

To

The Inspector General of Forest / Scientist C,

Integrated Regional Office (IRO),

Ministry of Environment, Forest and Climate Change,

Aranya Bhawan, A Wing, Room No. 409,

Near CH 3 Circle, Sector – 10A,

Gandhinagar – 382007.

E-mail: ecompliance-guj@gov.in, iro.gandhingr-mefcc@gov.in

Sub : Half yearly Compliance report of Environment Clearance under CRZ notification for "Port expansion project including dry/break bulk cargo container terminal, railway link and related ancillary and back-up facilities at Mundra Port, Dist. Kutch in Gujarat by M/s. Adani Ports & SEZ Limited."

Ref : Environment clearance under CRZ notification granted to M/s Adani Ports & SEZ Limited vide letter dated 20th September 2000 bearing no. J-16011/40/99-IA.III

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 April 2024 to September 2024 is being submitted through soft copy (e-mail communication).

Kindly consider 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.

Environmental Clearance Compliance Report



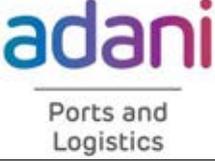
Port Expansion Project including Dry/Break Bulk Cargo Container Terminal, Railway Link and related Ancillary and Back-up facilities at Mundra Port, Dist. Kutch, Gujarat

Adani Ports and SEZ Limited

For the Period of:
April – 2024 to September – 2024

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 <p>adani Ports and Logistics</p>	<p>Adani Ports and Special Economic Zone Limited, Mundra.</p>	<p>From: Apr'24 To : Sep'24</p>
<p>Status of the conditions stipulated in Environment Clearance under CRZ notification</p>		

Chronology of company name change from **M/s. Gujarat Adani Port Limited** to **M/s. Adani Ports and Special Economic Zone Ltd.** was submitted along with half yearly EC Compliance report for the period Oct'20 to Apr'21.

Status of the conditions stipulated in Environment Clearance under CRZ notification

- **Half yearly Compliance report of Environment Clearance under CRZ notification for "Port expansion project including dry/break bulk cargo container terminal, railway link and related ancillary and back-up facilities at Mundra Port, Dist. Kutch in Gujarat vide letter no. J-16011/40/99-IA.III dated 20th September, 2000.'**

Sr. No.	Conditions	Compliance Status as on 30-09-2024																				
A. Specific Condition																						
i	All the conditions stipulated by the Gujarat Pollution Control Board vide their NOC No. PC/NOC/Kutch/391/18424 dated 10.6.99 and No. PC/NOC/Kutch/222(2)16880 dated 1.5.99 shall be strictly implemented.	<p>Complied.</p> <p>Consent to operate (CC&A) has been renewed from GPCB vide consent no. AWH-117045 valid till 20th November 2026. The copy of CtO renewal was submitted along with last half yearly compliance report for the period Oct'21 to Mar'22.</p> <p>Consent to Establish (CtE) and Consent to Operate (CtO) are obtained from GPCB and renewed/amended from time to time as per the progress of the project activity. The present in-force CtE / CtO are mentioned below.</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Permission</th> <th>Project</th> <th>Ref. No. / Order No.</th> <th>Valid till</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CtO – Renewal</td> <td>Mundra Port Terminal</td> <td>AWH-117045</td> <td>20.11.2026</td> </tr> <tr> <td>2</td> <td>CtE – Amendment</td> <td>WFDP</td> <td>17739 / 15618</td> <td>18.05.2027</td> </tr> <tr> <td>3</td> <td>CC&A Correction</td> <td>Mundra Port Terminal</td> <td>PC/CCA-KUTCH-39(8)/GPCB ID 17739/748148</td> <td>20.11.2026</td> </tr> </tbody> </table> <p>The permission mentioned above (Sr. No. 2) was submitted along with earlier compliance report submission. The copy of CtO renewal was submitted along with last half yearly compliance report for the period Oct'21 to Mar'22. The permission copy (Sr. No. 3) of CC&A – Correction letter was submitted along with half yearly compliance report for the period of Apr'23 to Sept'23.</p>	Sr. No.	Permission	Project	Ref. No. / Order No.	Valid till	1	CtO – Renewal	Mundra Port Terminal	AWH-117045	20.11.2026	2	CtE – Amendment	WFDP	17739 / 15618	18.05.2027	3	CC&A Correction	Mundra Port Terminal	PC/CCA-KUTCH-39(8)/GPCB ID 17739/748148	20.11.2026
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ii	The conditions stipulated in the letter No ENV-1098-6477-PI dated October 28, 1999, and No. ENV-1099-	<p>Complied.</p> <p>Point wise compliance report of CRZ recommendations issued vide letter No ENV-1098-</p>																				

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
	2702-PI dated 27.12.99 of shall be strictly implemented.	6477-PI dated October 28, 1999, and No. ENV-1099-2702-PI dated 27.12.99 is enclosed as Annexure- A.
iii	The turning circle should be increased from 550 m to 600 m.	Complied. Construction activities are completed and project is in operation phase.
iv	A girdle canal with settlement tanks shall be provided around the coal storage area.	Not applicable at present. Coal handling is not practiced at project site.
v	All efforts shall be made for water conservation and rainwater harvesting. Arrangements shall be made for roof top rainwater harvesting from various structures.	<p>Complied.</p> <p>Under the Water Conservation and Optimization Drive at APSEZ, various initiatives were taken for conservation of water such as,</p> <ol style="list-style-type: none"> 1. 100% utilization of treated water for horticultural purpose. 2. Water-free urinals are installed and in operation within APSEZ. 3. Recirculation of water from fixed firefighting system to reservoir through flexible pipe during testing of firefighting system. 4. Conservation of Condensate from Air Conditioner and use for gardening. 5. Water flow reducers are provided in taps of Adani House, Tug Berth, CT2, CT3 & CT4 buildings to reduce the water consumption and are in use. 6. Attending leakages and damages of water lines at various locations of APSEZ. 7. Process optimization 8. Aware to people by display of poster/sticker/ slogan of water saving at wash basin/bathroom/toilets areas of APSEZ & Residential colonies. <p>The above initiatives have saved substantial amount of water consumption.</p> <p>Groundwater recharge cannot be done at the project site since the entire project is in the intertidal / sub tidal areas. Rainwater within 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.</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>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 (till Sep'24) Approx. 7.31 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> <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. Water Conservation Projects – Water Conservation Projects completed during last Compliance period:</p> <p>Swajal Project:</p> <ul style="list-style-type: none"> ➤ Aim: The Foundation's Water Conservation program, SWAJAL, is aimed at addressing the

Status of the conditions stipulated in Environment Clearance under CRZ notification

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		<p>alarming depletion of groundwater levels and reduction in water sources in various parts of Kutch district.</p> <p>➤ Water Security Plan: Due to arid climatic characters of the Kutch region, it is essential to plan for water security drinking and livelihood purposes. Considering weather condition, rainfall characters, geohydrological condition and water demand, water security plan has been prepared for the Seven villages.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #d3d3d3;">Block Name</th> <th style="background-color: #d3d3d3;">Water conservation structure</th> <th style="background-color: #d3d3d3;">Total no. of Structure</th> <th style="background-color: #d3d3d3;">Total Capacity Created (CUM)</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Mundra</td> <td>Check Dam</td> <td>23</td> <td>6,07,332.80</td> </tr> <tr> <td>Pond Deepening</td> <td>66</td> <td>1,89,121.08</td> </tr> <tr> <td>RRWHS</td> <td>275</td> <td>2750</td> </tr> <tr> <td>Recharge Borewell</td> <td>209</td> <td>-</td> </tr> <tr> <td>Percolation Well</td> <td>24</td> <td>-</td> </tr> </tbody> </table> <p>Below tabulated Water Conservation Projects completed during past Compliance period:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #d3d3d3;">Sr. No.</th> <th style="background-color: #d3d3d3;">Project</th> <th style="background-color: #d3d3d3;">Unit</th> <th style="background-color: #d3d3d3;">Outcome</th> <th style="background-color: #d3d3d3;">Impact</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Check dam Restrengthening-Nana Kapaya</td> <td>1</td> <td>Water Storage Capacity increased by 48000 Cum</td> <td>60 + farmer's 120+Acre Area of Agri land can be Irrigated</td> </tr> <tr> <td>2</td> <td>Recharge Borewell</td> <td>21</td> <td>Reduce Salinity ingress, and preventing water run</td> <td>150+ farmer's 260+ Acre Area of Agri land for Irrigated</td> </tr> <tr> <td>3</td> <td>Pipe Culvert at Checkdam at Bhujpur</td> <td>1</td> <td>prevent water runoff into seaside.</td> <td>35 farmers' 120+Acre Area of Agri land can be Irrigated</td> </tr> </tbody> </table> <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. 	Block Name	Water conservation structure	Total no. of Structure	Total Capacity Created (CUM)	Mundra	Check Dam	23	6,07,332.80	Pond Deepening	66	1,89,121.08	RRWHS	275	2750	Recharge Borewell	209	-	Percolation Well	24	-	Sr. No.	Project	Unit	Outcome	Impact	1	Check dam Restrengthening-Nana Kapaya	1	Water Storage Capacity increased by 48000 Cum	60 + farmer's 120+Acre Area of Agri land can be Irrigated	2	Recharge Borewell	21	Reduce Salinity ingress, and preventing water run	150+ farmer's 260+ Acre Area of Agri land for Irrigated	3	Pipe Culvert at Checkdam at Bhujpur	1	prevent water runoff into seaside.	35 farmers' 120+Acre Area of Agri land can be Irrigated
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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<ul style="list-style-type: none"> • 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. • Roof Top Rainwater Harvesting 145 Nos. (40 Nos. current FY 2022-23) which is having 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 - 1 for full details of CSR activities carried out by Adani Foundation in the Kutch region. Budget for CSR Activity for the FY 2024-25 is to the tune of INR 823.58 lakh. Out of which, Approx. INR 309.11 lakh is spent during the FY 2024-25 till Sep'24.</p>
vi	To obviate the problem of coastal erosion due to dredging, the setback distance of at least 50 m from the Chart Datum line of Bocha island would be	<p>Complied.</p> <p>During Maintenance dredging in this area, it is ensured that at least 50 m distance is maintained.</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024																																																														
	maintained.																																																															
vii	The dredged material shall be disposed of only in the identified locations outside the CRZ area. While dumping the dredged material, sufficient distance should be ensured from the existing mangroves so that there is no damage to the ecology. During dumping of dredged material the mitigative measures as suggested by NIO shall be implemented. It shall be ensured that there is no dumping of dredged material in the CRZ.	<p>Complied.</p> <p>Capital dredging is completed and only maintenance dredging is being carried out, if required which is being ensured that there no damage of marine ecology.</p> <p>In order to ensure no damage to marine ecology Marine water & sediment 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 Apr'24 to Sep'24 is mentioned below.</p> <p>Total Sampling Locations: 09 Nos.</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>pH</td> <td>--</td> <td>7.91</td> <td>8.24</td> <td>8.12</td> <td>7.74</td> <td>8.16</td> <td>7.97</td> </tr> <tr> <td>BOD (3 Days @ 27 °C)</td> <td>mg/L</td> <td>2.2</td> <td>3.4</td> <td>2.89</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>94</td> <td>144</td> <td>127.04</td> <td>76</td> <td>132</td> <td>106.96</td> </tr> <tr> <td>DO</td> <td>mg/L</td> <td>5.73</td> <td>6.69</td> <td>6.23</td> <td>5.48</td> <td>6.49</td> <td>6.04</td> </tr> <tr> <td>Salinity</td> <td>ppt</td> <td>35.31</td> <td>38.82</td> <td>36.07</td> <td>26.76</td> <td>37.54</td> <td>36.86</td> </tr> <tr> <td>TDS</td> <td>mg/L</td> <td>34410</td> <td>36550</td> <td>35858</td> <td>35370</td> <td>37610</td> <td>36873</td> </tr> </tbody> </table> <p>*BDL – Below Detection Limit *MDL – Minimum Detection Limit</p> <p>Please refer Annexure – 2 for detailed analysis reports. Approx. INR 6.11 Lakh is spent for all environmental monitoring activities during the FY 2024-25 (till Sep'24) for overall APSEZ, Mundra.</p>	Parameter	Unit	Surface			Bottom			Min	Max	Avg.	Min	Max	Avg.	pH	--	7.91	8.24	8.12	7.74	8.16	7.97	BOD (3 Days @ 27 °C)	mg/L	2.2	3.4	2.89	BDL (MDL 1.0)	BDL (MDL 1.0)	BDL (MDL 1.0)	TSS	mg/L	94	144	127.04	76	132	106.96	DO	mg/L	5.73	6.69	6.23	5.48	6.49	6.04	Salinity	ppt	35.31	38.82	36.07	26.76	37.54	36.86	TDS	mg/L	34410	36550	35858	35370	37610	36873
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viii	The mangrove afforestation shall be undertaken at the identified sites and the progress report in this regard shall be submitted to this Ministry regularly. All the recommendations suggested	<p>Complied.</p> <p>All construction activities are completed and project is in operation phase since long time. 24 hectare of mangrove afforestation was carried out at identified sites in consultation with Dr Maity, (Mangrove Consultant of India).</p>																																																														

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Sr. No.	Conditions	Compliance Status as on 30-09-2024
	<p>in the NIO report for restoration of the coastal habitat by mangrove afforestation at Navinal island shall be strictly implemented.</p>	<p>Green belt was developed 72.67 ha. Total 149959 trees were planted with the density of 2063 Nos per hectare within the port area. 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>To enhance the marine biodiversity, till Sep'24 APSEZ has carried out total 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 date is annexed as Annexure – 3.</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 M/s. 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 Hectore 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 – 1 for CSR activity report carried out by Adani Foundation.</p>
ix	<p>No ground water shall be withdrawn for this project.</p>	<p>Complied.</p> <p>Present source of water for various project activities is desalination plant of APSEZ and/or through Gujarat Water Infrastructure Limited (GWIL). Average water</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024								
		consumption for entire APSEZ area is 5.34 MLD during the compliance period i.e. Apr'24 to Sep'24.								
x	The project proponent shall ensure that the construction workers do not cut the Mangroves for fuel wood etc.	Complied. All construction activities are completed and project is in operation phase since long time.								
xi	The project proponent shall ensure that no creeks are blocked and the natural drainage of the area is not affected due to project activities.	Complied. Prominent creek system (main creeks and small branches of creeks) in the study region are: (1) Kotdi (2) Baradimata (3) Navinal (4) Bocha (5) Mundra (Oldest port (Juna Bandar) leading to Bhukhi river). All above creeks are in existence allowing free flow of water and there is no filling or reclamation of any creek area. APSEZ has so far constructed 19 culverts having total length of approx. 1100 m with total cost of INR 20 Crores. Apart from that three RCC Bridges have been constructed over Kotdi creek with total length of 230 m at the cost of INR 10 Crores. Photographs of the same were submitted as part of compliance report for the duration of Apr'17 to Sep'17. As per the bathymetry study carried out by NCSCM in 2017-18, it can be concluded that there are sufficient depths at the creek mouths and all creek mouths are open allowing flushing of water.								
xii	The project proponent shall ensure that there will be no disposal of sludge and sewage generated from construction camps, surface run-off from construction sites, and oil and grease spillage from the construction equipment's in the creeks.	Complied. Project is in operation phase. Sewage generated from port is being treated in designated ETP and treated sewage is used for horticulture purposes. <table border="1" data-bbox="645 1648 1365 1837"> <thead> <tr> <th>Location</th> <th>Capacity</th> <th>Quantity of Treated Water (Avg. from Apr'24 to Sep'24)</th> <th>Type of ETP / STP</th> </tr> </thead> <tbody> <tr> <td>LT</td> <td>265 KLD</td> <td>71.13 KLD</td> <td>Activated Sludge</td> </tr> </tbody> </table> Summary of ETP treated water analysis results during	Location	Capacity	Quantity of Treated Water (Avg. from Apr'24 to Sep'24)	Type of ETP / STP	LT	265 KLD	71.13 KLD	Activated Sludge
Location	Capacity	Quantity of Treated Water (Avg. from Apr'24 to Sep'24)	Type of ETP / STP							
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Status of the conditions stipulated in Environment Clearance under CRZ notification

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		<p>compliance period as mentioned below.</p> <p>Frequency of Analysis: Once in a month</p> <table border="1" data-bbox="649 569 1362 890"> <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>pH</td> <td>--</td> <td>6.87</td> <td>7.51</td> <td>7.13</td> <td>6.5 – 8.5</td> </tr> <tr> <td>SS</td> <td>mg/L</td> <td>22</td> <td>46</td> <td>31.00</td> <td>100</td> </tr> <tr> <td>TDS</td> <td>mg/L</td> <td>629</td> <td>1318</td> <td>914.17</td> <td>2100</td> </tr> <tr> <td>COD</td> <td>mg/L</td> <td>82.1</td> <td>92</td> <td>87.58</td> <td>100</td> </tr> <tr> <td>BOD</td> <td>mg/L</td> <td>24</td> <td>27</td> <td>25.37</td> <td>30</td> </tr> <tr> <td>Ammonical Nitrogen as NH₃-N</td> <td>mg/L</td> <td>15.8</td> <td>34.4</td> <td>28.60</td> <td>50</td> </tr> </tbody> </table> <p style="text-align: right;">§ as per CC&A granted by GPCB</p> <p>The quality of marine water, treated effluents, air emissions and noise levels are being regularly analyzed by NABL accredited and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Please refer Annexure – 2.</p> <p>Monitoring and analysis of ETP treated waste is also carried out regularly through in-house laboratory for the parameters such as pH, TDS, TSS, COD, Chlorides, and residual chlorine.</p> <p>For detailed analysis reports for the period Apr'24 to Sep'24. Approx. INR 6.11 Lakh is spent for all environmental monitoring activities during the FY 2024-25 (till Sep'24) for overall APSEZ.</p> <p>It is also noted that GPCB is doing regular site inspection along with wastewater sampling and analysis. The last GPCB sample analysis report was submitted as part of compliance report submission for the duration of Apr'21 to Sep'21 which shows all the parameters are well within the permissible limit.</p>	Parameter	Unit	Min	Max	Average	Perm. Limit [§]	pH	--	6.87	7.51	7.13	6.5 – 8.5	SS	mg/L	22	46	31.00	100	TDS	mg/L	629	1318	914.17	2100	COD	mg/L	82.1	92	87.58	100	BOD	mg/L	24	27	25.37	30	Ammonical Nitrogen as NH ₃ -N	mg/L	15.8	34.4	28.60	50
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xiii	The project proponent shall stick to the time bound program submitted to the Department of Environment,	<p>Complied.</p> <p>Desalination plant has already been installed as per time bound program for overall APSEZ area and is in</p>																																										

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
	Government of Gujarat for the proposed activities including installation of desalination plant for meeting the entire water requirement. They shall coordinate their construction/operations schedule with the installation schedule of desalination plant.	use. Details regarding water consumption are mentioned in Sr. no. ix above.
xiv	The project proponent shall ensure that the commercial fisheries are not hampered due to presence of barges, vessels and other activities in the region. Necessary plan in this regard shall be prepared in consultation with the NIO and submitted within 3 months.	<p>Complied.</p> <p>No commercial fisheries are prevailing in this area except Pagadia and fishermen with small boats. Unhindered access is provided to the fishing boats.</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, through fishermen consultative process, APSEZ has provided seven (7) access roads. Total length of all the approach roads is approx. 23 Kms and expenditure involved was Rs. 637 Lacs. There is no hindrance to the movement of fisherman boats. Details of the same were submitted along with EC Compliance report for the period Apr'18 to Sep'18.</p>
xv	The project proponent shall bear the cost of the external agency that may be appointed by the Department of Environment, Government of Gujarat for carrying out the supervision and/or the monitoring of the construction activities.	<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"> 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.

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024																															
		<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. 80000 during FY 2023-24. The algal removal report was submitted during the last compliance report submission Oct'23 to Mar'24. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 132.0 Lacs during FY 2024-25 till Sep'24 which was incurred by APSEZ. This activity is being done on continuous basis as a part of CSR activity. <p>Summary of Conservation of mangroves:</p> <table border="1" data-bbox="635 1331 1371 1650"> <thead> <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> </thead> <tbody> <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> </tbody> </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>	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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Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024		
		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 using LISS IV satellite images for the duration of

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024																											
			<p>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 border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Mangrove mapping Year</th> <th rowspan="2" style="text-align: center;">Mangrove cover total Area (Ha.)</th> <th colspan="2" style="text-align: center;">Mangrove cover area Increased</th> </tr> <tr> <th style="text-align: center;">Hac</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2011</td> <td style="text-align: center;">2094</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">2011 to 2016-17</td> <td style="text-align: center;">2340</td> <td style="text-align: center;">246</td> <td style="text-align: center;">11.75%</td> </tr> <tr> <td style="text-align: center;">2017 to 2019 till March</td> <td style="text-align: center;">2596</td> <td style="text-align: center;">256</td> <td style="text-align: center;">10.94 %</td> </tr> <tr> <td style="text-align: center;">2019 to 2021 till March</td> <td style="text-align: center;">2723</td> <td style="text-align: center;">127</td> <td style="text-align: center;">4.89</td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">2723</td> <td style="text-align: center;">629</td> <td style="text-align: center;">--</td> </tr> </tbody> </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. 																										
3.	Removal of Algal and Prosopis		<ul style="list-style-type: none"> Algal and Prosopis growth monitoring was done in and 																										

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024	
			<p>growth from mangrove areas</p> <p>around mangrove area and algal encrustation was found in 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. 80000 during FY 2023-24. The algal removal report was submitted during the last compliance report submission Oct'23 to Mar'24.
		4.	<p>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 25 Villages. Project is covering total 15005 Cattles and hence enhancing cattle productivity. Dry Fodder 10,90,875 Kg Green – 27,64,920 Kg. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 132.0 Lacs during FY 2024-25 till Sep'24, 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

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024			
		<table border="1" data-bbox="635 428 1374 604"> <tr> <td data-bbox="635 428 703 604"></td> <td data-bbox="703 428 936 604"></td> <td data-bbox="936 428 1374 604"> <p>unique, special and vulnerable ecosystem". The report for the same is attached as Annexure - 1.</p> <ul style="list-style-type: none"> Refer CSR report attached as Annexure - 2. </td> </tr> </table> <p>To comply with the GCZMA recommendations regarding mangrove monitoring at every 2 years, 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. The said work will be undertaken by NCSCM shortly.</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>			<p>unique, special and vulnerable ecosystem". The report for the same is attached as Annexure - 1.</p> <ul style="list-style-type: none"> Refer CSR report attached as Annexure - 2.
		<p>unique, special and vulnerable ecosystem". The report for the same is attached as Annexure - 1.</p> <ul style="list-style-type: none"> Refer CSR report attached as Annexure - 2. 			
xvi	The project proponent shall carry out the post-project monitoring of various environmental parameters in consultation with the Department of Environment, Government of Gujarat and Gujarat Pollution Control Board.	Complied. Monitoring of various environmental parameters for Ambient Air, Noise, Wastewater, ground water, marine water and sediments along with the parameters mentioned in the consent order issued by GPCB is being carried out by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Monitoring reports for the period from Apr'24 to Sep'24 is enclosed as Annexure - 2.			
xvii	The project proponent shall prepare the detailed traffic control management plan for the port and shall participate in the VTMS to be developed for the Gulf of Kachchh.	Complied. APSEZ is practicing well defined traffic control procedure. A VTMS service for Gulf of Kutch is operated by Directorate General of Lighthouses and Lightships (DGLL), Govt. of India.			

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<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 vtsgok@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>
xviii	<p>Action plan shall be prepared by the project proponents to prevent damage to marine life and also to the coastline in case of any oil spillage and the same shall be strictly implemented. Regular mock drills shall be carried out to ensure fitness of the equipment in place.</p>	<p>Complied.</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 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 02-03 May 2024 at Mundra, Gujarat. All participants from various Oil Handling Agencies and Stakeholders (DPA, HMEL, ICGS and APSEZ, Mundra) were participated in this exercise. Details of the same is attached Annexure - 4</p> <p>Mock drills are conducted regularly by APSEZ. Last Oil Spill Mock drill was conducted on 03.05.2024. Oil Spill Mock Drill report is enclosed as Annexure - 4.</p>
xix	<p>The project proponents shall work out the maximum quantity of spilled material, which can find its way into</p>	<p>Complied.</p> <p>Oil spill contingency plan is in place to handle Tier 1 level oil spills considering different accident</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
	<p>the coastal waters, under different accident scenarios, and their impact on aquatic life shall be studied after clearly demarcating the impact zones. On the basis of such studies, the necessary action plan to mitigate the likely impacts shall be prepared before commencement of the operations. Action taken report in this regard shall be submitted to the Ministry.</p>	<p>scenarios, and the vulnerable areas are identified and mitigation plan is prepared.</p> <p>Based on the oil spill modeling study, it has been observed that crude oil spill of 700 tons (Tier-I) will spread over an area having radius of around 400 m within 4hr. APSEZ already has facilities for combating a Tier-1 spill.</p> <p>Recommendations of Marine EIA by NIO with respect to pollution emergency contingency plan for Multipurpose Terminal, Container, Dry & Break Bulk Terminal as well as associated facilities are addressed in Oil Spill Response Plan.</p> <p>This action plan prepared by APSEZ to combat the oil spill (LOS-DCP) is in accordance with the NOS DCP, International Petroleum Industry Environmental Conservation Association (IPIECA). Please refer Point No. xviii.</p>
B. General Condition		
i	<p>Construction of the proposed structures should be undertaken meticulously conforming to the existing Central / local rules and regulations. All the construction designs / drawings relating to the proposed construction activities must have approvals of the concerned State Government Departments / Agencies.</p>	<p>Already complied. Not applicable at present.</p> <p>All construction activities are carried out confirming to the existing rules and regulation and as per the CRZ notification.</p> <p>Approval under the preview of GMB, PESO and Factories act were taken prior to start of construction.</p>
ii	<p>The proponent shall ensure that as a result of the proposed constructions ingress of the saline water into the ground water does not take place. Piezometers shall be installed for regular monitoring for this purpose at appropriate locations on</p>	<p>Complied.</p> <p>To monitor the ground water quality, bore wells are provided at various location in the port and SEZ areas. Third party analysis of the ground water is being carried out twice a year 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 Apr'24 to Sep'24 is mentioned</p>

