insurance Company Limited, on 03 October 2024



Authorised Signatory

GST Registration No: 24AABCL5045N1ZE. The contract will be cancelled ab initio in case; the consideration under the policy is not realized.

The stamp duty of Rs. 1/- (Rupees One And Zero Paise Only) paid vide e-stamp Certificate No.(LOA/ENF-1/CSD/34/2023/ Validity Period Dt. 28/12/2023 to Dt. 31/12/2026. OW No. 6045 Date 27/Dec/2023 GRN NO. MH011651000202324M Dt. 05/12/2023, SBI Bank & DEFACE No. 0006692260202324 Dt. 21/12/2023) dated 27/12/2023 as prescribed in Government of Maharashtra Order No. Mudrank-2017/CR.97/M-1, dated the 09th January 2018".

Note: Where the proposal form is not received, information obtained from insured, whether orally or otherwise, is captured in the policy document. Discrepancies, if any, in the information contained in the policy document may be pointed out by an insured within 15 days from the policy issue date after which information contained in the policy document shall be deemed to have been accepted as correct.

I/ We hereby declare that though our aggregate turnover in any preceding financial year from 2017-18 onwards is more than the aggregate turnover notified under sub-rule (4) of rule 48, we are not required to prepare an invoice in terms of the provisions of the said sub-rule

Branch	A Shridhar Athens, Office No 1201 To 1206, 12th Floor Matheran Villa Satellite Jodhpur Near Rani Laxmibai Statue Nehrunagar Ahmedabad, 380015. Tel.: +91-79-39883600
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Warranties :

"Warranted that there are no known losses and /or circumstances that may lead to losses or claims under this policy (except the claims and / or circumstances already reported to HDFC ERGO General Insurance Co. Ltd.)."

□

This policy is issued basis the information and representations provided by or on behalf of the insured (whether by way of a proposal form or otherwise), and it is thus warranted that such information/representations are true, accurate, and complete, and that no other material information has been withheld. □

□

If the policy document, schedule or endorsement contains any inadvertent error or omission in regards the information provided to us, you are requested to inform us within 15 days of receipt of the policy document so that we can correct any such error or omission."□

□

This is with reference to the KYC norms prescribed by the Authority, whereby this policy is being issued relying on the undertaking / power of attorney / letter of authorisation / Board resolution provided by the authorized signatory of your Entity. Should the signatory be not authorized to provide such a declaration, please inform the Company within 15 days from the date of receipt of this policy.

Broker Name : Ace Insurance Brokers Pvt Ltd
Broker Code : 21037952

Premium & Coverage Statement

(Item. 10 of Schedule, Attached to and forming part of Policy No: 3133204931878902000)

10.1 Premium Computation

Premium Details	Amount (Rs.)
Net Premium	4,000.00
GST 18% : Central Tax 9% (Rs. 360) + State Tax 9% (Rs. 360)	720.00
Total Premium	4,720.00
Invoice Number :	4092601300501
GSTN :	24AAACG7917K2ZG
Place of Supply	Gujarat
SAC Code	997139

10.2 Insurance Limits & Excess

Insurance Limits



Details	Amount (Rs.)
Each Accident Insurance Limit	25,000,000.00
Aggregate Insurance Limit	25,000,000.00

Excess

Compulsory Excess	0.5% of LOI for each and every claim
Voluntary Excess	Not Applicable

Annexure – 14

Compliance Report of EMP & Mitigation Measures

Sr. No.	Suggested Measures	Compliance Status
 Construction Phase:		
1	Proper care is warranted while dredging which should be in a controlled manner. It should also be insured that reclamation, dredging, widening and slop stabilization measures do not significantly alter the stabilized erosional-accretional regime and prevailing rate of exchange of water between the outer area of the intricate creek system as well as the free flow of tidal water, to protect the mangroves.	<p>All construction and operation activities as well as dredging and reclamation activities are being carried out as per the approvals.</p> <p>Please refer condition no. 8 & 9 of the CRZ recommendation compliance report for further details.</p>
2	Good sanitation, water and fuel should be made available to the work force. Labour colonies should be set-up landward of the HTL and away from mangrove.	<p>Most of the construction labours resides in the nearby villages where all basic facilities are easily available. However, for those residing near the construction site, infrastructure facilities such as water supply, fuel, sanitation, first aid, ambulance etc. are provided by APSEZ. Details were submitted as a part of compliance report submission for the period Apr'17 to Sep'17.</p> <p>Please refer general condition no. ii of the EC & CRZ clearance for further details.</p>
 Operation Phase:		
1	Wastewater such as generated during cleaning of jetties, floor washing, domestic use etc. should be collected in a settling pond and released to marine environment only after ascertaining that it is free from oil and SS. The toilets on the jetties must have compact sewage treatment facilities.	<p>Entire quantity of sewage generated from APSEZ premises is being treated in designated ETP / STP and treated sewage is used for Horticulture purposes.</p> <p>Please refer specific condition no. xii of the EC & CRZ clearance or further details.</p>
2	Dust should be routinely monitored at the vantage points and corrective measures such as water sprinkling should be practiced if it increases beyond permissible limits.	<p>Ambient Air Quality (twice in a week) monitoring is being carried out by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi.</p> <p>Adequate safeguard measures are being taken for abatement of dust emissions.</p>

Sr. No.	Suggested Measures	Compliance Status
		Please refer specific condition no. xi of the EC & CRZ clearance or further details.
3	It should be ensured that the effluent released into the Gulf meets the prescribed GPCB criteria at all times.	Entire quantity of effluent / sewage generated from APSEZ premises is being treated in designated ETP / STP and treated water is being utilized on land for Horticulture purposes after compliance with GPCB standards. Please refer specific condition no. xii of the EC & CRZ clearance or further details.
4	Appropriate spill response scheme (Tier-1 to Tier-3) should be in place to minimize impacts on marine environment, should a spill occur.	Oil spill contingency plan is in place to handle Tier 1 level oil spills considering different accident scenarios, and the vulnerable areas are identified and mitigation plan is prepared. Oil spill contingency response plan updated on 31.07.2022 is in place and implemented. Updated Oil spill contingency response plan was submitted in the last compliance period Apr'22 to Sep'22.
5	MPSEZL should commit mangrove restoration programme through afforestation in a defined time frame over larger and promising areas and should monitored periodically and protect from anthropogenic pressures.	APSEZ has carried out mangrove afforestation in 3890 ha. area across the coast of Gujarat. Please refer specific condition no. i & vii of the EC & CRZ clearance or further details.
6	A comprehensive marine quality monitoring programme with periodic investigations at predetermined locations should be undertaken by a specialized agency.	Marine monitoring is being carried out once in a month by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Please refer specific condition no. ix of the EC & CRZ clearance or further details.
7	The dust and noise levels at pre-decided locations including the jetty sites should be periodically monitored and remedial action taken if the levels exceed the prescribed norms.	Ambient Air Quality (twice in a week) and Noise (once in a month) monitoring are being carried out by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Please refer specific condition no. xi of the EC & CRZ clearance or further details.
8	MPSEZL should establish an Environment Management Cell	M/s APSEZL has a well-structured Environment Management Cell, staffed

Sr. No.	Suggested Measures	Compliance Status
	(EMC) directly under the control of the Chief Executive.	with qualified manpower for implementation of the Environment Management Plan at site. Site team report to Sr. Manager (Environment) at Corporate, who heads the Environment Management Cell who directly reports to the top management. Environment Management Cell Organogram were submitted as part of compliance report submission for the duration of Apr'21 to Sep'21. And there is no further change.

Annexure – 15

REGIONAL LEVEL POLLUTION RESPONSE EXERCISE REPORT

OFF VADINAR ON 14-15 OCT 24

TABLETOP EXERCISE- 14TH OCT 2024

Below team members participated in Tabletop exercise organized by ICGS Vadinar at Hotel Vishal International, Jamnagar on 14th Oct-24:

1. Vikram Pratap Singh – Radio Officer
2. Ramdas Pawale – Marine Diver

AT SEA PR EXERCISE- 15TH OCT 2024

Venue: Off Vadinar

Exercise conducted by: Indian Coast guard

Resource agencies and stake holders involved:

1. M/S Adani Port & SEZ, Mundra
2. Indian Oil Corporation LTD, Jamnagar
3. M/S Nayara Energy LTD VOTL, Vadinar
4. M/S Reliance Industries LTD, Sikka Jamnagar
5. M/S Essar Bulk Terminal, Salaya

Manpower Attendees:

1. Capt. Prasoon Roy – Marine Pilot
2. Ayush Jha – SPM Maint. (Assist. Manager)
3. Mr. MP Choudhary – Diving In charge
4. Vikram Pratap Singh – Radio Officer
5. Yugul Kishor Sharma – Mooring Master
6. Pradeep Pandey – Supervisor
7. Shashikant Padave – Tanker Seaman
8. Narayan Tamhankar – Tanker Seaman
9. Dhruvas Patekar – Tanker Seaman
10. Monu Rai – Tanker Seaman
11. Santosh Rasam – Tanker Seaman
12. Sandeep Kumar – Diver
13. Som Kumar – Diver
14. Ajay Kumar – Diver
15. Suresh Kumar – Diver
16. Khagendra Dewangan – HMEL
17. Shashi Kumar – HMEL/VIRAJ
18. Kuldeep – HMEL/VIRAJ
19. Pavan Sharma – HMEL/VIRAJ
20. Kulbir Singh – HMEL/VIRAJ
21. Sunil K Maurya – Sea Care
22. Rakesh Kumar – Sea Care
23. Swapnil Sutar – Sea Care
24. Sunil Gupta – Sea Care

Tugs & Crafts

1. DoI 11 Crew with Master
2. Tug KB 48

Statement of facts

0500 hrs.: Tug KB 48 left SPM & started proceeding to Vadinar for exercise.

0548 hrs.: Tug Dol 11 with crew and attendees left for Vadinar for Regional Level Pollution Response exercise from Ro-Ro pontoon.

0642 hrs.: Tug Dol 11 informed Vadinar Port Control that Tug Dol 11 & Victor will be entering Vadinar port limit for Regional Level Pollution Response exercise.

0700 hrs.: Tug Dol 11 arrived at coast guard given position.

0710 hrs.: Briefing of drill carried out.

0750 hrs.: Informed ICG vessel Samudra Pawak (Victor1) on VHF Ch-67 that Tug Dol 11 arrived at specified location 2 cable south of 22 34.00 N 069 43.10 E. Samudra Pawak (Victor1) advised to keep watch on VHF CH 67 for further communication.

0930 hrs.: Tug Dol 11 communicated with ICG vessel Samudra Pawak (Victor1) for launching boom to demonstrate 'U' shape boom configuration. ICG vessel Samudra Pawak (Victor1) advised to commence launching boom.

0932 hrs.: Commence lowering boom.

0950 hrs.: Completed lowering boom (5 section 250 m in length).

1005 hrs.: U-formation of boom completed. Same informed to ICG vessel Samudra Pawak (Victor1) . Victor 1 advised maintaining position with 'U' shape boom configuration.

1015 hrs.: Skimmer & floating storage tank deployed in water.

1150 hrs.: The whole operation observed by ICG vessel Samudra Pawak (Victor1) and appreciated the quick and professional response from Dol-11. The Coast guard advised to start securing gears & break off from position.

1200 hrs.: Drill called off.

1205 hrs.: Secured all deployed equipment and started recovering boom.

1235 hrs.: Completed recovering boom and vessel started proceeding to Mundra. Same informed to Vadinar port control and ICG vessel Samudra Pawak (Victor1).

1240 hrs.: Debriefing of drill carried out.

1400 hrs.: Dol 11 arrived Mundra port. Tug KB 48 arrived at IOCL SPM.

Tabletop & Drill Exercise Snap – 14th-15th Oct 2024

TABLETOP EXERCISE AT HOTEL VISHAL INTERNATIONAL, JMANAGAR ON 14TH OCT 2024

Tabletop exercise



DRILL EXERCISE OFF VADINAR ON 15 OCT 2024

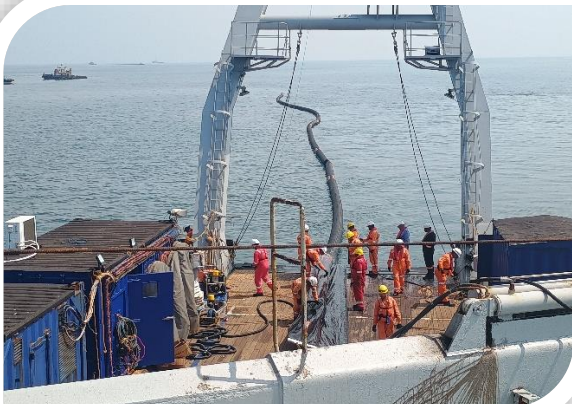
Initial debriefing of drill



Boom laying from Dol 11



Lowering boom (5 section 250 m in length)



U- formation making in progress



U-formation completed



Floating storage tank deploying



Brush skimmer operation



Operation observed by ICG vessel Samudra Pawak (Victor1)

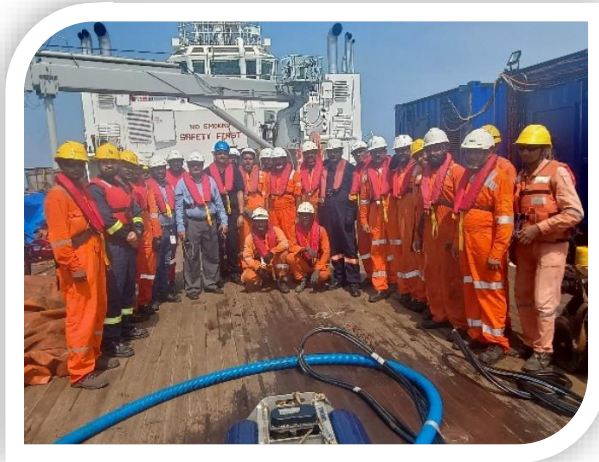


Commence recovering of boom



Completed recovering of boom





Annexure – 16

MOCK DRILL POLLUTION RESPONSE TRAINING/EXERCISE- 2025 REPORT
06 FEB 2025

Date: 06 Feb 2025	Exercise: PR Exercise
Name: Mr. Saket Kumar	Position: Radio Officer
Contact Number: 7874604321	Location: APSEZL, Mundra

Date: 06 Feb 2025 : Final Planning of Exercise

0900-1030 hrs : Pre Exercise briefing carried out at SPM Store to all participants of APSEZ Mundra .

Date: 06 Feb 2025 - Mock OSR drill

Location- Near MICT TURNING CIRCLE (22⁰ 44.63'N 069⁰ 43.1' E)/APSEZL, Mundra

Drill Activity Timeline:

1100 hrs.: Tug KB 48 reported to Marine Control and Dol 11 that an Oil patch observed in MICT Turning Circle.

1101 hrs.: Marine Control informed Marine HOD/HOS and all concerned departments.

1102 hrs.: Dol 11 was informed to pick up OSR team from RORO and proceed to sight immediately.

1115 hrs.: Dol 11 reached on site and commenced boom deployment.

1015 hrs.: Informed commercial team (Mr. Jagdish Rabadia), environment cell (Mr. Radhe Shyam Singh) and Liquid Control Room by Mr. Sudhakar Singh about the drill/incident to be in immediate readiness.

1120 hrs.: All vessels and crafts movements suspended in effected area.

1125 hrs.: Marine Control informed Tug Dol 17 & 18 to standby with OSD for spraying.

1130 hrs.: Marine Control informed Barge BB-10 along with Tug Dol 10 to be stand by.

1130 hrs.: Security department were informed to allow entry of authorized persons, emergency vehicles without any delay and OHS/Adani hospital to be on alert.

1145 hrs.: Dol 11 informed that spill is spread in an area of around 35-50 m².

1200 hrs.: Dol 11 reported 150m boom deployed and continued to deploy the remaining 100 meters and reported wind Ely 5-6 knots.

1215 hrs.: Dol 11 reported 250 m boom deployment completed and commenced J-formation.

1245 hrs.: Dol 11 reported J-formation completed, and oil containment is in progress and commenced skimmer deployment and this is HSD so it is volatile in nature, hence deploying resources to contain.

1255 hrs.: Liquid team informed Marine Control that the motor pump and other equipment is standby at RORO.

1305 hrs.: Recovery of 50 Ltrs spilled oil completed.

1310 hrs : Recovered oil stored in Drum.

1315 hrs.: Drill called off and at the same time informed all concerns.

1320 hrs.: Boom recovery started.

1325 hrs.: Area assessed by diving team for recovered oil and confirmed all clear.

1330 hrs.: Informed environment team for water sampling of spillage area.

1345 hrs.: Environment team informed that area is clear of oil and no harm for sea.

1345 – 1415 hrs.: De-briefing carried out onboard Dol 11.

Personnel & Boats Participated in Drill

1. Capt. Hemant Dhruv-APSEZL
2. Capt. Prasoon Roy-APSEZL
3. Ayush Jha-APSEZL
4. Yugul Kishor Sharma-APSEZL
5. Ramdas Pawale-APSEZL
6. Shubham Sonagara-APSEZL
7. Meet Patel-APSEZL
8. Saket Kumar – APSEZL
9. Vikram Pratap Singh-APSEZL
10. Prem Kumar Pabbisetty-APSEZL
11. Abhishek Panda-APSEZL
12. Shubham Agre-APSEZL
13. Radheshyam Singh-APSEZL
14. Jayesh Parmar-APSEZL
15. Harsh Parmar-APSEZL
16. Members from M/s Sea Care – 02
17. Crew of Tug Dol 11
18. Crew of Tug KB 48
19. Tug Dol 10 17 and 18.

Drill Performance Monitoring:

Sl. No	Activity	Time Taken
1.	Time taken to shift OSR equipment from SPM Store to load on DSV tugs	NA / 200-meter Fence boom and 1- skimmer is kept 24 x 7 on Tug Dol 11.
2.	Time taken for Tug cast off from time information given.	NA
3.	Time taken from tug cast off to Reach at Location.	NA
4.	Time taken for deploying 250-meter boom and skimmer after reaching at site.	30 min.
5	Time taken for J/U formation and deployment of skimmer.	11 min.

Observations:

SR. NO	POINTS	ACTION TAKEN	TARGET DATE	RESPONSIBILITY	REMARKS
1	Internal communication between Dol 11 and KB48 should be streamlined.	Point discussed during de-brief	10.02.2025	Dol 11	
2	The Boom laying area to be clear of obstruction	Point discussed during de-brief	10.02.2025	Dol 11	
3					

Pre Exercise Briefing - 06 Feb 2025

Pre Exercise briefing at SPM Store



PR Drill snap – 06 Feb 2025

Boom laying from Tug Dol 11



J formtion making in progress





De-briefing onboard Dol 11



Annexure – 17

राष्ट्रीय अंतर्विषयी विज्ञान तथा प्रौद्योगिकी संस्थान
NATIONAL INSTITUTE FOR INTERDISCIPLINARY SCIENCE AND TECHNOLOGY

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद

Council of Scientific & Industrial Research

इंडस्ट्रियल एस्टेट पी.ओ., पप्पनमकोड, तिरुवनंतपुरम, भारत - 695019

Industrial Estate P.O., Pappanamcode, Thiruvananthapuram, India - 695019

Lr. No. NIIST-EMGM/APSEZ/2025-01

Date: 02-05-2025

To

Head-Environment,

M/s. Adani Ports and SEZ Ltd.,

Adani House, PO Box No. 1,

Mundra, District Kachchh - 370421

Gujarat

Sub: Annual compliance assessment of APSEZ EC&CRZ Clearance conditions

Ref: i) Multi-Product SEZ EC & CRZ Clearance granted by MoEF F. No. 10-138/2008-IA.III dated July 15, 2014 (Specific condition no. vii)
ii) SO No: 5702022305 dated 25-12-2024
iii) Site visit by experts dated April 7-8, 2025

With reference to the above-cited subject and references, work has been awarded to CSIR-NIIST for carrying out a comprehensive inspection study for annual compliance assessment in accordance with the EC&CRZ Clearance specific condition no. (vii) granted for the development of a Multi-Product Special Economic Zone (SEZ) at M/s. Adani Ports and SEZ Ltd., Mundra.

The inspection study was conducted during April 7-8, 2025 as part of the annual compliance assessment which included detailed verification of all the EC & CRZ conditions through review of half-yearly compliance report that was submitted for the period of April 2024 to September 2024, monitoring reports, and an on-site physical examination. The developmental activities within the SEZ were evaluated by visiting the key project components, environment infrastructure management (air, water, noise, soil, CRZ, biodiversity) is functioning as intended and aligns with applicable environmental norms, standards, and regulatory frameworks.

The project is found to be largely compliant with the stipulated EC conditions at the time of inspection and no deviation was observed. Practices such as mangrove buffer preservation, greenbelt development, and regular environmental monitoring are being appropriately implemented. The proponent is advised to continue the current environmental management and compliance practices in the same spirit. This certificate is issued for submission to the relevant regulatory authorities as a record of annual compliance assessment (for the year 2024-25) in line with the EC condition requiring third-party evaluation.



Saurabh Sakhre
Senior Scientist



Sravanth Tangellamudi
Scientist

सौरभ साखरे / Saurabh Sakhre

वैज्ञानिक / Scientist

पर्यावरण प्रौद्योगिकी प्रभाग

Environmental Technology Division

सी एस आई आर- राष्ट्रीय अंतर्विषयी विज्ञान तथा प्रौद्योगिकी संस्थान

CSIR - National Institute for Interdisciplinary

Science and Technology (NIIST), Govt. of India

तिरुवनन्तपुरम / Thiruvananthapuram-695 019

श्रावन्त तंगेलमूडी / SRAVANTH TANGELLAMUDI

वैज्ञानिक / Scientist

पर्यावरण प्रौद्योगिकी प्रभाग

Environmental Technology Division

सी एस आई आर- राष्ट्रीय अंतर्विषयी विज्ञान तथा प्रौद्योगिकी संस्थान

CSIR - National Institute for Interdisciplinary

Science and Technology (NIIST), Govt. of India

तिरुवनन्तपुरम / Thiruvananthapuram-695 019

Annexure – 18

Expense Details for Fisherfolk Amenities work in different core areas												
Sr. No.	Details	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	TOTAL	AMT IN LACS
Expenditure Details (Amount in Rs.)												
1	Vidya Deep Yojana	2,069,300	193,000	2,087,000	1,771,000	110,225	580,103	969,660	-	-	7,780,288	77.80
2	Vidya Sahay Yojana	552,580	495,000	691,000	708,000	504,336	659,709	847,013	563,000	644,000	5,664,638	56.65
3	Adani Vidya Mandir – Shaping Lives	4,200,000	4,030,000	3,472,000	6,434,020	1,593,805	3,737,700	5,950,854	7,452,390	7,815,023	44,685,792	446.86
4	Senio Citizen Health Card	--	8,430,000	1,750,000	2,975,000	1,750,000	-	-	-	-	14,905,000	149.05
5	Financial Support to Poor Patients	4,439,507	1,275,000	813,000	1,296,063	763,800	1,255,000	1,691,410	1,620,000	1,666,000	14,819,780	148.20
6	Machhimar Kaushalya Vardhan Yojana	188,708	200,000	397,000	73,000	--	226,000	134,070	-	-	1,218,778	12.19
7	Machhimar Sadhan Sahay Yojana	--	--	315,000	522,000	--	-	-	-	-	837,000	8.37
8	Machhimar Awas Yojana	4,592,106	1,165,000	--	2,311,000	2,424,016	2,480,000	712,000	1,227,000	-	14,911,122	149.11
9	Machhimar Shudhh Jal Yojana	2,236,050	2,700,000	2,038,000	1,773,000	2,348,300	1,936,575	2,096,050	1,370,000	1,264,000	17,761,975	177.62
10	Sughad Yojana	1,367,300	170,000	--	192,000	30,000	-	-	-	-	1,759,300	17.59
11	Machhimar Akshay kiran Yojana	860,850	100,000	68,000	--	--	-	-	-	-	1,028,850	10.29
12	Machhimar Ajivika Uparjan Yojana-Mangroves plantation	1,558,800	500,000	1,382,000	1,400,000	1,900,272	2,069,432	1,914,432	-	270,000	10,994,936	109.95
13	Bandar Svachhata Yojana	106,400	50,000	--	--	367,000	145,000	25,000	-	-	693,400	6.93
14	Cricket league and Cycle Marathon	432,000	657,119	638,000	610,800	--	-	-	-	-	2,337,919	23.38
15	Sports Material For Children & Youth at Vasahats	197,797	--	--	--	--	-	-	-	-	197,797	1.98
16	New Pilot Initiative for Polyculture	398,240	160,000	--	--	--	-	-	-	-	558,240	5.58
17	New Pilot Initiative for Cage farming Asian Seabass & Lobster	864,000	660,000	--	--	--	-	-	-	-	1,524,000	15.24
18	Sea Weed Culture Project	--	--	--	200,000	--	-	-	-	-	200,000	2.00
19	Mangrove Biodiversity Project	--	--	1,890,000	684,000	499,210	997,642	1,135,000	-	191,000	5,396,852	53.97
20	Approach Road restoration at 9 vasahat	--	--	--	--	599,000	942,780	1,011,000	-	-	2,552,780	25.53
21	Community treading Centor & Maintenance work						6,022,000	2,051,000	-	-	8,073,000	80.73
TOTAL		24,063,638	20,785,119	15,541,000	20,949,883	12,889,964	21,051,941	18,537,489	12,232,390	11,850,023	157,901,447	1,579.01

Annexure – 19

Compliance Report of CIA Study Environment Management Plan

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
1	Land Use Change						
1.1	<p>It is predicted that the built up land in the rural areas would increase by an order 50% from the baseline 2015.</p> <p>New settlements near the SEZ area might create slums.</p> <p>Unorganized urban development leading to poor sanitation and proliferation</p>	Level - 1	<p>APSEZ has developed two townships (Shantivan and Samudra) presently accommodating 1668 households. Necessary permissions from concerned authorities were already obtained for the development of townships and Associated infrastructure facilities.</p>	<p>The existing townships will be expanded to accommodate about 4 lakh people when the APSEZ is fully developed.</p>	APSEZ	As and when Required	<p>APSEZ has developed two townships (Shantivan and Samudra) accommodating 4677 households and associated infrastructure facilities. Accommodation is made available for all interested employees working within Adani group & SEZ industries. Out of which 93.65 % Occupancies are accommodated within the townships and rest are available for employees working within APSEZ.</p> <p>At present 81 nos. of industries (processing & non-processing) are present within the SEZ (61 nos. are in operation). Township facilities are also made by some of SEZ industries within Mundra town for their employees with basic infrastructure facilities and requirements.</p> <p>Most of the employees working in SEZ industries are residing in Mundra township having all basic requirements and associated facilities.</p> <p>The existing social infrastructure facilities are adequate for present development at APSEZ. The existing townships with associated facilities will be</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
	of vectors and disease.						<p>expanded as per requirement.</p> <p>APSEZ has also been granted permission for receiving domestic sewage @ 2.5 MLD from Mundra village (which was earlier discharged into open area within Mundra region) into wastewater treatment plant for treatment and disposal. APSEZ has already started receiving of domestic sewage from Mundra, which abates the poor sanitation and unhygienic condition within Mundra region. Total project cost for laying domestic sewage underground pipeline with other associated facilities from Mundra to APSEZ is 362 Lacs.</p>
1.2	Once the project is fully developed, due to increase in built up land in the APSEZ area, there will be an increase in the storm water runoff from the facility.	Level-1	The study area experiences scanty rainfall less than 400 mm/year. Considering the natural gradient, APSEZ have designed and implemented storm water	Technical feasibility study can be carried out to explore the possibility of developing storm water collection ponds to utilize maximum possible storm water runoff for dust suppression in the coal yard areas during non-rainy days.	APSEZ	Technical Study - one time, Implementation - Continual process	<p>Presently, ~ 39 % area is already developed & ~ 13% area is under construction phase out of the total SEZ area</p> <p>At present all existing coal yards are designed with drain, for collection of water during water sprinkling and rainfall, which is carried away to dump pond. Supernatant water from dump pond is being collected and used for dust suppression activities or after sedimentation, discharged to sea. Details of drain and dump pond has been submitted along with EC compliance report (Oct 19 to March 20). Analysis of said water discharging into sea during monsoon season is being carried out (twice in a year during monsoon) through NABL / MoEF&CC accredited</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
			drains in the existing facility to meet the peak daily rainfall of 440 mm/hr. Hence flooding of water in the neighboring areas is not envisaged.				laboratory. The analysis report of the same shows there is no any contamination. The report of the same is was submitted during the compliance report submission for the period Apr'24 to Sep'24. During compliance period FY 2024-25 total recorded rain fall was 1365 mm observed, which was much less than the design capacity of existing storm water drainage system. So our existing storm water management facility is adequate to handle the storm water runoff from the area. Hence flooding of water in the neighboring areas is not envisaged.
			As per the directions given in the environmental clearance issued for the proposed Multi-Product SEZ and CRZ clearance for Desalination, sea water intake, outfall	The channel depth in all the natural streams shall be maintained to accommodate peak flood flow during the monsoon and periodical de-silting activities in the natural streams passing through the APSEZ area	APSEZ, District Administration* and Irrigation department	As and When Required	Presently there is no Desalination plant, sea water intake and outfall facility developed as part of EC & CRZ clearance of Multiproduct SEZ. The project will be designed and implemented as per requirement without disturbing the natural flow of rainwater in all the seasonal streams.

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
			facility and pipeline project, the master plan of the project was designed and being implemented without disturbing the natural flow of rainwater in all the seasonal streams.				
1. 3	Due to conservation and protection of mangroves in the designated conservation area, it has been predicted	Positive Impact with ecological benefits	In addition to conservation of the identified 1254 ha mangrove areas around Mundra port and SEZ, APSEZ has taken up large scale	APSEZ will continue mangrove afforestation as per the commitment made with concerned regulatory authority	APSEZ	Short Term	<p>APSEZ has carried out mangrove afforestation in 4140 ha. area across the coast of Gujarat till date. Total expenditure for the same till date is INR 1592.8 lakh. No further mangrove afforestation is pending w.r.t. commitment made with concerned regulatory authority for APSEZ, Mundra project.</p> <p>1. NCSCM (MoEF&CC promoted Government Agency) study on comprehensive and integrated plan for preservation and conservation of mangroves and associated creeks in and around</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance				
	that the current mangrove footprint area would marginally increase in next 15 years due to natural growth. This will enhance the overall biodiversity in the local coastal ecosystem.		mangrove afforestation activities in an area of more than 2800 ha at various locations across the coast of Gujarat state in consultation with various organizations				<p>APSEZ in year 2016-17. The cost of said study was 3.15 Cr, which was incurred by APSEZ.</p> <p>As a part of mangrove conservation plan, APSEZ has done following activities.</p> <p>a. Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island through NCSCM, Chennai. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.</p> <p>b. Tidal observation in creeks in and around APSEZ – The cost of the said activity was INR 1.0 Lacs incurred by APSEZ.</p> <p>c. Algal & Prosopis removal from Mangrove area - The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure – 1.</p> <p>d. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 410.48 Lacs during FY 2024-25 which was incurred by APSEZ. This activity is being done on continuous basis as a part of CSR activity.</p> <p><u>Summary of Conservation of mangroves:</u></p> <table><tr><td></td><td>Monitoring Agency</td><td></td><td>Mangrove cover area Increased</td></tr></table>		Monitoring Agency		Mangrove cover area Increased
	Monitoring Agency		Mangrove cover area Increased								

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude1	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance																																
							<table><tr><th>Mangrove mapping Year</th><th></th><th>Mangrove cover total Area (Ha.)</th><th>Hac.</th><th>%</th></tr><tr><td>2011</td><td rowspan="2">NCSCM</td><td>2094</td><td>-</td><td>-</td></tr><tr><td>2011 to 2016-17</td><td>2340</td><td>246</td><td>11.75%</td></tr><tr><td>2017 to 2019 till March</td><td>NCSCM</td><td>2596</td><td>256</td><td>10.94%</td></tr><tr><td>2019 to 2021 till March</td><td>GUIDE</td><td>2723</td><td>127</td><td>4.89%</td></tr><tr><td>Total</td><td></td><td>2723</td><td>629</td><td>--</td></tr></table> <p>Hence, overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%).</p> <p>As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.</p> <table><tr><th>Sr.</th><th>Recommendations</th><th>Compliance</th></tr></table>	Mangrove mapping Year		Mangrove cover total Area (Ha.)	Hac.	%	2011	NCSCM	2094	-	-	2011 to 2016-17	2340	246	11.75%	2017 to 2019 till March	NCSCM	2596	256	10.94%	2019 to 2021 till March	GUIDE	2723	127	4.89%	Total		2723	629	--	Sr.	Recommendations	Compliance
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							No.		
							1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none"> APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island. As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.94%. This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which also shows that the growth of mangroves in a progressive direction. Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance	
								<ul style="list-style-type: none"> According to GUIDE Mangrove monitoring study report November 2023 (the report was submitted during the last compliance report submission Apr'23 to Sep'23)), the distribution of mangroves in Kotadi, Baradi mata, Navinal, Bocha and Khari creeks as well as in the Bocha island was studied using LISS IV satellite images for the duration of March 2019 to March 2021. The mangrove cover in the creeks in and around APSEZ showed a positive trend from March 2019 to March 2021, with an overall increase of 52.79 ha (1.9%) compared to the cover during the year 2019. The total mangrove cover during 2019 was 2670 ha which has increased to 2723 ha during the year 2021. Hence, overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%). The cost of the said study was INR 23.60 Lacs incurred by APSEZ. <p>Summary of Mangrove mapping and monitoring (from 2011 to 2021):</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance																													
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2.	Tidal observation in creeks in								<ul style="list-style-type: none">APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal,																											

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance		
								and around APSEZ	<p>Bocha and Khari creeks under the guidance of NCSCM.</p> <ul style="list-style-type: none"> The observed tidal ranges indicate that the creeks experience normal tidal ranges, adequate for the growth of mangroves. The cost of the said activity was INR 1.0 Lacs.
							3.	Removal of Algal and Prosopis growth from mangrove areas	<ul style="list-style-type: none"> Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in some of the mangrove areas, which has been removed manually. The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure – 1.
							4.	Awareness of mangroves importance in surrounding communities	<ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done awareness camps/activities created in the community regarding importance of mangroves. Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 15005 Cattles and hence enhancing cattle productivity. Dry Fodder 15,74,250Kg Green – 51,66,805 Kg. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance		
									<p>supporting activities was approx. 410.48 Lacs during FY 2024-25, which was incurred by APSEZ.</p> <ul style="list-style-type: none"> • Grass Land development: 213 acres of gauchar land has been cleaned and allocated for Grass land development with strong Community Contribution and Mobilization. • Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no any unauthorized persons allowed within coastal as well as mangrove areas. • APSEZ has celebrated the International Day for the Conservation of the Mangrove Ecosystem on 24th to 26th July 2024 to raise awareness of the importance of mangrove ecosystems as "a unique, special and vulnerable ecosystem". The report for the same was submitted during the compliance report submission for the period Apr'24 to Sep'24. • Refer CSR report attached as Annexure – 2. <p>To comply with the GCZMA recommendations regarding mangrove monitoring at every 2 years, presently APSEZ has awarded the work order to</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
							<p>NCSCM, Chennai vide order no. 4802055905, dated 24/09/2024 with cost 45.87 Lacs for mangrove mapping in and around APSEZ March 2021 to March 2023.</p> <p>NCSCM has conducted ground truthing during 5th to 7th Mar'25 & 22nd to 27th Apr'25 in and around our APSEZ area for mangrove mapping & study work has been completed. Final Mangrove mapping report is awaited from NCSCM.</p>
1.4	Development activities along the coast might cause certain changes in hydro-dynamic characteristics along the shoreline. Shoreline of any area also can be influenced by storm surges and		Detailed hydro-dynamic modelling and shoreline change prediction for a fully developed APSEZ facility has been studied. The study reveals that the erosion and accretion in the study	It is recommended to map the coastal morphology (Shoreline) at least once in three years	APSEZ	Continual Process	<p>Shore line change aspect has been studied in detail as part of following two studies;</p> <ul style="list-style-type: none"> Bathymetry & Topography study, preparation of plan for protection of creeks/ mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary. A Regional Impact Assessment study to identify impacts of all the existing as well as proposed project activities in Mundra region. <p>As per the outcome of these studies, no erosion is observed on the coast of the project area. As part of the Regional Impact Assessment study, the possible changes in shoreline that may occur due to the proposed developments in 10 km area on either side of the waterfront development project have been predicted. It has been inferred from the modelling study that the shift in the shoreline will be less than 0.5 m/year, which reconfirms that the APSEZ facility would pose insignificant impact on the Mundra</p>