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	the project site.	<p>below. Monitoring Reports are attached as Annexure - 2 for the same.</p> <p>Number of Sampling Locations of port ground water: 5 Nos.</p> <table border="1" data-bbox="635 596 1374 1194"> <thead> <tr> <th>Parameters</th> <th>Unit</th> <th>Min</th> <th>Max</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>pH @ 25 ° C</td> <td>--</td> <td>7.13</td> <td>8.17</td> <td>7.87</td> </tr> <tr> <td>Salinity</td> <td>ppt</td> <td>0.90</td> <td>3.30</td> <td>1.54</td> </tr> <tr> <td>Oil & Grease</td> <td>mg/L</td> <td>*BDL (MDL:5.0)</td> <td>*BDL (MDL:5.0)</td> <td>*BDL (MDL:5.0)</td> </tr> <tr> <td>Hydrocarbon</td> <td>mg/L</td> <td>ND*</td> <td>ND*</td> <td>ND*</td> </tr> <tr> <td>Lead as Pb</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>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>0.10</td> <td>0.10</td> </tr> <tr> <td>Total Chromium as Cr</td> <td>mg/L</td> <td>*BDL (MDL:0.05)</td> <td>*BDL (MDL:0.05)</td> <td>*BDL (MDL:0.05)</td> </tr> <tr> <td>Cadmium as Cd</td> <td>mg/L</td> <td>0.03</td> <td>0.05</td> <td>0.04</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>*BDL (MDL:0.05)</td> <td>*BDL (MDL:0.05)</td> <td>*BDL (MDL:0.05)</td> </tr> <tr> <td>Copper as Cu</td> <td>mg/L</td> <td>0.08</td> <td>0.10</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>0.30</td> </tr> <tr> <td>Insecticides/Pesticides</td> <td>µg/L</td> <td>ND*</td> <td>ND*</td> <td>ND*</td> </tr> <tr> <td>Depth of Water Level from Gro</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>nd Level</td> <td>meter</td> <td>1.95</td> <td>2.25</td> <td>2.10</td> </tr> </tbody> </table> <p>Number of Sampling Locations of port ground water: 5 Nos.</p> <p>*ND = Not Detectable *BDL – Below Detection Limit</p> <p>Approx. INR 6.11 Lakh is spent for all environmental monitoring activities during the FY 2024-25 (till Sep'24) for overall APSEZ.</p>	Parameters	Unit	Min	Max	Average	pH @ 25 ° C	--	7.13	8.17	7.87	Salinity	ppt	0.90	3.30	1.54	Oil & Grease	mg/L	*BDL (MDL:5.0)	*BDL (MDL:5.0)	*BDL (MDL:5.0)	Hydrocarbon	mg/L	ND*	ND*	ND*	Lead as Pb	mg/L	*BDL (MDL:0.01)	*BDL (MDL:0.01)	*BDL (MDL:0.01)	Arsenic as As	mg/L	*BDL (MDL:0.01)	*BDL (MDL:0.01)	*BDL (MDL:0.01)	Nickel as Ni	mg/L	0.09	0.10	0.10	Total Chromium as Cr	mg/L	*BDL (MDL:0.05)	*BDL (MDL:0.05)	*BDL (MDL:0.05)	Cadmium as Cd	mg/L	0.03	0.05	0.04	Mercury as Hg	mg/L	*BDL (MDL:0.001)	*BDL (MDL:0.001)	*BDL (MDL:0.001)	Zinc as Zn	mg/L	*BDL (MDL:0.05)	*BDL (MDL:0.05)	*BDL (MDL:0.05)	Copper as Cu	mg/L	0.08	0.10	0.09	Iron as Fe	mg/L	0.12	0.61	0.30	Insecticides/Pesticides	µg/L	ND*	ND*	ND*	Depth of Water Level from Gro					nd Level	meter	1.95	2.25	2.10
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Oil & Grease	mg/L	*BDL (MDL:5.0)	*BDL (MDL:5.0)	*BDL (MDL:5.0)																																																																																			
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Lead as Pb	mg/L	*BDL (MDL:0.01)	*BDL (MDL:0.01)	*BDL (MDL:0.01)																																																																																			
Arsenic as As	mg/L	*BDL (MDL:0.01)	*BDL (MDL:0.01)	*BDL (MDL:0.01)																																																																																			
Nickel as Ni	mg/L	0.09	0.10	0.10																																																																																			
Total Chromium as Cr	mg/L	*BDL (MDL:0.05)	*BDL (MDL:0.05)	*BDL (MDL:0.05)																																																																																			
Cadmium as Cd	mg/L	0.03	0.05	0.04																																																																																			
Mercury as Hg	mg/L	*BDL (MDL:0.001)	*BDL (MDL:0.001)	*BDL (MDL:0.001)																																																																																			
Zinc as Zn	mg/L	*BDL (MDL:0.05)	*BDL (MDL:0.05)	*BDL (MDL:0.05)																																																																																			
Copper as Cu	mg/L	0.08	0.10	0.09																																																																																			
Iron as Fe	mg/L	0.12	0.61	0.30																																																																																			
Insecticides/Pesticides	µg/L	ND*	ND*	ND*																																																																																			
Depth of Water Level from Gro																																																																																							
nd Level	meter	1.95	2.25	2.10																																																																																			
iii	A comprehensive contingency plan in collaboration with the concerned authorities must be formulated to contain in case of any oil spills. Appropriate devices such as oil skimmer, oil monitor, oil water separator must be acquired for strengthening	<p>Complied.</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>Shoreline Resources available with APSEZ, for</p>																																																																																					

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024																						
	<p>the contingency plan. All the service vessels that required for oil spill operations must be equipped with booms and dispersants. The personal onboard of these vessels must be properly trained in operation of these booms and dispersants.</p>	<p>deployment during shoreline cleanup/ emergent situation:</p> <table border="1" data-bbox="635 533 1377 1180"> <thead> <tr> <th>Item</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Oil Spill Dispersants</td> <td>5000 ltr.</td> </tr> <tr> <td>Absorbent pads</td> <td>2000 Nos.</td> </tr> <tr> <td>Portable dispersant storage tank: 1000 ltr. Capacity</td> <td>1 no.</td> </tr> <tr> <td>Portable pumps</td> <td>2 nos.</td> </tr> <tr> <td>Oil Containment Boom-Length 2000 metres, Height -1500 mm, Draft-900mm, Free Board-600mm</td> <td>2000 m</td> </tr> <tr> <td>Skimmer-KOMARA 15 Duplex Skimmer System with floating IMP 6 Pump.</td> <td>4 Nos.</td> </tr> <tr> <td>12.5T Flexible Floating Storage Tank (PUA).</td> <td>3 Nos.</td> </tr> <tr> <td>Lamor Minimax 12 m³ skimmer</td> <td>2 sets</td> </tr> <tr> <td>Lamor Side Collector system (Recovery Capacity 123 m³/ hr)</td> <td>2 Nos. 2 sets</td> </tr> <tr> <td>Canadyne Fence Boom (Reel model 7296/8496 with Power Pack, Towing bridles and Tow lines - 235 meter</td> <td>1 No.</td> </tr> </tbody> </table> <p>11 Dolphin tugs are fitted with Oil Spill Dispersant boom and proportionate pump to mix OSD and Sea water as required. The tugs are fitted with a fire curtain and remote-controlled fire monitors.</p> <p>IMO module course organized by Maritime Training Institute is conducted & 24 personnel have achieved IMO level 1 & 04 personnel have achieved IMO Level 2. Different training modules as Oil Spill, Oil Spill Equipment, Oil spill Management course, Notification exercise, Tabletop, Incident are conducted at different frequency.</p> <p>Detail of resource available at APSEZL provided Oil Spill Contingency Response Plan which was submitted along with EC Compliance report for the period Apr'22 to Sep'22.</p>	Item	Quantity	Oil Spill Dispersants	5000 ltr.	Absorbent pads	2000 Nos.	Portable dispersant storage tank: 1000 ltr. Capacity	1 no.	Portable pumps	2 nos.	Oil Containment Boom-Length 2000 metres, Height -1500 mm, Draft-900mm, Free Board-600mm	2000 m	Skimmer-KOMARA 15 Duplex Skimmer System with floating IMP 6 Pump.	4 Nos.	12.5T Flexible Floating Storage Tank (PUA).	3 Nos.	Lamor Minimax 12 m ³ skimmer	2 sets	Lamor Side Collector system (Recovery Capacity 123 m ³ / hr)	2 Nos. 2 sets	Canadyne Fence Boom (Reel model 7296/8496 with Power Pack, Towing bridles and Tow lines - 235 meter	1 No.
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iv	<p>The operation plan for responding to an oil spill must include clear</p>	<p>Complied. Oil spill contingency plan is in place to handle Tier 1</p>																						

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024																																																												
	procedures for notification of a spill, response decision, cleanup operations, communications, and termination of cleanup operations, cleanup cost, oil pollution, damage control and disaster management plan.	<p>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>Oil Spill Contingency Plan includes procedures for notification of a spill as point no 7.1, response strategy as Point no. 3.0, cleanup operations, Clean-up cost and termination of cleanup in point no. 3.5, communications in point no. 6.0.</p>																																																												
v	A well-equipped laboratory with suitable instruments to monitor the quality of air and water shall be set up so as to ensure that the quality of ambient air and water conforms to the prescribed standards. The laboratory will also be equipped with qualified manpower including a marine biologist so that the marine water quality is regularly monitored in order to ensure that the marine life is not adversely affected as a result of implementation of the said project. The quality of ambient air and water shall be monitored periodically in all the seasons and the results should be properly maintained for inspection of the concerned pollution Control agencies. The periodic monitoring reports at least once in 6	<p>Being complied</p> <p>Site is provided with environment monitoring equipment with sufficient & competent staff of Third-Party laboratory accredited by NABL & MoEF&CC.</p> <p>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. Summary of the same for duration from Apr'24 to Sep'24 is mentioned below.</p> <p>Total Ambient Air & Noise Sampling Locations: 5 Nos.</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">AAQM</td> </tr> <tr> <td>PM₁₀</td> <td>µg/m³</td> <td>36.49</td> <td>87.39</td> <td>66.30</td> <td>100</td> </tr> <tr> <td>PM_{2.5}</td> <td>µg/m³</td> <td>16.94</td> <td>36.72</td> <td>26.54</td> <td>60</td> </tr> <tr> <td>SO₂</td> <td>µg/m³</td> <td>10.87</td> <td>33.71</td> <td>22.20</td> <td>80</td> </tr> <tr> <td>NO₂</td> <td>µg/m³</td> <td>13.66</td> <td>38.91</td> <td>25.63</td> <td>80</td> </tr> <tr> <td colspan="6">Noise</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>58.3</td> <td>69.6</td> <td>64.6</td> <td>75</td> </tr> <tr> <td>Night Time</td> <td>dB(A)</td> <td>57.8</td> <td>64.8</td> <td>61.6</td> <td>70</td> </tr> </tbody> </table> <p>[§] as per NAAQ standards, 2009 * as per CC&A granted by GPCB</p> <p>Values recorded confirms to the stipulated standards.</p>	Parameter	Unit	Min	Max	Average	Perm. Limit [§]	AAQM						PM ₁₀	µg/m ³	36.49	87.39	66.30	100	PM _{2.5}	µg/m ³	16.94	36.72	26.54	60	SO ₂	µg/m ³	10.87	33.71	22.20	80	NO ₂	µg/m ³	13.66	38.91	25.63	80	Noise						Noise	Unit	Leq Min	Leq Max	Leq Ave.	Leq Perm. Limit*	Day Time	dB(A)	58.3	69.6	64.6	75	Night Time	dB(A)	57.8	64.8	61.6	70
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Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024						
	<p>months must be sent to this Ministry as well as its Regional Office at Bhopal.</p>	<p>Sewage generated from port is being treated in designated ETP / STPs and treated sewage is being used for horticulture purposes.</p> <p>Please refer Specific Condition No. xii for further details.</p> <p>Marine Monitoring: Summary of the marine water monitoring for duration from Apr'24 to Sep'24 is provided above in point No. vii (specific conditions).</p> <p>Adani group has appointed a marine biologist Mr. Dhiraj Narale to monitor marine water quality. Also, the third-party monitoring of the Marine water is being carried out once a month by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi, who has marine biologist to ensure that the marine water quality do not adversely affects the marine life. Monitoring Reports are attached as Annexure – 2 for the same.</p> <p>Approx. INR 6.11 Lakh is spent for all environmental monitoring activities during the FY 2024-25 (till Sep'24) for overall APSEZ.</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 Oct'23 to Mar'24 was submitted through e-mail to Regional Office of Integrated Regional Office (IRO) @ Gandhinagar, Zonal Office of CPCB @ Baroda, GPCB @ Gandhinagar & Gandhidham and Dept. of Forests & Env., Gandhinagar on dated 29.05.2024. Copy of the same is also available on our web site https://www.adaniports.com/ports-downloads. Please refer below for the details regarding past six compliance submissions.</p> <table border="1" data-bbox="658 1850 1351 1913"> <thead> <tr> <th data-bbox="658 1850 770 1913">Sr. No.</th> <th data-bbox="770 1850 1035 1913">Compliance period</th> <th data-bbox="1035 1850 1351 1913">Date of submission</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sr. No.	Compliance period	Date of submission			
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Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024		
		1	2	3
		Apr'21 to Sep'21	30.11.2021	
		Oct'21 to Mar'22	30.05.2022	
		Apr'22 to Sep'22	30.11.2022	
		Oct'22 to Mar'23	30.05.2023	
		Apr'23 to Sep'23	29.11.2023	
		Oct'23 to Mar'24	29.05.2024	
vi	Adequate provision for infrastructure facilities such as water supply, fuel for cooking, sanitation etc. must be provided for the laborers during the construction period in order to avoid damage to the environment. Colonies for the laborers should not be located in the CRZ area. It should also be ensured that the construction workers do not cut trees including mangroves for fuel wood purpose.	<p>Already complied. Not Applicable at present.</p> <p>Construction Activity is already completed. Adequate infrastructure facilities as mentioned in the condition were provided during construction phase.</p> <p>The facility for drinking water, toilet and rest shelter are provided for the dignity of operation labors.</p> <p>Photographs of the same were provided along with the compliance submission for the duration of Oct'16 to Mar'17.</p>		
vii	To prevent discharge of sewage and other liquid wastes into the water bodies, adequate system for collection and treatment of the wastes must be provided. No sewage and other liquid wastes without treatment should be allowed to enter into the water bodies. The quality of treated effluents, emissions, solid wastes and noise levels must confirm to the standards laid down by the competent authority including the Central/State Pollution Control Board.	<p>Complied.</p> <p>Adequate pipelines are provided to ensure the collection and treatment of effluent. Raw sewage is collected from different collection pits at APSEZ locations through dedicated browsers and is transferred to ETP for treatment.</p> <p>Sewage generated from port is being treated in designated ETP and treated sewage is used for horticulture purposes. No treated water is discharged into the water bodies. Please refer Specific Condition No. xii for further details.</p> <p>Third party analysis of the treated water, Flue Gas, Ambient Air and Noise is being carried out regularly by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi.</p>		

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024																								
		<p>Summary of six-monthly monitoring of Flue gas emission is provided below.</p> <p>Total Nos. of Stacks: 16 Nos.</p> <table border="1" data-bbox="624 604 1380 768"> <thead> <tr> <th>Parameters</th> <th>Unit</th> <th>Min</th> <th>Max</th> <th>Average</th> <th>Permissible Limit[§]</th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>mg/Nm³</td> <td>16.11</td> <td>26.83</td> <td>20.54</td> <td>150</td> </tr> <tr> <td>SO₂</td> <td>ppm</td> <td>6.14</td> <td>14.98</td> <td>8.17</td> <td>100</td> </tr> <tr> <td>NOx</td> <td>ppm</td> <td>17.31</td> <td>28.73</td> <td>20.96</td> <td>50</td> </tr> </tbody> </table> <p style="text-align: right;">[§] as per CC&A granted by GPCB</p> <p>Six monthly reports of flue gas emissions for duration from Apr'24 to Sep'24 is attached as Annexure – 2.</p> <p>Summary of Ambient Air and Noise for duration from Apr'24 to Sep'24 is provided in general condition No. v above.</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 (ZWTL MS 2020) by</p>	Parameters	Unit	Min	Max	Average	Permissible Limit [§]	PM	mg/Nm ³	16.11	26.83	20.54	150	SO ₂	ppm	6.14	14.98	8.17	100	NOx	ppm	17.31	28.73	20.96	50
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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>TUVRheinland India Pvt. Ltd.</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 Sabnam Enterprise, Kutch • Solid Hazardous Waste is being disposed through co-processing / incineration through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau and/or cement industries of 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 . It is also being reused within organization for lubrication purpose. • ETP Sludge, Oily Cotton Waste, Pig Waste are being disposed through co-processing in cement industries of Ambuja Cement Ltd., Kodinar. • Discarded drums / barrels was 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

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024																												
		<p>was 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, there was no received or disposal of Slope Oil.</p> <ul style="list-style-type: none"> • However, during the compliance period, there was no generation and disposal of Sludge & Filters contaminated with oil, Tank Bottom sludge, Asbestos 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 change.</p> <p>The following table summarizes the waste management practice (from Apr'24 to Sep'24) for different types of wastes at APSEZ:</p> <table border="1" data-bbox="641 1369 1366 1892"> <thead> <tr> <th>Type of Waste</th> <th>Name of Waste</th> <th>Quantity (MT)</th> <th>Disposal Method</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Hazardous Waste</td> <td>Discarded Containers / Barrels</td> <td>0.57</td> <td>Sell to registered recycler</td> </tr> <tr> <td>ETP/CETP Sludge</td> <td>15.07</td> <td>Co-processing at cement industries</td> </tr> <tr> <td>Oily Cotton Waste</td> <td>39.80</td> <td>Co-processing at cement industries</td> </tr> <tr> <td>Pig Waste</td> <td>5.07</td> <td>Co-processing at cement industries</td> </tr> <tr> <td>Used / Spent / Waste Oil</td> <td>86.88</td> <td>Sell to registered recycler</td> </tr> <tr> <td colspan="2">Hazardous Waste Total</td> <td colspan="2">147.39</td> </tr> <tr> <td>Non-Hazardous Waste</td> <td>Glass Waste</td> <td>16.65</td> <td>After recovery sent for recycling / Reuse within premises</td> </tr> </tbody> </table>	Type of Waste	Name of Waste	Quantity (MT)	Disposal Method	Hazardous Waste	Discarded Containers / Barrels	0.57	Sell to registered recycler	ETP/CETP Sludge	15.07	Co-processing at cement industries	Oily Cotton Waste	39.80	Co-processing at cement industries	Pig Waste	5.07	Co-processing at cement industries	Used / Spent / Waste Oil	86.88	Sell to registered recycler	Hazardous Waste Total		147.39		Non-Hazardous Waste	Glass Waste	16.65	After recovery sent for recycling / Reuse within premises
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Sr. No.	Conditions	Compliance Status as on 30-09-2024			
			Horticulture Waste	359.15	Used for making of manure and utilize for horticulture purpose
			Metal Scrap	1418.91	After recovery sent for recycling / Reuse within premises
			Organic / Food Waste	537.95	Converted to Manure for Horticulture use / Biogas for cooking purpose
			Paper Waste	23.57	After recovery sent for recycling / Reuse within premises
			Plastic Waste	159.20	After recovery sent for recycling / Reuse within premises
			RDF (Non Recyclable Waste)	145.88	Co-processing at cement industries
			Rubber Waste	262.47	After recovery sent for recycling / Reuse within premises
			Wooden waste	57.45	After recovery sent for recycling / Reuse within premises
			Non-Hazardous Waste Total	2981.21	
			Other Waste		
			Battery Waste	3.04	Sell to registered recycler
			Bio Medical Waste	4.81	To approved CBWTF Site and registered recyclers
			E-Waste	15.07	Sell to registered recycler
			Other Waste Total	22.92	
			Grand Total	3151.52	
viii	Appropriate facility should be created for the collection of solid and liquid wastes generated by the barges/vessels and their safe treatment and disposal	Complied. <ul style="list-style-type: none"> Ships berthing at Mundra Port comply with MARPOL / DG Shipping regulations. The port is registered with DG Shipping PAN India portal "Swatch Sagar" for providing reception facility. All vessels wish to deliver waste at 			

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
	<p>should be ensured to avoid possible contamination of the water bodies.</p>	<p>Mundra Port, raises request in Swatch Sagar Portal. The Port arranges waste collection from vessels and uploads Waste Delivery Receipt in Swatch Sagar Portal against vessel's request. The waste disposal is being done as per regulation. The PRF is also annually audited by DG Shipping.</p> <ul style="list-style-type: none"> • The reception facility for all category of waste except Annex VI as per IMO and DG Shipping requirements is available in the port. • From all the waste, waste categorized in Annex – V category is being collected and disposed by port itself i.e. APSEZL Mundra. Port collects Solid waste (i.e. Garbage) categorized in Annex – V from vessels and collected waste is being sent to Material Recovery Facility for segregation & than segregated waste is being disposed in line with 5R principles. • Waste categorized in Annex – 1 (Sludge Oil) category is directly collected and disposed by GPCB authorized recyclers. • No discharge such as bilge wastes, sewage or any other liquid wastewater is allowed into marine environment inside port limits. • As a general practice APSEZ has been authorized under Hazardous Waste Rules – 2016 to provide facility for receiving waste / slop oil from vessels through hose connection with oil tankers. These tankers divert waste / slop oil to Oil water separator system where water and oil particles are separated. Separated oil is being sold to authorized recycler /re-processor. However, no waste / slope oil was received during the compliance period.
ix	<p>Necessary navigational aids such as channel markers should be provided to prevent accidents. Internationally recognized safety standards shall be applied in case of barge /vessel movements.</p>	<p>Complied.</p> <p>Navigational aids such as buoys and leading lights have been provided. The rules and regulation of the port contributes to the safe, efficient and environmentally responsible handling of shipping traffic. The international rules of IMO, such as SOLAS convention and its amendments and national regulations are in force at APSEZ, Mundra.</p>

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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>APPLICABLE REGULATION</p> <ul style="list-style-type: none"> ➤ Port Security Law (ISPS) ➤ Indian Port Act ➤ Gujrat Maritime Board Act 1981 ➤ Navigational Safety Port Committee (NSPC) ➤ All relevant international rules and regulations on MARPOL, Load lines etc.
x	<p>During operation phase proper precautions should be taken to avoid any oil spills and no oily wastes shall be discharged into the water bodies.</p>	<p>Complied.</p> <p>Proper precautions are taken to avoid any oil spills during operation such as pressure checks of oil transfer lines and manual watch during oil cargo transfer.</p> <p>Available mechanisms to avoid oil spills are identified as below.</p> <p><u>At liquid terminal:</u></p> <ul style="list-style-type: none"> • Immediate shut off valve from vessel and shore. • Periodical testing of lines • Immediate suction of material by pump. • Emergency operation shut down. <p><u>At Marine Operations:</u></p> <ul style="list-style-type: none"> • Scupper plug, dip tray, absorbent pad, saw dust is provided to address confined spillage/leakage. <p><u>At Container Terminals:</u></p> <ul style="list-style-type: none"> • Leak cart is available for collect spilled chemical. • Spill control materials in place. • Oil drums are stored in covered shed where pellets are used. Tray provided to collection of spillage/leakage if occurred. <p>No oily waste is discharged to water bodies. Oily waste or oil contaminated waste is being disposed as mentioned in General Condition no. vii above.</p>
xi	<p>The project authorities should take appropriate community development and welfare measures for the villagers in the vicinity of the project site, including drinking water facilities. A</p>	<p>Complied.</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</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024				
	<p>separate fund should be allocated for this purpose.</p>	<p>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 border="1" data-bbox="635 915 1374 1936"> <thead> <tr> <th data-bbox="635 915 839 961">Area</th> <th data-bbox="839 915 1374 961">Activity</th> </tr> </thead> <tbody> <tr> <td data-bbox="635 961 839 1936">Community Health</td> <td data-bbox="839 961 1374 1936"> <ul style="list-style-type: none"> • Mobile Health Care Units and Rural Clinics • 07 Rural Clinics • 05 villages of Mundra & 02 village Mandvi block has benefited by rural clinic service. • Total 5519 Patients Benefitted FY 24-25 till Sep'24 (direct & indirect) by Mobile van and rural clinic. • 2 financially challenged patients has been supported with Dialysis treatment at 22 Times which added day in their Life. • Provided 27,355 medical health services <ul style="list-style-type: none"> ❖ Burn & Intensive Care Unit <ul style="list-style-type: none"> • On August 11 (Adani Foundation Day), the foundation stone for the Burn Ward at GK General Hospital, Bhuj, was laid. • This center will provide comprehensive care for burn victims, from emergency treatment to long-term rehabilitation. It will benefit 22 lakh population of Kutch. ❖ Eye Vision Care: <ul style="list-style-type: none"> • To address these challenges, the Adani Foundation, in </td> </tr> </tbody> </table>	Area	Activity	Community Health	<ul style="list-style-type: none"> • Mobile Health Care Units and Rural Clinics • 07 Rural Clinics • 05 villages of Mundra & 02 village Mandvi block has benefited by rural clinic service. • Total 5519 Patients Benefitted FY 24-25 till Sep'24 (direct & indirect) by Mobile van and rural clinic. • 2 financially challenged patients has been supported with Dialysis treatment at 22 Times which added day in their Life. • Provided 27,355 medical health services <ul style="list-style-type: none"> ❖ Burn & Intensive Care Unit <ul style="list-style-type: none"> • On August 11 (Adani Foundation Day), the foundation stone for the Burn Ward at GK General Hospital, Bhuj, was laid. • This center will provide comprehensive care for burn victims, from emergency treatment to long-term rehabilitation. It will benefit 22 lakh population of Kutch. ❖ Eye Vision Care: <ul style="list-style-type: none"> • To address these challenges, the Adani Foundation, in
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Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>collaboration with Vision Spring, is launching a holistic eye care initiative for the community.</p> <ul style="list-style-type: none"> ❖ This initiative focuses on: <ul style="list-style-type: none"> • Student: See to Learn, SHG Women: See to Earn, Driver of APSEZ: See to be Safe • Total Screening 7476 (Students) + 3958 (Drivers) = 11434 ❖ Vision Aids: 621 (Students) + 1110 (Drivers) = 1731 ❖ Cataract Screening: 366 nos. of peoples ❖ Cataract Surgery: 18 nos. of peoples <p>Medical Services Data April to Sep - 2024:</p> <ul style="list-style-type: none"> • Ayushman Card: 243 beneficiary • Eye Vision Care; 7740 beneficiary • Driver Health Check-up: 2423 beneficiary • Blood Donation Camp: 2902 beneficiary • Specialty Health Camp: 2578 beneficiary • General Health Camp: 1074 beneficiary • Rural Clinic: 5519 beneficiary • Mobile Health Care Unit: 4348 beneficiary • Medical Supports: 1071 beneficiary • Dialysis Support: During this year, 2 patients were supported for regular dialysis with 22 Times which added day in their Life. • 1094 –Economically Challenged patients have been supported for operation, OPD, IPD, Medicines and lab-test. <p>Animal Husbandry:</p> <ul style="list-style-type: none"> • Fodder support to 25 villages, benefiting 15005 cattle, Dry

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024	
			<p>Fodder Support - 10,90,875 Kg & Green Fodder Support - 27,64,920 Kg</p> <ul style="list-style-type: none"> Launched a vaccination camp for 20,000 cattle, in collaboration with the Animal Health Department of Bhuj. 6,200+ cattle have been successfully vaccinated,
	Sustainable Livelihood – Fisher folk, Agriculture & Women		<ul style="list-style-type: none"> ❖ "CHETNA" - initiative with gender diversity <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 167 Female Joined Adani Solar @Pan India, 154 are from Kutch (92.21%) ❖ Saheli Groups: Form 82 Self Help Groups in coordination with National Rural Livelihood Mission (850+ Members). 16 SHG are on pathways of self-reliance their total Corpus Rs. 32,27,100 in 6 months. ❖ 3 women SHGs from Adani Foundation Mundra participated in the prestigious Sathwaro Mela in 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/- <p>Empowering Fisherfolk Community:</p> <ul style="list-style-type: none"> Education Support: Vehicle transportation facilities to 86 fisherfolk students, Education kits Support to 77 students, Scholarship support of Rs. 3,58,765 to 34 students.

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<ul style="list-style-type: none"> • Job Support: Facilitated job placements for 75 fisherfolk as RTG operators, in the HR department, professional painting roles and as supervisors in APSEZ companies. <p>Animal Husbandry:</p> <ul style="list-style-type: none"> • Fodder support to 25 villages, benefiting 15005 cattle, Dry Fodder Support - 10,90,875 Kg & Green Fodder Support - 27,64,920 Kg • Launched a vaccination camp for 20,000 cattle, in collaboration with the Animal Health Department of Bhuj, 6,200+ cattle have been successfully vaccinated, <p>Last Year conducted activities:</p> <p>Overall Persistent efforts for Fisherman development:</p> <ul style="list-style-type: none"> • 598 Education Kit Support • 273 Fisherman Shelter Support • 1,247 Vehicle transportation support of Mundra and Mandvi taluka • 106 Cycle Support to high school going students • 613 Scholarship Support • 419 Youth Employment • 195 Linkages with Fisheries Scheme • 3,534 Ramaotsav Community Engagement • 56,523 Man days Mangroves Plantation <p>Empowering Fisherfolk Communities through Education:</p> <ul style="list-style-type: none"> • Vehicle Transportation Facilities: 146 Students supported Mundra Taluka and 58 Students supported

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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>at Mandvi Taluka during the compliance period</p> <ul style="list-style-type: none"> • Education Kits Support: Education Kits including notebooks, guides, and bags, to fisherfolk students studying in 9th to 12th standard to enhance their learning experience (57 nos. students benefitted). • Educational Awareness Sessions: Through targeted awareness sessions in Fisherfolk Vasahat, we promote the transformative power of education, with a particular focus on advancing girl-child education. (487 Students motivated for high school Education). • Scholarship Support: Provide scholarship support to 31 deserving students, covering their higher secondary school fees. Emphasizing gender equality, we offer 100% fee support to female candidates and 80% to male candidates. • Cycle Support: Overcoming transportation obstacles, our cycle support initiative enables six 9th standard fisherfolk students from Juna Bandar to continue their education with ease. • Assisting During Emergencies: Fisherfolk Home were significantly damaged by the Biporjoy Cyclone. In response to that we provided 2696 cement sheets to 336 fisherfolk households of Juna Bandar, Luni, and Randh Bandar to support their recovery. (336 Fisherfolk house benefitted) • Fostering Youth Employment: At APSEZ Mundra, our mission revolves around providing sustainable employment opportunities for the local fishing

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024	
			<p>community. We serve as a bridge between industries and Fisherfolk youth, facilitating job placements to enhance livelihoods. This year, we have successfully engaged 115+ Fisherfolk youth, paving the way for a brighter future. (115+ Fisherfolk youth employed)</p> <ul style="list-style-type: none"> • Strengthening Fisherfolk women: Through comprehensive health and hygiene initiatives, we empower Fisherfolk women. Our programs include family planning resources, menstrual hygiene workshops, nutrition advocacy, and health awareness sessions covering vaccinations, clean water access, and mental health support. (449 Women benefited) • Potable Water Distribution: Providing potable water facilities to 9 Fisherfolk Vasahat daily, either through water tankers or by establishing linkages with the nearest Gram Panchayat. This initiative benefits over 5000 Fisherfolk, significantly improving their health and productivity. (5000+ Population benefited). <p><u>Sustainable Livelihood - Agriculture:</u> During compliance period This year, the Adani Foundation continued its strong commitment to advancing natural farming in Mundra. Through various initiatives and partnerships, we provided crucial support to local farmers, empowering them with knowledge and resources to transition to sustainable practices.</p> <ul style="list-style-type: none"> • 2200+ Farmers educated in natural farming • 800+ Farmers embracing natural farming methods • 200 Farmers got financial assistance of Rs. 10,000 • 3 District level exposure visit

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024	
			<ul style="list-style-type: none"> • ₹ 36.7 lakh Business done by our benefited Farmers <p>Promoting Natural Farming:</p> <ul style="list-style-type: none"> • Training: Conducted training for 1250 farmers in 16 villages, enlightening them about the harmful effects of chemical fertilizers. Demonstrated how to produce organic fertilizer using household products, emphasizing its benefits and cost-effectiveness. After adopting it, they witnessed its positive effects on their fields. • Kitchen Garden Kit: We have supported vegetable kitchen garden kits to 500 farmers with the aim to enable them to grow fresh and nutritious, chemical-free vegetables. This will enhance their food security and promote self-reliance. • Empowering Farmers: This year, amidst the aftermath of the cyclone, we stood by our farmers and held dedicated meetings with KVK, KCS, and DRC to restore the fallen date trees. Collaboratively, provided JCB, technical support, organic fertilizer etc. Successfully restored 615 trees. Each Date trees is projected to yield approximately Rs. 25,000, Total Yield in Next Season: - Rs.1.53 Cr. • Financial Assistance: Extend financial support to 200 farmers, each receiving Rs. 10,000, a transaction gracefully facilitated by Mr. R. N. Parmar, virtually transferring funds to their bank accounts, funded by Adani Petrochemicals. This fund will help farmers in planting a total of 53,136 fruit-bearing plants.

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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p><u>Raj Shakti Prakrutik Kheti Sahkari Mandali:</u></p> <ul style="list-style-type: none"> • Appreciation by Governor: Governor of Gujarat, Shree Acharya Devvratji, encouraged 25 of our farmers practicing natural farming at the Krushi and Dairy Expo event in Bhuj. • Exposure Visits Certification by GOPCA: Our farmers embarked on three eye-opening exposure visits to Gautech-2023, • Certification by GOPCA: We have successfully certified 28 farmers under the Gujarat Organic Products and Certification Agency (GOPCA). <p><u>Kutch Kalptaru FPO (KKPC) and Prakrutik Mandli</u></p> <ul style="list-style-type: none"> • To promote horticulture, the Kutch Kalptaru FPO (KKPC) was established in 2020 by farmers from Mundra Block to address various challenges they faced. With an initial 350 shares held by 280 shareholders, the company is now expanding to include up to 5000 farmers and 537 registered shareholders. (800 Farmers benefited and ₹ 33.67 lacs Turn over) • 19 nos. of Market Linkage for supporting to Green carnival at Samudra Township & Shantivan colony Now 302+ farmers are collaborated with Mandli. Total Green Carnivals 37, Total Sell 8,623 kg and Revenue generated ₹ 30184805. by connecting directly with consumers, they've seen a remarkable 35% increase in their income. • Adani Foundation has also provided 14.38 lacs kg Dry Fodder and 45.85 lacs kg Green fodder in

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Sr. No.	Conditions	Compliance Status as on 30-09-2024	
			<p>31 villages of Mundra and Anjar Block to support the resource dependent villagers, to avoid their dependency on mangroves. The expenditure for fodder supporting activities was approx. 305.55 Lacs during FY 2023-24.</p> <ul style="list-style-type: none"> Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 15005 Cattels / 2070 farmers and hence enhancing cattle productivity during FY 2023-24. Grass Land development: AF converted 18 acres of denuded village common pastureland gauchar into fertile and productive grassland in Zarpara, Siracha, Gundala, Kukadsar village to transform into Fodder Sustain village during FY 2023-24. <p>Women Empowerment:</p> <ul style="list-style-type: none"> Self Help Groups (SHGs): Established 82 self-help groups in various rural and urban areas to provide financial and social support to women. We provided training and capacity building workshops to members of these SHGs to help them develop income generating activities and improve their livelihoods. Through this initiative, we have empowered over 850 women to become self-reliant with Savings of more than Rs 35 Lacs. ❖ Making SHG Self Reliant: <ul style="list-style-type: none"> 16 SHG are on pathways of self-reliance. Various handicraft, dry and fresh food making, stitching, tie and die etc.

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<ul style="list-style-type: none"> ● 175+ women - Monthly average income @ 7000 of each member over Month. ❖ Job Sourcing – Govt: ● 11 Women supported for application and process of Gram Rakshak Dal, Bank Sakhi, Bima Sakhi and Professional Resource Person. ● Average income 4200 Per Month. ❖ Job Sourcing – Private: ● Coordination for Job by Unnati Portal with Adani Group company companies, Britania, B Medical and Emphazer company. ● 398 Women supported till date for job sourcing of more than 18 villages. ● Average income 10200 Per Month. ❖ Social Empowerment: ● 2 Livelihood Enhancement Training through RSETI. ● Financial support for business set up. ● Legal rights and domestic violence workshops. ● Family counselling for Job sourcing. ● During FY2023-24 Approx. INR 122.32 lakh were spent for Fisherfolk Amenities work in different core areas. ● Till FY 2023-24 Adani Foundation has done total expenditure of INR 1460.50 lakh for Fisherfolk Amenities work in different core areas. ● Skill Development and Income Generation –Adani Foundation is working with 82 Self-help group and supporting to develop entrepreneur skills to become self-reliant, sourcing more than

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024	
			850 women to absorb in various job.
		Education	<p>Key programmatic accomplishments:</p> <ul style="list-style-type: none"> • 69 Primary schools (10452 Students) • 8 High schools (1211 Students) • 12000+ Students • 2371 Progressive learner • 3421 IT on Wheels • 2449 Adani competitive coaching center • 250 Adani Evening Education center • Library Activity: 45000+ Books issued. 300+ Oasis workshop arranged to increase reading habits of students. • Mothers Meet: Mothers' meetings conducted every second Saturday in Utthan schools. 10,000+ mothers have participated. • Vedic maths and Abacus
		Rural Infrastructure & Environmental Sustainability	<p>Adani foundation designed and build various structure and provide service in the Health, Education, agriculture and sustainable livelihood area.</p> <ul style="list-style-type: none"> ❖ Renovation of Zarpara High School - benefit 450+ students/annually ❖ Construction of Madhav seva trust School at Zarpara - benefit 250+ students/annually ❖ Renovation of AVMB school - benefit 640+ students/annually ❖ Vruksh Se Vikas – Massive Drive <ul style="list-style-type: none"> • In the 6 months we establish 3 Adani Van, planting 22,460 trees in 9.5 acres area in N khakhar, Borana, and Dhruv village. Till Date 8 Adani Van 75,078 Trees @28 acres

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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<ul style="list-style-type: none"> • Prakrutik Rath: Empowering Communities Through Green Initiatives 7,136 saplings distributed and planted in 6 months. • Total 1.79 Lac tree plantation done till date. <p>❖ Mangrove Nursery Development with 10,000 seeds.</p> <p>❖ Coastal Cleanup day: At Kashivishvnath Beach, Mandvi, 200+ students and 80 Utthan Sahayaks cleaned a 1 km stretch, collecting significant plastic waste as part of a coastal cleanup and awareness drive.</p> <p>❖ Green Schools: Eco-clubs in 77 Utthan Schools and 12000+ students participate in "No Plastic" activities.</p> <p>Last Year Completed Activities/Projects:</p> <p><u>Water Conservation Projects:</u></p> <p><u>Swajal Project:</u></p> <ul style="list-style-type: none"> ➤ Aim: The Foundation's Water Conservation program, SWAJAL, is aimed at addressing the alarming depletion of groundwater levels and reduction in water sources in various parts of Kutch district. ➤ Water Security Plan: Due to arid climatic characters of the Kutch region, it is essential to plan for water security drinking and livelihood purposes. Considering weather condition, rainfall characters, geohydrological condition and water demand,

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Sr. No.	Conditions	Compliance Status as on 30-09-2024																											
		<p>water security plan has been prepared for the Seven villages.</p> <table border="1" data-bbox="842 562 1374 863"> <thead> <tr> <th data-bbox="842 562 951 646">Block Name</th> <th data-bbox="951 562 1104 646">Water conservation structure</th> <th data-bbox="1104 562 1228 646">Total no. of Structure</th> <th data-bbox="1228 562 1374 646">Total Capacity Created (CUM)</th> </tr> </thead> <tbody> <tr> <td data-bbox="842 646 951 695">Mundra</td> <td data-bbox="951 646 1104 695">Check Dam</td> <td data-bbox="1104 646 1228 695">23</td> <td data-bbox="1228 646 1374 695">6,07,332.80</td> </tr> <tr> <td></td> <td data-bbox="951 695 1104 743">Pond Deepening</td> <td data-bbox="1104 695 1228 743">66</td> <td data-bbox="1228 695 1374 743">1,89,121.08</td> </tr> <tr> <td></td> <td data-bbox="951 743 1104 791">RRWHS</td> <td data-bbox="1104 743 1228 791">275</td> <td data-bbox="1228 743 1374 791">2750</td> </tr> <tr> <td></td> <td data-bbox="951 791 1104 840">Recharge Borewell</td> <td data-bbox="1104 791 1228 840">209</td> <td data-bbox="1228 791 1374 840">-</td> </tr> <tr> <td></td> <td data-bbox="951 840 1104 863">Percolation Well</td> <td data-bbox="1104 840 1228 863">24</td> <td data-bbox="1228 840 1374 863">-</td> </tr> </tbody> </table> <p>Soil Conservation:</p> <ul style="list-style-type: none"> • 1250 Farmers Awareness Sessions at Village Level: Spreading awareness on natural farming benefits and address their concerns. • 7 exposure of Hands-On Training & Exposures: Arranged Workshop and training to emphasizing on real-world techniques. • 857 Farmers link with Government Scheme: facilitation of govt. Cow Nurturing scheme to promote eco- friendly farming practices. • 258 Gobardhan Bio-gas Support: Link with Gov Gobar Dhan Biogas Unit Nutrient-rich slurry serves as an essential organic fertilizer for natural farming. • 35 Farmers Natural Farming Certification Process to obtain natural farming certification through the GOPCA for the 35 Farmers who are Members of Raj shakti Sahakrai Mandali. • Rs.9.88 Lacs RG Marketing Assistance: Provide platforms and resources ensuring fair prices and broader consumer reach. <p>Skill Development Empowering Youth: Impact of ASDC in Mundra and Bhuj Center</p>				Block Name	Water conservation structure	Total no. of Structure	Total Capacity Created (CUM)	Mundra	Check Dam	23	6,07,332.80		Pond Deepening	66	1,89,121.08		RRWHS	275	2750		Recharge Borewell	209	-		Percolation Well	24	-
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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>ASDC has significantly enhanced employability in Mundra and Mandvi. Training programs in digital literacy, RTG crane operation, beauty therapy, and advanced Excel have provided practical skills and certifications. Real-time exposure along with the Entrepreneurship Development Program (EDP), has further empowered youth. Successful placements have resulted in well-paying jobs, contributing to regional economic growth. Overall, ASDC's initiatives have transformed the lives of many individuals, fostering both personal and professional development.</p> <p><u>ASDC Mundra Center Activities & Achievements:</u></p> <ul style="list-style-type: none"> • Women Empowerment through Skill Training: Provided Mud work training to 180 women in Mundra taluka villages supported by MPL. • RTG Crane Operator Training: Collaborated with APSEZ HR Team to train 79 students. • Dori Work and Hand Embroidery Training: Benefited 90 women in various Mundra villages supported by MPL. • Health Awareness and Career Sessions: 108 Ambulance Department enlightened GDA trainees at Adani Institute of Medical Sciences. Guest session on career advancement led by Mr. Kapil Goswami. • Exposure Visit for Women: Women trained in Mud Work, Dori Work, and Hand Embroidery showcased their skills during a visit by foreign delegates to the Solar Plant. • Women's Related Training Seminar: Held at Matrurvandana College, Bidada, Mandvi. <p><u>ASDC Bhuj Center Activities & Achievements:</u></p>

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Sr. No.	Conditions	Compliance Status as on 30-09-2024	
			<ul style="list-style-type: none"> • Commendation from Shree Jeet Adani: Received appreciation for supporting the Divyang job fair. • Employee Development Initiatives: Conducted Advanced Excel training for 18 Sumitomo India Ltd employees • Entrepreneurship Development Program: Organized a comprehensive 12- day program with 60 diverse candidates. • New Trainee Orientation: Conducted sessions about SAKSHAM center and LMS registration at the Bhuj Centre. • Civil Defense Training (5 days): Covered essential topics including Disaster Management, First Aid, 181 Mahila Helpline, 108 Emergency Services, and Fire Safety. • F&B & Housekeeping Batch Inauguration: 92 students trained to enhance employability. • Indo-Euro Project Seminar: Arranged at various Nursing Colleges in Kutch District. Focused on German Language training and job placements. • Crucial Meeting with ISAR & UNICEF: Discussed future skill development challenges and transgender equality on 9th December 2023.
xii	The quarrying material required for the construction purpose shall be obtained only from the approved quarries / borrow areas. Adequate safeguard measures shall be taken to ensure that the overburden and rocks at the quarry site	<p>Not applicable at present.</p> <p>Construction activities are completed. No such activity is carried out during the compliance period of Apr'24 to Sep'24.</p>	

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Sr. No.	Conditions	Compliance Status as on 30-09-2024
	does not find their way into water bodies.	
xiii	The dredging operations, if any, to be undertaken with the prior approval of this Ministry, shall be executed with appropriate safeguard measures to prevent turbidity conditions in consultation with the expert agencies such as CWPRS / NIO.	<p>Complied</p> <p>Capital dredging is completed and only maintenance dredging is being carried out, if required.</p>
xiv	For employing unskilled, semi-skilled and skilled workers for the project, preference shall be given to local people.	<ul style="list-style-type: none"> • Complied • Adani Foundation – CSR Arm of Adani Group is doing following activities as a part of Skill Development in surrounding communities in Kutch area. • Adani Skill Development Center (ASDC), Mundra & Bhuj is providing skill development training to the locals for Soft Skill, Technical Training and Career Guidance & knowledge-based training. • Adani Skill Development Centre (ASDC) is playing a pivotal role in implementing sustainable development in the state. ASDC is envisioned to be playing a major role in elevating the socio-economic status of the people belonging to the lowest strata of the society by empowering them with various skill development training for employability and livelihood. • Over the previous few years, ASDC has assessed various aspects of the technical, leadership and soft skills gaps that organizations, in general, face and accordingly focuses on imparting required training in those areas in partnership with various colleges and institutes. • ASDC imparted various soft skilled and technical training to make Atma Nirbhar India. • Adani Skill Development Centre (ASDC) is dedicated to enhancing employability and entrepreneurship. During previous year, ASDC has trained 50,000 individuals across Kutch, resulting in 65% livelihood generation. ASDC's vision is to make everyone skilled and employable, meeting

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Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>industry demands through trained manpower.</p> <ul style="list-style-type: none"> • Preference is given to local people for employment based on their qualification and experience. • All Mangrove plantations are done in consultation with GUIDE and Local forest dept. • 24 hectare of mangrove afforestation at Mundra was done through active participation of local fishermen at the cost of INR 25.0 Lac. • 25 hectare of mangrove plantation with a cost of 10 Lakh is already completed near railway yard in consultation with Dr. Maity, Mangrove consultant of India. • 56,523 Man-days Fisherman person days employed in Mangroves Plantation during the previous FY 2023-24. The Foundation has also supported Pagadiya fishermen as painting laborers by providing them with employment and job in various field. • Details on skill development training imparted during FY 2024-2025 till Sep'24 by Adani Foundation are available in CSR report enclosed as Annexure - 1.
xv	<p>To meet any emergency situation, appropriate firefighting system and water pipelines should be installed. Appropriate arrangements for uninterrupted power supply to the environment protection equipment and continuous water supply for the firefighting system should be made.</p>	<p>Complied.</p> <p>Tug (Dolphin-11) has firefighting system of 1200 m³/hr. along with 20 ton lifting "A" frame and diving support facility for support at offshore.</p> <p>With respect to onshore facilities valve station, pumping station and transportation pipeline, foam base fire tender, fire water network is available. Fire-fighting system has been installed and maintained to meet emergency situations. Additionally for emergency, emergency DG Set is provided for fire water pumps to ensure continuous water supply for firefighting purpose. Detail information on firefighting facility available at APSEZ was submitted as a part of compliance report for the duration of Apr'17 to Sep'17.</p>
xvi	<p>Regular drills should be conducted to check the effectiveness of the on-site Disaster Management Plan.</p>	<p>Complied.</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024			
		Sr. No.	Location	Month	Scenario
		1.	Canteen area, ACMTPL	Sep'24	Assuming that one driver was started vomiting due to food poisoning while taking meal. Canteen supervisor Mr. Kiran Kumar Immediately informed to Admin in charge, OHC and Safety Department
		2.	Encloser – 09, TLF-09, Loading Bay	Sep'24	Chemical Spillage (Methanol around 300 litter) on loading helper due to wrong opening of valve for tanker loading at TLF - 09.
		3.	Liquid Terminal (OO line (In front of FCC))	May'24	Isolation of Wagon due to fire catch on wagon during PY Gas Unloading at "OO" Line.
		4.	2L20B1 container AICTPL	Sep'24	Scenario was leakage observed in container MEDU4000038 (IMDG class 08, UN 1760) placed at 2L20B1, yard supervisor informed to duty superintendent by means of VHF and Duty superintendent informed to Tower control of AICTPL. Tower control informed to Fire services, OHC, Security, ERT, Terminal head, POC, department regarding emergency
		5.	FB-01 refrigerated storage tank, Mundra LPG Terminal Pvt Ltd	Sep'24	While monitoring the DCS at CCR, CCR operator recognize that Gas Detector #202, activates which resulted in alarm on DCS screen, CCR operator informs shift in charge and asked him to evaluate the situation, where shift in charge confirmed about the leak, CCR immediately informed all the stakeholders and further emergency declared by site incidence controller, fire team started precautionary

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024					
			<p>water spraying by using water monitors further leak was arrested by mechanical team and ensured zero % LEL by safety team along with all the stakeholders. All clear message declared, and emergency scenario communicated to all the employees at assembly point.</p>				
xvii	<p>The recommendations made in the Environmental Plan and Disaster Management Plan, as contained in the EIA and Risk Analysis Reports of the project, shall be effectively implemented.</p>	<p>Complied All the recommendations are being implemented.</p> <p>Few Marine EIA recommendations:</p> <table border="1" data-bbox="639 1199 1375 1936"> <tr> <td data-bbox="639 1199 943 1709"> <p>Operational protocols and safety procedure should be printed and freely available to concerned staff. The employees must be adequately trained to inculcate a high level of competence not only in day to day operations but also during emergency situations. Periodic refresher courses must also be organized to maintain the level of their competence.</p> </td> <td data-bbox="943 1199 1375 1709"> <p>The company has written the operational protocols and safety procedures as a part of ISO 14001:2015, ISO 45001:2018 and ISO 9001:2015 certifications. APSEZ has established training department to impart training to its employees.</p> <p>IMO module course organized by Maritime Training Institute is conducted & 24 personnel have achieved IMO level 1 & 3 personnel have achieved IMO Level 2. Different training modules as Oil Spill, Oil Spill Equipment, Notification exercise, Incident are conducted at different frequency.</p> </td> </tr> <tr> <td data-bbox="639 1709 943 1936"> <p>Periodic monitoring should be undertaken at the designated sites after the terminals become operational and the results of each monitoring should be carefully evaluated to</p> </td> <td data-bbox="943 1709 1375 1936"> <p>Monitoring of various environmental parameters for Ambient Air, Noise, Wastewater, ground water, marine water and sediments is being carried out by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs</p> </td> </tr> </table>		<p>Operational protocols and safety procedure should be printed and freely available to concerned staff. The employees must be adequately trained to inculcate a high level of competence not only in day to day operations but also during emergency situations. Periodic refresher courses must also be organized to maintain the level of their competence.</p>	<p>The company has written the operational protocols and safety procedures as a part of ISO 14001:2015, ISO 45001:2018 and ISO 9001:2015 certifications. APSEZ has established training department to impart training to its employees.</p> <p>IMO module course organized by Maritime Training Institute is conducted & 24 personnel have achieved IMO level 1 & 3 personnel have achieved IMO Level 2. Different training modules as Oil Spill, Oil Spill Equipment, Notification exercise, Incident are conducted at different frequency.</p>	<p>Periodic monitoring should be undertaken at the designated sites after the terminals become operational and the results of each monitoring should be carefully evaluated to</p>	<p>Monitoring of various environmental parameters for Ambient Air, Noise, Wastewater, ground water, marine water and sediments is being carried out by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs</p>
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<p>Periodic monitoring should be undertaken at the designated sites after the terminals become operational and the results of each monitoring should be carefully evaluated to</p>	<p>Monitoring of various environmental parameters for Ambient Air, Noise, Wastewater, ground water, marine water and sediments is being carried out by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment and Research Labs</p>						

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024	
		identify changes if any and to take corrective measures, if warranted.	Pvt. Ltd., Vapi. Monitoring reports for the period from Apr'24 to Sep'24 is enclosed as Annexure – 2 .
		Adequate vigilance is required to adherence of ships to MARPOL protocol and related regulations.	During the vessel declaration compliances with respect to Air Pollution and Oil are monitored by the Port Authority. The ships are certified with international certification bodies only after complying with the MARPOL protocol.
		Manual Listing for conducting ship movement operations in the port area must be available to the concerned staff.	Berthing Policy & Tariff Structure is made available for conducting ship movement to the concerned staff and made available on web link www.adaniports.com/pdfs/PIB_06122013.pdf Port Information Booklet is also made available on web link www.adaniports.com/Port_Operations_Port_Tariffs.aspx
		Few Risk Assessment Recommendations of EIA of Multipurpose Terminal carried out in 1995:	
		There should be a provision for activating a fire alarm at the fire control room from various strategic/hazard prone areas in the factory. In areas where there is high level of Noise, It may be necessary to install more than one audible alarm transmitter or flashing lights.	Provision of activating a alarm is available at Con Room. Employees are provided with communication system which they can communicate about any emergency to Con Room. Emergency alarm systems are installed which is audible from any port location. Alarm testing is carried out at frequency of once in a month.
		Wind sleeves with adequate lightings around them should be provided at various places to guide personnel to escape in a direction perpendicular to the prevailing wind direction.	Wind sleeves with adequate various lighting system around them are available at various places of Port locations to guide personnel to escape in a direction perpendicular to the prevailing wind direction.
		Succession or second line Coordinators should be named for assuming responsibilities in case disaster occurs in the absence of principal coordinators.	Disaster Management Plan APSEZ is in place and it includes second line coordinators to assume responsibilities in absence of principal coordinators.
xviii	A separate Environment Management Cell with suitably qualified staff to	Complied. APSEZL has a well-structured Environment	

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
	carry out various environment related functions should be set up under the charge of a Senior Executive who will report directly to the Chief Executive of the company.	Management Cell, staffed with qualified manpower for implementation of the Environment Management Plan at site. Site environment head direct report to site Chief Executive Officer (CEO) and the CEO directly reports to the top management. Updated Environment Management Cell Organogram is attached as Annexure-5 .
xix	The project affected people, if any, should be properly compensated and rehabilitated.	Not applicable. The project was conceptualized in such a way that there are no impacts on the local settlements due to the project proposal. However, the project is already implemented and is in operation phase.
xx	The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year wise expenditure on environmental safeguards should be reported to this Ministry.	Complied 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. No separate bank account is maintained for the same however, all the expenses are recorded in advanced accounting system of the organization. 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 365.97 lakh are spent during the year FY 2024-25 (till Sep'24). Detailed breakup of the expenditures for the past 3 years is attached as Annexure - 6 .
xxi	Full support should 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 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	Complied APSEZL is always extending full support to the regulatory authorities during their visit to the project site. Last visit of Regional Office, GPCB was done on 07.03.2022 for Main port and compliance of the same has been submitted vide our letter dated 11.03.2022. Details of the same were submitted as part of compliance report submission for the duration of Oct'21 to Mar'22. Inline to the compliance certification process of

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
	environmental protection activities.	<p>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 20th 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 submitted action taken report w.r.t. certified compliance was submitted along with last half yearly compliance report for the</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		period Oct'23 to Mar'24.
xxii	In case of deviation or alteration in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures.	Point Noted.
xxiii	This Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Point Noted.
xxiv	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.	Point Noted.
xxv	A copy of the clearance letter will be marked to concerned Panchayat / local NGO. If any, from whom any suggestion / representation has been received while processing the proposal.	Not applicable at present
xxvi	State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industries center and Collector's Office/Tehsildar's Office for 30 days	Applicable for State Pollution Control Board.
xxvi	The project proponent should	Already Complied.

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Compliance Status as on 30-09-2024
i	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 Website of the Ministry of Environment and Forests at http://www.envfor.nic.in/ .	
xxvi ii	The Project Proponents should inform the Regional Office 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.	Already Complied.
xxix	The Project Proponent should make specific arrangements for rainwater harvesting in the project design and the rainwater so harvested should be optimally utilized.	Complied Groundwater recharge cannot be done at the project site since the entire project is in the intertidal / sub tidal areas. Rainwater within project area is managed through storm water drainage. Please refer specific condition no. v for further details upon ground water recharging and rainwater harvesting is being done by Adani Foundation as a part of CSR activity.

 <p>adani Ports and Logistics</p>	<p>Adani Ports and Special Economic Zone Limited, Mundra</p>	<p>From: Apr'24 To : Sep'24</p>
<p>Status of the conditions stipulated in Environment Clearance under CRZ notification</p>		

ANNEXURE – A

Half yearly Compliance report of CRZ recommendation

Status of the conditions stipulated in Environment Clearance under CRZ notification

Half yearly Compliance report of CRZ recommendation for "Port expansion project including dry/break bulk cargo container terminal, railway link and related ancillary and back-up facilities at Mundra Port, Dist. Kutch in Gujarat vide DoEF, GOG letter no. ENV-1098-6477-p1 dated 28th October 1999.

Sr. No.	Conditions	Status as on 30-09-2024
Specific Condition		
1	The company shall submit comprehensive Environmental Impact Assessment Report and Risk Assessment Report containing worst case scenario and detailed oil spill control management plan before carrying out the construction activities and shall implement all the mitigative measures/suggestions/recommendations given in the report of NIO and Tata AIG Risk Management Services.	<p>Already Complied. Not applicable at present</p> <p>Environmental Clearance was granted based on the submission of said documents. Rapid EIA was submitted on Feb 29, 2000 & Risk Assessment Report containing worst case scenario and detailed oil spill control management plan was submitted on Dec 28, 1999.</p> <p>For more details, please refer to general condition no xvii of the compliance of EC and CRZ clearance.</p>
2	The company in no case tap ground water.	<p>Complied.</p> <p>Please refer to Specific Condition no. ix of the compliance of EC and CRZ clearance above for details.</p>
3	The company shall not cut mangroves for the project activities except for stray mangrove seeding required for the railway line only after detailed assessment through NIO and 25 acre of land shall be planted with mangroves in consultation with NIO.	<p>Already Complied. Not applicable at present</p> <p>The company has not cut any mangroves. APSEZ has carried out 24 hectare of mangrove plantation near Navinal creek.</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>
4	The company shall carry out the mangroves plantation programme in	Green belt was developed 72.67 ha. Total 149959 trees were planted with the density of 2063 Nos per hectare within the port area. So, far APSEZ has developed

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Status as on 30-09-2024																					
	<p>addition to 25-acre mangrove plantation to be done with the help of the NIO, in consultation with the forest department.</p>	<p>457.99 ha. area as greenbelt with plantation of more than 9.06 Lacs saplings within the APSEZ area. Details on Mangroves afforestation & Green belt development carried out by APSEZ till date is annexed as Annexure - 3.</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 - 1 for CSR activity report carried out by Adani Foundation.</p> <p>EIA report was prepared by NIO in which all impacts on mangroves and coastal ecology of the region for the proposed design were studied in detail.</p> <p>Please refer to Specific Condition no. viii of the compliance of EC and CRZ clearance above for details.</p> <p>Summary of Conservation of mangroves:</p> <table border="1" data-bbox="605 1711 1344 1927"> <thead> <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> </thead> <tbody> <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> </tbody> </table>	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%
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Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Status as on 30-09-2024				
		2019 to 2021 till March	GUIDE	2723	127	4.89%
		Total		2723	629	--
		<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>				
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 				

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Status as on 30-09-2024																											
			<p>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.</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 border="1"> <thead> <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> </thead> <tbody> <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> </tbody> </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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Total	2723	629	--																										
		2.	<p>Tidal observation in creeks in and around APSEZ</p> <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. 																										