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	other natural processes.		area at the end of 15th year will be within the designated criteria of ± 0.5 m/year. which reconfirms that the waterfront development activities of APSEZ would pose insignificant impact on the Mundra shoreline.				<p>shoreline. Accretion is observed at South port and at West port due to approved reclamation activities.</p> <p>Based on the study outcome, it is recommended to map the coastal morphology (shoreline change) at least once in three years.</p> <p>Shoreline change study was carried out by M/s. Gujarat Institute of Desert Ecology, Bhuj in 2022 as a part of the Environmental Management Plan (EMP) compliance with the CIA study. The cost of said study was INR 17.39 Lacs.</p> <p>As per GUIDE study, the rate of shoreline changes statistics on a time series of multiple shoreline positions of a totally 43 km coastline stretches (16 km on the west side and 27 km on the east side of Adani main port) on either side of Adani Ports and Special Economic Zone Ltd (APSEZL) has been taken into account for the calculation by using satellite images.</p> <p>As a part of the NGT direction, the shoreline change analysis has been carried out for the years 2015-2022 to study the immediate changes after the commissioning of the port and initiation of the activities (September 2015) for short-term variation for the year 2015-2022 using EPR method has been carried out.</p>

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							<p>The details of the rate of shoreline changes (Short interval time) recorded from 2015 to 2022 are summarized in below table.</p> <table><tr><th rowspan="2">Period</th><th rowspan="2">Name of the block</th><th rowspan="2">Average Shoreline Change(M/Y ear)</th><th colspan="2">Shoreline Change(M)</th></tr><tr><th>Maximum Accretion</th><th>Maximum Erosion</th></tr><tr><td rowspan="2">2015-2022</td><td>West Port</td><td>-11.43</td><td>39.86</td><td>-78.68</td></tr><tr><td>Eastern side</td><td>-26.60</td><td>191.32</td><td>-165.19</td></tr></table> <p>The Shoreline Change Assessment Study report of GUIDE was submitted along with six monthly compliance report for the period Oct'22 to Mar'23.</p> <p>Shoreline change study was carried out by M/s. Chola MS, Chennai (NABET accredited consultant) also as a part of Waterfront Development Project – Expansion EIA study. The summary of the said study are as below.</p> <p>To estimate the shoreline change due to the earlier approved waterfront development plan, a historical shoreline change assessment has been undertaken using the satellite imagery for a period of 2008 to 2018. In order to avoid any major errors in estimating the shoreline, the satellite data for similar tidal condition was considered for 2008, 2013 and</p>	Period	Name of the block	Average Shoreline Change(M/Y ear)	Shoreline Change(M)		Maximum Accretion	Maximum Erosion	2015-2022	West Port	-11.43	39.86	-78.68	Eastern side	-26.60	191.32	-165.19
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							<p>2018. AMBUR Methodology was used to study the historical analysis.</p> <p>10 km radius stretch of shoreline on either side of the APSEZ project boundary has been considered for assessing the historical shoreline change scenario. The baseline shoreline change assessment depicts the influence of both natural causes and also possible changes in the shore due to various development activities in the study area during the designated period. For the purpose of this study, shoreline on left side of APSEZ is termed as West Side Shoreline and that of the right side as East Side Shoreline for ease of recognition.</p> <p>The maximum accretion and erosion rate of the west side shoreline over a period of 10 years during the year 2008 – 2018 are observed to be 4.78 m/yr and 1.93 m/yr respectively.</p> <p>The maximum accretion and erosion rate of the east side shoreline over a period of 10 years during the year 2008 – 2018 are observed to be 05 m/yr and 0.82 m/yr respectively.</p>
2	Regional Traffic Management Plan						
2.1	The projected traffic data as per the	Level-1	As per the master plan of APSEZ, eight artillery	Additional road as per master plan will be built in future based	APSEZ	As and When Required	Presently, ~ 39 % area is already developed & ~ 13% area is under construction phase out of the total SEZ area..

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	<p>EIA Report of Multi-Product Special Economic Zone, the peak vehicular traffic from the port and SEZ operations (including supporting facilities and colony) could be in the order of 18,300 and 10,400 vehicles per day respectively.</p> <p>There could be a</p>		<p>roads will be connected to either state highway or national highway for evacuating the goods from APSEZ. None of these roads are passing through settlements, thereby avoiding traffic Congestions in the respective villages. The carrying capacity of the eight artillery roads connecting APSEZ is</p>	<p>on the overall progress of the project. Currently about 25% of cargo from APSEZ is transported by Rail and the same will be enhanced to 40% when the facility is fully developed in future. This will further reduce the traffic volumes on the regional road network.</p>			<p>Existing road/rail/conveyer infrastructure facilities are adequate to evacuate the existing cargo. Further, APSEZ's cargo evacuation through rail / conveyer / pipeline has ~40.79 %. Additional Road facilities will be built as per master plan considering future development.</p> <p>The facilities for transportation of cargo other than road will be enhanced considering future development, which will reduce the traffic volumes on the regional road Network.</p>

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	possible increase in traffic congestions on village-highway intersections and road accidents.		<p>estimated to be about 16,000 PCU/hr as against the envisaged peak traffic volume of 4,500 PCU/hr.</p> <p>Out of eight artillery roads considered in APSEZ master plan, seven roads were already developed and functional.</p>				
			APSEZ has been imparting Driver Training Programs to	APSEZ can undertake technical feasibility of implementing Intelligent	APSEZ & GSRDC*	Long Term	<p>APSEZ is being imparting the regular in-house training awareness program in different mode i.e., classroom, on-job training, virtual platform & Assessment by internal & external trainer to all drivers and employees on below topics:</p> <p>✓ Basic induction Training for drivers</p>

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			all their contractors to enhance awareness on road safety.	Transport System (ITS) for the freight carriers associated with their development activities.			<ul style="list-style-type: none"> ✓ ITV Driver Training ✓ ITV Driver Induction for Supervisor ✓ Defensive Driving for LMV & HMTV ✓ Defensive Driving & BBS ✓ Driver Assessment ✓ Road accident & rescue ✓ Traffic Management & Road Signage ✓ Driving safety training ✓ RORO Driver training ✓ Road Safety ✓ Defensive Driving & Emergency Action Plan ✓ Drivers Responsibilities & Safe driving ✓ Emergency Rescue (Vehicle) Training <p>Approx. 915 Participants (On roll and contractual manpower) were benefitted from above trainings in compliance period Oct'24 to Mar'25. The same will be continued in future also.</p> <p>APSEZ has also implemented the Remote traffic management system (RTMS) to manage the traffic movements and capturing the violations to further improve the system.</p> <p>Following steps were taken by APSEZ to reduce the accidents.</p> <ul style="list-style-type: none"> ✓ Handling and escorting of the ODC to ensure the smooth movement on the roads.

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							<ul style="list-style-type: none"> ✓ Traffic Awareness programs for the drivers and regular briefing of the drivers in the parking areas. ✓ Incident handling and root cause analysis for taking necessary action in order to avoid such incidents. ✓ BAC checks for the drivers in order to identify the intoxicated drivers and necessary action is being taken against them. ✓ Water spray drive at gates are being conducted on regular basis during night hours to avoid dozing by the driver while driving. ✓ RTMS devices are being installed at 08 critical locations in order to capture speed violations and enforcing road safety regulations. ✓ Display of traffic signages and lane markings on road in coordination with the Civil team for ensuring road safety rules are being followed by the road users. ✓ We have approx. 100+ cameras which are being utilized for monitoring of traffic movement through CCTV and timely response in order to avoid any congestion and during traffic incidents. ✓ Regular traffic checks by Traffic Marshalls in order to ensure road safety rules (Wearing seat belt/Wearing helmet/Carrying driving license/Speed checks/Documents) is being followed by the drivers. ✓ Installation of Road furniture's (Cones/Water filled barriers/Cats eye/Spring Posts/Jersey Barriers) for lane segregation, Channelizing the traffic, at

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							<p>Junctions and indicating Caution for the road users.</p> <ul style="list-style-type: none"> ✓ In case on any Vehicle found breakdown in main roads, we arrange the security crane / lifting machines to remove /relocated the vehicle. Which help for smooth passage to other vehicles. ✓ Ensuring Drivers must wear near necessary PPEs, for that we have arranged a PPE's Stall at APMS parking area (issued on chargeable basis). ✓ Night Patrolling and PA announcement by Traffic DSO to manage traffic condition. ✓ Safety briefing via PA system at Security Gate.
3	Water resources Management and sewage treatment & disposal Plan						
3.1	For a fully developed APSEZ facility, water demand will be in the order of 4,30,000 m ³ /day (430 MLD). APSEZ will be sourcing majority of the water from the	No-Impact	APSEZ is meeting the current water demand through Narmada water supply scheme and 47 MLD captive desalination plant at site. Necessary water allocation	As per the master plan and permissions granted under EC, APSEZ will be developing progressively 4,50,000 m ³ /day (450 MLD) of desalination plants to meet the future demand. Hence stress on regional water resources due to	APSEZ	As and When Required	<p>Presently there are two fresh water sources available with APSEZ.</p> <p>Desalination Plant – 80 MLD (47 MLD-Existing + 33 MLD New)</p> <p>Gujarat Water Infrastructure Limited (GWIL) – 9 MLD (sanctioned capacity).</p> <p>Current water demand for APSEZ along with SEZ industries including Adani Power Plant is an avg. of 31.89 MLD.</p> <p>So presently, these sources are adequate to fulfill the current freshwater requirement of entire APSEZ including member units.</p>

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	captive desalination plants, which will be developed in progressive manner.		from concerned authorities was obtained and the same will be renewed from time to time as per the directions of state government.	these developmental projects will be less significant.			The desalination plant of additional capacities will be installed on modular basis considering future requirement of APSEZ.
3.2	Existing water demand in the Mundra taluk is estimated as 8500 m ³ /day (@55 lpcd) and the potable and sanitation water needs would increase to	Level-2	Adani Foundation has been contributing to various watershed development projects in the Mundra region to enhance ground water resources in the area.	Adani Foundation is planning to implement the various water resource conservation programs in next ten years under various schemes.	APSEZ and CGWB*	Long Term	<p>Water needs of APSEZ is being met through existing Desalination Plant of APSEZ and GWIL which may be further enhanced on modular basis. At present Ground water is not utilized for any activities within APSEZ.</p> <p>However various works are being carried out by Adani Foundation continuously under Water Conservation Work to achieve water security in Mundra region by Adani Foundation. Following works are carried out as a part of water conservation work since April – 2018. Water conservation Projects i.e. Roof Top Rainwater Harvesting, Desilting of Check dams, Bore Well Recharge and Pond deepening were taken up in past years, review and monitoring of all water harvesting structures had been taken up.</p>

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	37,000 m ³ /day (@125 lpcd) in future when the area is fully grown into larger municipality due to induced economic growth. Water demand of the local communities is met through Narmada water supply system to some extent, but largely depending on the		Adani Foundation has contributed about Rs. 300 Lakhs so far for the development of 18 check dams.				<p>To make connections between human actions and the level of biological diversity found within a habitat and/or ecosystem, this year Adani Foundation launch project "Sanrakshan" in coordination with GUIDE and Sahjeevan.</p> <p>Since, 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain in current year 1.11 mtr ground water table increased as per increased in coastal belt of Mundra as per Government Figures.</p> <p><u>WORK COMPLETED:</u></p> <p>Water Conservation Projects completed during FY 2024-25 Compliance period:</p> <ul style="list-style-type: none"> ❖ Adani Foundation has undertaken significant water conservation initiatives to address water scarcity and improve water availability in rural areas. ❖ Through the creation of 737 various water structures, the project has increased water capacity by 5,400,735 cubic meters (CUM) and benefited 64,515 people. • Check Dam New/Renovation: <ul style="list-style-type: none"> ○ Structures: 29 ○ Water Capacity Increase: 1,072,332 CUM ○ Beneficiaries: 30,870 ○ Impact: Enhances water storage and irrigation. • Rainwater Harvesting Structures (RRWHS): <ul style="list-style-type: none"> ○ Structures: 330

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	ground water in the study area. Mundra block is reported to be a safe ground block as on date. Due to influx of people and rapid urbanization due to the economic development, there could be some stress on the ground water resources in future.						<ul style="list-style-type: none"> Water Capacity Increase: 3,300,000 CUM Beneficiaries: 1,650 Impact: Maximizes rainwater capture and usage. Rs. 10950 yearly saved/house Pond Deepening: <ul style="list-style-type: none"> Structures: 135 Water Capacity Increase: 1,028,403 CUM Beneficiaries: 18,350 Impact: Improves water retention and availability. Construction of Percolation Wells: <ul style="list-style-type: none"> Structures: 26 Ground Water Recharge: Significant Beneficiaries: 3,000 Impact: Boosts groundwater levels and availability. Bore/Well Recharge Structures: 209 Ground Water Recharge: Significant Beneficiaries: 1,045 Impact: Enhances groundwater recharge and sustainability. Construction of New Wells: <ul style="list-style-type: none"> Structures: 8 Purpose: Drinking Water Beneficiaries: 9,600 Impact: Provides reliable drinking water sources <p>Earlier Completed Activities/Projects:</p> <ul style="list-style-type: none"> Large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) and Augmentation of 3 check dams.

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							<ul style="list-style-type: none"> • Ground recharge activities (pond deepening work for 66 ponds) individually and 26 ponds under Sujlam Suflam Jal Abhiyan were built leading to a significant increase in water table and higher returns to the farmers. • New Pond Deepening Under Ajadi ka Amrut Mahotsav done in Goyarsama village Approx Deepening Capacity is 12000 Cum. • Roof Top Rainwater Harvesting 145 Nos. (40 Nos. current FY 2022-23) which has 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family. • Recharge Borewell 208 Nos (19 Nos. current FY 2022-23) which is best ever option to direct recharge the soil. • Drip Irrigation approx. 1505 Farmers benefitted in coordination with Gujrat Green Revolution Company till date. • Bund construction on way of Nagmati River could save more than 575 MCFT water quantity which recharged in ground due to which borewell depth decreased by 50-100 Ft in Zarpara, Bhujpur and Navinal Vadi Vistar. • Pond Pipeline work at Prasla Vistar Zarpara which increase recharge capacity more than 25% in 100 hector area. • Check dam gate valve construction at Bhujpur which controlled more than 350 MCFT water to go into sea and get recharged current year. <p>With the objective of to preserve the rainwater to reduce the impact of salinity and recharge the ground water (the main source of water) to facilitate the Agricultural activities as well as for drinking water.</p>

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							Adani foundation has spent approx. INR 10079.78 lakhs from April – 2018 to March - 2025 for CSR activities which also includes water conservation projects as mentioned above.
3.3	It is estimated that about 60,000 m ³ /day (60 MLD) of sewage will be generated from the APSEZ facility when the project is fully developed.	No Impact	Seven sewage treatment plants with an aggregate capacity of 3.1 MLD have already built at APSEZ. Treated sewage is utilized for greenbelt development and sewage is not discharged into either seasonal natural streams or marine environment.	APSEZ is permitted to develop decentralized sewage treatment plants of total 62 MLD capacities. Existing sewage treatment facilities will be augmented progressively based on the development at APSEZ in future. Similar to existing practices, treated sewage will be utilized for greenbelt development.	APSEZ	As and When Required	<p>Current installed capacity of wastewater treatment plants is 6.255 MLD (ETP, STPs & CETP) for treatment of effluent & sewage generated at various locations of APSEZ excluding wastewater treatment plants installed within individual member units.</p> <p>Out of 61 only 4 operational industries within the SEZ are sending their partially treated industrial as well as domestic effluent to the CETP confirming to CETP inlet norms for further treatment and final disposal. Other SEZ industries have their own STPs / ETPs for treatment of wastewater generated from their industrial operation and discharging the treated water on land for horticulture purpose within their premises as per specific permission granted by SPCB.</p> <p>APSEZ also granted permission to treat 2.5 MLD of sewage generated from Mundra village through CETP and STP.</p> <p>Presently avg. 2.61 MLD of wastewater (into ETP, STPs & CETP) is treated and being utilized on land for horticulture purpose within APSEZ premises during</p>

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							<p>Oct'24 to Mar'25. Existing wastewater treatment plants are adequate to treat and handle the total effluent / sewage load considering current development.</p> <p>Existing wastewater treatment facilities will be augmented, or new plants will be developed on modular basis considering future requirement.</p>
4	Air quality management Plan						
4.1	Although all the regulated activities in the study area will be adopting promulgated emission norms, total air emission mass discharge from the study area would increase.	Level-2	APSEZ and other thermal power plants have obtained valid consent to operate and have been operating the facilities as per the emission norms stipulated in respective consent orders.	All existing and new industrial establishments will obtain requisite consents from GPCB and adhere to the stipulated emission norms regulations and guidelines issued by authorities from time to time.	APSEZ And Other Industries	Continual Process	<p>APSEZ has been granted requisite permissions from the concerned authorities with stipulated norms for air emission (flue gas as well as ambient air).</p> <p>Ambient Air Quality monitoring is being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi for APL as per NAAQ standards, 2009. Stack emission monitoring is also being carried out on regular basis. Reports of the same are being submitted to the concerned authorities on regular basis.</p> <p>Adani power plant has installed continuous emission and air quality monitoring instruments as per CPCB Directive and submitting the reports also. Another power plant of CGPL is outside APSEZ area.</p> <p>The AAQM summary for last six months (Oct'24 to Mar'25) are as below.</p>