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Status as on 30-09-2024	
			<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.	<p>Removal of Algal and Prosopis growth from mangrove areas</p> <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. 80000 during FY 2023-24. The algal removal report was submitted during the last compliance report submission Oct'23 to Mar'24.
		4.	<p>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 25 Villages. Project is covering total 15005 Cattels and hence enhancing cattle productivity. Dry Fodder 10,90,875 Kg Green – 27,64,920 Kg. Awareness of mangroves importance in surrounding communities & Fodder support - The expenditure for fodder supporting activities was approx. 132.0 Lacs during FY 2024-25 till Sep'24, 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.

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Status as on 30-09-2024			
		<table border="1" data-bbox="587 432 1356 806"> <tr> <td data-bbox="587 432 654 806"></td> <td data-bbox="654 432 899 806"></td> <td data-bbox="899 432 1356 806"> <ul style="list-style-type: none"> 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 is attached as Annexure - 1. Refer CSR report attached as Annexure - 2. </td> </tr> </table> <p data-bbox="587 842 1378 1083">To comply with the GCZMA recommendations regarding mangrove monitoring at every 2 years, 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. The said work will be undertaken by NCSCM shortly.</p>			<ul style="list-style-type: none"> 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 is attached as Annexure - 1. Refer CSR report attached as Annexure - 2.
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5	The company shall ensure that the construction labors do not cut mangroves for fuel, etc.	<p data-bbox="587 1083 1378 1157">Already Complied. Not applicable at present Construction activity is already completed.</p> <p data-bbox="587 1188 1378 1398">Most of the construction labours were residing 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. were provided by APSEZ.</p>			
6	The company shall ensure that no creek are blocked due to the project activities,	<p data-bbox="587 1398 1378 1430">Complied.</p> <p data-bbox="587 1461 1378 1535">Please refer to Specific Condition no. xi of the compliance of EC and CRZ clearance above for details.</p>			
7	The company shall ensure that there will be no disposal of sullage and sewage generated from construction camps, surface run-off from construction sites, and oil and grease spillage from construction equipment in the creeks.	<p data-bbox="587 1535 1378 1566">Already complied. Not applicable at present.</p> <p data-bbox="587 1598 1378 1671">Please refer condition no. xii of EC Compliance report. Project is in operation phase.</p> <p data-bbox="587 1703 1378 1808">Sewage and effluent generated from port is being treated in designated ETP and treated water is used for horticulture purposes.</p> <p data-bbox="587 1839 1378 1915">Third party analysis of the treated water is being carried out twice in a month by NABL and MoEF&CC accredited</p>			

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Status as on 30-09-2024
		<p>agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. The results of the same are attached as Annexure – 2.</p> <p>Monitoring and analysis of ETP treated waste is also carried out regularly through in-house laboratory for the parameters such as pH, TDS, TSS, COD, Chlorides, and residual chlorine.</p>
8	<p>The company shall stick to the time bound programme submitted to this department for the proposed activities including installation of desalination plant for meeting the entire water requirement.</p>	<p>Already complied. Not applicable at present.</p> <p>Construction work was completed on time and project is in operation phase. Desalination plant with the capacity of 47 MLD is installed to meet the water requirement for overall APSEZ, Mundra.</p> <p>For detail on present source of water and quantity of water consumption, Please refer to Specific Condition no. ix of the compliance of EC and CRZ clearance above.</p>
9	<p>The company shall ensure that the commercial fisheries are not hampered due to the presence of barges, vessels and other activities in the region. Necessary plan in this regards shall be prepared in consultation with the NIO.</p>	<p>Complied.</p> <p>Communication mechanisms have been developed for the smooth movement of fishing boats vis-à-vis shipping activities.</p> <p>Please refer to Specific Condition no. xiv of the compliance of EC and CRZ clearance above for details.</p>
10	<p>The company shall bear the cost of the external agency that may appointed by this department for carrying out the supervision and/or the monitoring of the construction activities.</p>	<p>Complied.</p> <p>Construction activities are completed and project is in operation phase. If at all any study is suggested by Govt. of Gujarat, we will give full co-operation.</p> <p>Please refer to Specific Condition no. xv of the compliance of EC and CRZ clearance above for details.</p>
11	<p>The company shall carry out the post project monitoring of various environmental parameters in</p>	<p>Being complied.</p> <p>Post project monitoring of various environmental parameters is being carried out regularly.</p>

Status of the conditions stipulated in Environment Clearance under CRZ notification

Sr. No.	Conditions	Status as on 30-09-2024
	consultation with this department and Gujarat Pollution Control Board.	Please refer to Specific Condition no. xvi of the compliance of EC and CRZ clearance above for details.
12	The company shall prepare the detailed traffic control management plan for the port and shall participate in the VTMS to be developed for the Gulf of Kachchh.	Complied. APSEZ has participated in VTMS. Please refer to Specific Condition no. xvii of the compliance of EC and CRZ clearance above for details.
13	In order to eliminate adverse impact on the mangroves of Bocha Island and coastal ecology of the region, the company shall carry out construction activities only after the construction design and methodology is approved by NIO.	Already complied. Not applicable at present. Construction activity is already completed. EIA report was prepared by NIO in which all impacts on mangroves and coastal ecology of the region for the proposed design were studied in detail.
14	Any other conditions may be stipulated by this department from time to time.	Point noted.

Annexure – 1



Mundra

Half Yearly update: Apr – Sept 2024

Utilization status

Rs. in Lakhs

Site name: Mundra

Adani Foundation - Mundra Budget Tracking CSR Budget-AF-Mundra_F.Y.-2024-25											
(Amount in Lakhs)											
Sr No	Particulars	Proposed Budget			Salary & Admin Not Req.NFA	NFA Planned	NFA	PR	PO	Utilization	Percentage
		CAPEX	OPEX	Total							
A.	General Management and Administration	1.30	87.61	88.91	41.12	47.79	47.44	39.77	39.50	40.08	45.08%
B.	Education		45.26	45.26	28.66	16.60	16.04	15.69	11.65	27.43	60.60%
B1	Utthan-Education -Mundra		39.26	39.26	28.66	10.60	10.04	9.10	5.36	22.67	57.74%
B2	Utthan : Fisherfolk		6.00	6.00	-	6.00	6.00	6.59	6.29	4.76	79.29%
C.	Community Health		82.22	82.22	53.37	28.85	28.85	33.71	33.21	44.82	54.51%
D.	Sustainable Livelihood		162.68	162.68	37.68	125.00	125.01	124.25	5.49	43.49	26.74%
E.	Climate Action		10.00	10.00	-	10.00	10.00	9.65	7.50	3.92	39.22%
F.	Community Development		42.85	42.85	9.41	33.44	32.94	32.94	12.80	9.59	22.39%
G	EDM Recommended Projects		100.00	100.00	-	100.00	61.94	52.32	37.59	30.79	30.79%
	Total AF CSR Budget :	1.30	530.62	531.92	170.24	361.68	322.21	308.33	147.75	200.13	37.62%
							89.09%	95.69%	47.92%	37.62%	
Fodder Support- 1 Cr +										56.42%	

Key programmatic accomplishments

Community Health

Education

Sustainable Livelihoods

Community Infrastructure

Stakeholder engagement

Medical Services Data April to Sep - 2024



Key programmatic accomplishments

Community Health

Education

Sustainable Livelihoods

Community Infrastructure

Stakeholder engagement

❖ **Burn & Intensive Care Unit**

- On August 11 (Adani Foundation Day), the foundation stone for the Burn Ward at GK General Hospital, Bhuj, was laid.
- This center will provide comprehensive care for burn victims, from emergency treatment to long-term rehabilitation. **It will benefit 22 lakh population of Kutch..**

❖ **Eye Vision Care:**

- To address these challenges, the Adani Foundation, in collaboration with Vision Spring, is launching a holistic eye care initiative for the community.

❖ **This initiative focuses on:**

- Student: See to Learn , SHG Women: See to Earn, Driver of APSEZ: See to be Safe

❖ **Total Screening 7476 (Students) + 3958 (Drivers) = 11434**

❖ **Vision Aids 621 (Students) + 1110 (Drivers) = 1731**

❖ **Cataract Screening 366**

❖ **Cataract Surgery 18**

Highlights: Community Health



Eye Vision Care



Cataract Surgery



Nutritional kits to 153 children with thalassemia

Key programmatic accomplishments

Community Health

Education

Sustainable Livelihoods

Community Infrastructure

Stakeholder engagement

- 69 Primary schools (10452 Students)
- 8 High schools (1211 Students)
- 12000+ Students
- 2371 Progressive learner
- 3421 IT on Wheels
- 2449 Adani competitive coaching center
- 250 Adani Evening Education center
- Library Activity: 45000+ Books issued. 300+ Oasis workshop arranged to increase reading habits of students.
- Mothers Meet: Mothers' meetings conducted every second Saturday in Utthan schools. 10,000+ mothers have participated.
- Vedic maths and Abacus

Highlights: Education



Abacus Mathematics

Eye Vision Care in Utthan School

Green School Initiative – plastic collection

Key programmatic accomplishments

Community Health

Education

Sustainable Livelihoods

Community Infrastructure

Stakeholder engagement

- ❖ **"CHETNA"** - initiative with gender diversity
 - 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 167 Female Joined Adani Solar @Pan India, 154 are from Kutch (92.21%)
- ❖ **Saheli Groups:** Form 82 Self Help Groups in coordination with National Rural Livelihood Mission (850+ Members). 16 SHG are on pathways of self-reliance their total Corpus Rs. 32,27,100 in 6 months.
- ❖ 3 women SHGs from Adani Foundation Mundra participated in the prestigious Sathwaro Mela in 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/-

Key programmatic accomplishments

Community Health

Education

Sustainable Livelihoods

Community Infrastructure

Stakeholder engagement

Empowering Fisherfolk Community:

- Education Support: Vehicle transportation facilities to 86 fisherfolk students, Education kits Support to 77 students, Scholarship support of Rs. 3,58,765 to 34 students.
- Job Support: Facilitated job placements for 75 fisherfolk as RTG operators, in the HR department, professional painting roles and as supervisors in APSEZ companies.

Animal Husbandry:

- Fodder support to 25 villages, benefiting 15005 cattle, Dry Fodder Support - 10,90,875 Kg & Green Fodder Support - 27,64,920 Kg
- Launched a vaccination camp for **20,000 cattle**, in collaboration with the Animal Health Department of Bhuj. 6,200+ cattle have been successfully vaccinated,

Highlights: Sustainable Livelihood



Local women of Kutch confidently working in Adani Solar



SHGs participating in SATHWARO'24 Powering Art, Empowering Artisans



Educational and Job Support to Fisherfolk youth

Key programmatic accomplishments

Community Health

Education

Sustainable Livelihoods

Community Development

Stakeholder engagement

- ❖ Renovation of Zarpaar High School - benefit 450+ students/annually
- ❖ Construction of Madhav seva trust School at Zararpa - benefit 250+ students/annually
- ❖ Renovation of AVMB school - benefit 640+ students/annually



Key programmatic accomplishments

Community Health

Education

Sustainable Livelihoods

Community Infrastructure

Climate Action

❖ **Vruksh Se Vikas – Massive Drive**

- In the 6 months we establish 3 Adani Van, planting 22,460 trees in 9.5 acres area in N khakhar, Borana, and Dhruh village. Till Date 8 Adani Van 75,078 Trees @28 acres
- Prakrutik Rath: Empowering Communities Through Green Initiatives 7,136 saplings distributed and planted in 6 months.
- **Total 1.79 Lac tree plantation done till date.**

❖ **Mangrove Nursery Development with 10,000 seeds.**

- ❖ **Costal Clean up day:** At Kashivishvnath Beach, Mandvi, 200+ students and 80 Utthan Sahayaks cleaned a 1 km stretch, collecting significant plastic waste as part of a coastal cleanup and awareness drive.

- ❖ **Green Schools:** Eco-clubs in 77 Utthan Schools and 12000+ students participate in “No Plastic” activities.

Highlights: Vruksh Se Vikas



Vruksh Se Vikas – Massive Drive: Adani van & Prakrutik Rath

Costal cleanup Day

Adani skill development center

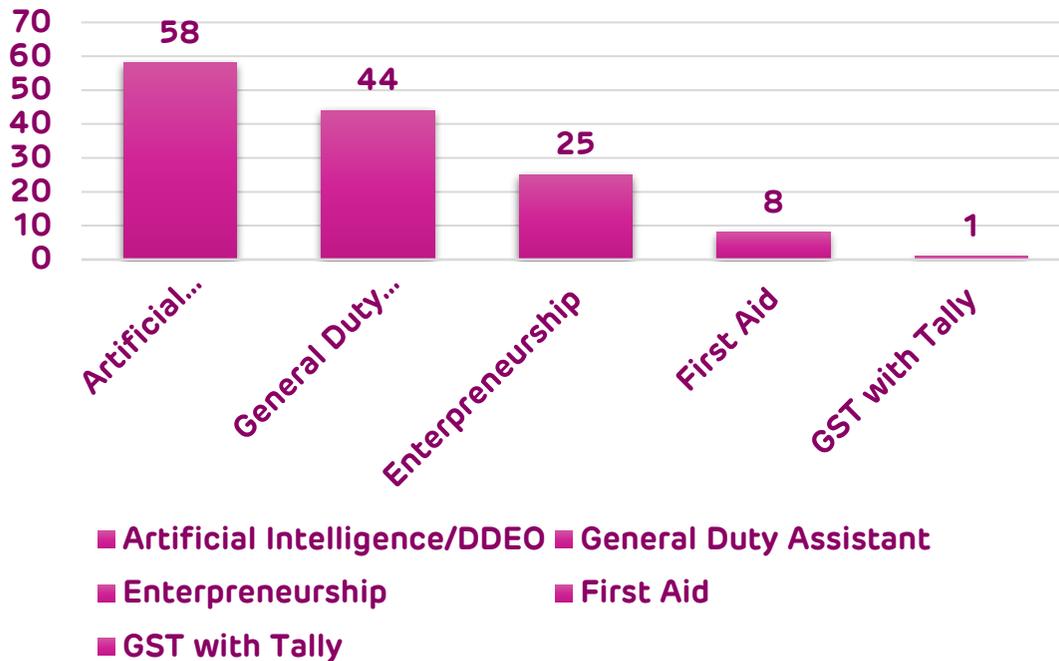


Adani Skill Development Centre (ASDC) plays a pivotal role in empowering individuals through skill enhancement. By offering a wide range of training programs, ASDC aims to bridge the gap between industry requirements and workforce capabilities. This initiative not only helps individuals stay adaptable in a rapidly evolving job market but also opens up opportunities for career advancement and higher productivity. In rural areas, many youth possess degrees but lack the practical skills needed for employment; ASDC addresses this gap by providing targeted training to enhance their employability. Through continuous learning and development, participants can achieve greater job satisfaction and personal fulfillment. On a broader scale, ASDC contributes to economic growth by fostering a skilled workforce that drives innovation and provides businesses with a competitive edge. Ultimately, the Adani Skill Development Centre is dedicated to building a future-ready workforce that supports the overall progress of society.

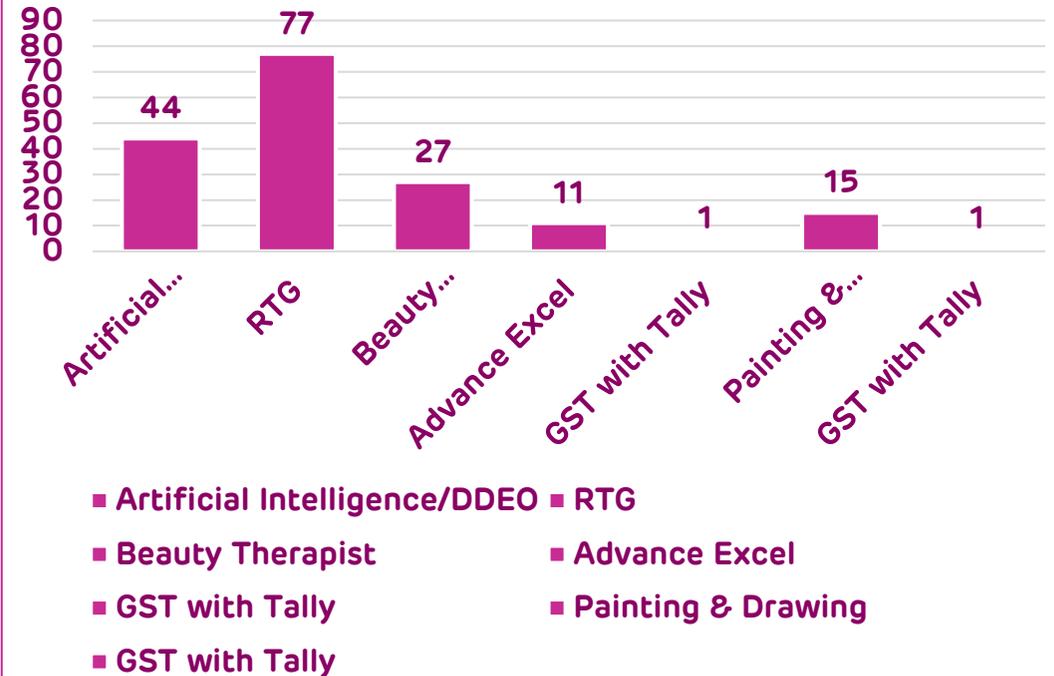
Empowering Youth : Impact of ASDC in Mundra and Bhuj Center

ASDC has significantly enhanced employability in Mundra and Mandvi. Training programs in digital literacy, RTG crane operation, beauty therapy, and advanced Excel have provided practical skills and certifications. Real-time exposure along with the Entrepreneurship Development Program (EDP), has further empowered youth. Successful placements have resulted in well-paying jobs, contributing to regional economic growth. Overall, ASDC's initiatives have transformed the lives of many individuals, fostering both personal and professional development.

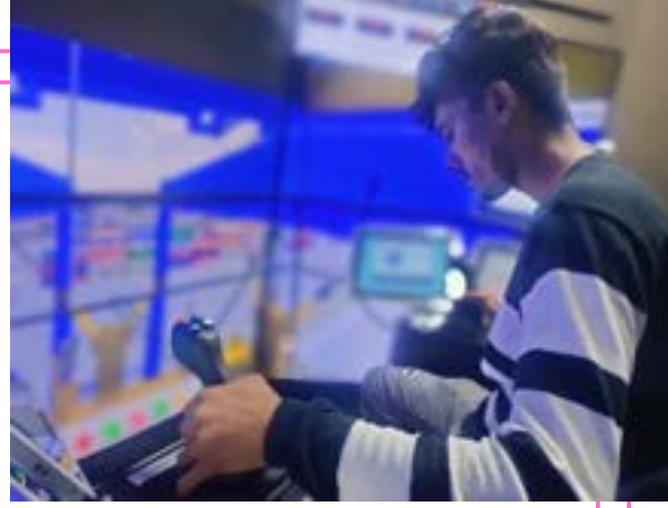
Percentage of Students in course, Bhuj



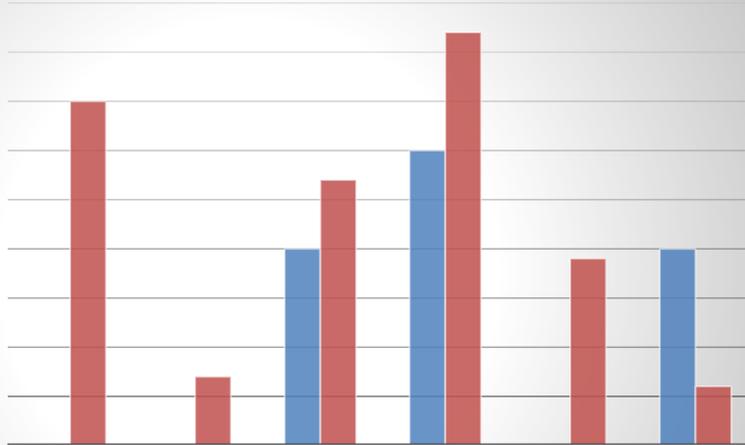
Percentage of Students in course, Mundra



Some glimpse of ASDC Mundra and Bhuj



Half Yearly Target Vs Achievement Bhuj



■ Target

■ Achivement

Apr May Jun Jul Aug Sep

0 0 20 30 0 20

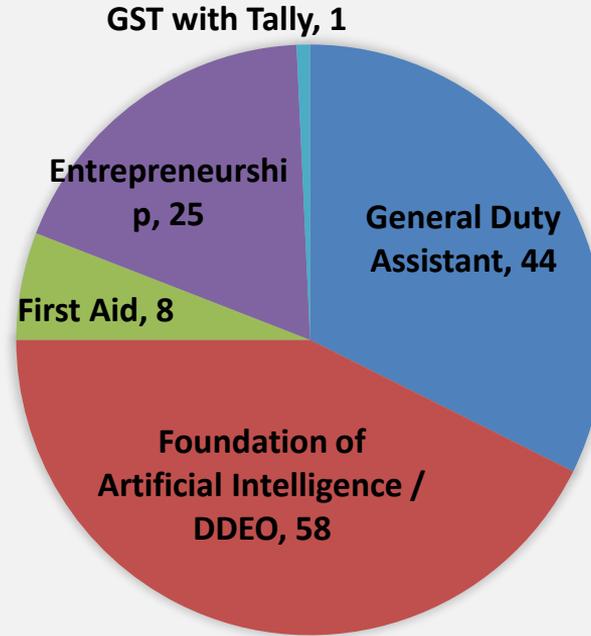
35 7 27 42 19 6

Half Yearly Target Vs Achievement



■ Total Half Yearly Target ■ Total Half Yearly Achivement

JOB ROLE WISE STUDENTS DETAILS, BHUJ



Total Students = 136

Revenue Generation Bhuj _Centre & Tie Up

Job Role	Student Paid	Tie Ups	Any other	Total Income
General Duty Assistant	284500	0	0	284500
Foundation of Artificial Intelligence / DDEO	177000	0	0	177000
First Aid	4792	0	0	4792
Tally with GST	8000	0	0	8000
Total	4,74,292	0	0	4,74,292

Bhuj Center Activities Photos



Bhuj Center Press Notes



અનુશાસનનું પાલન લક્ષ્યસિદ્ધિનું પ્રથમ સોપાન

1 કચ્છ આઈસીસી | તુષ્ટ જીવન માટે અદાણી સ્ટીલ ડેવલપમેન્ટ કોર્પોરેશન દ્વારા કચ્છના કુટુંબોને આર્થિક સ્વતંત્રતા આપવા માટે શરૂ કરેલા અનુશાસનના પ્રથમ સોપાનનું આયોજન કરવામાં આવ્યું છે. આ કાર્યક્રમમાં અધિકારીઓ અને સ્ટાફના સહયોગે કુટુંબોને જરૂરની સહાયતા આપવામાં આવી છે.

અનુશાસનનું પાલન કુટુંબોને આર્થિક સ્વતંત્રતા આપવા માટે શરૂ કરેલા અનુશાસનના પ્રથમ સોપાનનું આયોજન કરવામાં આવ્યું છે. આ કાર્યક્રમમાં અધિકારીઓ અને સ્ટાફના સહયોગે કુટુંબોને જરૂરની સહાયતા આપવામાં આવી છે.

■ ભુજ અદાણી સ્ટીલ ડેવલપમેન્ટ કોર્પોરેશન દ્વારા કચ્છના કુટુંબોને આર્થિક સ્વતંત્રતા આપવા માટે શરૂ કરેલા અનુશાસનના પ્રથમ સોપાનનું આયોજન કરવામાં આવ્યું છે.

કચ્છના કુટુંબોને આર્થિક સ્વતંત્રતા આપવા માટે શરૂ કરેલા અનુશાસનના પ્રથમ સોપાનનું આયોજન કરવામાં આવ્યું છે. આ કાર્યક્રમમાં અધિકારીઓ અને સ્ટાફના સહયોગે કુટુંબોને જરૂરની સહાયતા આપવામાં આવી છે.

જવાનોની જીવનશૈલી અનુરૂપ રાંધણ કલા વિકાસ માટે ૨૪ બહેનોએ તાલીમ લીધી



1 કચ્છ આઈસીસી | ભુજ ભાતે અદાણી સ્ટીલ ડેવલપમેન્ટ કોર્પોરેશન દ્વારા ચાલતા વિવિધ તાલીમ વર્ગો અંતર્ગત આર્મીના જવાનોની જીવનશૈલીને અનુરૂપ યોજાતા આહાર તૈયાર કરવા માટે જવાનોની પત્નીઓને

આપાયેલી ડાયેટ એંડ ન્યુટ્રીશનમાં ૨૪ બહેનોએ સફળતાપૂર્વક ટ્રેનિંગ પૂર્ણ કર્યા બદલ તેમને પ્રમાણપત્ર વિતરણ કરવાનો કાર્યક્રમ યોજાયો હતો. આર્મી સ્ટેશનના ઓરિટોરિયમમાં યોજાયેલા કાર્યક્રમમાં પ્રમાણપત્ર સ્વીકાર

આર્મી મથક ખાતે અદાણી સ્ટીલ ડેવલપમેન્ટ કોર્પોરેશન દ્વારા સફળતાપૂર્વક ટ્રેનિંગ પૂર્ણ કર્યા બદલ પ્રમાણપત્રો અપાયા

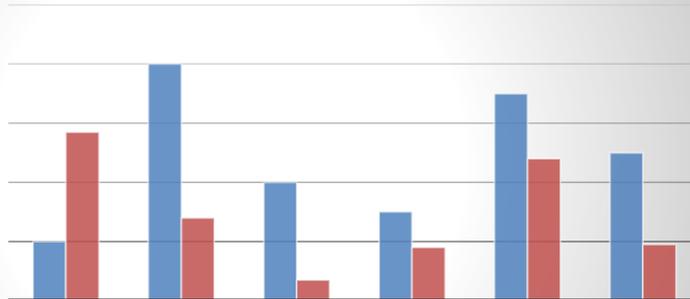
કરતાં આર્મી વેલ્ફેર ઓર્ગેનાઈઝેશનના ચેરપર્સન શાલિની સિંહે જણાવ્યું કે, જવાનોની જીવનશૈલીને અનુરૂપ રાંધણ કલાનો વિકાસ કરવા અને જવાનોના સ્વાસ્થ્ય માટે આ તાલીમ પ્રાપ્ત કરી છે જે એક ઉત્તમ પગલું પુરવાર થશે. તેમણે સંસ્થાનાં પ્રકલ્પનો આભાર માન્યો હતો. ભુજ યુનિટના ડુનિ. ઓફિસર ડૉ. પુર્વી ગોસ્વામીએ પ્રમાણપત્રો એનાયત કર્યા હતા. વ્યવસ્થા આર્મી વેલ્ફેરના સેક્રેટરી પ્રિયા સેલ્વમએ તથા સંચાલન માધ્યમી તુરવએ કર્યું હતું.

હેપ્પી મથર્સ ડે : માતૃત્વની વાસ્તવ્યમૂર્તિએ કૌશલ્ય ઉજાગર કરી ટીકરીને પગભર કરી

આર્મીના જવાનોની પત્નીઓને આર્થિક સ્વતંત્રતા આપવા માટે શરૂ કરેલા અનુશાસનના પ્રથમ સોપાનનું આયોજન કરવામાં આવ્યું છે. આ કાર્યક્રમમાં અધિકારીઓ અને સ્ટાફના સહયોગે કુટુંબોને જરૂરની સહાયતા આપવામાં આવી છે.

આર્મીના જવાનોની પત્નીઓને આર્થિક સ્વતંત્રતા આપવા માટે શરૂ કરેલા અનુશાસનના પ્રથમ સોપાનનું આયોજન કરવામાં આવ્યું છે. આ કાર્યક્રમમાં અધિકારીઓ અને સ્ટાફના સહયોગે કુટુંબોને જરૂરની સહાયતા આપવામાં આવી છે.

Half Yearly Target Vs Achievement Mundra



■ Target

■ Achivement

Apr May Jun Jul Aug Sep

20 80 40 30 70 50

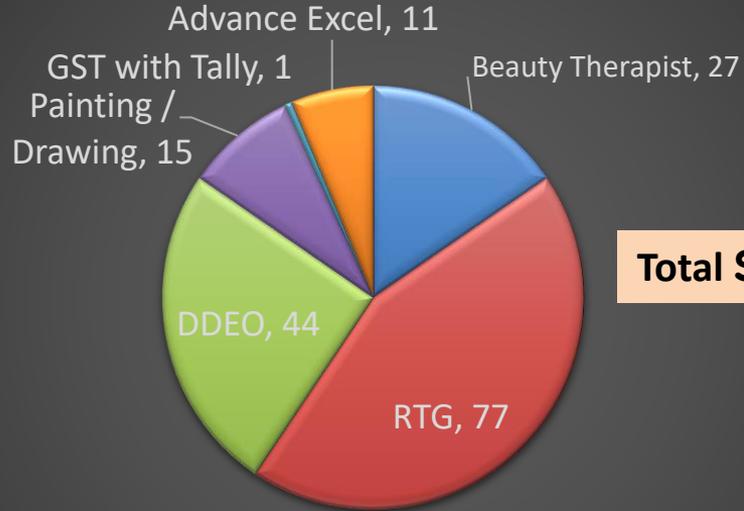
57 28 7 18 48 19

Yearly Target Vs Achievement Mundra



■ Total Half Yearly Target ■ Total Half Yearly Achivement

Job Role Wise Details Mundra



Total Students = 177

- Beauty Therapist
- RTG
- DDEO
- Painting / Drawing
- GST with Tally
- Advance Excel

Revenue Generation Mundra _Centre & Tie Up

Job Role	Student Paid	Tie Ups	Any other	Total Income
RTG	0	756000	0	756000
German Language Training	10000	0	0	10000
Beauty Therapist	54000	0	0	54000
DDEO	28000	0	0	28000
Tally with GST	3000	0	0	3000
Drawing/ Painting	18000	0	0	18000
Total	1,13,000	7,56,000	0	8,69,000

Mundra Center Activities Photos



Mundra Center Press note

મુન્દ્રામાં યુવાનો કેન ઓપરેટરની તાલીમ પ્રાપ્ત કરી રોજગાર મેળવવા બન્યા સુસજ્જ અદાણી કૌશલ્ય વિકાસ કેન્દ્ર દ્વારા સફળ તાલીમાર્થીને પ્રમાણપત્રનું કરાયું વિતરણ

ભાસ્કર ન્યૂઝ | મુન્દ્રા

તાજેતરમાં મુન્દ્રા ખાતે અદાણી સ્કીલ ડેવલોપમેન્ટ સેન્ટર દ્વારા નવી બેચના ઉદ્ઘાટન સાથે તાલીમાર્થીઓને આરટીકે કેન ઓપરેટર પ્રમાણપત્રો વિતરિત કરવામાં આવ્યા હતા. આમ સફળતા પૂર્વક તાલીમ પ્રાપ્ત કરનાર યુવાઓ હવે રોજગાર મેળવવા સુસજ્જ બન્યા છે.

એ સી ડી એસ યુવાઓને આત્મનિર્ભર બનાવવાના ઉદ્દેશ્ય સાથે ધોરણ દસ બાદ આઈટીઆઈ અથવા ધોરણ બાર ઉત્તીર્ણ વિદ્યાર્થીઓને તાલીમ આપી રોજગાર અર્થે સક્ષમ બનાવવામાં આવે છે. એસી ડી એસ દ્વારા છેલ્લા બે વર્ષમાં કેન ઓપરેશન ટ્રેડમાં 120 છાત્રોને સફળતાપૂર્વક ટ્રેનિંગ



અપાઈ છે. જેમાંથી 80 ઉમેદવારો અદાણી પોર્ટ પર જ નોકરી મેળવી આત્મનિર્ભર બન્યા છે. નવી બેચમાં 70 ટકા ઉમેદવારો કચ્છ જિલ્લાના અને અન્ય 30 ટકા પ્રમાણપત્ર વિતરણ સમારંભ માં ઉપસ્થિત ખાસ મહેમાનોને પણ સન્માનિત કરવામાં આવ્યા હતા. મુખ્ય અતિથી તરીકે ઓપીસેકના એચ આર હેડ રનેહાશીષ ભટ્ટાચાર્યએ કેન ઓપરેટર ની ભૂમિકા અંગે વિસ્તૃત માહિતી આપી

હતી. અને તાલીમાર્થીઓને અદ્યતન ટેકનોલોજી સાથે અપડેટ રહેવા અને સતત નવું શીખતું રહેવા પ્રોત્સાહિત કર્યા હતા. રાષ્ટ્ર નિર્માણમાં યોગદાનના ઉદ્દેશ્ય થી ભારતના યુવાધન ને સક્ષમ બનાવવા અદાણી કૌશલ્ય વિકાસ કેન્દ્ર ની સ્થાપના 16 મેં 2016 ન રોજ કરવામાં આવી હતી. અને હવે તે વર્ટિકલ ભવિષ્ય માટે તૈયાર વ્યાવસાયિકો અન્યાયુનિક ટેકનોલોજી નો ઉપયોગ કરી તાલીમ આપવાના મિશન ને સતત આગળ ધપાવી રહ્યું છે.

અદાણી કૌશલ્ય વિકાસ કેન્દ્ર દ્વારા સફળ તાલીમાર્થીઓને પ્રમાણપત્ર વિતરણ કરાયા એએસડીસી યુવાઓને આત્મનિર્ભર બનાવવાની દિશામાં અગ્રેસર

લોકમાન્ય મુન્દ્રા અદાણી કૌન્ટરેશન યુવા રોજગારીને પ્રાધન્ય આપતા અનેક કાર્યક્રમોમાં પ્રવૃત્ત છે. તાજેતરમાં અદાણી સ્કીલ ડેવલપમેન્ટ સેન્ટર મુન્દ્રા દ્વારા નવી બેચના ઉદ્ઘાટન સાથે તાલીમાર્થીઓને આરટીકે કેન ઓપરેટર પ્રમાણપત્રો વિતરિત કરવામાં આવ્યા હતા. કેન ઓપરેટરની તાલીમ સફળતાપૂર્વક પૂર્ણ કરનાર યુવાઓને આત્મનિર્ભર બની સમાજમાં તેમની આગવી ઓળખ ઉભી કરશે.



વધારો કરવાનું છે. ધોરણ ૧૦ બાદ આઈટીઆઈ અથવા ધોરણ ૧૨ ઉત્તીર્ણ કરનાર વિદ્યાર્થીઓ એએસડીસીમાં સફળતાપૂર્વક તાલીમ લઈ રોજગાર સક્ષમ બની શકે છે. કચ્છ ક્ષેત્રે સિમ્લિટ ડિવિઝન આપી તેમની કૌશલ્ય વિકાસમાં

કરવા માટે ભંડોળ ઉપલબ્ધ કરાશે. એએસડીસી દ્વારા છેલ્લા ૨ વર્ષમાં આરટીકે કેન ઓપરેશન ટ્રેડમાં ૧૨૦ ઉમેદવારોને સફળતાપૂર્વક તાલીમ આપવામાં આવી છે. જેમાંથી ૮૦ ઉમેદવારો અદાણી પોર્ટ પર જ નોકરીએ

મેળવી આત્મનિર્ભર બન્યા છે. નવી બેચમાં 80 ટકા ઉમેદવારો કચ્છ જિલ્લાના અને અન્ય ૨૦ ટકા વિવિધ સ્થળેએથી લેવામાં આવશે. સક્ષમ પ્રમાણપત્ર વિતરણ કાર્યક્રમમાં ઉપસ્થિત ખાસ મહેમાનોને પણ સન્માનિત કરવામાં આવ્યા હતા, જેમાં અદાણી કૌશલ્ય વિકાસ કેન્દ્રના સ્વરૂપ હેડ, અદાણી પોર્ટ પર અને સંવિધ્ય ડેવલપમેન્ટ ઝોન અને રમેસ કંપનીના ઉચ્ચાધિકારીઓનો સમાવેશ થાય છે. મુખ્ય અતિથિ તરીકે અદાણી પોર્ટ સેક્ટના એચઆર હેડ રનેહાશીષ ભટ્ટાચાર્યએ અદાણી પોર્ટ ખાતે આરટીકે કેન ઓપરેટરની ભૂમિકા વિશે

સંવિધ્ય માહિતી આપી હતી. તેમણે તાલીમાર્થીઓને અદ્યતન ટેકનોલોજી સાથે અપડેટ રહેવાના અને સતત નવું શીખતું રહેવા માટે પ્રોત્સાહિત કર્યું હતા. રાષ્ટ્રનિર્માણમાં યોગદાનના દિશાથી ભારતના યુવાધનને સક્ષમ બનાવવા અદાણી કૌશલ્ય વિકાસ કેન્દ્રની સ્થાપના ૧૬ મે, ૨૦૧૬ના રોજ કરવામાં આવી હતી. એએસડીસી વર્ટિકલ ભવિષ્ય માટે તૈયાર વ્યાવસાયિકોને અન્યાયુનિક ટેકનોલોજીનો ઉપયોગ કરી તાલીમ આપવાના મિશનને સતત આગળ ધપાવી રહ્યું છે.

અદાણી કૌશલ્ય વિકાસ કેન્દ્ર દ્વારા કેન ટ્રેડની ૧૨૦ ઉમેદવારને તાલીમ

મુન્દ્રા, તા. ૧૮ : અદાણી કૌન્ટરેશન યુવા રોજગારીને પ્રાધન્ય આપતા અનેક કાર્યક્રમોમાં પ્રવૃત્ત છે. તાજેતરમાં અદાણી સ્કીલ ડેવલપમેન્ટ સેન્ટર (એએસડીસી) મુન્દ્રા દ્વારા નવી બેચના ઉદ્ઘાટન સાથે તાલીમાર્થીઓને આરટીકે કેન ઓપરેટર પ્રમાણપત્રો વિતરિત કરવામાં આવ્યાં હતાં. આ તાલીમ સફળતાપૂર્વક પૂર્ણ કરનારા યુવાઓ આત્મનિર્ભર બની સમાજમાં તેમની આગવી ઓળખ ઊભી કરશે.

એએસડીસી દ્વારા છેલ્લા ૨ વર્ષમાં આરટીકે કેન ઓપરેશન ટ્રેડમાં ૧૨૦ ઉમેદવારોને સફળતાપૂર્વક તાલીમ આપવામાં આવી છે, જેમાંથી ૮૦ ઉમેદવારો અદાણી પોર્ટ પર જ નોકરીએ મેળવી આત્મનિર્ભર બન્યા છે. નવી બેચમાં 80 ટકા ઉમેદવારો કચ્છ જિલ્લાના અને અન્ય ૨૦ ટકા વિવિધ સ્થળેએથી લેવામાં આવશે.

સક્ષમ પ્રમાણપત્ર વિતરણ કાર્યક્રમમાં ઉપસ્થિત ખાસ મહેમાનોને પણ સન્માનિત કરવામાં આવ્યાં હતાં, જેમાં અદાણી કૌશલ્ય વિકાસ કેન્દ્રના સ્વરૂપ હેડ, અદાણી પોર્ટ પર અને સંવિધ્ય ડેવલપમેન્ટ ઝોન અને રમેસ કંપનીના ઉચ્ચાધિકારીઓનો સમાવેશ થાય છે. મુખ્ય અતિથિ તરીકે અદાણી પોર્ટ સેક્ટના એચઆર હેડ રનેહાશીષ ભટ્ટાચાર્યએ અદાણી પોર્ટ ખાતે આરટીકે કેન ઓપરેટરની ભૂમિકા વિશે સંવિધ્ય માહિતી આપી હતી. તેમણે તાલીમાર્થીઓને અદ્યતન ટેકનોલોજી સાથે અપડેટ રહેવાના અને સતત નવું શીખતું રહેવા માટે પ્રોત્સાહિત કર્યું હતા.

આ ભારતના યુવાધનને સક્ષમ બનાવવા અદાણી કૌશલ્ય વિકાસ કેન્દ્રની સ્થાપના ૧૬ મે, ૨૦૧૬ના કરવામાં આવી હતી. જે વ્યાવસાયિકોને અન્યાયુનિક ટેકનોલોજીનો ઉપયોગ કરી તાલીમ આપવાના મિશનને સતત આગળ ધપાવી રહ્યું છે.



અદાણી કૌશલ્ય વિકાસ કેન્દ્ર દ્વારા તાલીમાર્થીઓને પ્રમાણપત્ર વિતરણ કાર્યક્રમનું દર્શન.

Annexure – 2



“Half Yearly Environmental Monitoring Reports “



M/S.ADANI PORTS & SPECIAL ECONOMIC ZONE LTD.

PLOT NO. 169/P, AT - NAVINAL ISLAND, TAL. - MUNDRA, DIST. - KUTCH - 370421.

Monitoring Period: April - 2024 to September - 2024

Submitted By



UniStar Environment & Research Labs Pvt. Ltd.

White House, Near GIDC Office, Char Rasta, Vapi, Gujarat, India – 396195



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	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM											
1.	pH	--	8.11	7.94	7.96	7.81	8.05	7.89	7.98	7.74	7.91	7.82	8.12	7.94	IS 3025 (Part 11):2022
2.	Temperature	°C	29.9	29.8	30.5	30.4	30.7	30.6	30.1	30	30	29.9	29.9	29.8	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	138	118	144	120	132	118	98	82	142	126	128	102	APHA 24th Ed., 2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	2.6	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.12	5.92	6.02	5.77	5.93	5.68	6.42	6.22	6.59	6.3	6.69	6.4	APHA 24th Ed.2023,4500 -O, B
6.	Salinity	ppt	35.86	37.11	35.92	37.28	38.82	37.15	36.12	36.88	35.78	36.71	35.87	36.64	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	IS 3025 (Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.39	3.06	3.55	3.23	3.71	3.39	3.55	3.39	1.94	1.61	2.32	1.72	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.543	0.478	0.609	0.565	0.565	0.522	0.456	0.435	0.174	0.13	0.379	0.312	APHA 24th Ed.2023,4500 NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.22	4.11	4.48	4.37	4.43	4.37	3.8	3.69	3.954	3.85	2.59	2.16	APHA 24th Ed. 2023,4500-NH3 B
11.	Phosphates as PO ₄	µmol/L	1.68	1.58	1.9	1.68	1.16	1.05	1.05	BDL(MDL :0.4)	1.37	1.16	1.47	1.26	APHA 24th Ed.2023,4500 -P, D

QCI-NABET Accredited EIA
Consultant Organization

GPCB Recognized Environmental
Auditor (Schedule-11)

ISO 9001 : 2015
Certified Company

ISO 45001 : 2018
Certified Company

12.	Total Nitrogen	µmol/L	8.153	7.648	8.639	8.165	8.705	8.282	7.806	7.515	6.068	5.59	5.289	4.192	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,552 OF
14.	Total Dissolved Solids	mg/L	36410	37180	36550	37210	36480	37180	36120	36980	34970	35960	34740	35830	IS 3025(Part 16):2023
15.	COD	mg/L	23.9	7.9	28.17	12.07	23.9	8	16.1	4	20	8	24.1	12	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	April-24		May-24		June-24		July-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	3.05	3.25	3.06	3.24	3.08	3.26	3.07	3.27	3.08	3.26	3.07	3.07	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	2	1.56	3	1.59	4	1.56	3	1.55	4	1.57	6	6	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	109	90	110	92	114	91	112	92	114	93	112	112	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Coscinodiscus</i>	<i>Odontella</i>	<i>Nitzschia</i>	<i>Biddulphia</i>	<i>Nitzschia</i>	<i>Biddulphia</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	APHA (24th Ed. 2023)10200A-G
			<i>Diploneis</i>	<i>Rhizosolenia</i>	<i>Diploneis</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Rhizosolenia</i>	<i>Surirella</i>	<i>Pinnularia</i>	<i>Surirella</i>	<i>Pinnularia</i>	<i>Biddulphia</i>	<i>Pinnularia</i>	
			<i>Rhizosolenia</i>	<i>Coscinodiscus</i>	<i>Rhizosolenia</i>	<i>Coscinodiscus</i>	<i>Rhizosolenia</i>	<i>Coscinodiscus</i>	<i>Navicula</i>	<i>Thalassiothrix</i>	<i>Navicula</i>	<i>Thalassiothrix</i>	<i>Navicula</i>	<i>Thalassiothrix</i>	
			<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Grammatophora</i>	<i>Nitzschia</i>	<i>Grammatophora</i>	<i>Nitzschia</i>	<i>Grammatophora</i>	
			<i>Thalassionema</i>	<i>Thalassiosira</i>	<i>Biddulphia</i>	<i>Navicula</i>	<i>Biddulphia</i>	<i>Navicula</i>	<i>Skeletonema</i>	<i>Ceratium</i>	<i>Skeletonema</i>	<i>Ceratium</i>	<i>Skeletonema</i>	<i>Ceratium</i>	
B			Zooplankton												
1	Abundance(Population)	noX103/100 m3	66		65		64		66		68		67		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		<i>Crustacean Larvae</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		<i>Egg(Fish and Shrimps)</i>		<i>Egg(Fish and Shrimps)</i>		<i>Egg(Fish and Shrimps)</i>		
			<i>Egg(Fish and Shrimps)</i>		<i>Pinnularia</i>		<i>Pinnularia</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		
			<i>Copepods</i>		<i>Copepods</i>		<i>Copepods</i>		<i>Copepods nauplii</i>		<i>Copepods nauplii</i>		<i>Copepods nauplii</i>		
			<i>Crustacean</i>		<i>Copepods nauplii</i>		<i>Copepods nauplii</i>		<i>Crustacean</i>		<i>Crustacean</i>		<i>Crustacean</i>		
			<i>Bivalve Larvae</i>		<i>Thalassionema</i>		<i>Thalassionema</i>		<i>Bivalve Larvae</i>		<i>Bivalve Larvae</i>		<i>Bivalve Larvae</i>		
3	Total Biomass	ml/100 m ³	13.64		13.65		13.64		13.66		13.67		13.67		

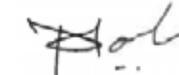
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RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO	TEST PARAMETERS	UNIT	April-24		May-24		June-24		July-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
Microbiological															
1	Total Bacterial Count	CFU/ml	100		102		104		106		108		110		APHA 24 th Ed.2023,9215-C
2	Total Coliform	/100ml	12		10		11		12		14		13		APHA 24 th Ed.2023,9 222-B
3	Ecoli	/100ml	10		12		9		8		7		8		IS :15185:2016
4	Enterococcus	/100ml	Absent		IS:15186:2002										
5	Salmonella	/100ml	Absent		IS:15187:2016										
6	Shigella	/100ml	Absent		APHA 24 th Ed.2023,9 260-E										
7	Vibrio	/100ml	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	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.43	0.46	0.44	0.48	0.41	0.44	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	558.4	551.2	558.6	542.2	510.5	524.2	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	%	4.09	4.05	4.08	3.98	3.82	3.88	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	138.4	132.2	136.4	144.2	120.8	128.7	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	594.6	580.4	574.2	550.6	610.2	624.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.12	4.08	3.98	3.86	3.94	3.86	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	42.06	41.25	41.36	42.35	48.65	44.62	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	42.86	41.94	42.28	43.25	51.25	48.96	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	122.4	120.2	120.84	116.5	124.6	120.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.41	2.36	2.48	2.41	2.31	2.22	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

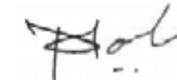
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RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24 SEDIMENT	May-24 SEDIMENT	Jun-24 SEDIMENT	Jul-24 SEDIMENT	Aug-24 SEDIMENT	Sep-24 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	364	366	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 PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.18	7.98	8.06	7.86	8.12	7.94	8.05	7.86	7.96	7.84	8.06	7.94	IS 3025(Part 11):2022
2.	Temperature	°C	29.8	29.7	30.4	30.3	30.5	30.4	30.2	30.1	30.1	30	29.8	29.7	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	142	118	136	104	142	122	118	96	94	76	114	88	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL(M DL:1.0)	3.2	BDL(M DL:1.0)	2.8	BDL(M DL:1.0)	2.5	BDL(M DL:1.0)	2.6	BDL(M DL:1.0)	2.8	BDL(M DL:1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.12	5.82	6.02	5.67	5.93	5.58	6.22	6.03	6.4	6.1	6.49	6.2	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.38	37.13	36.44	37.42	36.35	37.36	35.94	36.84	35.69	36.72	35.59	36.78	By Calculation
7.	Oil & Grease	mg/L	BDL(M DL:2.0)	IS 3025(Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.39	3.23	3.71	3.55	3.87	3.55	3.39	3.23	2.42	2.1	2.49	2.15	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.5	0.478	0.543	0.522	0.5	0.456	0.478	0.435	0.239	0.196	0.259	0.13	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.27	4.16	4.48	4.43	4.32	4.27	3.74	3.69	4.11	4.014	2.28	1.81	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO ₄	µmol/L	1.68	1.47	1.47	1.37	1.26	1.16	1.16	1.05	1.05	BDL(M DL:0.4)	1.16	1.05	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	8.16	7.868	8.733	8.502	8.69	8.276	7.608	7.355	6.769	6.31	5.029	4.09	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36240	37310	36280	37340	36110	37140	35860	36920	35810	36860	35860	36740	IS 3025(Part 16):2023
15.	COD	mg/L	19.9	7.9	32.19	16.1	27.9	12	20.1	8	24	12	28.1	16.1	IS 3025(Part 58):2023

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

SR. NO.	TEST PARAMETERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A Phytoplankton															
1.	Chlorophyll	mg/m ³	2.98	2.69	2.97	2.64	2.96	2.63	2.95	2.66	2.98	2.67	2.99	2.68	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	2.09	2.06	2.08	2.07	2.05	2.05	2.06	2.06	2.08	2.05	2.06	2.04	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	95	147	97	146	94	148	95	147	93	148	94	147	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Thalassiothrix</i>	<i>Pinnularia</i>	<i>Thalassiothrix</i>	<i>Pinnularia</i>	<i>Dinophysis</i>	<i>Pinnularia</i>	<i>Navicula</i>	<i>Thalassiothrix</i>	<i>Surirella</i>	<i>Thalassiothrix</i>	<i>Surirella</i>	<i>Thalassiothrix</i>	APHA (24th Ed. 2023)10200A-G
			<i>Surirella</i>	<i>Biddulphia</i>	<i>Surirella</i>	<i>Biddulphia</i>	<i>Surirella</i>	<i>Biddulphia</i>	<i>Skeletonema</i>	<i>Surirella</i>	<i>Pinnularia</i>	<i>Surirella</i>	<i>Pinnularia</i>	<i>Surirella</i>	
			<i>Navicula</i>	<i>Navicula</i>	<i>Navicula</i>	<i>Navicula</i>	<i>Nitzschia</i>	<i>Navicula</i>	<i>Rhizosolenia</i>	<i>Navicula</i>	<i>Rhizosolenia</i>	<i>Navicula</i>	<i>Melosira</i>	<i>Navicula</i>	
			<i>Thalassiosira</i>	<i>Rhizosolenia</i>	<i>Cyclotella</i>	<i>Rhizosolenia</i>	<i>Cyclotella</i>	<i>Rhizosolenia</i>	<i>Dinophysis</i>	<i>Thalassiosira</i>	<i>Dinophysis</i>	<i>Thalassiosira</i>	<i>Dinophysis</i>	<i>Thalassiosira</i>	
			<i>Skeletonema</i>	<i>Skeletonema</i>	<i>Skeletonema</i>	<i>Thalassiosira</i>	<i>Skeletonema</i>	<i>Thalassiosira</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	

B Zooplankton															
1	Abundance (Population)	noX10 ³ / 100 m ³	42	44	43	42	43	42	43	42	43	42	43	42	APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>					
			<i>Copepods</i>	<i>Oikoplura</i>	<i>Nitzschia</i>	<i>Egg(Fish and Shrimps)</i>									
			<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>					
			<i>Crustacean</i>	<i>Crustacean</i>	<i>Pinnularia</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Copepods nauplii</i>						
3	Total Biomass	ml/100 m ³	15.74	15.7	15.25	15.5	15.3	15.3	15.3	15.3	15.3	15.3	15.3		

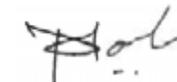
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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	110	114	116	118	120	122							APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	32	34	33	34	35	36							APHA 24 th Ed.2023, 9222-B
3	E.coli	/100ml	13	16	14	13	14	12							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 [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.48	0.44	0.49	0.46	0.52	0.48	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	574.2	564.8	562.2	550.2	590.5	582.1	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	4.06	4.11	4.02	3.83	3.84	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	151.4	154.2	148.9	135.4	146.2	152.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	659	668	672.2	640.5	710.2	685.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.09	4.02	4.11	4.02	4.16	4.02	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	43.21	44.13	44.28	39.82	42.44	44.31	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	43.05	42.64	42.86	41.25	48.95	46.36	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	155.4	146.5	145.6	136.4	142.4	135.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.33	2.13	1.96	2.05	2.11	2.04	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

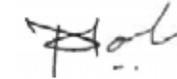
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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
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	305	296	307	306	303	301	



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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	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.22	8.1	8.14	8.06	8.18	8.08	8.07	7.91	8.11	7.89	8.14	7.93	IS 3025(Part 11):2022
2.	Temperature	°C	29.9	29.8	30.5	30.4	30.4	30.3	30.2	30.1	30.1	30	29.9	29.8	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	136	112	142	116	136	116	128	118	112	94	106	82	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3	BDL(MD L:1.0)	2.8	BDL(MD L:1.0)	2.9	BDL(MD L:1.0)	2.4	BDL(MD L:1.0)	2.8	BDL(MD L:1.0)	3.1	BDL(MD L:1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	5.92	5.72	5.82	5.57	5.73	5.48	6.32	6.22	6.49	6.3	6.59	6.4	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.58	37.28	36.64	37.44	36.55	37.38	36.24	37.21	35.96	36.88	35.88	36.74	By Calculation
7.	Oil & Grease	mg/L	BDL(MD L:2.0)	IS 3025(Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.23	2.9	3.87	3.55	3.23	2.9	3.06	2.9	2.26	1.94	3.23	2.59	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.435	0.413	0.478	0.456	0.522	0.5	0.435	0.413	0.304	0.261	0.413	0.379	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.37	4.22	4.498	4.32	4.22	4.16	3.64	3.59	3.95	3.85	3.66	2.93	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO ₄	µmol/L	1.37	1.16	1.26	1.05	1.37	1.26	1.26	1.05	1.37	1.16	1.05	BDL(MD L:0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	8.035	7.533	8.846	8.326	7.972	7.56	7.135	6.903	6.514	6.051	7.303	5.899	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36246	37250	36270	37310	36190	37240	35560	36770	35090	36680	35120	36550	IS 3025(Part 16):2023
15.	COD	mg/L	15.9	7.9	28.17	16.1	23.9	12	12	BDL(MD L:2.0)	16	4	20.1	8	IS 3025(Part 58):2023

Continue...