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			APSEZ and other two power plants are monitoring the ambient air quality on regular intervals as per GPCB/CPCB guidelines and the data is analyzed and presented to GPCB on monthly basis. Both the thermal power plants located within the study area have installed continuous emission and				<p>Locations: 18 Nos. (APSEZ – 15 + APL – 3 including 4 villages) Frequency: Twice in a week</p> <table><tr><th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th><th>Average</th><th>Perm. Limit[§]</th></tr><tr><td>PM₁₀</td><td>µg/m³</td><td>42.00</td><td>85.91</td><td>70.96</td><td>100</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>14.61</td><td>42.39</td><td>27.52</td><td>60</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>7.15</td><td>34.01</td><td>19.13</td><td>80</td></tr><tr><td>NO₂</td><td>µg/m³</td><td>9.83</td><td>38.46</td><td>23.04</td><td>80</td></tr></table> <p>[§] as per NAAQ standards, 2009 Values recorded confirms to the stipulated standards.</p> <p>Approx. INR 17.27 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2024-25, which also includes ambient air quality monitoring for overall APSEZ, Mundra.</p> <p>Other industries located within the SEZ have obtained requisite permissions from the competent authorities for their respective plant and they also carried out environmental monitoring within their premises to comply with the permission granted. The same has been ensured by APSEZ as well as SPCB during their regular visits. APSEZ carries out regular visits/inspections of member industries within SEZ and</p>	Parameter	Unit	Min	Max	Average	Perm. Limit [§]	PM ₁₀	µg/m ³	42.00	85.91	70.96	100	PM _{2.5}	µg/m ³	14.61	42.39	27.52	60	SO ₂	µg/m ³	7.15	34.01	19.13	80	NO ₂	µg/m ³	9.83	38.46	23.04	80
Parameter	Unit	Min	Max	Average	Perm. Limit [§]																																
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			air quality monitoring instruments as per CPCB directive.				<p>last visit was conducted during March, 2025 for EMS & compliance verification. During compliance verification, it was verified that monitoring of air emission was well within the permissible standards based on analysis reports. Same will be continued in future also.</p> <p>The monitoring reports of industries within SEZ are also being submitted to the regulatory authorities as a part of half yearly Compliance report of EC for Multi-Product SEZ.</p>
				A common air quality management committee may be framed under the guidance of the State Pollution Control Board and district administration to manage regional level emission inventory data that can help to manage regional level air	APSEZ and Other Industries, Stakeholders, District Administration and GPCB*	Long Term And Continual	<p>APSEZ will co-operate and comply with the directions from concerned regulatory authorities for air quality management within APSEZ area. However, at present, APSEZ has formed Internal Environment Monitoring Committee, involving officials from APSEZ, Adani Power Limited and other SEZ member units with following role and responsibilities:</p> <ul style="list-style-type: none"> • Identification of sources of air & noise emission and its dispersion in surrounding villages • Remedial measures to eliminate, control, reduce or capture air & noise emission. • Identify available resource to abate the air and noise emission. • Required additional resources for control of air and noise emission. • Drinking water and its testing of all the available fresh water sources in surrounding villages

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				quality management goals.			<ul style="list-style-type: none"> Identify any surrounding villages affected by organization's improper waste disposal mechanism. <p>Last committee meeting was conducted on dated 16.05.2025 and below was the point of discussion for way forward.</p> <ul style="list-style-type: none"> Brief introduction about the Environment Management Plan (EMP) All members conveyed his environment management practices, issue & suggestions. Discussed about the various ways to improve existing practice to control the emission in terms of Air, Water and Noise. Discussed about the proper management of the canteen waste. Discussed about the cleaning of outside of the SEZ units. Discussed about the management of rain water & proper cleaning of the common storm water drainage system. Discussed about proper segregation & disposal of solid waste material. Discussed about to increase more green belt area inside plant premises of SEZ units. <p>APSEZ and all the industries within SEZ are complying to NAAQS and same is being ensured by APSEZ. The</p>

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							monitoring reports of industries within SEZ are being submitted to the regulatory authorities as part of half yearly Compliance report of EC for Multi-Product SEZ.
4.2	Release of particulate emissions from handling and storage of coal at the port and power plants would influence PM10 and PM2.5 concentration in the background air. This could pose some health impacts such as asthma and COPD etc. among the	Health Impact	APSEZ has been implementing the following management plan to control emissions as per the applicable regulations and similar practices will be adopted in future: Entire bulk material handling facilities are mechanized. Regular water sprinkling on road and	All industries located in the APSEZ shall adhere to the emissions norms and minimum stack height guidelines issued by CPCB and consent to operate issued by Gujarat Pollution Control Board from time to time.	APSEZ and Other Industries	Continual Process	<p>Following safeguard measures are taken by APSEZ for abatement of dust emissions.</p> <ul style="list-style-type: none"> • Adequate stack heights to the Boilers, D.G. Sets, TFHs & HWGs for proper dispersion of pollutants within APSEZ • Using of liquid & Gaseous fuels instead of solid fuels in Boilers, Thermic fluid heaters and hot water generators. • Regular sprinkling on road and other open area • Regular cleaning of roads • Dry fog Dust Suppression System (DSS) in hopper, transfer towers and conveyor belts • Use of water mist canon • Closed type conveyor belts • Regular sprinkling on coal heaps • Covering other types of dry bulk cargo heaps • Installation of wind breaking wall • Development of greenbelt along the periphery of the storage yards/back up area • Mechanized handling system for coal and other dry bulk cargo • Wagon loading and truck loading through closed silo

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	local communities.		other open areas, regular cleaning of roads, dry fog dust suppression systems (DSS) in hoppers, transfer towers and conveyor belts, use of water mist canon, covered conveyor belts, regular sprinkling on coal heaps,				<ul style="list-style-type: none">Optimized the weigh bridge location to reduce the movement of trucks. <p>Adequate air pollution control measures like ESPs, FGDs, Bag Filters, etc. and adequate stack heights provisions are implemented within the thermal power plant.</p> <p>For reduction of emission from DG stacks, Retrofitting Emission Control Device (RECD) has been installed on 06 nos. of DG sets to reduce the particulate material from DG stacks. Photographs of RECD attached as Annexure – 11.</p> <p>The stack monitoring summary for last six months (Oct'24 to Mar'25) are as below.</p> <p>Total Nos. of Stacks: 23 Nos. Frequency: Monthly / Half Yearly</p> <table><tr><th>Parameter</th><th>Unit</th><th>GPCB Limit</th><th>Min</th><th>Max</th><th>Avrg.</th></tr><tr><td>PM</td><td>mg/ Nm³</td><td>150</td><td>18.86</td><td>32.11</td><td>22.41</td></tr><tr><td>SO₂</td><td>Ppm</td><td>100</td><td>6.15</td><td>18.75</td><td>9.28</td></tr><tr><td>NO_x</td><td>ppm</td><td>50</td><td>18.79</td><td>35.19</td><td>23.45</td></tr></table> <p>Values recorded confirms to the stipulated standards.</p> <p>Approx. INR 17.27 Lakhs is spent by APSEZ for environmental monitoring activities during the FY</p>	Parameter	Unit	GPCB Limit	Min	Max	Avrg.	PM	mg/ Nm ³	150	18.86	32.11	22.41	SO ₂	Ppm	100	6.15	18.75	9.28	NO _x	ppm	50	18.79	35.19	23.45
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							<p>2024-25, which also includes ambient air quality monitoring for overall APSEZ, Mundra.</p> <p>All other industries located within SEZ are adhere to provide adequate stack height and pollution control measures for proper dispersion of pollutants as per respective permissions granted by the board. The same is being inspected and ensured by APSEZ as well as SPCB officials on regular basis.</p>
			covering of other types of dry bulk cargo heaps by protective materials, installation of wind breaking wall, development of greenbelt along the periphery of the storage yards/back up area and mechanized	An internal Coal Dust Management Working Group shall be formed by APSEZ to effectively co-ordinate the approach to coal dust management and monitoring	APSEZ and Other Industries, Concerned Stake holders, District Administration*	Long Term	<p>As mentioned above, earlier APSEZ has formed Internal Environment Monitoring Committee, involving Officials of APSEZ, Adani Power Limited & other member units, with specific role and responsibilities as defined above.</p> <p>The dry cargo is being handled by mechanized system and transported by covered conveyer system, trucks and rail wagons.</p> <p>Wind breaking wall is provided around the coal storage yards of APSEZ as well as Adani Power Plant.</p> <p>Adequate air pollution control measures like ESPs, FGDs, Bag Filters, etc. and adequate stack heights provisions within the thermal power plant for proper dispersion of pollutants.</p> <p>Green belt / plantation is provided around the periphery of dry cargo storage area and regular water sprinkling is also being done to abate the dust emission</p>

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			handling system for coal and other dry bulk cargo and Wagon loading and truck loading through closed silo. Both thermal power plants in the study area have installed electrostatic precipitators on the boilers and are meeting the emission norms as per the respective ECs granted. Due to installation of tall stacks				<p>from coal hips.</p> <p>Last committee meeting was conducted on dated 16.05.2025 and below were the points of discussion for way forward.</p> <ul style="list-style-type: none"> • Brief introduction about the Environment Management Plan (EMP) • All members conveyed his environment management practices, issue & suggestions. • Discussed about the various ways to improve existing practice to control the emission in terms of Air, Water and Noise. • Discussed about the proper management of the canteen waste. • Discussed about the cleaning of outside of the SEZ units. • Discussed about the management of rain water & proper cleaning of the common storm water drainage system. • Discussed about proper segregation & disposal of solid waste material. • Discussed about to increase more green belt area inside plant premises of SEZ units. • Discussed about disposal of minor qty. of generated hazardous waste & E-Waste materials at authorized recycler/vendor.

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			as per CPCB guidelines and EC conditions, the relative air pollution impacts due to release of emissions from two power plants is insignificant.				
4.3	Ships are one of the significant sources of SO ₂ and NO _x emissions in the study area. Marine diesel engines on the ships often utilize fuel oils that might	Level-2	A Standard Operating Procedure (SOP) has been developed to be included as a part of APSEZ environment management	The current global limit for Sulphur content of ships fuel oil is 3.5 % m/m (mass by mass). According to MARPOL, the new global cap on sulphur in the marine vessel fuels will be 0.50% m/m by the 1st January	APSEZ and Ship Owners	Long Term	The ships coming to the APSEZ is complying with MARPOL and other shipping rules and regulations. APSEZ has already started providing shore power supply to the tugs (11 Nos.), dredgers (2 Nos.) and barges (1 No.). The feasibility of shore power will be explored and implemented on large scale for the visiting vessels to reduce idling stage ship emissions.

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	contain higher sulphur content. As per the international best practices, these marine diesel engines are designed to meet MARPOL regulations with NOX emissions less than 14.4 gram/Kwhr of engine. Due to lower stack heights of the marine diesel engine, ship		plan to verify that all ships anchored at the port are adopting the MARPOL4 regulations.	2025. APSEZ should explore the possibility of providing shore power to the ships at the port to reduce idling stage ship emissions.			

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	emissions often gets dispersed in the local environment and might pose risk of fumigation during the early morning and evening hours due to atmospheric inversion break-up periods.						
4.4	Road vehicle emissions will be other major contributors to the air	Level-2	Not Applicable	Due to implementation of Bharat VI fuels (MoEF&CC) in near future the vehicular and diesel engine emissions will be reduced by about 50% from the current national	APSEZ and All Industries	Short Term	<p>Presently, cargo evacuation through rail / conveyer / pipeline is ~40.79 % of overall cargo evacuation.</p> <p>Vehicles having valid PUC certificate are only being allowed to enter within the APSEZ area.</p> <p>APSEZ, has procured 217 nos. of Electrical Vehicle for internal cargo movement and all E-ITV's are in operation.</p> <p>As well as procured 10 nos. LMV E-Vehicles for</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
	pollution in the region when the facility is fully developed.			levels. APSEZ should develop a robust contractor environmental policy to ensure that Bharat Stage VI emission norms are adopted by all their contractors and sub-contractors.			manpower movement and all are in operation. Electrification of Rail Corridor from Dhrub Railway Station to Adipur Railway Station has completed and movement started by electric locomotive. It will lead to reduce the gaseous emission and increase efficiency of transportation by rail.
5	Noise emissions						
5.1	Noise emissions are envisaged from port operations, industrial operations and power plants in the study area.	Level-1	Due to adoption of various mechanized operations at the waterfront development, the noise emissions from the port cargo handling will	APSEZ, all the tenant industries and facilities within APSEZ are required to undertake noise monitoring at their facilities to demonstrate the compliance with the Noise level standards. Continuous noise	APSEZ	Continual Process	Below Safeguard measures are already taken for abatement of noise emissions. <ul style="list-style-type: none"> • Development of greenbelt along the periphery of the operational area. • D.G. Sets having Acoustic enclosures. • Maintenance of plant machineries and equipment's on regular frequency. Noise monitoring is being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi as per permission granted and reports are being submitted to the concerned authorities on regular

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude ¹	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance																		
	Any increase in noise levels beyond three decibels from the background levels would be perceived as noise nuisance (USEPA) ⁷ .		be minimal. An adequate greenbelt is being developed by APSEZ to further reduce any residual impacts due to noise emissions from the facility. Periodic noise level monitoring programs were adopted by APSEZ. Predicted noise levels were found to be well within the designated noise	recording units can be installed by APSEZ at facility boundary to address the community grievances, when ever required. To assess the overall site wide compliance and also to address any community grievances related to noise issues due to operation of APSEZ facilities.			<p>basis.</p> <p>The noise monitoring summary for last six months (Oct'24 to Mar'25) are as below.</p> <p>Locations: 18 Nos. Frequency: Once in a month (24 hourly)</p> <table><tr><th>Noise</th><th>Unit</th><th>Leq Min</th><th>Leq Maxn</th><th>Leq Avr.</th><th>Leq Perm. Limit[§]</th></tr><tr><td>Day Time</td><td>dB(A)</td><td>69.30</td><td>47.90</td><td>63.36</td><td>75</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>66.40</td><td>38.70</td><td>59.61</td><td>70</td></tr></table> <p>[§] as per GPCB standards</p> <p>Approx. INR 17.27 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2024-25, which also includes ambient air quality monitoring for overall APSEZ, Mundra.</p> <p>All the results are well within the standards. From this it can be inferred that there no impacts on the surrounding community.</p> <p>All other industries located in the APSEZ are adhere to monitor and control the ambient noise level as per permission granted by SPCB and same is being</p>	Noise	Unit	Leq Min	Leq Maxn	Leq Avr.	Leq Perm. Limit [§]	Day Time	dB(A)	69.30	47.90	63.36	75	Night Time	dB(A)	66.40	38.70	59.61	70
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			standards for Industrial facilities.				confirmed by APSEZ as well as SPCB on regular basis. Further, till date APSEZ has not received any grievances/notice for noise issues from any of the stakeholders.
				In order to address the public grievances related to noise from the facility, an internal Noise Management Committee can be formed by APSEZ to investigate the root cause and to develop and implement noise mitigation plans in the specific zones.	APSEZ	Continual Process	As mentioned above, earlier APSEZ has formed Internal Environment Monitoring Committee, involving Officials of APSEZ, Adani Power Limited & other member units, having role and responsibilities as defined above. Last committee meeting was conducted on dated 16.05.2025 and below were the point of discussion for way forward. <ul style="list-style-type: none"> Brief introduction about the Environment Management Plan (EMP) All members conveyed his environment management practices, issue & suggestions. Discussed about the various ways to improve existing practice to control the emission in terms of Air, Water and Noise. Discussed about the proper management of the canteen waste. Discussed about the cleaning of outside of the SEZ units. Discussed about the management of rain water & proper cleaning of the common storm water drainage system.

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							<ul style="list-style-type: none"> Discussed about proper segregation & disposal of solid waste material. Discussed about to increase more green belt area inside plant premises of SEZ units. Discussed about disposal of minor qty. of generated hazardous waste & E-Waste materials at authorized recycler/vendor. <p>No grievance received for noise related issues, and it is observed that ambient noise level are well within the permissible standards.</p>
6	Surface water quality (Terrestrial and Marine)						
6.1	In general, release of untreated wastewater from industrial facilities would pose threat to water quality of streams, estuaries and marine water	Level -1	As per the master plan of APSEZ, 67 MLD of wastewater is expected to be generated from the fully developed scenario, for which necessary permissions to set up	As per the master plan of APSEZ, the existing CETP shall be augmented to 67 MLD in progressive manner based on the future demand. The facility should limit the marine discharge of treated industrial wastewater to 16 MLD as per the	APSEZ	As and When Required	<p>APSEZ has installed Common Effluent Treatment Plant (CETP) having 2.5 MLD capacities for treatment of partially treated effluent and sewage generated from industries within SEZ.</p> <p>Currently, CETP receives 902.45 KLD (Avg.) during this compliance period hydraulic load and considering the current development scenario, existing CETP is adequate to treat and handle the total effluent load coming from industries within SEZ.</p> <p>Out of 61 operational units only 4 industries within SEZ are sending their partially treated industrial as well as domestic effluent to the CETP confirming CETP inlet norms for further treatment and final disposal. Other industries within SEZ have their own STPs / ETPs for</p>

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	bodies.		decentralized CETPs of various capacities are already obtained. Presently a CETP capacity of 2.5 MLD is in place. Presently member units treat their effluents to meet the CETP inlet norms and then send it to CETP. Treated wastewater from CETP meets the stipulated discharge norms for	permits. Remaining treated wastewater shall be utilized for horticulture purpose.			<p>treatment of wastewater generated from their industrial operation and discharging the treated water on land for horticulture purpose within their premises as per permission granted by SPCB.</p> <p>The capacities of CETP will be enhanced on modular basis as per future requirement.</p> <p>Presently avg. 2.61 MLD (from CETP, ETP & STPs) of treated water is being utilized on land for horticulture purpose within APSEZ premises during period Oct'24 to Mar'25 and no discharge is made to any other source.</p>

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			utilization for greenbelt development within the APSEZ areas.				
			Online wastewater quality monitoring systems are installed at CETP to ensure quality of treated effluent meets the requisite discharge norms. No wastewater from CETP is discharged into natural bodies as on date..	Efforts shall be made to recycle complete treated wastewater for port operations and industrial operations of APSEZ in future based on a detailed techno-economic feasibility study.	APSEZ	Based on outcome Techno-feasibility Study	Online continuous effluent monitoring system (CEQMS) installed at the discharge point of CETP to track any deviation from discharge norms. CEQMS is connected with CPCB/GPCB server & data is continuous transferring in both servers. Presently entire quantity of treated water from CETP is used for gardening / horticulture purpose within APSEZ premises.
			Runoff during	Storm water runoff from the			There are provision of drains around coal stack yard to carry to runoff water to dump ponds. This water is

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			monsoon from coal storage yards is collected in sedimentation ponds (dump pond) to remove any residual dust particulates for further disposal into sea	facility during the first rain shall be sampled and analyzed for the presence of heavy metals or other criteria pollutants to adopt corrective and preventive actions to protect the marine water quality. All red and hazard category industry within APSEZ shall adopt spill prevention and control program and no effluents shall be discharged into storm water-drains.	APSEZ	Continual	<p>either used for dust suppression or after sedimentation (to remove residual dust), is allowed disposal to sea.</p> <p>Presently Marine monitoring is being carried out once in a month by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi for APSEZ & APL both. The analysis reports of the same are being submitted to the concerned authorities on regular basis.</p> <p>The marine water quality monitoring summary for last six months (Oct'24 to Mar'25) is as per below.</p> <p>Locations: 14 Nos. (APSEZ – 9 + APL – 5) Frequency: Once in a Month / Half Yearly</p> <table border="1"> <thead> <tr> <th>TEST PARAMETERS</th><th>UNIT</th><th colspan="3">Cumulative Surface</th><th colspan="3">Cumulative Bottom</th></tr> <tr> <th></th><th></th><th>Min</th><th>Max</th><th>Average</th><th>Min</th><th>Max</th><th>Average</th></tr> </thead> <tbody> <tr> <td>pH</td><td>--</td><td>7.91</td><td>8.30</td><td>8.16</td><td>7.74</td><td>8.30</td><td>8.11</td></tr> <tr> <td>BOD</td><td>mg/L</td><td>2.20</td><td>4.40</td><td>3.13</td><td>BDL (MDL:1.0)</td><td>4.50</td><td>3.04</td></tr> <tr> <td>TSS</td><td>mg/L</td><td>26.90</td><td>144.00</td><td>90.12</td><td>32.90</td><td>132.00</td><td>84.64</td></tr> <tr> <td>DO</td><td>mg/L</td><td>4.50</td><td>6.69</td><td>5.62</td><td>4.40</td><td>6.49</td><td>5.42</td></tr> </tbody> </table>	TEST PARAMETERS	UNIT	Cumulative Surface			Cumulative Bottom					Min	Max	Average	Min	Max	Average	pH	--	7.91	8.30	8.16	7.74	8.30	8.11	BOD	mg/L	2.20	4.40	3.13	BDL (MDL:1.0)	4.50	3.04	TSS	mg/L	26.90	144.00	90.12	32.90	132.00	84.64	DO	mg/L	4.50	6.69	5.62	4.40	6.49	5.42
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Salinity	ppt	35.20	39.20	36.46	26.76	39.40	36.91																								
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Temperature	oC	29.00	30.70	29.90	28.90	30.60	29.71																								
			Detailed marine hydrodynamic modelling studies revealed that the current and proposed dredged soil disposal practices, sea water intake and outfall facilities and desalination	Good dredging practices shall be adopted by APSEZ: (i).Improving the dredging accuracy (ii).Improving onboard automation and monitoring, (iii). Reduce spill and loss, (iv). evaluating the need for installing silt screens near	APSEZ	Long Term	<p>No capital dredging has been done, since Apr 2015 to Aug 2024.</p> <p>Capital dredging or reclamation is carried out in CRZ – 1 (A) area during the compliance period Oct'24 to Mar'25. Total 1.55 MCuM Capital dredging has been carried out during the compliance period Oct'24 to Mar'25.</p> <p>Dredged material generated during maintenance dredging is being disposed at designated locations within deep sea as identified by NIO.</p> <p>Dredging Management plan is adopted for carrying out dredging and management of dredge material. Presently there are 3 nos. (2 Nos. Cutter suction + 1 No. Trailer suction) of dredgers are in operation for dredging.</p>																								

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			plant outfall etc have shown insignificant impact on the marine eco-system. As part of the comprehensive environmental monitoring program, APSEZ has been adopting marine water and sediment quality monitoring on monthly basis.	mangrove areas during the dredging phase operations, (v). Environment friendly dredging activities can be undertaken in such a way that the overall turbidity levels near the mangrove and ecologically sensitive zones shall not exceed 100 NTU or 200 mg/l of TSS (10% lethal level of fish) Existing marine monitoring program shall be continued as per the directions of MoEF&CC and GPCB.			<p>Marine monitoring is being carried out once in a month by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. The analysis reports of the same are being submitted to the concerned authorities on regular basis. Summary of marine water for the last six months is as mentioned above.</p> <p>The same practice will be continued in future also as per direction by MoEF&CC as well as GPCB.</p> <p>Monitoring will be focused near ecological sensitive area in case of need to carryout capital dragging near such areas.</p>
7	Groundwater quality and salinity ingress						

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7.1	While Mundra block is enjoying safe ground water status as on date (based on the data published by CGWB), due to induced economic and population growth, use of ground water resources by the local people might increase in Mundra region. This might increase the	Level-2	APSEZ is not utilizing ground water for any type of use. APSEZ is meeting the current water demand through Narmada water supply scheme and 47 MLD captive desalination plant at site.	A dedicated desalination plant of capacity 4,50,000 m ³ /day (450 MLD) will be developed in progressive manner to meet the APSEZ requirements.	APSEZ	As and When Required	<p>Present source of water for various project activities is desalination plant of APSEZ and/or through Gujarat Water Infrastructure Limited (GWIL) and same is sufficient to meet the present water demand.</p> <p>APSEZ does not draw any ground water.</p> <p>"Desalination plant of 47 MLD capacities already developed as part of earlier clearances granted in 2009. Additional development of 33 MLD capacity Desalination plant has been developed.</p> <p>At present total 80 MLD (47 MLD – Existing + 33 MLD – New) desalination plant developed under WFDP west port (GPCB ID – 35427) with utilization of existing intake and outfall channel (up to 300 MLD capacities) and CC&A Amendment for the same granted by GPCB board CC&A Amendment order copy for the same is attached as Annexure – 8.</p> <p>Additional development of 80 MLD desalination plant is under progress through Mundra Petrochemical Ltd. (Subsidiary company of Adani Group). Separate Consent to Establish from GPCB has been obtained by them vide Order no. CTE-77914 dated 09.12.2024. Copy of the same is attached as Annexure – 21.</p>

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	TDS and chloride levels in the ground water in future.						Balance 287 MLD capacity desalination plant will be developed on a modular basis as per business requirement.
7.2	Due to induced growth in the region, pressure on the available ground water source would increase and this could pose some threat to salinity ingress.	Level-2	Ground water is not drawn by APSEZ for its operations. Natural streams (seasonal rivers) passing through the APSEZ area will not be disturbed, the micro-watershed in the area will not be disturbed. Due to the above reasons, the	The Govt. of Gujarat, Narmada, Water Resources, Water Supply & Kalpsar Dept.,(WRD)12 has been implementing various salinity ingress prevention projects	District Administration*	Long Term	<p>APSEZ will co-operate and comply with the directions from concerned regulatory authorities.</p> <p>APSEZ does not draw any ground water for the fresh water requirement.</p> <p>However, Adani Foundation – CSR arm of Adani Group has carried out rainwater harvesting activities in the nearby villages for benefit of the locals.</p> <p>Water conservation Projects i.e. Roof Top Rainwater Harvesting, Desilting of Check dams, Bore Well Recharge and Pond deepening were taken up in past years, review and monitoring of all water harvesting structures had been taken up.</p> <p>To make connections between human actions and the level of biological diversity found within a habitat and/or ecosystem, this year Adani Foundation launch project "Sanrakshan" in coordination with GUIDE and Sahjeevan.</p> <p>Since, 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain</p>

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			possibility of salinity ingress due to APSEZ development is not envisaged. Mundra and Anjar blocks fall under fresh water to medium salinity zones. It can be observed that little variation was observed in the ground water salinity levels from year 2013 to 2016 across the Mundra and Anjar blocks. This aspect confirms				<p>in current year 1.11 mtr ground water table increased as per increased in coastal belt of Mundra as per Government Figures.</p> <p><u>WORK COMPLETED:</u></p> <p>Water Conservation Projects completed during last Compliance period:</p> <p>Water Conservation Projects completed during FY 2024-25 Compliance period:</p> <ul style="list-style-type: none"> ❖ Adani Foundation has undertaken significant water conservation initiatives to address water scarcity and improve water availability in rural areas. ❖ Through the creation of 737 various water structures, the project has increased water capacity by 5,400,735 cubic meters (CUM) and benefited 64,515 people. • Check Dam New/Renovation: <ul style="list-style-type: none"> ○ Structures: 29 ○ Water Capacity Increase: 1,072,332 CUM ○ Beneficiaries: 30,870 ○ Impact: Enhances water storage and irrigation. • Rainwater Harvesting Structures (RRWHS): <ul style="list-style-type: none"> ○ Structures: 330 ○ Water Capacity Increase: 3,300,000 CUM ○ Beneficiaries: 1,650 ○ Impact: Maximizes rainwater capture and usage. Rs. 10950 yearly saved/house • Pond Deepening: <ul style="list-style-type: none"> ○ Structures: 135

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
			that the overall salinity ingress from the shore into the land due to existing APSEZ facilities and power plant outfalls are less significant.				<ul style="list-style-type: none"> ○ Water Capacity Increase: 1,028,403 CUM ○ Beneficiaries: 18,350 ○ Impact: Improves water retention and availability. ● Construction of Percolation Wells: <ul style="list-style-type: none"> ○ Structures: 26 ○ Ground Water Recharge: Significant ○ Beneficiaries: 3,000 ○ Impact: Boosts groundwater levels and availability. ○ Bore/Well Recharge ○ Structures: 209 ○ Ground Water Recharge: Significant ○ Beneficiaries: 1,045 ○ Impact: Enhances groundwater recharge and sustainability. ● Construction of New Wells: <ul style="list-style-type: none"> ○ Structures: 8 ○ Purpose: Drinking Water ○ Beneficiaries: 9,600 ○ Impact: Provides reliable drinking water sources <p>Earlier Completed Activities/Projects:</p> <ul style="list-style-type: none"> ● Large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) and Augmentation of 3 check dams. ● Ground recharge activities (pond deepening work for 61 ponds) individually and 26 ponds under Sujlam Suflam Jal Abhiyan were built leading to a significant increase in water table and higher returns to the farmers. ● New Pond Deepening Under Ajadi ka Amrut Mahotsav done in Goyarsama village Approx Deepening Capacity is 12000 Cum.

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							<ul style="list-style-type: none"> • Roof Top Rainwater Harvesting 145 Nos. (40 Nos. current FY 2022-23) which has 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family. • Recharge Borewell 208 Nos (19 Nos. current FY 2022-23) which is best ever option to direct recharge the soil. • Drip Irrigation approx. 1505 Farmers benefitted in coordination with Gujrat Green Revolution Company till date. • Bund construction on way of Nagmati River could save more than 575 MCFT water quantity which recharged in ground due to which borewell depth decreased by 50-100 Ft in Zarpara, Bhujpur and Navinal Vadi Vistar. • Pond Pipeline work at Prasla Vistar Zarpara which increase recharge capacity more than 25% in 100 hector area. • Check dam gate valve construction at Bhujpur which controlled more than 350 MCFT water to go into sea and get recharged current year. <p>With the objective of to preserve the rainwater to reduce the impact of salinity and recharge the ground water (the main source of water) to facilitate the Agricultural activities as well as for drinking water.</p> <p>Narmada Water Resources, Water Supply & Kalpsar Dept., (WRD)1 has been implementing various salinity</p>

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							ingress prevention projects. Under Sardar Sarovar canal project, Govt. of Gujarat has proposed to implement about 8200 Km stretch of water canal and the project is at various stages of implementation. Under this project about 112,000 ha of land in about 180 villages will be benefitted with irrigation needs. This will significantly reduce the pressure on the ground water resources in the region.																														
				While the individual industries in the study area will continue to undertake ground water quality monitoring as per the environmental clearances issued for the respective projects, a regional level ground water conservation	All Concerned Stakeholders, District Administration and CGWB*	Continual Process	<p>APSEZ (9 Locations – half yearly) & Adani Power Ltd. (5 Locations – quarterly) is carrying out ground water sampling and reports of the same are being submitted to the regulatory authorities on regular basis.</p> <p>The summary of APSEZ ground water quality monitoring for last six months (Oct'24 to Mar'25) are as below.</p> <p>Nos. of Location: 09</p> <table><tr><th>Parameters</th><th>Unit</th><th>Min</th><th>Max</th><th>Average</th></tr><tr><td>pH @ 25 ° C</td><td>--</td><td>7.13</td><td>8.41</td><td>7.83</td></tr><tr><td>Salinity</td><td>ppt</td><td>0.90</td><td>17.64</td><td>3.98</td></tr><tr><td>Oil & Grease</td><td>mg/L</td><td>BDL(MDL:2.0)</td><td>BDL(MDL:2.0)</td><td>BDL(MDL:2.0)</td></tr><tr><td>Hydrocarbon</td><td>mg/L</td><td>Not Detected</td><td>Not Detected</td><td>Not Detected</td></tr><tr><td>Lead as Pb</td><td>mg/L</td><td>0.01</td><td>0.02</td><td>0.02</td></tr></table>	Parameters	Unit	Min	Max	Average	pH @ 25 ° C	--	7.13	8.41	7.83	Salinity	ppt	0.90	17.64	3.98	Oil & Grease	mg/L	BDL(MDL:2.0)	BDL(MDL:2.0)	BDL(MDL:2.0)	Hydrocarbon	mg/L	Not Detected	Not Detected	Not Detected	Lead as Pb	mg/L	0.01	0.02	0.02
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				action committee can be formed under the guidance of state ground water board and district Administration.			<table><tr><td>Arsenic as As</td><td>mg/L</td><td>BDL(MDL:0.01)</td><td>BDL(MDL:0.01)</td><td>BDL(MDL:0.01)</td></tr><tr><td>Nickel as Ni</td><td>mg/L</td><td>0.09</td><td>0.15</td><td>0.10</td></tr><tr><td>Total Chromium as Cr</td><td>mg/L</td><td>Not Detected</td><td>Not Detected</td><td>Not Detected</td></tr><tr><td>Cadmium as Cd</td><td>mg/L</td><td>0.03</td><td>0.88</td><td>0.15</td></tr><tr><td>Mercury as Hg</td><td>mg/L</td><td>BDL(MDL:0.001)</td><td>BDL(MDL:0.001)</td><td>BDL(MDL:0.001)</td></tr><tr><td>Zinc as Zn</td><td>mg/L</td><td>0.06</td><td>0.11</td><td>0.09</td></tr><tr><td>Copper as Cu</td><td>mg/L</td><td>0.08</td><td>0.11</td><td>0.09</td></tr><tr><td>Iron as Fe</td><td>mg/L</td><td>0.12</td><td>0.61</td><td>0.26</td></tr><tr><td>Insecticides/ Pesticides</td><td>µg/L</td><td>Absent</td><td>Absent</td><td>Absent</td></tr><tr><td>Depth of Water Level from Ground Level</td><td>meter</td><td>1.95</td><td>2.25</td><td>2.11</td></tr></table>	Arsenic as As	mg/L	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	Nickel as Ni	mg/L	0.09	0.15	0.10	Total Chromium as Cr	mg/L	Not Detected	Not Detected	Not Detected	Cadmium as Cd	mg/L	0.03	0.88	0.15	Mercury as Hg	mg/L	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL(MDL:0.001)	Zinc as Zn	mg/L	0.06	0.11	0.09	Copper as Cu	mg/L	0.08	0.11	0.09	Iron as Fe	mg/L	0.12	0.61	0.26	Insecticides/ Pesticides	µg/L	Absent	Absent	Absent	Depth of Water Level from Ground Level	meter	1.95	2.25	2.11	<p>BDL – Below Detection Limit MDL – Minimum Detection Limit</p> <p>Approx. INR 17.27 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2024-25, which also includes ambient air quality monitoring for overall APSEZ, Mundra.</p> <p>The freshwater requirement of all the industries within SEZ is being satisfied through APSEZ. All the industries are encouraged to monitor ground water quality as per the permissions granted by competent authorities.</p>				
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							<p>As mentioned above, presently, APSEZ has formed Internal Environment Monitoring Committee, involving Officials of APSEZ, Adani Power Limited and other member units, having role and responsibilities as defined above.</p> <p>APSEZ will co-operate and comply with the directions from concerned regulatory authorities for ground water management.</p>
8	Waste Management						
8.1	Solid waste will be generated from industrial activities of APSEZ and other permitted facilities in the study area including Mundra town. These wastes would contain	Level-2	APSEZ has been adopting Zero waste Initiatives and the entire waste generated from existing operations is segregated and disposed to recycling vendors, thereby APSEZ has achieved zero landfill	APSEZ will continue to adopt Zero Waste Initiative and wastes will be segregated at source and disposed to various recycling vendors, co-processing in cement plants. This initiative helps not only to reduce the waste to landfill significantly, but also to recycle	APSEZ	Continual Process	<p>Presently APSEZ has implemented Zero waste Initiatives as per 5R (Reduce, Reuse, Recycle, Recover & Reprocess) principles of waste management. At present, APSEZ has developed material recovery facility for 6.0 TPD capacities. A well-established system for segregation of dry & wet waste is in place. All wet waste (Organic waste) is being segregated & utilized for compost manufacturing and/or biogas generation for cooking purpose. The compost is further used by in house horticulture team for greenbelt development. Whereas dry recyclable waste is being sorted in various categories. Presently manual sorting is being done for sorting of different types of solid waste. Segregated recyclable materials such as Paper, Plastic, Cardboard, PET Bottles, Glass etc. are then sent to respective recycling units, whereas remaining non-recyclable waste is bailed and sent to cement plants for Co-processing as RDF (Refused Derived Fuel). The</p>

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	recyclable material, construction debris, organic waste, inert material and e-waste etc. In the absence of any organized source segregation programs and material recycling strategies and infrastructure facilities, these wastes will enter into environment and would pose long term health		status as on date.	the materials there by avoiding ecological impacts.			<p>same practice will be continued in future also. APSEZ has also been recognized for Zero Waste to Landfill certification from reputed organization.</p> <p>APSEZ, Mundra is certified for Zero Waste to Landfill management system (Certificate No.: CII/ZWL/2025/001) by Confederation of Indian Industry (CII). (valid up to 22.12.2027). The copy of certificate is attached as Annexure – 9.</p> <p>APSEZ is being done proper solid waste management in his operational area with 5R principle as per Waste Management Plan.</p>