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

SR. NO.	TEST PARAMETERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	2.47	2.47	2.44	2.48	2.42	2.44	2.43	2.46	2.42	2.47	2.41	2.46	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	1.66	1.47	1.65	1.42	1.67	1.43	1.68	1.44	1.67	1.42	1.68	1.41	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	140	98	142	97	146	96	148	97	150	98	154	99	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Pinnularia</i>	<i>Coscino discus</i>	<i>Pinnularia</i>	<i>Coscino discus</i>	<i>Pinnularia</i>	<i>Coscino discus</i>	<i>Melosira</i>	<i>Cyclotella</i>	<i>Melosira</i>	<i>Cyclotella</i>	<i>Melosira</i>	<i>Cyclotella</i>	APHA (24th Ed. 2023)10200A-G
			<i>Biddulphia</i>	<i>Pinnularia</i>	<i>Biddulphia</i>	<i>Pinnularia</i>	<i>Biddulphia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	
			<i>Navicula</i>	<i>Rhizosolenia</i>	<i>Navicula</i>	<i>Rhizosolenia</i>	<i>Navicula</i>	<i>Rhizosolenia</i>	<i>Skeletonema</i>	<i>Skeletonema</i>	<i>Rhizosolenia</i>	<i>Skeletonema</i>	<i>Rhizosolenia</i>	<i>Skeletonema</i>	
			<i>Thalassiosira</i>	<i>Dinophysis</i>	<i>Thalassiosira</i>	<i>Dinophysis</i>	<i>Thalassiosira</i>	<i>Dinophysis</i>	<i>Thalassiosira</i>	<i>Thalassiosira</i>	<i>Thalassiosira</i>	<i>Thalassiosira</i>	<i>Thalassiosira</i>	<i>Thalassiosira</i>	
			<i>Skeletonema</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	

B			Zooplankton										TEST METHOD		
SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Apr-24	May-24	Jun-24	Jul-24		Aug-24	Sep-24
1	Abundance (Population)	noX10 ³ / 100 m ³	40	41	40	43	45	44							APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		<i>Copepods</i>	<i>Copepods</i>	<i>Rhizosolenia</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>							
			<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Crustacean Larvae</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>						
			<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>						
			<i>Crustacean</i>	<i>Pinnularia</i>	<i>Oikoplura</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Egg(Fish and Shrimps)</i>							
			<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Thalassionema</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>							
3	Total Biomass	ml/100 m ³	14.48	15.5	15.4	15.6	15.5	15.5							

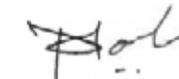
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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	126		128		130		132		130		132		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	28		27		29		30		31		30		APHA 24 th Ed.2023, 9222-B
3	E.coli	/100ml	24		23		22		21		22		21		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 [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.42	0.46	0.42	0.48	0.52	0.46	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	618.2	620.5	611.8	618.6	632.4	610.2	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	%	4.14	4.36	4.09	4.12	3.94	3.88	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	146.2	154.1	146.5	138.5	124.5	132.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	618.9	620.2	608.5	619.2	520.6	538.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.09	4.11	4.06	3.98	4.09	4.14	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.6	42.5	44.8	41.62	36.8	35.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	42.05	43.11	43.82	45.08	40.95	36.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	134.6	142.2	143.8	146.7	124.9	115.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.33	2.16	2.22	2.15	1.96	2.05	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

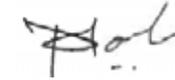
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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHASLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24 SEDIMENT	May-24 SEDIMENT	Jun-24 SEDIMENT	Jul-24 SEDIMENT	Aug-24 SEDIMENT	Sep-24 SEDIMENT	TEST METHOD
D	Benthic Organisms								
1	Macrobenthos	--	Polychates	<i>Polychates</i>	<i>Amphipods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Decapods Larvae</i>	APHA (24th Ed. 2023)10500
			<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	
			<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	
			<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	
2	MeioBenthos	--	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Foraminiferan</i>	
			<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	
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 PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.19	8.01	8.14	8.04	8.17	8.01	8.12	7.99	8.05	7.92	8.16	7.98	IS 3025(Part 11):2022
2.	Temperature	°C	29.8	29.7	30.4	30.3	30.6	30.5	30.1	30	30	29.9	29.9	29.8	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	138	122	142	128	144	132	132	114	124	108	132	102	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.8	BDL(MD L:1.0)	3.1	BDL(MD L:1.0)	3.2	BDL(MD L:1.0)	2.6	BDL(MD L:1.0)	2.9	BDL(MD L:1.0)	2.5	BDL(MD L:1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.22	6.12	6.12	5.97	6.03	5.88	6.42	6.32	6.59	6.4	6.69	6.49	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.94	36.97	36.15	37.22	36.18	37.24	35.84	36.92	35.66	36.78	35.74	36.82	By Calculation
7.	Oil & Grease	mg/L	BDL(MD L:2.0)	IS 3025(Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.39	3.23	3.55	3.39	3.23	2.9	3.06	2.9	2.1	1.77	2.37	2.16	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.435	0.391	0.478	0.5	0.543	0.522	0.391	0.37	0.239	0.174	0.207	0.189	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.27	4.16	4.22	4.16	4.32	4.27	3.53	3.48	4.01	3.9	2.75	2.62	APHA 24th Ed.2023,4500- NH3 B
11.	Phosphates as PO ₄	µmol/L	1.79	1.68	1.16	1.05	1.26	1.16	1.05	BDL(MD L:0.4)	1.26	1.05	1.16	BDL(MD L:0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	8.095	7.781	8.248	8.05	8.093	7.692	6.981	6.75	6.349	5.844	5.327	4.969	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36380	37320	36410	37360	36320	37180	35730	36810	35650	36780	35710	36790	IS 3025(Part 16):2023
15.	COD	mg/L	23.9	7.9	32.19	20.12	27.9	16	16.1	4	20	8	24.1	12	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'57" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD	
			SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M		
A																
Phytoplankton																
1.	Chlorophyll	mg/m ³	2.36	3.14	2.38	3.17	2.37	3.19	2.35	3.2	2.36	3.1	2.37	3.2	APHA (24th Ed. 2023)10200A-G	
2.	Phaeophytin	mg/m ³	2.69	2	2.66	3	2.59	4	2.6	5	2.7	4	2.5	6	APHA (24th Ed. 2023)10200A-G	
3.	Cell Count	No. x 10 ³ /L	154	88	156	86	154	84	155	88	152	89	156	88	APHA (24th Ed. 2023)10200A-G	
4	Name of Group Number and name of group species of each group	--	<i>Coscino discus</i>	<i>Surirella</i>	<i>Surirella</i>	<i>Surirella</i>	<i>Coscino discus</i>	<i>Surirella</i>	<i>Thalassiosira</i>	<i>Coscino discus</i>	<i>Thalassiosira</i>	<i>Coscino discus</i>	<i>Thalassiosira</i>	<i>Coscino discus</i>	APHA (24th Ed. 2023)10200A-G	
			<i>Diploneis</i>	<i>Biddulphia</i>	<i>Diploneis</i>	<i>Biddulphia</i>	<i>Diploneis</i>	<i>Biddulphia</i>	<i>Melosira</i>	<i>Diploneis</i>	<i>Melosira</i>	<i>Diploneis</i>	<i>Melosira</i>	<i>Diploneis</i>		
			<i>Rhizosolenia</i>	<i>Navicula</i>	<i>Thalassiothrix</i>	<i>Coscino discus</i>	<i>Skeletonema</i>	<i>Coscino discus</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>		<i>Rhizosolenia</i>
			<i>Dinophysis</i>	<i>Thalassiosira</i>	<i>Navicula</i>	<i>Thalassiosira</i>	<i>Navicula</i>	<i>Thalassiosira</i>	<i>Rhizosolenia</i>	<i>Dinophysis</i>	<i>Rhizosolenia</i>	<i>Dinophysis</i>	<i>Rhizosolenia</i>	<i>Dinophysis</i>		<i>Dinophysis</i>
			<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>		

B															
Zooplankton															
1	Abundance (Population)	noX10 ³ /100 m ³	37		36		37		36		37		38		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		<i>Oikoplura</i>		<i>Oikoplura</i>		<i>Copepods nauplii</i>		<i>Copepods nauplii</i>		<i>Copepods nauplii</i>		<i>Copepods nauplii</i>		
			<i>Copepods nauplii</i>		<i>Rhizosolenia</i>		<i>Rhizosolenia</i>		<i>Crustacean Larvae</i>		<i>Crustacean Larvae</i>		<i>Egg(Fish and Shrimps)</i>		
			<i>Crustacean Larvae</i>		<i>Crustacean Larvae</i>		<i>Egg(Fish and Shrimps)</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		
			<i>Crustacean</i>		<i>Crustacean</i>		<i>Crustacean</i>		<i>Bivalve Larvae</i>		<i>Bivalve Larvae</i>		<i>Copepods nauplii</i>		
			<i>Bivalve Larvae</i>		<i>Bivalve Larvae</i>		<i>Bivalve Larvae</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		
3	Total Biomass	ml/100 m ³	14.22		14.24		14.23		14.26		14.27		14.27		

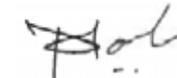
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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'57" E 069°43'620"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	100		92		94		96		98		100		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	44		42		44		43		42		44		APHA 24 th Ed.2023, 9222-B
3	E.coli	/100ml	12		11		10		11		10		12		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 [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.51	0.52	0.49	0.41	0.49	0.44	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	619.4	621.4	624.2	612.5	580	560.8	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	%	4.14	4.06	3.98	3.88	3.92	3.99	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	144.4	138.9	142.2	132.6	122.6	132.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	611.5	602.5	610.4	589.2	554.6	540.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.06	4.11	4.08	4.11	4.18	4.06	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	51.24	52.2	53.1	55.6	48.6	48.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	48.62	48.44	49.02	52.1	46.9	45.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	134.2	136.2	138.4	148.6	138	144.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.24	2.22	2.31	2.24	2.11	2.16	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

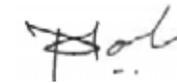
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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24 SEDIMENT	May-24 SEDIMENT	Jun-24 SEDIMENT	Jul-24 SEDIMENT	Aug-24 SEDIMENT	Sep-24 SEDIMENT	TEST METHOD
D	Benthic Organisms								
1	Macrobenthos	--	<i>Foraminiferan</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	APHA (24th Ed. 2023)10500
			<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	<i>Decapods Larvae</i>	
			<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	
			<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Turbellarians</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Foraminiferan</i>	
2	MeioBenthos	--	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Turbellarians</i>	<i>Gastropods</i>	<i>Gastropods</i>	
			<i>Polychates</i>	<i>Turbellarians</i>	<i>Decapods Larvae</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	
3	Population	no/m ²	322	341	288	304	308	300	



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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	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.16	8.06	8.18	8.11	8.21	8.09	8.14	8.04	8.07	7.88	8.18	8.02	IS 3025(Part 11):2022
2.	Temperature	°C	29.8	29.7	30.5	30.4	30.6	30.5	30.2	30.1	30.1	30	30	29.9	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	134	114	128	112	130	108	138	114	132	108	122	104	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(MD L:1.0)	3.3	BDL(MD L:1.0)	3.1	BDL(MD L:1.0)	2.7	BDL(MD L:1.0)	2.8	BDL(MD L:1.0)	2.7	BDL(MD L:1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.22	6.02	6.12	5.87	6.03	5.78	6.22	6.13	6.4	6.2	6.49	6.3	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.54	37.1	36.62	37.26	36.55	37.33	35.55	36.28	35.42	36.34	35.31	36.41	By Calculation
7.	Oil & Grease	mg/L	BDL(MD L:2.0)	IS 3025(Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.87	3.55	4.03	3.87	3.71	3.39	2.9	2.74	2.1	1.94	2.8	2.37	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.456	0.413	0.522	0.5	0.478	0.456	0.435	0.413	0.391	0.348	0.259	0.189	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	3.95	3.8	4.16	4.11	4.11	4.06	3.64	3.59	3.48	3.42	4.05	3.83	APHA 24th Ed.2023,4500- NH3 B
11.	Phosphates as PO ₄	µmol/L	1.9	1.68	1.37	1.26	1.16	1.05	1.05	BDL(MD L:0.4)	1.16	BDL(MD L:0.4)	1.26	1.16	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	8.276	7.763	8.712	8.48	8.298	7.906	6.975	6.743	5.971	5.708	7.109	6.389	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36210	37300	36250	37340	36190	37240	35640	36930	34680	35880	34720	35910	IS 3025(Part 16):2023
15.	COD	mg/L	23.9	11.9	24.14	20.12	19.9	16	4	BDL(MD L:2.0)	8	4	12	8	IS 3025(Part 58):2023

Continue...

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

SR. NO.	TEST PARAMETERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	3.17	3.15	3.14	3.17	3.11	3.15	3.13	3.16	3.14	3.18	3.12	3.17	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	2.4	1.25	2.3	1.24	2.2	1.23	2.3	1.24	2.4	1.23	2.3	1.22	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	115	105	118	107	120	106	122	108	123	109	122	110	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Diploneis</i>	<i>Navicula</i>	<i>Diploneis</i>	<i>Navicula</i>	<i>Navicula</i>	<i>Navicula</i>	<i>Navicula</i>	<i>Pinnularia</i>	<i>Navicula</i>	<i>Pinnularia</i>	<i>Navicula</i>	<i>Pinnularia</i>	APHA (24th Ed. 2023)10200A-G
			<i>Rhizosolenia</i>	<i>Skeletonema</i>	<i>Rhizosolenia</i>	<i>Skeletonema</i>	<i>Biddulphia</i>	<i>Skeletonema</i>	<i>Biddulphia</i>	<i>Biddulphia</i>	<i>Biddulphia</i>	<i>Biddulphia</i>	<i>Biddulphia</i>	<i>Rhizosolenia</i>	
			<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Navicula</i>	<i>Nitzschia</i>	<i>Navicula</i>	<i>Odentella</i>	<i>Dinophysis</i>	
			<i>Cyclotella</i>	<i>Dinophysis</i>	<i>Cyclotella</i>	<i>Biddulphia</i>	<i>Cyclotella</i>	<i>Biddulphia</i>	<i>Cyclotella</i>	<i>Thalassiosira</i>	<i>Cyclotella</i>	<i>Thalassiosira</i>	<i>Cyclotella</i>	<i>Coscinodiscus</i>	
			<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Skeletonema</i>	<i>Pleurosigma</i>	<i>Skeletonema</i>	<i>Pleurosigma</i>	<i>Skeletonema</i>	

B			Zooplankton												
1	Abundance (Population)	noX10 ³ /100 m ³	48	49	48	50	52	51							APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		<i>Copepods nauplii</i>	<i>Nitzschia</i>	<i>Nitzschia</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>							
			<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>							
			<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods nauplii</i>							
			<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>							
			<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>							
3	Total Biomass	ml/100 m ³	14.17	14.15	14.12	14.13	14.12	14.12							

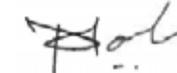
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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	130		134		134		136		140		144		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	27		30		31		32		33		31		APHA 24 th Ed.2023, 9222-B
3	E.coli	/100ml	15		16		18		17		18		17		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 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	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.48	0.49	0.46	0.42	0.53	0.48	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	728.4	710.5	698.5	650.9	612.1	590.8	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	4.08	4.12	3.91	3.88	3.92	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	142.2	162.4	166.2	156.4	142.3	136.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	598.4	602.4	609.8	617.2	570.9	560.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.06	4.14	4.09	4.16	4.19	4.11	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.36	43.36	43.12	42.19	44.36	45.68	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	45.91	45.28	45.11	45.86	41.25	48.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	121.4	124.4	122.2	120.8	111.6	116.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.09	1.89	1.94	2.08	1.92	2.11	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

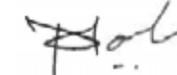
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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24 SEDIMENT	May-24 SEDIMENT	Jun-24 SEDIMENT	Jul-24 SEDIMENT	Aug-24 SEDIMENT	Sep-24 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	305	304	305	307	305	



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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	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.18	7.98	8.15	8.04	8.19	8.06	8.04	7.88	8.15	7.98	8.16	8.04	IS 3025(Part 11):2022
2.	Temperature	°C	29.9	29.8	30.5	30.4	30.7	30.6	30.2	30.1	30.1	30	29.8	29.7	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	118	96	124	106	120	108	134	116	122	106	104	78	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(MD L:1.0)	3.4	BDL(MD L:1.0)	2.8	BDL(MD L:1.0)	2.5	BDL(MD L:1.0)	3.1	BDL(MD L:1.0)	2.5	BDL(MD L:1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.02	5.92	5.92	5.77	5.83	5.68	6.42	6.22	6.59	6.3	6.69	6.4	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.52	37.35	36.58	37.48	36.42	37.21	36.14	36.97	35.97	36.77	35.81	36.58	By Calculation
7.	Oil & Grease	mg/L	BDL(MD L:2.0)	IS 3025(Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.39	3.23	4.19	4.03	4.03	3.71	3.39	3.23	2.42	2.1	3.66	3.44	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.5	0.456	0.565	0.522	0.564	0.543	0.37	0.348	0.196	0.13	0.413	0.379	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.06	3.9	4.16	4.11	4.27	4.22	3.69	3.59	4.22	4.06	3.96	3.62	APHA 24th Ed.2023,4500- NH3 B
11.	Phosphates as PO ₄	µmol/L	2.21	2	2.11	1.9	1.9	1.68	1.37	1.26	1.47	1.37	1.58	1.47	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.95	7.586	8.915	8.662	8.864	8.473	7.45	7.168	6.836	6.29	8.033	7.439	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36290	37340	36320	37110	36260	37180	35860	36720	35780	36690	35690	36480	IS 3025(Part 16):2023
15.	COD	mg/L	19.9	7.9	36.22	24.14	31.9	19.9	8	4	12	8	16.1	12	IS 3025(Part 58):2023

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

SR. NO.	TEST PARAMETERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	3.04	2.3	3.06	2.6	3.08	2.5	3.07	2.4	3.08	2.6	3.07	2.6	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	2.6	1.77	2.7	1.78	2.5	1.77	2.6	1.78	2.7	1.77	2.6	1.78	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	88	122	89	124	87	123	89	122	91	123	92	122	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Nitzschia</i>	<i>Thalassiothrix</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Diploneis</i>	<i>Coscinodiscus</i>	<i>Diploneis</i>	<i>Coscinodiscus</i>	<i>Diploneis</i>	<i>Coscinodiscus</i>	APHA (24th Ed. 2023)10200A-G
			<i>Pinnularia</i>	<i>Surirella</i>	<i>Pinnularia</i>	<i>Surirella</i>	<i>Odontella</i>	<i>Surirella</i>	<i>Rhizosolenia</i>	<i>Diploneis</i>	<i>Rhizosolenia</i>	<i>Diploneis</i>	<i>Rhizosolenia</i>	<i>Diploneis</i>	
			<i>Odontella</i>	<i>Navicula</i>	<i>Dinophysis</i>	<i>Navicula</i>	<i>Dinophysis</i>	<i>Navicula</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	
			<i>Dinophysis</i>	<i>Thalassiosira</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	
			<i>Surirella</i>	<i>Skeletonema</i>	<i>Surirella</i>	<i>Skeletonema</i>	<i>Cyclotella</i>	<i>Skeletonema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	

B			Zooplankton													
1	Abundance (Population)	noX10 ³ /100 m ³	41	42	42	43	42	43	42	43	42	43	42	43	APHA (24rd Ed. 2023)10200 G	
2	Name of Group Number and name of group species of each group		<i>Nitzschia</i>	<i>Nitzschia</i>	<i>Egg(Fish and Shrimps)</i>											
			<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Coscinodiscus</i>	<i>Oikoplura</i>										
			<i>Odontella</i>	<i>Odontella</i>	<i>Odontella</i>	<i>Copepods nauplii</i>		<i>Copepods nauplii</i>								
			<i>Dinophysis</i>	<i>Dinophysis</i>	<i>Dinophysis</i>	<i>Crustacean</i>		<i>Crustacean</i>								
			<i>Surirella</i>	<i>Surirella</i>	<i>Bivalve Larvae</i>											
3	Total Biomass	ml/100 m ³	16.54	16.55	16.57	16.58	16.59	16.59	16.59	16.59	16.59	16.59	16.59			

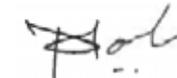
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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	90		94		94		92		94		92		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	29		27		25		26		27		26		APHA 24 th Ed.2023, 9222-B
3	E.coli	/100ml	11		13		12		13		14		12		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 MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.14	7.94	8.24	8.11	8.18	8.02	8.1	7.94	8.21	8.06	8.15	8.01	IS 3025(Part 11):2022
2.	Temperature	°C	29.9	29.8	30.5	30.4	30.7	30.6	30.2	30.1	30.1	30	29.9	29.8	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	114	92	118	104	122	110	108	88	124	98	122	94	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL(MD L:1.0)	2.8	BDL(MD L:1.0)	2.9	BDL(MD L:1.0)	2.4	BDL(MD L:1.0)	2.8	BDL(MD L:1.0)	3.2	BDL(MD L:1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.02	5.82	5.92	5.67	5.83	5.58	6.42	6.32	6.59	6.4	6.69	6.49	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.42	37.24	35.44	37.37	35.39	37.28	35.44	37.05	35.48	36.82	35.64	36.71	By Calculation
7.	Oil & Grease	mg/L	BDL(MD L:2.0)	IS 3025(Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.71	3.23	4.03	3.71	4.19	3.87	3.55	3.23	2.74	2.42	3.45	3.02	APHA 24th Ed.2023,4500 NO3-
9.	Nitrite as NO ₂	µmol/L	0.522	0.478	0.565	0.522	0.609	0.543	0.478	0.456	0.239	0.174	0.379	0.328	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.16	4.11	4.11	4.06	4.32	4.27	3.59	3.48	4.37	4.22	3.84	3.62	APHA 24th Ed.2023,4500- NH3
11.	Phosphates as PO ₄	µmol/L	2.21	2	1.9	1.79	1.68	1.58	1.26	1.05	1.26	BDL(MD L:0.4)	BDL(MD L:0.4)	BDL(MD L:0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	8.392	7.818	8.705	8.292	9.119	8.683	7.618	7.166	7.349	6.814	7.669	6.968	APHA 24th Ed.2023,4500 NH3 -
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36540	37610	36410	37480	36220	37340	35760	36520	35110	36460	35260	36180	IS 3025(Part 16):2023
15.	COD	mg/L	23.9	15.9	32.19	28.17	23.9	19.9	8	BDL(MD L:2.0)	12	4	16.1	8	IS 3025(Part 58):2023

Continue...

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

SR. NO.	TEST PARAMETERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	3.1	3.17	3.2	3.14	3.1	3.12	3.2	3.11	3.3	3.12	3.2	3.11	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	1.8	1.34	1.4	1.38	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.7	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	109	107	112	109	114	107	116	108	117	109	116	108	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Odontella</i>	<i>Cyclotella</i>	<i>Odontella</i>	<i>Cyclotella</i>	<i>Odontella</i>	<i>Cyclotella</i>	<i>Nitzschia</i>	<i>Diploneis</i>	<i>Nitzschia</i>	<i>Diploneis</i>	<i>Nitzschia</i>	<i>Diploneis</i>	APHA (24th Ed. 2023)10200A-G
			<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Grammatophora</i>	<i>Rhizosolenia</i>	<i>Grammatophora</i>	<i>Rhizosolenia</i>	<i>Grammatophora</i>	<i>Rhizosolenia</i>	
			<i>Coscino discus</i>	<i>Skeletonema</i>	<i>Coscino discus</i>	<i>Skeletonema</i>	<i>Coscino discus</i>	<i>Skeletonema</i>	<i>Diploneis</i>	<i>Nitzschia</i>	<i>Diploneis</i>	<i>Nitzschia</i>	<i>Diploneis</i>	<i>Nitzschia</i>	
			<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Thalassiothrix</i>	<i>Cyclotella</i>	<i>Thalassiothrix</i>	<i>Cyclotella</i>	<i>Thalassiothrix</i>	<i>Grammatophora</i>	
			<i>Thalassiosira</i>	<i>Thalassionema</i>	<i>Thalassiosira</i>	<i>Thalassionema</i>	<i>Thalassiosira</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Pleurosigma</i>	<i>Pleurosigma</i>	<i>Pleurosigma</i>	<i>Pleurosigma</i>	<i>Pleurosigma</i>	

B			Zooplankton												
1	Abundance (Population)	noX10 ³ / 100 m ³	34	33	31	32	33	31							APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		<i>Coscinodiscus</i>	<i>Coscinodiscus</i>	<i>Odontella</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>							
			<i>Diploneis</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Egg(Fish and Shrimps)</i>							
			<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>							
			<i>Dinophysis</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>							
			<i>Thalassionema</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>							
3	Total Biomass	ml/100 m ³	14.78	14.77	14.78	14.77	14.78	14.78							

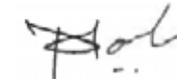
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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	96	98	96	94	98	90							APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	14	16	15	14	12	11							APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	13	14	11	10	11	13							IS :15185:2016
4	Enterococcus	/100ml	8	7	9	8	6	7							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°45'98" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.49	0.42	0.41	0.49	0.53	0.45	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	602	596	602.4	610.5	564.8	574.2	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	%	3.98	3.94	3.98	4.05	4.19	4.06	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	122.4	128.6	132.2	134.4	142.3	134.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	618.3	606	608.4	612.6	580.5	590.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.11	4.02	4.06	4.11	4.09	4.12	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	42.31	43.22	43.84	44.69	39.55	40.85	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	44.86	44.685	44.23	42.36	51.31	52.31	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	121.2	120.4	122.5	114.6	128.4	122	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.44	2.52	2.43	2.31	2.06	1.92	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

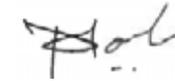
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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
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	368	367	365	366	367	368	



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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	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.21	8.06	8.24	8.16	8.17	8	8.09	7.89	8.02	7.84	8.11	7.91	IS 3025 (Part 11):2022
2.	Temperature	°C	29.8	29.7	30.5	30.4	30.7	30.6	30.2	30.1	30.1	30	29.8	29.7	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	132	108	124	112	130	118	122	104	138	116	142	128	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL(MD L:1.0)	3.4	BDL(MD L:1.0)	3.1	BDL(MD L:1.0)	2.8	BDL(MD L:1.0)	2.2	BDL(MD L:1.0)	3.4	BDL(MD L:1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.02	5.92	5.92	5.77	5.83	5.68	6.32	6.22	6.49	6.3	6.59	6.4	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.34	37.33	36.42	37.51	36.34	37.39	35.82	37.08	35.73	37.12	35.84	36.98	By Calculation
7.	Oil & Grease	mg/L	BDL(MD L:2.0)	IS 3025 (Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.06	2.74	3.39	3.23	3.55	3.39	3.06	2.74	2.42	2.26	3.02	2.59	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.565	0.543	0.652	0.609	0.543	0.522	0.5	0.456	0.413	0.37	0.276	0.215	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.22	4.06	4.32	4.22	4.37	4.27	3.48	3.42	4.43	4.27	3.79	3.36	APHA 24th Ed. 2023,4500- NH ₃ B
11.	Phosphates as PO ₄	µmol/L	1.9	1.68	1.79	1.68	1.47	1.37	1.16	1.05	1.16	1.05	BDL(MD L:0.4)	BDL(MD L:0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.845	7.343	8.362	8.059	8.463	8.182	7.04	6.616	7.263	6.9	7.086	6.165	APHA 24th Ed. 2023,4500 NH ₃ - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36280	37190	36240	37230	36230	37140	36110	36940	35280	36860	35310	36520	IS 3025(Part 16):2023
15.	COD	mg/L	19.9	11.9	28.17	24.14	19.9	16	8	4	12	8	16.1	12	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	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	2.9	2.8	2.7	2.6	2.6	2.7	2.7	2.8	2.6	2.9	2.9	2.8	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	2.7	1.6	2.6	1.7	2.7	1.5	2.9	1.6	2.8	1.5	2.7	1.6	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	132	117	129	115	128	116	130	117	133	118	132	117	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Dinophysis</i>	<i>Navicula</i>	<i>Odontella</i>	<i>Cyclotella</i>	<i>Cyclotella</i>	<i>Surirella</i>	<i>Odontella</i>	<i>Nitzschia</i>	<i>Odontella</i>	<i>Nitzschia</i>	<i>Odontella</i>	<i>Nitzschia</i>	APHA (24th Ed. 2023)10200A-G
			<i>Pinnularia</i>	<i>Skeletonema</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Skeletonema</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	
			<i>Thalassiothrix</i>	<i>Rhizosolenia</i>	<i>Coscinodiscus</i>	<i>Skeletonema</i>	<i>Thalassiothrix</i>	<i>Rhizosolenia</i>	<i>Coscinodiscus</i>	<i>Odontella</i>	<i>Coscinodiscus</i>	<i>Odontella</i>	<i>Coscinodiscus</i>	<i>Odontella</i>	
			<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Rhizosolenia</i>	<i>Cyclotella</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Pleurosigma</i>	<i>Dinophysis</i>	
			<i>Ceratium</i>	<i>Thalassionema</i>	<i>Thalassiosira</i>	<i>Thalassionema</i>	<i>Ceratium</i>	<i>Thalassionema</i>	<i>Thalassiosira</i>	<i>Surirella</i>	<i>Thalassiosira</i>	<i>Surirella</i>	<i>Thalassiosira</i>	<i>Surirella</i>	

B		Zooplankton										TEST METHOD
SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD			
1	Abundance (Population)	noX10 ³ / 100 m ³	31	36	35	34	35	36	APHA (24rd Ed. 2023)10200 G			
2	Name of Group Number and name of group species of each group		<i>Diploneis</i>	<i>Diploneis</i>	<i>Diploneis</i>	<i>Decapoda</i>	<i>Decapoda</i>	<i>Decapoda</i>				
			<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Oikoplura</i>				
			<i>Nitzschia</i>	<i>Nitzschia</i>	<i>Nitzschia</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>				
			<i>Thalassiothrix</i>	<i>Coscinodiscus</i>	<i>Coscinodiscus</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Bivalve Larvae</i>				
			<i>Pleurosigma</i>	<i>Pleurosigma</i>	<i>Pleurosigma</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>				
3	Total Biomass	ml/100 m ³	15.23	15.22	15.23	15.23	15.23	15.25				

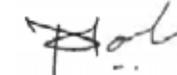
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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	224	230	230	234	230	232	APHA 24 th Ed.2023,9215 -C						
2	Total Coliform	/100ml	42	40	40	43	44	43	APHA 24 th Ed.2023, 9222-B						
3	E.coli	/100ml	32	33	33	33	32	31	IS :15185:2016						
4	Enterococcus	/100ml	18	15	15	12	14	13	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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Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M											
1.	pH	--	8.18	8.03	8.12	7.94	8.15	8.04	8.07	7.94	8.12	7.88	8.16	7.96	IS 3025 (Part 11):2022
2.	Temperature	°C	29.8	29.7	30.4	30.3	30.6	30.5	30.3	30.2	30.2	30.1	29.9	29.8	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	142	122	130	104	132	112	120	102	110	92	124	88	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(M DL:1.0)	3.3	BDL(M DL:1.0)	3.1	BDL(M DL:1.0)	2.2	BDL(M DL:1.0)	2.8	BDL(M DL:1.0)	3.4	BDL(M DL:1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	5.92	5.82	5.82	5.67	5.73	5.58	6.42	6.32	6.59	6.4	6.69	6.49	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.39	37.44	36.42	37.54	36.12	37.28	35.74	36.91	35.81	36.87	35.67	26.76	By Calculation
7.	Oil & Grease	mg/L	BDL(M DL:2.0)	IS 3025 (Part 39):2021											
8.	Nitrate as NO ₃	µmol/L	3.06	2.74	3.23	3.06	3.39	3.23	3.23	2.9	2.1	1.77	2.67	2.54	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.543	0.5	0.652	0.565	0.609	0.565	0.522	0.478	0.435	0.371	0.414	0.362	APHA 24th Ed.2023,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	4.43	4.22	4.37	4.27	4.43	4.32	3.74	3.64	4.16	3.95	3.4	3.32	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO ₄	µmol/L	2	1.79	2.11	1.9	1.9	1.68	1.37	1.26	1.26	1.16	1.16	1.05	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	8.033	7.46	8.252	7.895	8.429	8.115	7.492	7.018	6.695	6.091	6.484	6.222	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36370	37410	36230	37140	36190	37110	35720	36410	34680	35370	34410	35420	IS 3025(Part 16):2023
15.	COD	mg/L	11.9	7.9	24.14	20.123	16	12	12	8	16	12	20.1	16.1	IS 3025(Part 58):2023

Continue...

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

SR. NO.	TEST PARAMETERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	SURFAC E	BOTTO M	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	2.7	2.8	2.6	2.7	2.5	2.5	2.3	2.6	2.2	2.5	2.1	2.4	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m ³	1.16	1.45	1.17	1.47	1.18	1.48	1.17	1.46	1.18	1.47	1.17	1.46	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10 ³ /L	75	122	77	126	75	127	77	130	78	133	77	132	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	<i>Ceratium</i>	<i>Melosira</i>	<i>Ceratium</i>	<i>Rhizosolenia</i>	<i>Surirella</i>	<i>Rhizosolenia</i>	<i>Skeletonema</i>	<i>Odontella</i>	<i>Skeletonema</i>	<i>Odontella</i>	<i>Skeletonema</i>	<i>Odontella</i>	APHA (24th Ed. 2023)10200A-G
			<i>Pinnularia</i>	<i>Dinophysis</i>	<i>Pinnularia</i>	<i>Dinophysis</i>	<i>Pinnularia</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Rhizosolenia</i>	<i>Grammatophora</i>	<i>Rhizosolenia</i>	<i>Grammatophora</i>	<i>Rhizosolenia</i>	
			<i>Odontella</i>	<i>Skeletonema</i>	<i>Odontella</i>	<i>Skeletonema</i>	<i>Grammatophora</i>	<i>Skeletonema</i>	<i>Nitzschia</i>	<i>Coscinodiscus</i>	<i>Nitzschia</i>	<i>Coscinodiscus</i>	<i>Nitzschia</i>	<i>Coscinodiscus</i>	
			<i>Thalassiothrix</i>	<i>Thalassiosira</i>	<i>Thalassiothrix</i>	<i>Thalassiosira</i>	<i>Thalassiothrix</i>	<i>Thalassiosira</i>	<i>Thalassiothrix</i>	<i>Grammatophora</i>	<i>Thalassiothrix</i>	<i>Grammatophora</i>	<i>Coscinodiscus</i>	<i>Pinnularia</i>	
			<i>Thalassiosira</i>	<i>Thalassionema</i>	<i>Thalassiosira</i>	<i>Melosira</i>	<i>Rhizosolenia</i>	<i>Melosira</i>	<i>Pleurosigma</i>	<i>Thalassiosira</i>	<i>Pleurosigma</i>	<i>Thalassiosira</i>	<i>Pleurosigma</i>	<i>Thalassiosira</i>	
B			Zooplankton												
1	Abundance (Population)	noX10 ³ /100 m ³	66		37		68		67		67		70		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		<i>Nitzschia</i>		<i>Nitzschia</i>		<i>Nitzschia</i>		<i>Copepods</i>		<i>Copepods</i>		<i>Copepods</i>		
			<i>Grammatophora</i>		<i>Grammatophora</i>		<i>Grammatophora</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		<i>Oikoplura</i>		
			<i>Diploneis</i>		<i>Diploneis</i>		<i>Egg(Fish and Shrimps)</i>		<i>Crustacean Larvae</i>		<i>Crustacean Larvae</i>		<i>Crustacean Larvae</i>		
			<i>Thalassiothrix</i>		<i>Thalassiothrix</i>		<i>Thalassiothrix</i>		<i>Crustacean</i>		<i>Crustacean</i>		<i>Crustacean</i>		
3	Total Biomass	ml/100 m ³	14.56		14.55		14.54		14.57		14.54		14.57		

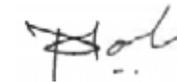
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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO	TEST PARAMETER S	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	248		250		254		256		250		254		APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100ml	50		52		50		52		51		50		APHA 24 th Ed.2023, 9222-B
3	E.coli	/100ml	40		41		44		43		45		44		IS :15185:2016
4	Enterococcus	/100ml	31		30		32		31		32		30		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 ETP OUTLET WATER

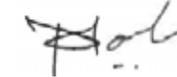
SR.NO.	TEST PARAMETERS	UNIT	LIQUID TERMINAL						GPCB Limit	TEST METHOD
			Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24		
			27-04-2024	25-05-2024	27-06-2024	24-07-2024	06-08-2024	20-09-2024		
1.	Colour	Pt. Co. Scale	40	40	40	60	50	50	100	IS 3025(Part 4):2021
2.	pH @ 27 ° C	--	7.35	6.97	7.11	6.96	6.87	7.51	6.5 to 8.5	IS 3025(Part 11):2022
3.	Temperature	°C	30.5	31.5	31	30	29.5	30	40	IS 3025(Part 9):2023
4.	Total Suspended Solid	mg/L	34	28	22	24	32	46	100	APHA 24th Ed.2023,2540 –D
5.	Total Dissolved Solids	mg/L	1242	1318	940	720	636	629	2100	APHA 24th Ed.2023,2540- C
6.	COD	mg/L	86	88	92	86.2	82.1	91.2	100	IS 3025(Part 58):2023
7.	BOD (3 days at 27 °C)	mg/L	24.9	27	25.3	24	24	27	30	IS 3025(Part 44):2023
8.	Chloride (as Cl) -	mg/L	486	502.4	437.1	400	234	247.7	600	IS 3025(Part 32):1988
9.	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)	10	IS 3025(Part 39):2021
10.	Sulphate (as SO ₄)	mg/L	42	48	44	42	36.8	34	1000	IS 3025(Part 24):2022
11.	Ammonical Nitrogen	mg/L	30.2	34.4	32.5	30.2	15.8	28.5	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

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SR.NO.	TEST PARAMETERS	UNIT	LIQUID TERMINAL						GPCB Limit	TEST METHOD
			Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24		
			27-04-2024	25-05-2024	27-06-2024	24-07-2024	06-08-2024	20-09-2024		
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)	0.04	0.017	BDL(MDL:0.003)	2	APHA 24th Ed.2023,3111-B
17.	Fluoride as F	mg/L	1.8	1.64	1.58	1.74	1.88	1.84	2	APHA 24th Ed.2023,4500 F, D
18.	Residual Chlorine	mg/L	0.66	0.74	0.68	0.74	0.68	BDL(MDL:0.1)	0.5 Min.	APHA 24th Ed.2023,4500-Cl-G
19.	Percent Sodium	%	46.77	47.38	47.39	47.64	47.25	46.91	60	By Calculation
20.	Sodium Absorption ratio	--	3.06	3.3	3.4	3.3	2.5	3.1	26	By Calculation



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Technical Manager

Results of Ambient Air Quality Monitoring

Name of Location		CT3 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.	01-04-2024	79.75	31.28	27.86	31.25	1.1	--	NOT DETECTED
2.	04-04-2024	77.45	30.83	26.91	30.26	1.12	5.59	NOT DETECTED
3.	08-04-2024	81.36	33.46	29.75	32.37	1.16	5.62	NOT DETECTED
4.	11-04-2024	84.91	36.13	32.32	35.92	1.19	5.85	NOT DETECTED
5.	15-04-2024	82.37	32.86	29.4	32.53	1.15	5.76	NOT DETECTED
6.	18-04-2024	80.95	31.81	27.65	31.27	1.12	5.54	NOT DETECTED
7.	22-04-2024	82.52	33.37	30.48	34.64	1.14	5.68	NOT DETECTED
8.	25-04-2024	85.1	35.05	31.11	35.63	1.17	5.81	NOT DETECTED
9.	29-04-2024	83.26	33.49	30.64	34.13	1.12	5.7	NOT DETECTED
10.	02-05-2024	82.37	34.10	29.42	33.19	1.14	5.82	NOT DETECTED
11.	06-05-2024	84.13	36.72	31.64	35.32	1.15	5.89	NOT DETECTED
12.	09-05-2024	80.84	33.87	28.93	31.78	1.12	5.73	NOT DETECTED
13.	13-05-2024	78.46	32.87	29.98	33.52	1.10	5.61	NOT DETECTED
14.	16-05-2024	81.25	35.38	32.31	36.74	1.13	5.73	NOT DETECTED
15.	20-05-2024	79.63	33.89	30.13	34.62	1.12	5.56	NOT DETECTED

Continue...

Name of Location		CT3 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.	23-05-2024	76.47	31.32	27.53	31.29	1.10	5.46	NOT DETECTED
17.	27-05-2024	78.52	34.54	28.41	32.48	1.13	5.37	NOT DETECTED
18.	30-05-2024	81.13	35.81	30.37	34.35	1.15	5.52	NOT DETECTED
19.	03-06-2024	80.62	33.35	28.84	31.98	1.12	5.57	NOT DETECTED
20.	06-06-2024	78.63	31.29	26.54	30.28	1.13	5.41	NOT DETECTED
21.	10-06-2024	81.12	33.27	29.17	32.48	1.16	5.69	NOT DETECTED
22.	13-06-2024	78.92	30.71	27.24	31.63	1.14	5.45	NOT DETECTED
23.	17-06-2024	74.39	28.16	26.19	30.84	1.1	5.32	NOT DETECTED
24.	20-06-2024	76.26	29.43	28.83	31.35	1.13	5.25	NOT DETECTED
25.	24-06-2024	63.37	26.71	25.69	28.14	1	4.74	NOT DETECTED
26.	27-06-2024	58.42	24.84	23.96	26.84	0.87	4.55	NOT DETECTED
27.	01-07-2024	60.75	26.86	24.62	27.46	1	--	NOT DETECTED
28.	04-07-2024	57.48	25.62	22.75	25.37	0.95	4.68	NOT DETECTED
29.	08-07-2024	63.48	27.19	24.59	28.11	1.02	4.78	NOT DETECTED
30.	11-07-2024	67.51	29.38	26.42	29.64	1.07	4.65	NOT DETECTED
31.	15-07-2024	64.38	26.51	24.96	27.15	1.03	4.73	NOT DETECTED

Continue...

Name of Location		CT3 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.	18-07-2024	68.73	29.31	26.18	28.97	1.1	4.86	NOT DETECTED
33.	22-07-2024	65.41	27.54	25.38	28.26	1.12	4.79	NOT DETECTED
34.	25-07-2024	63.27	25.48	23.64	26.48	1.08	4.72	NOT DETECTED
35.	29-07-2024	59.83	24.28	22.69	25.13	1.02	4.61	NOT DETECTED
36.	01-08-2024	57.27	24.84	22.16	25.53	0.98	4.24	NOT DETECTED
37.	05-08-2024	61.29	26.58	23.81	26.48	1.04	4.41	NOT DETECTED
38.	08-08-2024	63.18	29.63	25.11	28.37	1.1	4.58	NOT DETECTED
39.	12-08-2024	60.72	27.37	22.84	25.42	1.06	4.38	NOT DETECTED
40.	15-08-2024	62.39	28.15	23.21	26.84	1.08	4.49	NOT DETECTED
41.	19-08-2024	64.15	29.52	25.37	28.15	1.12	4.64	NOT DETECTED
42.	22-08-2024	62.19	28.31	23.68	26.49	1.1	4.73	NOT DETECTED
43.	26-08-2024	58.37	25.48	22.57	25.16	1.05	4.51	NOT DETECTED
44.	29-08-2024	61.29	26.38	24.63	27.35	1.08	4.62	NOT DETECTED
45.	02-09-2024	60.17	25.52	21.92	24.63	1.02	4.42	NOT DETECTED
46.	05-09-2024	62.38	26.19	22.74	25.16	1.05	4.6	NOT DETECTED
47.	09-09-2024	65.13	28.36	24.82	27.48	1.08	4.66	NOT DETECTED

Continue...

Name of Location		CT3 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.	12-09-2024	63.29	25.91	23.69	26.41	1.04	4.56	NOT DETECTED
49.	16-09-2024	65.49	27.47	25.12	28.74	1.10	4.62	NOT DETECTED
50.	19-09-2024	68.42	29.3	25.81	27.98	1.14	4.71	NOT DETECTED
51.	23-09-2024	66.1	27.85	24.39	27.63	1.11	4.64	NOT DETECTED
52.	26-09-2024	62.37	24.41	22.35	25.68	1.06	4.49	NOT DETECTED
53.	30-09-2024	65.18	25.37	23.7	26.45	1.1	4.58	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		Near Fire Station						
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.	01-04-2024	79.67	30.14	26.39	30.11	0.82	--	NOT DETECTED
2.	04-04-2024	81.38	32.74	29.51	33.46	0.88	3.74	NOT DETECTED
3.	08-04-2024	77.49	30.13	25.38	30.27	0.85	3.68	NOT DETECTED
4.	11-04-2024	79.13	31.82	27.91	32.47	0.82	3.53	NOT DETECTED
5.	15-04-2024	75.37	27.42	24.89	30.11	0.77	3.38	NOT DETECTED
6.	18-04-2024	77.91	29.73	25.52	29.28	0.86	3.49	NOT DETECTED
7.	22-04-2024	80.15	32.49	29.73	33.42	0.83	3.71	NOT DETECTED
8.	25-04-2024	75.24	28.47	26.93	30.17	0.79	3.56	NOT DETECTED
9.	29-04-2024	78.42	29.85	28.12	32.73	0.78	3.67	NOT DETECTED
10.	02-05-2024	78.72	28.84	25.91	29.18	0.78	3.58	NOT DETECTED
11.	06-05-2024	75.92	26.79	24.43	28.73	0.75	3.49	NOT DETECTED
12.	09-05-2024	79.63	29.26	26.8	30.02	0.85	3.66	NOT DETECTED
13.	13-05-2024	81.27	31.36	28.75	31.97	0.84	3.81	NOT DETECTED
14.	16-05-2024	78.64	29.74	27.45	31.12	0.78	3.61	NOT DETECTED
15.	20-05-2024	75.64	27.46	25.61	29.53	0.75	3.58	NOT DETECTED

Continue...

Name of Location		Near Fire Station						
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.	23-05-2024	73.4	26.99	24.94	27.88	0.73	3.51	NOT DETECTED
17.	27-05-2024	76.62	29.17	27.32	31.42	0.80	3.67	NOT DETECTED
18.	30-05-2024	74.96	27.84	25.63	29.85	0.83	3.57	NOT DETECTED
19.	03-06-2024	79.14	29.73	25.94	28.13	0.71	3.62	NOT DETECTED
20.	06-06-2024	77.38	26.85	24.58	27.63	0.69	3.54	NOT DETECTED
21.	10-06-2024	80.62	29.16	25.72	28.11	0.73	3.6	NOT DETECTED
22.	13-06-2024	76.37	27.48	24.94	27.27	0.75	3.43	NOT DETECTED
23.	17-06-2024	73.29	25.85	23.84	26.05	0.68	3.35	NOT DETECTED
24.	20-06-2024	69.52	24.87	22.58	25.71	0.73	3.27	NOT DETECTED
25.	24-06-2024	48.42	20.73	18.68	22.31	ND	2.67	NOT DETECTED
26.	27-06-2024	42.83	18.65	17.12	20.64	ND	2.42	NOT DETECTED
27.	01-07-2024	45.38	17.69	15.44	18.61	0.31	--	NOT DETECTED
28.	04-07-2024	48.63	19.47	17.15	20.57	0.37	2.65	NOT DETECTED
29.	08-07-2024	55.14	22.72	19.46	23.1	0.45	2.71	NOT DETECTED
30.	11-07-2024	58.27	24.15	20.84	23.79	0.51	2.77	NOT DETECTED
31.	15-07-2024	53.84	21.29	17.35	20.45	0.46	2.85	NOT DETECTED

Continue...

Name of Location		Near Fire Station						
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.	18-07-2024	60.15	24.59	19.72	22.31	0.55	2.71	NOT DETECTED
33.	22-07-2024	57.51	23.43	17.1	20.84	0.49	2.65	NOT DETECTED
34.	25-07-2024	54.19	20.81	14.89	17.57	0.42	2.59	NOT DETECTED
35.	29-07-2024	48.76	18.93	13.47	16.39	0.28	2.55	NOT DETECTED
36.	01-08-2024	49.81	19.1	14.82	18.31	0.4	2.51	NOT DETECTED
37.	05-08-2024	52.37	19.86	15.71	19.53	0.45	2.58	NOT DETECTED
38.	08-08-2024	55.71	20.42	16.29	20.81	0.42	2.64	NOT DETECTED
39.	12-08-2024	58.74	21.79	17.63	22.1	0.48	2.76	NOT DETECTED
40.	15-08-2024	53.29	20.63	15.24	19.21	0.41	2.61	NOT DETECTED
41.	19-08-2024	56.48	21.24	16.1	20.64	0.45	2.65	NOT DETECTED
42.	22-08-2024	59.63	22.14	17.71	22.15	0.48	2.72	NOT DETECTED
43.	26-08-2024	57.14	21.28	16.32	20.61	0.46	2.67	NOT DETECTED
44.	29-08-2024	54.59	20.81	15.39	19.3	0.43	2.59	NOT DETECTED
45.	02-09-2024	47.15	18.84	14.13	18.26	0.42	2.56	NOT DETECTED
46.	05-09-2024	50.18	19.24	15.25	19.42	0.45	2.63	NOT DETECTED
47.	09-09-2024	48.74	18.92	14.73	18.68	0.43	2.66	NOT DETECTED

Continue...

Name of Location		Near Fire Station						
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.	12-09-2024	52.38	19.65	15.69	19.36	0.48	2.59	NOT DETECTED
49.	16-09-2024	55.38	20.14	15.89	20.05	0.5	2.67	NOT DETECTED
50.	19-09-2024	57.28	21.75	16.29	21.14	0.51	2.72	NOT DETECTED
51.	23-09-2024	54.39	20.43	15.36	19.74	0.48	2.60	NOT DETECTED
52.	26-09-2024	50.82	19.53	14.48	18.63	0.44	2.54	NOT DETECTED
53.	30-09-2024	53.37	20.42	15.1	18.86	0.47	2.59	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 PORT – TUG Berth 600 KL Pupm 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	HC µg/m ³	Benzene µg/m ³
1.	01-04-2024	85.53	36.13	33.57	38.91	1.15	--	NOT DETECTED
2.	04-04-2024	82.38	34.62	30.98	35.64	1.12	4.71	NOT DETECTED
3.	08-04-2024	80.93	32.48	29.18	33.45	1.14	4.53	NOT DETECTED
4.	11-04-2024	83.47	35.63	33.45	37.61	1.17	4.69	NOT DETECTED
5.	15-04-2024	78.39	30.16	30.74	35.2	1.10	4.47	NOT DETECTED
6.	18-04-2024	80.63	32.7	28.46	33.29	1.13	4.61	NOT DETECTED
7.	22-04-2024	76.36	29.95	31.29	35.42	1.12	4.5	NOT DETECTED
8.	25-04-2024	82.35	31.56	33.71	38.81	1.15	4.73	NOT DETECTED
9.	29-04-2024	79.24	33.72	30.37	34.78	1.11	4.57	NOT DETECTED
10.	02-05-2024	80.26	32.91	30.18	34.51	1.12	4.48	NOT DETECTED
11.	06-05-2024	82.75	34.2	32.1	36.27	1.14	4.61	NOT DETECTED
12.	09-05-2024	79.64	30.73	29.38	32.63	1.15	4.42	NOT DETECTED
13.	13-05-2024	76.39	28.98	28.61	31.85	1.13	4.36	NOT DETECTED
14.	16-05-2024	78.63	30.73	29.86	33.41	1.12	4.45	NOT DETECTED
15.	20-05-2024	81.24	33.17	31.28	34.62	1.13	4.59	NOT DETECTED

Continue...

Name of Location		ADANI PORT – TUG Berth 600 KL Pupm 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	HC µg/m ³	Benzene µg/m ³
16.	23-05-2024	79.84	30.82	28.41	32.55	1.11	4.41	NOT DETECTED
17.	27-05-2024	76.54	29.71	27.94	31.28	1.1	4.29	NOT DETECTED
18.	30-05-2024	78.16	30.47	29.74	33.46	1.14	4.38	NOT DETECTED
19.	03-06-2024	78.72	30.25	27.64	31.38	1.11	4.39	NOT DETECTED
20.	06-06-2024	80.16	31.28	28.73	32.17	1.13	4.53	NOT DETECTED
21.	10-06-2024	76.39	28.63	26.37	30.62	1.1	4.42	NOT DETECTED
22.	13-06-2024	79.93	30.12	28.19	32.85	1.12	4.36	NOT DETECTED
23.	17-06-2024	75.59	28.83	25.48	29.16	1.11	4.27	NOT DETECTED
24.	20-06-2024	73.43	27.19	24.81	28.36	1.08	4.1	NOT DETECTED
25.	24-06-2024	56.32	24.75	22.59	25.42	0.74	3.38	NOT DETECTED
26.	27-06-2024	48.64	21.29	20.11	24.05	0.51	3.13	NOT DETECTED
27.	01-07-2024	54.38	23.51	20.83	23.49	0.67	--	NOT DETECTED
28.	04-07-2024	57.69	24.35	23.47	27.15	0.79	3.56	NOT DETECTED
29.	08-07-2024	63.48	26.61	24.06	27.39	0.83	3.61	NOT DETECTED
30.	11-07-2024	66.17	27.42	25.11	28.13	0.89	3.7	NOT DETECTED
31.	15-07-2024	65.49	25.15	24.63	26.96	0.81	3.76	NOT DETECTED

Continue...

Name of Location		ADANI PORT – TUG Berth 600 KL Pupm 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	HC µg/m ³	Benzene µg/m ³
32.	18-07-2024	68.58	28.35	25.21	28.74	0.87	3.68	NOT DETECTED
33.	22-07-2024	62.49	24.12	23.47	26.55	0.79	3.59	NOT DETECTED
34.	25-07-2024	58.57	22.75	20.91	24.1	0.74	3.54	NOT DETECTED
35.	29-07-2024	55.69	21.27	18.75	22.46	0.71	3.47	NOT DETECTED
36.	01-08-2024	55.14	22.63	20.45	24.21	0.72	3.41	NOT DETECTED
37.	05-08-2024	60.53	25.17	22.53	26.81	0.75	3.52	NOT DETECTED
38.	08-08-2024	58.28	23.48	21.53	25.48	0.73	3.45	NOT DETECTED
39.	12-08-2024	63.48	25.37	23.1	26.93	0.8	3.62	NOT DETECTED
40.	15-08-2024	65.12	26.91	24.36	28.13	0.85	3.71	NOT DETECTED
41.	19-08-2024	61.29	24.38	22.86	26.42	0.81	3.63	NOT DETECTED
42.	22-08-2024	63.45	25.18	23.41	27.36	0.77	3.69	NOT DETECTED
43.	26-08-2024	59.83	23.15	21.79	25.22	0.74	3.48	NOT DETECTED
44.	29-08-2024	61.27	24.61	23.24	27.46	0.79	3.57	NOT DETECTED
45.	02-09-2024	58.26	23.75	21.38	24.87	0.69	3.6	NOT DETECTED
46.	05-09-2024	55.93	22.59	20.88	24.56	0.64	3.54	NOT DETECTED
47.	09-09-2024	57.94	23.15	21.27	24.98	0.67	3.63	NOT DETECTED

Continue...

Name of Location		ADANI PORT – TUG Berth 600 KL Pupm 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	HC µg/m ³	Benzene µg/m ³
48.	12-09-2024	60.38	25.47	22.63	26.14	0.71	3.68	NOT DETECTED
49.	16-09-2024	63.38	25.96	22.78	26.69	0.74	3.74	NOT DETECTED
50.	19-09-2024	66.26	26.75	23.57	27.42	0.76	3.82	NOT DETECTED
51.	23-09-2024	64.39	25.14	22.63	26.46	0.73	3.71	NOT DETECTED
52.	26-09-2024	60.42	22.84	20.74	24.35	0.67	3.64	NOT DETECTED
53.	30-09-2024	62.54	23.67	21.81	24.63	0.71	3.68	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		PUB / Adani 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	HC µg/m ³	Benzene µg/m ³
1.	01-04-2024	72.38	29.81	23.13	26.79	0.71	--	NOT DETECTED
2.	04-04-2024	70.76	27.54	20.84	24.51	0.63	2.64	NOT DETECTED
3.	08-04-2024	65.24	30.12	21.25	22.94	0.68	2.56	NOT DETECTED
4.	11-04-2024	63.71	28.15	20.86	24.63	0.64	2.39	NOT DETECTED
5.	15-04-2024	68.12	27.36	21.74	23.46	0.67	2.48	NOT DETECTED
6.	18-04-2024	73.31	31.98	23.47	26.48	0.70	2.67	NOT DETECTED
7.	22-04-2024	69.53	29.78	21.47	25.10	0.65	2.55	NOT DETECTED
8.	25-04-2024	75.82	30.85	24.19	27.15	0.62	2.74	NOT DETECTED
9.	29-04-2024	72.46	31.82	21.86	24.35	0.68	2.61	NOT DETECTED
10.	02-05-2024	70.72	30.15	20.77	23.82	0.64	2.52	NOT DETECTED
11.	06-05-2024	73.14	32.10	22.49	25.37	0.69	2.67	NOT DETECTED
12.	09-05-2024	68.47	29.84	20.16	23.47	0.61	2.55	NOT DETECTED
13.	13-05-2024	65.48	27.46	21.73	23.91	0.60	2.46	NOT DETECTED
14.	16-05-2024	67.53	28.61	20.85	23.42	0.67	2.53	NOT DETECTED
15.	20-05-2024	64.29	26.83	19.27	22.11	0.63	2.42	NOT DETECTED

Continue...

Name of Location		PUB / Adani 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	HC µg/m ³	Benzene µg/m ³
16.	23-05-2024	68.42	28.23	21.44	23.40	0.70	2.79	NOT DETECTED
17.	27-05-2024	70.42	31.14	22.91	25.32	0.65	2.58	NOT DETECTED
18.	30-05-2024	72.34	31.93	20.82	23.84	0.68	2.63	NOT DETECTED
19.	03-06-2024	73.27	29.31	20.87	22.48	0.63	2.62	NOT DETECTED
20.	06-06-2024	68.53	27.15	19.74	22.02	0.59	2.55	NOT DETECTED
21.	10-06-2024	72.48	28.16	20.77	23.09	0.63	2.48	NOT DETECTED
22.	13-06-2024	70.12	25.74	19.35	21.28	0.60	2.53	NOT DETECTED
23.	17-06-2024	61.92	24.64	17.79	20.11	0.55	2.40	NOT DETECTED
24.	20-06-2024	63.78	26.13	18.53	20.85	0.63	2.49	NOT DETECTED
25.	24-06-2024	39.26	22.54	15.83	18.42	NOT DETECTED	1.87	NOT DETECTED
26.	27-06-2024	37.91	20.75	13.97	16.20	NOT DETECTED	1.64	NOT DETECTED
27.	01-07-2024	36.49	18.63	12.84	15.36	0.26	--	NOT DETECTED
28.	04-07-2024	40.28	19.87	14.11	17.63	0.29	1.57	NOT DETECTED
29.	08-07-2024	45.81	22.36	16.74	19.25	0.35	1.63	NOT DETECTED
30.	11-07-2024	48.73	24.15	17.59	20.74	0.41	1.82	NOT DETECTED
31.	15-07-2024	43.94	21.82	15.37	18.21	0.39	1.75	NOT DETECTED

Continue...

Name of Location		PUB / Adani 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	HC µg/m ³	Benzene µg/m ³
32.	18-07-2024	52.62	24.03	16.13	19.42	0.44	1.79	NOT DETECTED
33.	22-07-2024	47.49	23.13	14.59	17.84	0.40	1.68	NOT DETECTED
34.	25-07-2024	43.28	20.85	12.71	15.49	0.32	1.62	NOT DETECTED
35.	29-07-2024	39.51	16.94	10.87	13.66	0.24	1.55	NOT DETECTED
36.	01-08-2024	41.11	18.93	13.28	16.42	0.32	1.51	NOT DETECTED
37.	05-08-2024	43.29	19.35	13.74	16.49	0.34	1.58	NOT DETECTED
38.	08-08-2024	41.73	18.83	12.93	15.37	0.31	1.61	NOT DETECTED
39.	12-08-2024	47.52	21.37	14.16	17.10	0.34	1.68	NOT DETECTED
40.	15-08-2024	49.69	22.45	15.26	18.22	0.37	1.72	NOT DETECTED
41.	19-08-2024	47.14	21.43	14.32	17.25	0.35	1.63	NOT DETECTED
42.	22-08-2024	45.28	20.67	13.82	16.74	0.33	1.58	NOT DETECTED
43.	26-08-2024	43.74	20.11	13.32	16.14	0.32	1.49	NOT DETECTED
44.	29-08-2024	47.15	22.32	14.35	17.49	0.35	1.54	NOT DETECTED
45.	02-09-2024	44.39	19.74	14.10	17.35	0.36	1.6	NOT DETECTED
46.	05-09-2024	40.83	18.81	12.94	15.81	0.32	1.53	NOT DETECTED
47.	09-09-2024	42.91	19.46	13.32	16.26	0.33	1.57	NOT DETECTED

Continue...