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	impacts.						Industries located within the SEZ area are also complying with the waste management rules stipulated by statutory authorities and same is also being confirmed by APSEZ as well SPCB on regular basis.
8.2	Considering an average solid waste generation of 0.25 Kg/person/day, the estimated solid waste from facilities within APSEZ will be in the order of 100 TPD (36,500 TPA).	Level-2	APSEZ has made a provision for central waste management facilities within the existing site based on the future needs. As part of the Zero Waste Initiatives, no landfill facilities will be installed at APSEZ.	The existing waste segregation and material recycling facilities will be augmented to dispose safely the wastes generated from APSEZ areas. Solid Waste Management Program shall be adopted and implemented as per Municipal Solid Waste Management Rules 2016 and Construction Waste Management Rules 2016	APSEZ	Continual Process	
8.3	About 35 TPD (13,000	Level-2	As per the MSW Rules	Solid Waste Management Program shall be	All Industries	Continual	

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	TPA) of solid waste would be generated from the proposed industrial areas located outside the APSEZ area.		2016 all the industrial facilities and SEZs are required to adopt waste segregation facilities at the respective properties and non-recyclable waste shall be disposed to landfill sites.	adopted and implemented as per Municipal Solid Waste Management Rules 2016 and Construction Waste Management Rules 2016		Process	
9	Ecological aspects (terrestrial and marine)						
9.	About 1576 ha of shrub forest land contiguous	Level -1	It is noted that the designated forest land is free from any native	APSEZ has approached concerned authorities for diversion of designated forest land. Suitable	APSEZ/State Forest	Long Term	<p>Stage – 1 Forest clearance granted for diversion of 1576.81 Ha Forest land. Compliance of stage-1 forest clearance is process. After getting EC & CRZ Clearance, Stage-2 Forest clearance will be obtained.</p> <p>APSEZ has applied for getting EC & CRZ clearance for SEZ / Industrial Park in 1576.81 Ha Forest land.</p>

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1	to APSEZ area is applied for land diversion for various developmental activities. This might have certain level of changes in the biodiversity in the study area.		vegetation and comprises of Prosopis juliflora. It is also noted that no endangered species are present at the shrub forests that are applied for land diversion. It is also noted that no forest produce is reported from this designated forest land parcel due to lack of economic importance	compensatory afforestation plan shall be adopted based on the recommendations and directions of the concerned authorities. Due to adoption of compensatory afforestation program through a scientific manner, the overall ecological footprint in the district will be increased. Due to plantation of native tree species as part of greenbelt development, the overall biodiversity of the region will increase	Department*		ToR accorded by MoEF&CC on 30.11.2021 and draft EIA is being carried out through NABET accredited consultant. Recently, Public Hearing (PH) has been conducted by RO-GPCB, Gandhidham dated 27.03.2025. PH proceeding submitted to MoEF&CC, Delhi on 16.04.2025.

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			of plant species reported in the shrub forest. It is also noted that no tribal lands are located in the designated forest land parcel. Hence there will not be any change in biodiversity due to the proposed diversion.	considerably when the project is fully developed.			
9.2	Mangrove conservation areas are located	Level -1	No development activities will be undertaken within	Mangrove footprint and health status	APSEZ	Continual Process	As per study conducted by NCSCM in 2017, mangrove cover in and around APSEZ, Mundra has increased from 2094 Ha to 2340 ha (as compared between 2011 to 2017). The analysis has shown an overall growth of 246 ha. The cost for said study was INR 3.15 Cr.

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	adjacent to the APSEZ area. Accidental discharges of industrial effluents into the marine environment would pose certain ecological risk.		mangrove conservation areas. APSEZ has taken up large scale mangrove afforestation activities in an area of more than 2800 ha at various locations across the coast of Gujarat state in consultation with various organizations. The Adani Foundation introduced 'Mangrove Nursery Development	shall be monitored annually			<p>1. NCSCM (MoEF&CC promoted Government Agency) study on comprehensive and integrated plan for preservation and conservation of mangroves and associated creeks in and around APSEZ in year 2016-17. The cost of said study was 3.15 Cr, which was incurred by APSEZ.</p> <p>As a part of mangrove conservation plan, APSEZ has done following activities.</p> <ol style="list-style-type: none"> Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island through NCSCM, Chennai. The cost of the said study was INR 23.56 Lacs incurred by APSEZ. Tidal observation in creeks in and around APSEZ – The cost of the said activity was INR 1.0 Lacs incurred by APSEZ. Algal & Prosopis removal from Mangrove area - The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure – 1. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 410.48 Lacs during FY 2024-25, which was incurred by APSEZ. This activity is being done on continuous basis as a part of CSR activity.

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			t and Plantation' scheme in the area as an alternative income generating activity for the people of the region.				<div><p>Summary of Conservation of mangroves:</p><table><tr><th rowspan="2">Mangrove mapping Year</th><th rowspan="2">Monitoring Agency</th><th rowspan="2">Mangrove cover total Area (Ha.)</th><th colspan="2">Mangrove cover area Increased</th></tr><tr><th>Hac.</th><th>%</th></tr><tr><td>2011</td><td rowspan="2">NCSCM</td><td>2094</td><td>-</td><td>-</td></tr><tr><td>2011 to 2016-17</td><td>2340</td><td>246</td><td>11.75%</td></tr><tr><td>2017 to 2019 till March</td><td>NCSCM</td><td>2596</td><td>256</td><td>10.94%</td></tr><tr><td>2019 to 2021 till March</td><td>GUIDE</td><td>2723</td><td>127</td><td>4.89%</td></tr><tr><td>Total</td><td></td><td>2723</td><td>629</td><td>--</td></tr></table></div> <p>Hence, overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%).</p> <p>As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.</p>	Mangrove mapping Year	Monitoring Agency	Mangrove cover total Area (Ha.)	Mangrove cover area Increased		Hac.	%	2011	NCSCM	2094	-	-	2011 to 2016-17	2340	246	11.75%	2017 to 2019 till March	NCSCM	2596	256	10.94%	2019 to 2021 till March	GUIDE	2723	127	4.89%	Total		2723	629	--
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							Sr. No.	Recommendations	Compliance
							1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none"> APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island. As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.94%. This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense

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									<p>mangroves and also conversion of scattered to sparse which also shows that the growth of mangroves in a progressive direction.</p> <ul style="list-style-type: none"> Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019. The cost of the said study was INR 23.56 Lacs incurred by APSEZ. According to GUIDE Mangrove monitoring study report November 2023 (the report was submitted during the last compliance report submission Apr'23 to Sep'23)), the distribution of mangroves in Kotadi, Baradi mata, Navinal, Bocha and Khari creeks as well as in the Bocha island was studied using LISS IV satellite images for the duration of March 2019 to March 2021. The mangrove cover in the creeks in and around APSEZ showed a positive trend from March 2019 to March 2021, with an overall

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										<p>increase of 52.79 ha (1.9%) compared to the cover during the year 2019. The total mangrove cover during 2019 was 2670 ha which has increased to 2723 ha during the year 2021.</p> <ul style="list-style-type: none">Hence, overall increase in mangrove cover area in creek system in and around APSEZ from 2011 (2094 Ha) to 2021 (2723 Ha) is 629 Ha (30%).The cost of the said study was INR 23.60 Lacs incurred by APSEZ. <p>Summary of Mangrove mapping and monitoring (from 2011 to 2021):</p> <table><tr><th rowspan="2">Mangrove mapping Year</th><th rowspan="2">Mangrove cover total Area (Ha.)</th><th colspan="2">Mangrove cover area Increased</th></tr><tr><th>Hac.</th><th>%</th></tr><tr><td>2011</td><td>2094</td><td>-</td><td>-</td></tr></table>	Mangrove mapping Year	Mangrove cover total Area (Ha.)	Mangrove cover area Increased		Hac.	%	2011	2094	-	-
Mangrove mapping Year	Mangrove cover total Area (Ha.)	Mangrove cover area Increased																		
		Hac.	%																	
2011	2094	-	-																	

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									2011 to 2016-17	2340	246	11.75%
									2017 to 2019 till March	2596	256	10.94%
									2019 to 2021 till March	2723	127	4.89
									Total	2723	629	--
							2.	Tidal observation in creeks in and around APSEZ	• APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal, Bocha and Khari creeks under the guidance of NCSCM. • The observed tidal ranges indicate that the creeks experience normal tidal ranges, adequate for the growth of mangroves. • The cost of the said activity was INR 1.0 Lacs.			
							3.	Removal of Algal and Prosopis growth from	• Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in some of the mangrove areas,			

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								mangrove areas	<p>which has been removed manually.</p> <ul style="list-style-type: none"> The cost of the said activity was Rs. 150000 during FY 2024-25. The algal removal report is attached as Annexure - 1.
							4.	Awareness of mangroves importance in surrounding communities	<ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done awareness camps/activities created in the community regarding importance of mangroves. Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 15005 Cattle and hence enhancing cattle productivity. Dry Fodder 15,74,250 Kg Green – 51,66,805 Kg. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 410.48 Lacs during FY 2024-25, which was incurred by APSEZ.

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								<ul style="list-style-type: none"> • Grass Land development: 213 acres of gauchar land has been cleaned and allocated for Grass land development with strong Community Contribution and Mobilization. • Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no any unauthorized persons allowed within coastal as well as mangrove areas. • APSEZ has celebrated the International Day for the Conservation of the Mangrove Ecosystem on 24th to 26th July 2024 to raise awareness of the importance of mangrove ecosystems as "a unique, special and vulnerable ecosystem". The report for the same was submitted during the compliance report submission for the period Apr'24 to Sep'24. • Refer CSR report attached as Annexure - 2.
To comply with the GCZMA recommendations regarding mangrove monitoring at every 2 years,								

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							<p>presently APSEZ has awarded the work order to NCSCM, Chennai vide order no. 4802055905, dated 24/09/2024 with cost 45.87 Lacs for mangrove mapping in and around APSEZ March 2021 to March 2023.</p> <p>NCSCM has conducted ground truthing during 5th to 7th Mar'25 & 22nd to 27th Apr'25 in and around our APSEZ area for mangrove mapping & study work has been completed. Final Mangrove mapping report is awaited from NCSCM.</p>
9.3	Outfall from the thermal power plants desalination and CETP would pose certain level of impact on the marine environment.	Level-1	A detailed marine hydro-dynamic and dispersion modelling of the study area indicates that the background temperature and salinity at mangrove conservation area will not increase	All approved marine outfalls shall be monitored for salinity, temperature and other designated parameters as per consent to establish issued by GPCB. Existing marine environmental monitoring program shall be continued.	APSEZ and Concerned Industry	Continual Process	<p>Presently marine monitoring is being carried out by the Adani power plant at the marine outfall locations and reports are being submitted to the concerned authorities on regular basis.</p> <p>APSEZ is carrying out Marine monitoring once in a month at 9 locations in deep sea by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. The analysis reports of the same are being submitted to the concerned authorities on regular basis.</p> <p>Adani power plant is also doing marine water quality at 5 locations (2 locations at outfall location) in deep sea by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment & Research Labs Pvt. Ltd. The analysis reports of the same are being submitted to the concerned authorities on regular basis. The summary of marine water quality is shown above.</p>

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			from the prevailing background levels as the outfalls are located far away. APSEZ and respective power plants in the study area have been monitoring the marine water quality status on monthly basis for the stipulated environmental and ecological parameters.				<p>The comparison of marine water results between CIA and current monitoring data are as below.</p> <table><tr><th rowspan="2">Parameter</th><th rowspan="2">Unit</th><th colspan="2">Max</th><th colspan="2">Min</th></tr><tr><th>CIA</th><th>Present</th><th>CIA</th><th>Present</th></tr><tr><td>Temp.</td><td>°C</td><td>36.4</td><td>25.4</td><td>35.2</td><td>24.4</td></tr><tr><td>Salinity</td><td>ppt</td><td>29.5</td><td>36.5</td><td>29</td><td>35.8</td></tr></table> <p>As per above results, it can be seen that there is no deviation in the concentration of parameters and thus indicates that impacts are insignificant.</p>	Parameter	Unit	Max		Min		CIA	Present	CIA	Present	Temp.	°C	36.4	25.4	35.2	24.4	Salinity	ppt	29.5	36.5	29	35.8
Parameter	Unit	Max		Min																									
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9.4	Terrestrial Ecology:	Level-1	APSEZ has developed greenbelt in an area of	The compensatory afforestation	APSEZ	Continual Process	APSEZ has developed its own “Dept. of Horticulture” which is taking measures/ steps for terrestrial plantation/greenbelt development. APSEZ, Individual SEZ Industries and Adani Power Plant has developed																						

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	Study area doesn't have any notified national parks or ecological sanctuaries. Since the area falls under dry deciduous shrubs. Due to scanty rains in the area, the overall natural green-cover/vegetation in the area is very small.		550ha as against the committed area of 430ha. A dedicated nursery is set up to promote plantation. APSEZ have undertaken a plantation with about 9.6 Lakh fully grown trees.	area to be monitored annually to check the survival rate of the plantation.			approx. 700 Ha. area as greenbelt within the APSEZ area including SEZ industries & Adani Power Plant. Dedicated horticulture department is maintaining and monitoring the terrestrial green belt development on regular basis to check the survival rate of plantation. Budget for Horticulture Department for the FY 2024-25 is to the tune of INR 831 lakh. Out of which, Approx. INR 570 lakh has spent during the year FY 2024-25.
10	Socio-economic aspects						
10.1	Population growth in the Mundra region was	Level-1	Dedicated townships are developed within APSEZ	The existing townships will be expanded to accommodate	APSEZ	As and When Required	APSEZ has developed two townships (Shantivan and Samudra) accommodating 4677 households and associated infrastructure facilities. Accommodation is made available for all interested employees working

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	reported to be in the order of 85% during the past decade (2001-2011). Further expansion of the urban area could be possible due to induced economic growth in the region. Increase in population will have a additional need for public infrastructure in the region.		area with necessary community infrastructures such as hospital, school, recreational facilities, sewage treatment and waste collection facilities. Adani Foundation has been undertaking various CSR programs under the principal themes such as education, community health, sustainable livelihood and rural infrastructure.	about 4lakh people when the project activity is fully developed.			<p>within Adani group & SEZ industries. Out of which 93.65 % Occupancies are accommodated within the townships and rest are available for employees working within APSEZ.</p> <p>At present 61 nos. of industries (processing & non-processing) are operating within the SEZ. Township facilities are also made by SEZ industries within Mundra town for their employees having basic infrastructure facilities and requirements. Most of the employees working in SEZ industries are residing in Mundra township having all basic requirements and associated facilities.</p> <p>The existing social infrastructure facilities are adequate to accommodate the people considering present APSEZ development. The existing townships with associated facilities will be expanded as per requirement. Other infrastructure facilities have been developed for people are as follows.</p> <ul style="list-style-type: none"> • Multi-Specialty Hospital • School • Commercial complex • Religious place <p>APSEZ is actively working with local community (including fishermen community) around the project area and provides required support for their livelihood and other concerns through the CSR arm – Adani</p>

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			About Rs. 97 Cr has been spent on various CSR activities in the Mundra region since 2010. Similar community development programs (based on need based assessment) will be continued in future as well with allocation of appropriate budget.				<p>Foundation in the main five persuasions is mentioned below.</p> <ul style="list-style-type: none"> • Community Health • Sustainability Livelihood – Fisher Folk • Education • Rural Infrastructures • Skill Development <p>Adani foundation has spent approx. INR 10079.78 lakhs from April – 2018 to March - 2025 for CSR activities which also includes cost of rural infrastructure projects.</p> <p>Major works carried out since April 2018 as a part of CSR activities are as below.</p> <p><u>Infrastructure development activities during FY 2024-25:</u></p> <p>➤ COMMUNITY INFRASTRUCTURE DEVELOPMENT PROJECTS & ITS BENEFICIARIES</p> <ul style="list-style-type: none"> • Renovation of Aanganwadi, Goyarsama Village – 40 beneficiaries • Construction of Pipe Culvert, Old Bandar Fisherman Vasahat - 1200 beneficiaries • Open Shed & Community Hall, Sukhpurvah Mundra – 1200 beneficiaries

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							<ul style="list-style-type: none"> • Open Shed at PTC College, Mundra – 160 beneficiaries • Renovation of High School, Zarapra Village – 550 beneficiaries • Open Shed at Mokha Parking – 2000 beneficiaries • Canal Cleaning & Chamber Renovation, Bhadreswar Village – 120 beneficiaries • Renovation of Approach Road, Shekadiya and Luni – 1200 beneficiaries • R.O. Plant Installation, ITI Mundra & Sanjivni School – 800 beneficiaries • Paver Block Floor Work, Wandi Village – 2000 beneficiaries <p>➤ <u>COMMUNITY INFRASTRUCTURE DEVELOPMENT KEY COMMUNITY INFRASTRUCTURE DEVELOPMENTS:</u></p> <ul style="list-style-type: none"> ○ Educational Facility Renovations ○ High School, Zarapra: 550 students benefited. ○ Aanganwadi, Goyarsama: 40 students benefited. ○ High School, Desalpar: 550 students benefited. ○ Kasturba Girls Hostel, Desalpar: 150 girls benefited. ○ Infrastructure Improvements: ○ Pipe Culvert, Old Bandar: 1200 people benefited.

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							<ul style="list-style-type: none"> Box Culvert & CC Road, Zarpara: 12000 people benefited. Approach Road, Shekadiya & Luni: 1200 people benefited. Approach Road, Vadi Vistar: 800 farmers benefited. Water Management Projects: <ul style="list-style-type: none"> Percolation Well, Mota Bhadiya: 80 farmers benefited. Percolation Bore Cleaning, GPVC Villages: 3150 farmers benefited. Pond Deepening & Road Cleaning, GPVC Villages: 6KM cleaned. Sanitation and Health Initiatives: <ul style="list-style-type: none"> R.O. Plant, ITI Mundra & Sanjivni School: 800 students benefited. Toilet Block for Disabled, GPVC Villages: 5 families benefited. Painting & Office Work, CHC Mundra: 14600 people benefited. <p><u>Last FY 2023-24 infrastructure development activities:</u></p> <ul style="list-style-type: none"> 377 - AC Roof sheet support to Fisherfolk Vasaha 1700+ Benefited. 2 Development of Common Gathering flooring work – 4000+ Benefited. 195 Stall – Vegetable market– 900+ Benefited.

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							<ul style="list-style-type: none"> • Solar Panel System at Mundra – 600+ Benefited. • Maintenance, Fencing & Material Support - 30+ Benefited. Renovation of Shed at Shekranpir Bhopavandh - 2000+ Benefited. • Renovation Check dam and CC road work at Nani Khakhar – 200+ Benefited. • Renovation of High School at Zaarapa – 2200+ Benefited. • Construction of Pipe Culvert – 400+ Benefited. • Construction of chain-link fencing at Mangra village – 300 people benefited. • Gaushala Shed at Zarapara village – 400 cattle benefited. • Renovation of approach road, Zarpara – benefiting 400 villagers. • Renovation of Civil and Electrical Work at ITI, Mundra - 500 students benefited. • Construction of 21 Borewell Recharge in Nagmati River - 150+ farmer benefited. • Check dam Desilting and restoration at Nana Bhadiya – 100+ farmers benefited. • Renovation of Check dam at Pavadiyara village - 300 people benefited. • Renovation of Balwadi at Juna bandar & Luni bandar. • 185 RRWHS construction is ongoing in various villages - will benefit 1300+ residents.

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							<ul style="list-style-type: none"> Supply & installation of Solar panel (3.25 KV) at CGP, Mundra – benefiting 1200 people. Development of Model Farm in Zarpara, Siracha & Mangra – Benefiting 300 people. Renovation of approach road at various fisherfolk vasahat. <p>Similar community development programs (based on need based assessment) will be continued in future as well with allocation of appropriate budget.</p>
10.2	The overall sex ratio was found to reduce by 28% in the Mundra taluk (study area) during the period 2001 - 2011. This could be attributed to increase in influx of working men in the region due to rapid economic development.	Level-2	Adani foundation is taking up several girl child education programs as part of CSR activities to create awareness about girl child protection.	Suitable regional level awareness programs on the girl child protection and encouragement programs in line with state and national policies shall be adopted under Corporate Social Responsibility programs in association with district authorities.	APSEZ, Other development projects and District Administration*	Long Term	<p>Major works carried out since April 2018 as a part of CSR activities to create awareness about girl child protection are as below.</p> <ul style="list-style-type: none"> The Adani Foundation provided scholarship support to motivation and encouragement of fishermen boys and girls for higher education under this program. We extend 100% fee support to female candidates and 80% to male candidates." <p>Student Benefitted Under Uthhan Project during the FY 2024-25:</p> <ul style="list-style-type: none"> ❖ Enriched reading corners to develop reading habits Library books were issued twice a month, and a dedicated reading corner was established in each school to enhance accessibility.

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	Similar trend might continue in future due to induced economic growth in the region.						<p>Additionally, over 1,000 books and various magazines were provided</p> <ul style="list-style-type: none"> 2,09,640 Books issued between students <p>❖ Progressive Students: Strengthening foundational literacy, numeracy and skills</p> <ul style="list-style-type: none"> A total of 6,540 students from Class 3 to 7 were assessed in reading, writing, and math skills, with 2399 students identified as needing additional support. Targeted interventions helped 1,520 students successfully integrate into regular academic programs <p>❖ Utthan's Impact: A Data-Driven Overview of Utthan Initiatives</p> <ul style="list-style-type: none"> Distribution of sports kits, music kits, TLM kits, and stationery kits. to 12K+ Students Value education is imparted through films that teach important life lessons and moral values to 1K+ Students Provide students to engage in fun and educational activities, fostering their holistic development. 8K+ students. Children toy foundation kit to 5k+ Students Building as Learning Aid (7K+ Students): BALA transforming school spaces into vibrant

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							<p>learning environments through creative artwork.</p> <ul style="list-style-type: none"> • Environmental Education Project: 80 Schools, 12000+ Students • Adani Competitive Coaching Center: 27 School, 5000+ Students • Oasis Reading workshop: 700+ Workshop. 20000+ Students • Capacity building of teachers: 150 • Teachers, 16000+ Hours <p>❖ Key finding of third-party assessment:</p> <ul style="list-style-type: none"> • The Utthan program assessment employed a quasi-experimental, mixed-methods design with pre- post comparisons and stratified random and purposive sampling to evaluate student outcomes, program impact, and sustainability. • The sample included 288 intervention students, 96 non- intervention students, 53 Sahayak, 30 head teachers, 30 SMC members, 30 parents, and community members, with data collected through FGDs, SSIs, and KIs. Univariate and bivariate analyses were conducted, and field notes were transcribed to identify themes. These themes were aligned with objectives and compared to past data to uncover discrepancies and analyze their causes.

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							<ul style="list-style-type: none"> More than 90% of the students have achieved proficiency in reading, writing and numeracy skills in Utthan Schools. Utthan sahayak as catalyst: The introduction of Saha yaks (teacher assistants) ensures personalized student support and bridges gaps between schools and families, fostering greater parental involvement. Sahayak mentioned improvements in their classroom management practices, strong parent and community management and understanding of student child development 97% of students reported improved confidence in leadership and communication and 97% of students in Utthan schools have mentioned interest in attending school. Teachers' capacity building: Comprehensive teacher training programs enhance instructional quality, equipping educators with tools to deliver FLN-focused curriculum effectively. Community engagement through home visits and mothers' meetings, the project strengthens parental accountability and participation, directly influencing students' motivation and performance. <p>❖ Holistic Development & Achievements</p> <ul style="list-style-type: none"> Academic and Institutional Developments: Board exam results showcased excellent

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							<p>student performance, with targeted remedial sessions introduced for continuous improvement.</p> <ul style="list-style-type: none"> • The Housekeeping Training Program (May 28) emphasized cleanliness and hygiene maintenance among staff. • Teacher Development and Training: Teacher Capacity Building Program (June 6) enhanced instructional strategies and curriculum planning. • NABET Accreditation Training (June 12) ensured compliance with national educational standards. • Technological Advancements: Inauguration of a New Computer Lab (Sept 27) enhanced digital learning opportunities. • AI and Google Gemini Training (Nov 16) prepared educators for modern teaching methodologies. • Cultural and Co- Curricular Activities: World Book Day (April 23) promoted reading culture through storytelling and book exhibitions. • International Yoga Day (June 21) emphasized mindfulness and physical wellness. • Student Achievements: SVS Science Exhibition (Oct 4): AVMB students won first place for their research on screen time and its impact.

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							<ul style="list-style-type: none"> • District-Level Science Fair (Dec 9-10): Students represented Mundra Taluka with innovative projects. • Health and Safety Initiatives: Menstrual Hygiene Awareness Program (June 22) educated girls on personal health and wellness. • School-Wide Health Check-Up (July 8) ensured early detection of health concerns. <p>❖ Project Udaan - Inspiring Minds</p> <ul style="list-style-type: none"> • About Project: Under this project, exposure tours are organized wherein school, college students, faculties, employees from corporates are given a chance to visit the Adani Group facilities. • Total 408 no. of Schools/Colleges/ Institutes participated. • Total 26346 no. of participants participated. <p>About INR 10079.78 lakhs has been spent on various CSR activities in the Mundra region since April 2018 to till March 2025 including cost of community health and education for woman and girl child.</p>
10.4	Due to economic growth leading to rapid	Level-2	Adani hospitals, Mundra is setup by Adani group near Samudra	APSEZ will explore other possibilities to augment the primary and secondary healthcare	APSEZ	Long Term	<p>Adani hospitals (Multi-specialty), Mundra is having 100 bed facility and same is setup by Adani group near Samudra township.</p> <p>Primary health center and community health center are in place within the Mundra taluka.</p>

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	urbanization, which prompts the need for healthcare facilities in the region. For an influx of 6 lakh people from APSEZ operations and additional 3 Lakh from induced growth by the year by 2030 (fully developed scenario), total hospitals facilities with about 540 beds would be required.		township with a goal to provide primary and secondary health care services to Adani group employees and the local populace of Mundra. The existing 100 bed Adani hospital at Mundra has been catering the services ranging from wellness and preventative care.	facilities in future depending on the growth scenario at APSEZ development.			<p>Other than this Adani foundation is doing various activities as part of community health. The details of FY 2024-25 are as below.</p> <ul style="list-style-type: none"> ❖ Mobile Health Care Units and Rural Clinics <ul style="list-style-type: none"> 7 Rural Clinics 5 villages of Mundra & 2 village Mandvi block has benefited by rural clinic service. Total 23799 Patients Benefitted in FY 24-25 (direct & indirect) by Mobile van and rural clinic. Provided 52,063 medical health services. 45602 nos. patients have been supported for operations, OPD, IPD, Medicines and lab-test at Adani Hospital Mundra Pvt. Ltd. ❖ Financial Assistance for Critical Illness <ul style="list-style-type: none"> Understanding the burden of life- threatening diseases on economically weaker families, the Foundation provides financial support for patients suffering from heart, liver, kidney diseases, and cancer. In the current year alone, 45,602 patients from Mundra, Mandvi, and Anjar Blocks have received critical medical assistance at Adani Hospital, Mundra, in collaboration with Adani GK General Hospital, Bhuj.

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							<p>❖ General Health Camp</p> <ul style="list-style-type: none"> It aims to make quality healthcare accessible to underserved communities by providing free consultations and basic medical services. Doctors conducted health check-ups, including blood pressure monitoring, respiratory assessments, and screening for seasonal illnesses. Patients were also provided with necessary medicines on the spot, ensuring timely treatment and care. Such camps play a vital role in promoting health awareness and addressing common health issues in rural areas where access to healthcare is limited. In the current year 1922 patients benefited through General Health Camp <p>❖ Specialty Health Camp</p> <ul style="list-style-type: none"> It is organized to support focused medical care to rural communities through consultations from specialists such as gynecologists, pediatricians, orthopedists, ophthalmologists, and physicians. The primary objective is to address critical health issues among women and children, particularly during pregnancy, to prevent maternal and infant mortality. Additionally, Specialty Health Camps are organized promptly in response to disease outbreaks in villages, ensuring quick medical support and controlling the spread of illnesses.

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							<p>. In the current year 3217 patients benefited through Specialty Health Camp.</p> <p>❖ Eye Vision Care Initiative</p> <ul style="list-style-type: none"> This year, Adani Foundation, in collaboration with Vision Spring, has launched a comprehensive Eye Vision Care program to address uncorrected refractive errors and improve eye health in the community. The initiative focuses on students ("See to Learn"), SHG women ("See to Earn"), and APSEZ drivers ("See to Be Safe"), ensuring better education, livelihood, and road safety. It also promotes "Vision for All" across the community. It is a holistic eye care campaign starting from the process of registration to eyeglass dispensing, and cataract surgery support. In the current year 10,000 patients benefited through Eye Vision Care program. <p>❖ Cataract-Free Mundra Initiative</p> <ul style="list-style-type: none"> To combat vision loss among the elderly, the Cataract-Free Mundra campaign has screened 567 individuals at the village level. Patients identified with cataracts are referred to GK General Hospital, Bhuj, for surgery, followed by post-operative care and follow-ups. This initiative has restored vision for many senior citizens, helping them regain

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							<p>independence and quality of life. In the current year 68 successful cataract operations through Cataract-Free Mundra campaign.</p> <p>❖ Menstrual Hygiene Awareness Camps</p> <ul style="list-style-type: none"> Promoting health and dignity among adolescent girls and women, menstrual hygiene awareness camps are regularly organized in schools and community centers. These sessions focus on educating participants about menstrual health, hygiene practices, and breaking cultural taboos. Sanitary pads are also distributed to encourage proper menstrual care and improve overall health outcomes for women and girls. <p>❖ Medical Services Data from April 2024 to March - 2025:</p> <ul style="list-style-type: none"> Mobile Van – 11066 beneficiaries Rural Clinic – 2500 beneficiary Medical Support & Dialysis – 2733 beneficiary General Health Camp – 1922 beneficiary Specialty Health Camp – 3217 beneficiaries Blood Donation Camp – 2902 beneficiary Cataract Camp – 567 beneficiaries Eye Vision Care – 10000 beneficiaries Driver Health Check Up – 7156 beneficiaries <p>❖ Animal Husbandry:</p>

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							<ul style="list-style-type: none"> Fodder support to 24 Villages, benefiting 36808 cattle, Dry Fodder Support - 15,74,250 Kg & Green Fodder Support - 51,66,805 Kg Under the Preventive Health Care program, the Foundation, in partnership with the Animal Husbandry Department, organizes regular cattle health camps across 24 villages. These camps provide veterinary check-ups, vaccinations, and treatments for common diseases. Life-saving vaccines, such as those for Foot-and-Mouth Disease (FMD) and Clostridial infections, help ensure long-term immunity and healthier livestock. Additionally, medicines and vaccines are supplied by the Foundation. Cattle vaccinated -14,056 Deworming tablet distributed – 1460 Cattle benefited – 15000+ <p>Previously Conducted Community Health Details:</p> <ul style="list-style-type: none"> Total Patients Benefitted FY 23-24: - 23327 (direct & indirect) by Mobile van and rural clinic 2 financially challenged patients has been supported with Dialysis treatment at 124 Times which added day in their Life. Provided 41,546 medical health services and conducted health awareness camps for 763 High school students.

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							<ul style="list-style-type: none"> • Cataract-Free Mundra: The initiative is a dedicated effort to eradicate cataract-related vision impairments specially focused on Senior citizen through Meticulous planning as below. Lives Impacted: - 1131 <ul style="list-style-type: none"> ➤ Comprehensive Eye Screenings at Village level ➤ Cataract Surgeries to GKGH, Bhuj ➤ Post-Operative Care and Follow-up ➤ 5 successful Operation • Health camp: <ul style="list-style-type: none"> • Specialty camps, Eye checkup camps, Blood donation camp, Anti-tobacco awareness camp, TB screening, and other are conducted in core villages as well as in labour colonies. • Specialty health (Gynec, ophthalmic, specialty health camp): - 5795 Patients Benefited. • General health camp: - 1618 Patients benefited. • Blood Donation Camp: 1715 people have donated blood. • Conducted health programs for students, engaging 763 participants, and held sessions on Personal Health & Hygiene Awareness, addressing critical health issues and promoting overall well-being.

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							<ul style="list-style-type: none"> • Women's Health: Provided health services to more than 2610 women benefitted through Menstrual & Mental Health Awareness Drive. • Dialysis Support: During this year, 2 patients were supported for regular dialysis with 124Times which added day in their Life. • Medical Supports: 1007 beneficiary in 35 village. • International year of Millets – 2023: To promote millet culture and raise awareness about its benefits in Mundra, we organized a Millet Competition across nine villages. Over 715 women took part in the competition, while 2200 benefited from awareness sessions. Through this initiative, 300 indigenous millet recipes were showcased, highlighting the potential for sustainable and nutritious dishes in our daily diets. • Ayushman card facilitation: Ayushman card issued to 5584 for 25 village of 686.50 Cr. health insurance. • Preventive health Campaign the Adani Foundation is focusing on providing preventive healthcare to women and adolescent girls, raising awareness of Physical and Mental health issues, promoting healthy behaviors, implementing Menstrual hygiene initiatives and Millet consumption for healthy body. • Sample Survey Report 2023-24

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							<ul style="list-style-type: none"> ○ 55% Never heard about Menstrual hygiene. ○ 60% Are using cloths on regular basis. ○ 36% Had never used sanitary pads. ○ 68% Had no information about UTI. ○ 30% Never used millets in their diet. ○ 60% Never heard about millets or it's benefits. <ul style="list-style-type: none"> • 2222 –Economically Challenged patients have been supported for operation, OPD, IPD, Medicines and lab-test. • For Preventive health care General and multispecialty camps Pediatric camp, General Health camps in 7 villages and Super specialist camp which benefitted more than 4690 patients of Mundra & Mandvi Taluka. • Cattle Health Camp: Adani Foundation and Animal Husbandry department Veterinary Jointly organizing cattle health Awareness and vaccination programs in 24 Villages of our periphery villages with total 18903 cattle benefitted, and 18870 cattle vaccinated. Total 982 cattle owners benefited for Preventive Health Care & Fodder Support Program • Present Hospital facilities are adequate to avail the medical treatment for Mundra region considering present development. Other Occupational Health centres, primary health centres and community health centres are also in place in Mundra to take care the people residing in Mundra. Adani group is also operating high

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							<p>quality health care services to the people of Kutch at G. K. General Hospital, Bhuj having 750 beds facilities on public private partnership (PPP) model, which is 60 km far from Mundra.</p> <p>APSEZ will explore other possibilities to augment the primary and secondary healthcare facilities in future depending on the future development at APSEZ.</p>
10.5	<p>Due to rapid economic development in the region, several employment opportunities can be generated to the local people.</p> <p>When the area is fully developed by the end of 2030, the working population of the Mundra taluk would increase from</p>		<p>APSEZ has been giving preferences to people from Gujarat for providing employment opportunities based on eligibility and skills. In Mundra, special programmes have been conducted by Adani Foundation to enhance the employability of youth from fisherfolk</p>	<p>APSEZ is committed to provide support for fishermen livelihood activities and has submitted a detailed 5 years plan to MoEF&CC with a total budget of Rs.13.5 Cr.</p>	APSEZ	Short Term	<p><u>Fishermen livelihood development activities during FY 2024-25:</u></p> <p>➤ <u>WOMEN EMPOWERMENT:</u></p> <p>❖ Self Help Groups</p> <ul style="list-style-type: none"> 88 Self Help Groups in coordination with National Rural Livelihood Mission. 920+ Members Over Rs.39 Lacs Saving Amount Corpus <p>❖ Job Sourcing - Govt</p> <ul style="list-style-type: none"> 11 Women supported for application and process of Gram Rakshak Dal, Bank Sakhi, Bima Sakhi and Professional Resource Person. Average income Rs.7500 Per Month <p>❖ Making SHG Self Reliant</p> <ul style="list-style-type: none"> 16 SHG are making strides towards self-reliance. Various handicrafts, dry and fresh food making, stitching, tie and die etc.

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	current level of 55,000 to as high as 4,00,000, which will be 45% of the total envisaged population in Mundra Taluk by the end of 2030.		communities. Based on the need assessment results, several livelihood options have been introduced by the Adani Skill Development Centre, Mundra. In these centres, youth can join and get vocational training for a number of technical and non-technical skills. An industrial Training Institute is set up at APSEZ, Mundra, to enhance the skill levels of the local				<ul style="list-style-type: none"> 175+ women - Monthly average income @ Rs.7000 of each member/Month ❖ Social Empowerment <ul style="list-style-type: none"> 4 Livelihood Enhancement Training through RSETI Financial support for business set up Legal rights and domestic violence workshops Family counselling for Job Sourcing ❖ Job Sourcing - Private <ul style="list-style-type: none"> Coordination for Job by Unnati Portal with Adani Group company companies, Britania, B Medical and Emphazer company 758 Women supported till date for job sourcing. Average income Rs.10,800 Per Month ❖ <u>"CHETNA" - INITIATIVE WITH GENDER DIVERSITY</u> <ul style="list-style-type: none"> Adani Foundation, in collaboration with Unnati Portal and Adani Solar, launched an initiative to provide equal opportunities for employment and self-development to women from Kutch. Till Now 614 women from Kutch are successfully employed at Adani Solar, marking a significant step towards their economic empowerment and fostering gender diversity in the workforce.

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			youth to maximum possible extent.				<p>❖ Highlights of the Work done by our SHG:</p> <ul style="list-style-type: none"> • Sathwara'24 - Powering Art, Empowering Artisans: 3 women SHGs from Adani Foundation Mundra participated in the prestigious Sathwara Mela at the Belvedere Club, Ahmedabad, showcasing Mud Art, Bead Art, and Soof Art, along with two artisans specializing in Rabari and Doorri work, achieving an impressive turnover of Rs.1,30,000/-. • New Stitching Centre - Livelihood opportunities for local women: In Vandh Village, by providing advanced stitching and embroidery training, the new stitching center empowers women with skills and employment. Equipped with 11 modern machines, women are producing 5,000 bags, gaining financial independence and professional confidence. • Women empowerment initiative: Adani Foundation is empowering rural women through skill training, exposure visits, and SHG formation, enabling them to achieve financial independence and entrepreneurship. • Skill Training: Stone Dust Art Training Mud Art Training Beauty & wellness Training. 100+ Local women empowered • Exposure Visit: Visit to Welspun Stitching Centre for women to learn about stitching enterprises • New SHG Formation:

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							<ul style="list-style-type: none"> ○ Madhav Saheli" a Food service SHG ○ "Gopinath Saheli" a Tailoring SHG ○ "Suidhaga" a Tailoring SHG <ul style="list-style-type: none"> • CELEBRATED INTERNATIONAL WOMEN'S DAY WITH 1,000 LAKHPATI DIDIS: • On 5th March, Adani Foundation celebrated the strength and resilience of women by marking International Women's Day with 1,000 Lakhpatri Didis. The event highlighted the Foundation's ongoing efforts to empower rural women through meaningful livelihood opportunities. • Over 614 women have been connected with job opportunities at Adani Solar, while 850+ women entrepreneurs received support to grow their businesses. <p>❖ MENSTRUAL HYGIENE AWARENESS:</p> <ul style="list-style-type: none"> • Adani Foundation is dedicated to educating and empowering rural girls and women from marginalized communities about menstrual health. • We aim to break negative social stigmas around menstruation and improve their overall well-being. • 61 Villages covered • 8300+ School girls & women participated till now

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							<p><u>EMPOWERING FISHERFOLK COMMUNITIES THROUGH EDUCATION:</u></p> <p>❖ PERSISTENT EFFORTS FOR FISHERMAN DEVELOPMENT:</p> <ul style="list-style-type: none"> • Educational Kit Support – 686 beneficiaries • Fisherman Shelter Support – 273 beneficiaries • Vehicle transportation Support – 1368 beneficiaries • Cycle Support to high school going students – 111 beneficiaries • Scholarship Support – 648 beneficiaries • Youth Employment – 494 beneficiaries • Linkage with Fisheries Scheme – 195 beneficiaries • Ramatotasav Community Engagement – 3534 beneficiaries • Man-Days mangrove plantation - 56,523 beneficiaries <p>❖ Scholarship Support:</p> <ul style="list-style-type: none"> • To uplift financially challenged communities, we extended scholarships support of Rs. 3,58,765 to 35 students, enabling them to pursue higher secondary and technical education. This support is helping break the

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							<p>cycle of poverty and create a brighter future for these students and their families.</p> <p>❖ Vehicle Transportation Facilities:</p> <ul style="list-style-type: none"> Ensure seamless access to education for 121 school-going children from Modhva, Tragadi, and Zarpara Bandar Fisherfolk Students in reaching the nearest School, eliminating barriers to regular attendance. Additionally, personal cycle support to 5 fisherfolk students. <p>❖ Job opportunity</p> <ul style="list-style-type: none"> Acting as a bridge between industries and fisherfolk youth, the Adani Foundation facilitated job placements for 30 fisherfolk as RTG operators, in the HR department, and as supervisors in APSEZ companies. In the APSEZ area and colony, 45 fisherfolk youth have been offered professional painting roles. To ensure they are skilled for the role, they underwent comprehensive training in partnership with Asian Paints. This initiative has enhanced their livelihoods and provided sustainable employment opportunities. <p>❖ Awareness camp on Menstrual health:</p> <ul style="list-style-type: none"> A menstrual health awareness camp was organized for 200+ women from the fishing communities of Modhva and Tragadi villages. The program focused on educating them about

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							<p>menstrual hygiene, PCOD, and menopause management. It promoted healthy practices, offered guidance on managing related health issues, and distributed sanitary products to support their overall well-being.</p> <p>❖ Potable water Distribution:</p> <ul style="list-style-type: none"> • Providing access of potable Drinking water Facilities to Nine fisherfolk vasahat on Daily bases, either By Water tanker or Linkage with Nearest Gram panchayat. • 5000+ Fisherfolk Population are getting benefit <p>➤ <u>SUSTAINABLE LIVELIHOOD - AGRICULTURE:</u></p> <p>❖ BIOGAS PROJECT</p> <ul style="list-style-type: none"> • In our ongoing efforts to promote sustainable and eco-friendly farming practices, we have successfully registered 863 farmers from five different talukas in the Kutch district. Each registered farmer will receive financial support of ₹ 9,000 for the installation of biogas plants on their farms. This initiative aims to provide farmers with a renewable source of energy, reduce dependency on conventional fuels, and improve overall agricultural productivity. <p>• Benefits of Biogas:</p>

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							<ul style="list-style-type: none"> Renewable Energy Source: Biogas is a sustainable and renewable energy source that reduces dependence on fossil fuels. Cost Savings: Farmers save on fuel expenses as biogas can be used for cooking, heating, and electricity generation. Waste Management: Biogas plants efficiently manage agricultural waste by converting it into useful energy. Environmental Impact: Biogas reduces greenhouse gas emissions, contributing to climate change mitigation. Soil Health: The by-product, known as digestate, is a nutrient-rich organic fertilizer that enhances soil fertility. Improved Livelihoods: Biogas provides farmers with additional income and energy security, improving their overall quality of life. <ul style="list-style-type: none"> Biogas benefit Key Highlights <ul style="list-style-type: none"> Total Farmer Registered - 863 Farmers Financial Support for each farmer - Rs. 9000 Geographical coverage in Kutch - 6 Talukas <p>❖ DRIP IRRIGATION - ENHANCING LIVELIHOODS IN KUTCH:</p> <ul style="list-style-type: none"> The Drip Irrigation Initiative by Adani Foundation promotes efficient water use in farming by providing financial support to

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							<p>farmers for installing drip systems. It helps conserve water, improve crop yield, and encourage sustainable agriculture in Kutch.</p> <ul style="list-style-type: none"> In 2024-25, Adani Foundation supported sustainable water management in Kutch by Promoting drip irrigation across 490 villages in Abdasa, Lakhpur, Mandvi, Mundra, and Nakhtrana talukas. Covering a total area of 2,074,53 hectares, the initiative benefited 1,041 farmers. This effort enhanced irrigation efficiency, boosted agricultural productivity, and contributed to water conservation and eco-friendly farming practices in the region. <p>❖ Natural Farming</p> <ul style="list-style-type: none"> As part of our commitment to sustainable agriculture, we have focused on promoting natural farming practices to conserve soil health and enhance environmental sustainability. Till Date 2,275 Farmers trained in Natural Farming 226 Farmers successfully transformed to 100% Natural Farming 857 Farmers linked with GOG to support cattle welfare scheme <p>❖ Green Carnival</p>

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							<ul style="list-style-type: none"> Organized an annual Green Carnival, providing farmers with a dedicated marketplace to sell their organic produce directly to consumers. This event is hosted by our employee company and attracts many buyers interested in organic products. <p>❖ Sales Achievements</p> <ul style="list-style-type: none"> This year, the Green Carnival was a resounding success, with farmers selling a total of 16,241 kg of organically grown vegetables and fruits at the event. Achieved Rs. 6,49,640+ Total revenue. <p>APSEZ is carrying out various initiatives specific to the Fisherfolk community which includes:</p> <ul style="list-style-type: none"> Vidya Deep Yojana Vidya Sahay Yojana – Scholarship Support Adani Vidya Mandir Fisherman Approach in SEZ Machhimar Arogya Yojana Machhimar Kaushalya Vardhan Yojana Machhimar Sadhan Sahay Yojana Machhimar Awas Yojana Machhimar Shudhh Jal Yojana Sughad Yojana Machhimar Akshay kiran Yojana Machhimar Suraksha Yojana Machhimar Ajivika Uparjan Yojana Bandar Svachhata Yojana

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							<p>These initiatives are planned for the period 2016 – 2021 with a committed expense of INR 13.5 Cr as submitted earlier in detail in the report namely "Silent Transformation of Fisher folk at Mundra",</p> <p>Till, FY 2024-25 approx. 15.79 Cr. INR, has already been spent in support for fishermen livelihood activities. Further, details regarding the expenditure incurred against the commitment are attached as Annexure – 18.</p>

Annexure – 20

PHOTOGRAPHS OF INSTALLED RECD ON DG SETS

Adani House (DG Room) – 750 KVA



PUB Custom House – 500 KVA



WTP -CETP: 380 KVA



NORTH GATE SITE - 320 KVA



AIRPORT - 125 KVA & 140 KVA



Annexure – 21



GUJARAT POLLUTION CONTROL BOARD

Regional Office : Kutch - East

Room No. 215-216-217, Deendayal Port Trust Administrative Building, Sector 8, Gandhidham - 370205. Kutch-Gujarat
Ph. No. 02836-230828. E-mail : ro-gpcb-kute@gujarat.gov.in • xgn site : gpcb.xgn.gujarat.gov.in

By R.P.A.D

Consent to Establish (NOC)

CTE NO: CTE-77914 Appl. Type: CTE-Fresh

NO:GPCB/KUT/CTE-/ID-111809/

To,
M/s. Mundra Petrochem Limited
Near Adani Solar,
Industrial Estate: APSEZ, Town: Tunda,
Tal: Mundra, Dist: Kutch East, Pin: 370 435.

SUB: Consent to Establish (NOC) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981.

REF: Your NOC application No. 320795 dated 18/10/2024.

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 anyway, this is to inform you that this Board grant Consent to Establish (NOC) for setting up of an industrial plant/ activities at **Near Adani Solar, Industrial Estate: APSEZ, Town: Tunda, Tal: Mundra, Dist: Kutch East, Pin: 370 435.**

1. CTE Order No.: **CTE-77914 date of issue 09/12/2024, Valid upto 18/09/2031.**
2. The list of proposed product to be manufactured shall be as follows:

Sr. No.	List of Product	Quantity	Unit per Annum	CAS No.	Remarks
1.	DESAL Water	29,200	Million Liter per Annum	7732-18- 5	Sea Water Reverse Osmoses Process.

SPECIFIC CONDITION:

- a. No ground water shall be used for the project coming under dark zone without permission of competent authority.
- b. Industry shall comply with fresh water from valid source having permission of the competent authority.
- c. You shall not carry out any activity which may attract the applicability of EIA notification-2006.
- d. Management of Solid Waste generated from industrial activities shall be as per Solid Waste Management Rules-2016 (solid waste as defined in Rule-3(46)).
- e. As per provision of Rule-18 of Solid Waste Management Rules-2016 all industrial units using fuel and located within 100 km from the refused derived fuel (RDF) plant shall made an arrangement to replace at least five percent of their fuel requirement by refused derived fuel so produced.
- f. Unit shall comply with the Board circular dated 27/08/2021 regarding retrofitting of emission control devices/equipment in D.G. Set with a capacity of 125 KVA and above as per system & procedure for emission compliance testing of Retrofit Emission Control Device (RECD) for D.G. Set issued by CPCB dated 01/02/2022 at the earliest and submit compliance.

- g. Industry shall strictly comply with the submitted undertaking dated 23/09/2024 that lessee & lessor (APSEZ) are both jointly and severally responsible in case of any violation of environmental Acts/laws.
- h. Industry shall not carried out any activity which may attract the CRZ Notification 2011 & amendment therein.
- i. Industry shall strictly comply with all the conditions mention in Environment and CRZ Clearance vide No. EC24A3501GJ5976060N.

3. **CONDITION UNDER THE WATER ACT:**

- 3.1 The quantity of total water consumption shall not exceed **200,008 KL/Day** as per below break up as mentioned in form D submitted for consent application under the Water Act-1974.
 - a) Industrial: **200,000.00 KL/Day**
 - b) Domestic: **08.00 KL/Day**
- 3.2 Source of water: **Existing Arabian Sea Water Reservoir.**
- 3.3 The quantity of total waste water generation shall not exceed **120,007 KL/Day** as per below break up as mentioned in form D submitted for consent application under the Water Act- 1974.
 - a) Industrial: **120,000.00 KL/Day**
 - b) Domestic: **07.00 KL/Day**
- 3.4 Industrial effluent management:
 - a) Mode of disposal of treated industrial effluent: **Existing Outfall Channel**
 - b) Description for treated industrial effluent disposal: **The quantity of the industrial effluent from the manufacturing process and other ancillary operation (DESAL Plant Rejected water) shall be discharge into the Existing Outfall Channel.**
- 3.5 Domestic sewage management:
 - a) Mode of disposal of treated domestic sewage: **Soak Pit/ Septic Tank.**
 - b) Description for treated domestic sewage disposal: **Generated domestic waste water shall be Disposed into Soak Pit/ Septic Tank.**
- 3.6 Industry shall affix of water meters for the purpose of measuring and recording the quantity of water consumed at such places as may be required and it shall be presumed that the quantity indicated by the meter has been consumed by the industry until the contrary is proved.
- 3.7 Industry shall provide fixed pipeline network with flow meter at inlet and outlet of DESAL Water plant and maintain its records.
- 3.8 Disposal system for storm water shall be provided separately, in no circumstances storm water shall be mixed with the industrial effluent.
- 3.9 The Board reserves the right to review and/or revoke the consent and/or make modifications in the conditions which it seems fit in accordance with provisions of WaterAct-1974.

4. **CONDITIONS UNDER THE AIR ACT:**

- 4.1 There shall be no use of any fuel anywhere in the manufacturing process and consequently there shall be no flue gas emission from the manufacturing process and any other ancillary industrial operation.
- 4.2 There shall be no process gas emission from the manufacturing process and any other ancillary industrial operation.
- 4.3 The height of vent/exhaust attached with hood of kitchen shall be at least 3m above the building height.
- 4.4 The concentration of the following parameters in the ambient air within the premises of the unit shall not exceed the limits specified here under.



GUJARAT POLLUTION CONTROL BOARD

Regional Office : Kutch - East

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Sr. No.	Parameters	Permissible Limit (microgram /m ³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM ₁₀)	60	100
2.	Particulate Matter (PM _{2.5})	40	60
3.	Oxides of Sulphur (SO _x)	50	80
4.	Oxides of Nitrogen (NO _x)	40	80

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.
- 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

4.5 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 75 dB(A) during day time and 70 dB(A) during night time. Daytime is reckoned in between 6 a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

5. CONDITION UNDER HAZARDOUS & OTHER WASTE (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016:


- 5.1. Unit shall have to comply with provisions of hazardous & other wastes (management & Transboundary Movement) Rules, 2016 as amended from time to time.
- 5.2. 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.
- 5.3. The applicant shall obtain membership of common TSDF site for Hazardous Waste as categorized in Hazardous & other Waste (Management Transboundary Movement) Rules, 2016 as amended from time to time.

6. GENERAL CONDITIONS:

- 6.1 In case of change of ownership/ management the name and address of the new ownership/ partners/ directors/ proprietor should immediately be intimate to the Board. Also, any change in equipment or working conditions as mentioned in the consent form/ order should immediately be intimated to this Board.
- 6.2 Industry shall put up at the entrance a board displaying the name of the Industry, particulars of the products/ process and the name of proprietor/partners /directors of the Industry and the electricity consumer number as on the record of PGVCL.
- 6.3 The environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th June every year.
- 6.4 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 5 meters width is developed.
- 6.5 The industry shall have to display the relevant information with regard to hazardous waste, waste water & air pollutants as indicated in the Courts Order in W.P. No.657 of 1995 dated 14th October-2003.
- 6.6 As per "Public Liability Insurance Act - 1991", industry shall get Insurance Policy, if applicable.
- 6.7 Applicant shall also comply with the general conditions given in annexure I.

- 6.8 The waste generator shall be totally responsible for (I.E. Collection, storage, transportation and ultimate disposal) of the wastes generated.
- 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.
- 6.10 In case of any accident, details of the same shall be submitted in Form - 5 to Gujarat Pollution Control Board.
- 6.11 Empty drums and containers of toxic and hazardous 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.
- 6.12 In no case any kind of hazardous waste shall be imported without prior approval of appropriate authority.
- 6.13 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.
- 6.14 Unit shall take all concrete measures to show tangible results in waste generation reduction, avoidance, reuse and recycle. Action taken in this regard shall be submitted within 03 months and also along with Form 4.
- 6.15 Industry shall have to display online 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



(F.M. Modi)

RO Head, Kutch East

**ISSUED TO,
M/s. Mundra Petrochem Limited
Near Adani Solar,
Industrial Estate: APSEZ, Town: Tunda,
Tal: Mundra, Dist: Kutch East, Pin: 370 435.**