Name of Location		PUB / Adani 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	HC µg/m ³	Benzene µg/m ³
48.	12-09-2024	44.48	20.31	13.84	16.52	0.36	1.63	NOT DETECTED
49.	16-09-2024	47.30	22.29	14.75	17.47	0.38	1.69	NOT DETECTED
50.	19-09-2024	44.10	21.16	13.68	16.42	0.35	1.75	NOT DETECTED
51.	23-09-2024	46.75	22.36	14.53	17.38	0.37	1.62	NOT DETECTED
52.	26-09-2024	43.47	21.73	12.64	15.16	0.32	1.67	NOT DETECTED
53.	30-09-2024	45.83	22.08	13.75	16.54	0.34	1.71	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		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.	01-04-2024	85.13	30.82	27.35	30.15	0.81	--	NOT DETECTED
2.	04-04-2024	82.39	29.25	25.72	29.13	0.78	4.74	NOT DETECTED
3.	08-04-2024	80.18	27.31	24.86	27.35	0.73	4.61	NOT DETECTED
4.	11-04-2024	77.49	29.16	23.12	26.83	0.75	4.53	NOT DETECTED
5.	15-04-2024	81.93	28.38	24.64	28.02	0.86	4.86	NOT DETECTED
6.	18-04-2024	84.13	29.48	25.81	28.37	0.80	4.93	NOT DETECTED
7.	22-04-2024	87.39	32.15	27.68	30.64	0.85	4.75	NOT DETECTED
8.	25-04-2024	83.57	30.57	24.82	27.91	0.78	4.67	NOT DETECTED
9.	29-04-2024	86.12	32.81	27.14	31.25	0.83	4.81	NOT DETECTED
10.	02-05-2024	83.74	29.83	25.24	29.15	0.79	4.75	NOT DETECTED
11.	06-05-2024	85.19	32.53	27.81	31.11	0.85	4.88	NOT DETECTED
12.	09-05-2024	82.37	30.88	25.37	29.42	0.75	4.81	NOT DETECTED
13.	13-05-2024	79.36	28.64	24.93	28.64	0.73	4.73	NOT DETECTED
14.	16-05-2024	82.38	31.27	26.45	29.71	0.83	4.61	NOT DETECTED
15.	20-05-2024	80.91	30.15	25.19	29.37	0.79	4.70	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.	23-05-2024	77.37	28.53	23.75	26.89	0.75	4.63	NOT DETECTED
17.	27-05-2024	79.52	29.75	25.29	28.74	0.81	4.68	NOT DETECTED
18.	30-05-2024	81.27	31.43	28.31	31.74	0.84	4.61	NOT DETECTED
19.	03-06-2024	81.84	30.14	24.26	28.74	0.80	4.67	NOT DETECTED
20.	06-06-2024	78.63	28.58	22.19	26.54	0.77	4.58	NOT DETECTED
21.	10-06-2024	80.27	29.18	22.97	27.15	0.72	4.63	NOT DETECTED
22.	13-06-2024	82.36	30.47	23.65	27.14	0.81	4.75	NOT DETECTED
23.	17-06-2024	76.21	27.63	22.10	26.74	0.70	4.67	NOT DETECTED
24.	20-06-2024	74.39	26.84	21.62	25.36	0.68	4.52	NOT DETECTED
25.	24-06-2024	60.67	23.71	18.64	22.37	0.24	3.65	NOT DETECTED
26.	27-06-2024	56.52	20.85	16.39	19.96	0.16	3.32	NOT DETECTED
27.	01-07-2024	58.28	22.31	17.53	20.47	0.38	--	NOT DETECTED
28.	04-07-2024	55.91	21.85	16.48	18.95	0.45	3.64	NOT DETECTED
29.	08-07-2024	61.38	24.62	18.25	22.17	0.49	3.78	NOT DETECTED
30.	11-07-2024	66.38	26.82	19.69	23.53	0.54	3.83	NOT DETECTED
31.	15-07-2024	63.73	25.21	18.14	22.16	0.46	3.71	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
32.	18-07-2024	70.16	27.13	21.36	24.64	0.52	3.77	NOT DETECTED
33.	22-07-2024	67.52	24.31	18.77	21.38	0.47	3.63	NOT DETECTED
34.	25-07-2024	63.10	21.96	16.35	19.13	0.41	3.69	NOT DETECTED
35.	29-07-2024	59.47	20.58	15.19	18.57	0.36	3.59	NOT DETECTED
36.	01-08-2024	61.42	21.86	16.58	20.81	0.52	3.61	NOT DETECTED
37.	05-08-2024	59.47	21.28	15.87	19.38	0.51	3.56	NOT DETECTED
38.	08-08-2024	63.71	22.64	16.95	20.15	0.55	3.68	NOT DETECTED
39.	12-08-2024	67.39	24.47	17.12	21.63	0.51	3.73	NOT DETECTED
40.	15-08-2024	65.28	23.19	16.56	20.06	0.56	3.70	NOT DETECTED
41.	19-08-2024	69.63	25.38	18.19	22.31	0.58	3.76	NOT DETECTED
42.	22-08-2024	63.29	24.37	17.42	21.35	0.57	3.73	NOT DETECTED
43.	26-08-2024	62.11	23.42	16.36	20.81	0.52	3.67	NOT DETECTED
44.	29-08-2024	65.38	24.88	17.15	21.37	0.58	3.71	NOT DETECTED
45.	02-09-2024	64.19	22.47	16.93	21.16	0.55	3.65	NOT DETECTED
46.	05-09-2024	67.28	23.81	17.24	21.72	0.58	3.72	NOT DETECTED
47.	09-09-2024	65.38	22.74	16.69	20.48	0.54	3.62	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
48.	12-09-2024	63.29	22.53	16.24	21.15	0.50	3.66	NOT DETECTED
49.	16-09-2024	67.63	23.96	17.48	21.95	0.57	3.69	NOT DETECTED
50.	19-09-2024	70.16	25.91	18.37	22.28	0.60	3.74	NOT DETECTED
51.	23-09-2024	68.47	24.63	17.86	21.42	0.57	3.71	NOT DETECTED
52.	26-09-2024	65.28	22.85	16.43	20.57	0.53	3.63	NOT DETECTED
53.	30-09-2024	67.83	23.47	17.12	21.63	0.56	3.59	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		CT3 RMU-2					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		11-04-2024	13-05-2024	13-06-2024	11-07-2024	12-08-2024	12-09-2024
1	06:00 to 07:00	64.7	63.7	64.1	62.7	62.3	62.8
2	07:00 to 08:00	66.2	64.6	63.7	61.9	62.5	63.2
3	08:00 to 09:00	65.4	63.8	65.4	63.6	65.1	63.7
4	09:00 to 10:00	66.6	65.2	67.8	64.3	65.4	64.5
5	10:00 to 11:00	66.4	63.8	66.2	64.9	63.8	65.3
6	11:00 to 12:00	65.3	64.7	65.4	67.4	65.7	65.4
7	12:00 to 13:00	64.5	65.4	66.3	65.1	66.7	65.6
8	13:00 to 14:00	63.8	66.8	67.2	66.3	65.4	64.2
9	14:00 to 15:00	66.8	65.2	66.9	65.9	67.3	66.6
10	15:00 to 16:00	65.3	64.8	65.1	64.3	66.4	65.7
11	16:00 to 17:00	67.8	64.7	62.4	64.3	65.2	64.3
12	17:00 to 18:00	65.4	66.1	64.8	65.9	64.3	63.1
13	18:00 to 19:00	63.1	64.8	64.2	63.4	64.7	63.5
14	19:00 to 20:00	64.3	65.2	63.4	65.1	63.2	64.6
15	20:00 to 21:00	62.6	64.3	66.2	63.8	63.4	64.2
16	21:00 to 22:00	62.3	63.2	64.1	62.2	62.5	62.4
Day Time		<75 dB (A)					

Continue...

Location Name		CT3 RMU-2					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) – Night Time					
		11-04-2024	13-05-2024	13-06-2024	11-07-2024	12-08-2024	12-09-2024
1	22:00 to 23:00	63.2	63.5	63.3	62.7	61.8	61.3
2	23:00 to 24:00	63.4	62.4	63.8	62.4	62.3	62.6
3	24:00 to 01:00	61.9	63.5	62.7	63.9	62.8	63.5
4	01:00 to 02:00	63.5	63.8	63.2	63.1	62.5	61.5
5	02:00 to 03:00	62.6	62.3	61.7	63.4	63.2	63.5
6	03:00 to 04:00	61.1	60.6	62.3	61.7	60.7	62.1
7	04:00 to 05:00	61.7	62.3	60.4	61.1	61.3	60.7
8	05:00 to 06:00	61.3	61.6	61.6	60.2	59.4	59.2
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		Near Fire Station					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		04-04-2024	06-05-2024	06-06-2024	04-07-2024	05-08-2024	05-09-2024
1	06:00 to 07:00	64.8	62.9	63.2	62.4	61.8	62.1
2	07:00 to 08:00	64.2	65.1	64.3	63.7	63.5	63.3
3	08:00 to 09:00	65.3	64.7	65.7	63.2	64.6	63.8
4	09:00 to 10:00	66.9	65.4	64.2	66.4	65.3	64.5
5	10:00 to 11:00	65.4	66.8	66.1	65.2	65.2	66.2
6	11:00 to 12:00	66.8	65.4	65.8	61.3	63.7	65.4
7	12:00 to 13:00	68.4	67.2	66.7	63.8	64.2	66.6
8	13:00 to 14:00	66.2	65.8	66.3	64.5	65.7	64.9
9	14:00 to 15:00	65.8	68.1	67.5	66.4	64.8	66.5
10	15:00 to 16:00	65.8	66.2	68.3	65.8	66.1	65.3
11	16:00 to 17:00	65.4	65.1	66.8	67.2	66.7	65.8
12	17:00 to 18:00	65.8	63.4	65.4	64.2	65.4	64.3
13	18:00 to 19:00	63.4	64.7	65.1	62.8	63.8	63.6
14	19:00 to 20:00	65.2	62.9	63.4	64.7	64.1	65.2
15	20:00 to 21:00	64.3	64.2	65.1	63.3	62.8	64.1
16	21:00 to 22:00	62.8	63.6	63.1	62.7	62.1	62.5
Day Time		<75 dB (A)					

Continue...

Location Name		Near Fire Station					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time					
		04-04-2024	06-05-2024	06-06-2024	04-07-2024	05-08-2024	05-09-2024
1	22:00 to 23:00	61.4	62.3	63.1	63.5	62.5	62.7
2	23:00 to 24:00	62.5	62.9	62.4	63.8	63.4	63.1
3	24:00 to 01:00	60.4	61.6	62.7	61.7	62.7	62.4
4	01:00 to 02:00	63.5	63.2	63.2	63.2	62.8	63.6
5	02:00 to 03:00	62.3	62.8	62.6	62.8	63.2	63.3
6	03:00 to 04:00	59.7	62.2	62.5	61.7	62.5	62.1
7	04:00 to 05:00	60.3	61.5	60.3	60.1	61.2	60.6
8	05:00 to 06:00	59.6	60.1	59.7	60.2	60.7	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		ADANI PORT – TUG Berth 600 KL Pump House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		08-04-2024	09-05-2024	10-06-2024	08-07-2024	08-08-2024	09-09-2024
1	06:00 to 07:00	62.4	64.2	62.8	61.8	60.5	61.3
2	07:00 to 08:00	63.7	62.8	63.4	64.1	61.8	60.7
3	08:00 to 09:00	63.8	65.4	63.9	62.8	63.3	61.5
4	09:00 to 10:00	64.3	64.9	66.1	64.5	63.8	63.4
5	10:00 to 11:00	64.2	65.4	64.8	65.8	64.6	62.8
6	11:00 to 12:00	65.1	66.3	67.3	64.7	66.1	64.5
7	12:00 to 13:00	66.5	67.3	65.4	67.3	65.4	67.2
8	13:00 to 14:00	67.9	67.1	68.4	65.2	67.3	65.4
9	14:00 to 15:00	65.4	66.4	65.3	64.8	66.2	65.8
10	15:00 to 16:00	63.6	65.3	67.2	66.3	65.7	66.3
11	16:00 to 17:00	65.1	63.8	64.7	65.7	64.3	65.2
12	17:00 to 18:00	63.6	64.7	67.2	66.3	66.8	65.7
13	18:00 to 19:00	65.3	64.3	65.3	64.6	65.2	64.3
14	19:00 to 20:00	63.6	66.1	64.7	62.8	64.3	61.7
15	20:00 to 21:00	62.7	63.4	64.5	65.1	64	63.4
16	21:00 to 22:00	60.5	62.7	63.8	63.5	61.9	61.7
Day Time		<75 dB (A)					

Continue...

Location Name		ADANI PORT – TUG Berth 600 KL Pump House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time					
		08-04-2024	09-05-2024	10-06-2024	08-07-2024	08-08-2024	09-09-2024
1	22:00 to 23:00	60.8	61.7	61.5	60.3	60.1	58.5
2	23:00 to 24:00	58.8	60.3	59.8	61.5	62.8	59.9
3	24:00 to 01:00	61.3	62.7	60.4	63.2	63.2	62.5
4	01:00 to 02:00	62.8	61.3	62.7	62.6	63.6	62.5
5	02:00 to 03:00	61.7	63.4	62.9	61.2	61.9	62.8
6	03:00 to 04:00	63.3	61.8	61.3	60.5	62.3	63.4
7	04:00 to 05:00	62.3	61.6	61.8	58.7	60.5	62.3
8	05:00 to 06:00	60.1	59.8	60.3	59.5	58.6	61.1
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		PUB/Adani House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		01-04-2024	02-05-2024	03-06-2024	01-07-2024	01-08-2024	02-09-2024
1	06:00 to 07:00	63.5	61.8	60.4	58.3	59.1	59.6
2	07:00 to 08:00	65.8	63.6	62.8	61.2	60.3	59.8
3	08:00 to 09:00	67.2	65.4	66.1	64.8	62.8	62.3
4	09:00 to 10:00	65.5	66.8	65.3	65.7	64.7	63.6
5	10:00 to 11:00	64.8	65.3	65.9	64.4	65.4	64.8
6	11:00 to 12:00	64.2	65.9	67.1	66.8	66.2	65.2
7	12:00 to 13:00	65.5	64.6	66.3	64.2	65.7	64.8
8	13:00 to 14:00	63.1	65.2	64.7	65.4	64.8	65.4
9	14:00 to 15:00	64.3	66.5	65.1	64.8	63.7	64.8
10	15:00 to 16:00	64.8	65.3	65.5	65.2	64.5	64.3
11	16:00 to 17:00	63.2	64.8	64.6	63.9	64.8	64.9
12	17:00 to 18:00	65.7	63.4	64.1	65.5	66.2	65.7
13	18:00 to 19:00	64.1	62.2	62.3	63.2	64.5	65.4
14	19:00 to 20:00	62.7	64.5	63.8	62.9	63.8	64.8
15	20:00 to 21:00	62.9	63.7	64.1	63.5	64.1	63.5
16	21:00 to 22:00	61.3	60.4	61.2	60.4	61.3	61.9
Day Time		<75 dB (A)					

Continue...

Location Name		PUB/Adani House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time					
		01-04-2024	02-05-2024	03-06-2024	01-07-2024	01-08-2024	02-09-2024
1	22:00 to 23:00	59.7	60.1	60.3	61.2	59.7	58.5
2	23:00 to 24:00	58.4	59.4	60.8	59.6	60.1	60.4
3	24:00 to 01:00	59.7	60.3	61.4	62.5	62.3	61.7
4	01:00 to 02:00	60.2	62.3	62.1	62.8	63.6	62.5
5	02:00 to 03:00	63.1	62.6	61.8	61.1	62.4	61.4
6	03:00 to 04:00	60.3	61.2	61.6	60.4	61.7	63.2
7	04:00 to 05:00	58.3	59.7	60.4	58.4	59.7	58.7
8	05:00 to 06:00	57.8	58.3	59.2	58.7	59.3	58.5
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		CT-4 RMU-2				
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time				
		20-04-2024	25-05-2024	22-06-2024	27-07-2024	24-08-2024
1	06:00 to 07:00	61.3	61.6	61.4	59.8	61.3
2	07:00 to 08:00	63.6	62.8	63.5	61.3	63.7
3	08:00 to 09:00	64.8	65.2	63.7	65.5	62.8
4	09:00 to 10:00	65.2	65.7	64.1	64.2	64.5
5	10:00 to 11:00	68.7	66.8	65.4	66.1	65.7
6	11:00 to 12:00	66.1	68.2	66.5	64.7	64.3
7	12:00 to 13:00	66.7	66.4	65.8	64.9	67.5
8	13:00 to 14:00	64.7	65.9	64.7	63.6	65.8
9	14:00 to 15:00	68.9	67.3	65.3	64.2	65.2
10	15:00 to 16:00	65.4	68.3	67.4	66.8	66.7
11	16:00 to 17:00	67.3	66.4	65.9	64.7	63.8
12	17:00 to 18:00	65.4	65.9	66.3	65.3	64.5
13	18:00 to 19:00	63.6	64.2	63.8	63.9	63.5
14	19:00 to 20:00	62.7	63.5	65.2	60.8	61.3
15	20:00 to 21:00	65.4	64.3	64.2	62.4	61.5
16	21:00 to 22:00	63.4	62.8	62.3	61.6	60.8
Day Time		<75 dB (A)				

Continue...

Location Name		CT-4 RMU-2				
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time				
		20-04-2024	25-05-2024	22-06-2024	27-07-2024	24-08-2024
1	22:00 to 23:00	62.2	61.8	61.3	61.5	60.2
2	23:00 to 24:00	61.7	63.4	62.7	63.7	61.8
3	24:00 to 01:00	63.2	64.8	61.3	62.6	62.5
4	01:00 to 02:00	61.7	63.7	62.8	63.8	62.8
5	02:00 to 03:00	63.5	63.1	62.7	61.5	63.2
6	03:00 to 04:00	61.2	62.3	61.6	62.3	61.8
7	04:00 to 05:00	62.4	61.8	60.4	61.1	59.8
8	05:00 to 06:00	60.8	61.3	60.8	60.3	60.5
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 Stack Monitoring								
Sr. No.	Parameter	Unit	Hot Water System-1 (Liquid Terminal)	Hot Water System-2 (Liquid Terminal)	Thermic Fluid Heater (Bitumin-1)	Thermic Fluid Heater (Bitumin-2)	GPCB LIMIT	Method of Test
Apr-24								
1	Particulate Matter	mg/Nm ³	23.07	20.75	22.48	20.94	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.89	6.98	8.53	8.11	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	21.68	21.63	20.84	20.83	50	IS 11255 (Part - 7)
May-24								
1	Particulate Matter	mg/Nm ³	22.78	21.11	21.85	20.10	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.53	7.15	8.13	7.92	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	20.85	22.24	19.95	20.22	50	IS 11255 (Part - 7)
Jun-24								
1	Particulate Matter	mg/Nm ³	20.54	20.13	20.46	19.27	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	6.93	6.63	7.57	7.38	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	18.79	20.74	17.83	19.85	50	IS 11255 (Part - 7)
Jul-24								
1	Particulate Matter	mg/Nm ³	19.47	18.37	18.93	17.59	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	6.59	6.14	7.12	6.85	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	18.11	19.12	17.31	17.74	50	IS 11255 (Part - 7)

Continue...

Sr. No.	Parameter	Unit	Hot Water System-1 (Liquid Terminal)	Hot Water System-2 (Liquid Terminal)	Thermic Fluid Heater (Bitumin-1)	Thermic Fluid Heater (Bitumin-2)	GPCB LIMIT	Method of Test
Aug-24								
1	Particulate Matter	mg/Nm ³	19.13	18.63	19.15	17.31	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.09	6.51	7.47	6.69	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	19.12	19.48	18.82	17.38	50	IS 11255 (Part - 7)
Sep-24								
1	Particulate Matter	mg/Nm ³	20.86	19.06	19.84	19.23	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.38	6.89	7.79	7.35	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	19.74	20.17	19.46	17.96	50	IS 11255 (Part - 7)



Nikunj D. Patel
(Chemist)




Jaivik S. Tandel
(Manager - Operations)

Results of Stack Monitoring

Sr. No	Parameter	Unit	D.G. Set-6, 7 & 8 (1250 KVA - CT2) Common Stack	D.G. Set-9 (1500 KVA - CT3)	D.G. Set-10 (1500 KVA - CT3)	D.G. Set-11 (1500 KVA - CT3)	GPC B LIMI T	Method of Test
			Aug-24					
			16-08-2024	16-08-2024	16-08-2024	16-08-2024		
1	Particulate Matter	mg/Nm ³	22.14	16.11	18.63	18.26	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	8.68	14.36	14.98	13.85	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	17.39	24.93	26.39	20.38	50	IS 11255 (Part - 7)
4	Carbon Monoxide	mg/Nm ³	3.55	3.6	3.3	3.1	--	UERL/AIR/SOP/18
5	Non Methyl Hydro Carbon	ppm	Not Detected	Not Detected	Not Detected	Not Detected	--	UERL/AIR/SOP/27
Sr. No	Parameter	Unit	D.G. Set-12 (1500 KVA) - CT4	D.G. Set-13 (1500 KVA) - CT4	D.G. Set-14 (1500 KVA) - CT4	D.G. Set-1 (500 KVA) - DG House - MPT	GPC B LIMI T	Method of Test
			Aug-24					
			12-08-2024	12-08-2024	12-08-2024	11-08-2024		
1	Particulate Matter	mg/Nm ³	21.38	25.48	19.86	21.48	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	8.17	9.1	8.87	8.14	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	18.64	21.37	18.42	27.19	50	IS 11255 (Part - 7)
4	Carbon Monoxide	mg/Nm ³	3.1	4.61	3.7	2.97	--	UERL/AIR/SOP/18
5	Non Methyl Hydro Carbon	ppm	Not Detected	Not Detected	Not Detected	Not Detected	--	UERL/AIR/SOP/27

Continue...

Sr. No	Parameter	Unit	D.G. Set-2 (500 KVA) - DG House - MPT	D.G. Set-3 (500 KVA) - DG House - MPT	D.G. Set-4 (500 KVA) - DG House - MPT	D.G. Set-5 (500 KVA) - DG House - MPT	GPC B LIMIT	Method of Test
			Aug-24					
			11-08-2024	11-08-2024	11-08-2024	11-08-2024		
1	Particulate Matter	mg/Nm ³	25.47	21.91	26.83	20.86	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.12	9.32	8.79	8.11	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	28.73	27.68	28.13	25.37	50	IS 11255 (Part - 7)
4	Carbon Monoxide	mg/Nm ³	3.28	4.25	4.31	3.19	--	UERL/AIR/SOP/18
5	Non Methyl Hydro Carbon	ppm	Not Detected	Not Detected	Not Detected	Not Detected	--	UERL/AIR/SOP/27



Nikunj D. Patel
(Chemist)



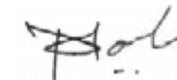

Jaivik S. Tandel
(Manager - Operations)

RESULTS OF BORE HOLE WATER

SR.NO.	TEST PARAMETERS	UNIT	Pump House-1	Pump House-2	Pump House-3	Near Unloading bays	Near ETP	TEST METHOD
			14-06-2024	14-06-2024	14-06-2024	14-06-2024	14-06-2024	
1.	pH @ 25 ° C	--	8.12	7.13	8.17	7.83	8.11	IS 3025(Part 11):2022
2.	Salinity	ppt	3.3	0.9	1.2	1.1	1.2	APHA 24th Ed.,2023,2520 B
3.	Oil & Grease	mg/L	BDL(MDL:5.0)	BDL(MDL:5.0)	BDL(MDL:5.0)	BDL(MDL:5.0)	BDL(MDL:5.0)	IS 3025(Part 39):2021
4.	Hydrocarbon	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	GC/GCMS
5.	Lead as Pb	mg/L	BDL(MDL:0.01)	0.012	BDL(MDL:0.01)	0.013	0.024	IS 3025 (PART 47) 1994
6.	Arsenic as As	mg/L	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	APHA 24th Ed.,2023,3114-C
7.	Nickel as Ni	mg/L	0.097	0.098	0.093	0.098	0.089	IS 3025 (PART 54) 2003
8.	Total Chromium as Cr	mg/L	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	IS 3025 (PART 52) 2003
9.	Cadmium as Cd	mg/L	0.047	0.042	0.042	0.026	0.045	IS 3025(PART 41) 1992
10.	Mercury as Hg	mg/L	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL(MDL:0.001)	APHA 24th Ed.,2023, 3112-B
11.	Zinc as Zn	mg/L	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	IS 3025(PART 49) 1994
12.	Copper as Cu	mg/L	0.075	0.079	0.095	0.096	0.104	IS 3025 (PART 42) 1992
13.	Iron as Fe	mg/L	BDL(MDL:0.1)	0.331	0.435	0.606	0.119	IS 3025(PART 53) 2003
14.	Insecticides/Pesticides	µg/L	Absent	Absent	Absent	Absent	Absent	USEPA 8081 B
15.	Depth of Water Level from Ground Level	meter	1.95	2.15	2	2.25	2.15	--



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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 (PM2.5)	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 SO _X	mg/Nm ³	4 mg/Nm ³
3	Oxides of Nitrogen NO _X	mg/Nm ³	5 mg/Nm ³

ETP Water

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 0C)	mg/L	1
8	Chloride (as Cl) -	mg/L	1
9	Oil & Grease	mg/L	2
10	Sulphate (as SO4)	mg/L	1
11	Ammonical Nitrogen	mg/L	2
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	--	--

MARINE WATER			
Sr. No.	Test Parameter	Unit	MDL
1	pH	--	5
2	Temperature	oC	5
3	Total Suspended Solids	mg/L	4
4	BOD (3 Days @ 27oC)	mg/L	1
5	Dissolved Oxygen	mg/L	0.2
6	Salinity	ppt	0.01
7	Oil & Grease	mg/L	2
8	Nitrate as NO ₃	μmol/L	0.4
9	Nitrite as NO ₂	μmol/L	0.04
10	Ammonical Nitrogen as NH ₃	μmol/L	0.8
11	Phosphates as PO ₄	μmol/L	0.4
12	Total Nitrogen	μmol/L	2.2
13	Petroleum Hydrocarbon	μg/L	0.1
14	Total Dissolved Solids	mg/L	4
15	COD	mg/L	2

Sea SEDIMENT			
Sr. No.	Test Parameter	Unit	MDL
1	Organic Matter	%	0.5
2	Phosphorus as P	µg/g	1
3	Texture	--	--
4	Petroleum Hydrocarbon	µg/g	0.1
5	Aluminum as Al	%	0.1
6	Total Chromium as Cr+3	µg/g	2
7	Manganese as Mn	µg/g	1
8	Iron as Fe	%	0.1
9	Nickel as Ni	µg/g	1
10	Copper as Cu	µg/g	1
11	Zinc as Zn	µg/g	1
12	Lead as Pb	µg/g	1
13	Mercury as Hg	µg/g	0.05

BORE HOLE WATER			
Sr. No.	Test Parameter	Unit	MDL
1	pH @ 25 ° C	--	5
2	Salinity	ppt	--
3	Oil & Grease	mg/L	2
4	Hydrocarbon	mg/L	0.1
5	Lead as Pb	mg/L	0.01
6	Arsenic as As	mg/L	0.01
7	Nickel as Ni	mg/L	0.02
8	Total Chromium as Cr	mg/L	0.05
9	Cadmium as Cd	mg/L	0.003
10	Mercury as Hg	mg/L	0.001
11	Zinc as Zn	mg/L	0.05
12	Copper as Cu	mg/L	0.05
13	Iron as Fe	mg/L	0.1
14	Insecticides/Pesticides	µg/L	0.1
15	Depth of Water Level from Ground Level	meter	--

Annexure – 3

Details of Greenbelt Development at APSEZ, Mundra

Total Green Zone Detail till Up to September 2024					
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 – 4

AREA LEVEL POLLUTION RESPONSE TRAINING/EXERCISE- 2024 REPORT
02-03rd MAY 2024

Date: 02-03 May 2024	Exercise: Area Level PR Exercise
Name: Mr. Shashank Badola	Position: Radio Officer
Contact Number: 9825228673	Location: APSEZL, Mundra

Date: 02 May 2024: Final Planning and Tabletop Exercise

0930-1230 hrs: Tabletop Exercise carried out at Indian Coast Guard Station Mundra. Participants- APSEZ Mundra and HMEL.

Date: 03 May 2024- Mock OSR drill

Location- Near IOCL SPM (22° 41' N 069° 39.2' E)/APSEZL, Mundra

Drill Activity Timeline:

1000 hrs.: ICGS Informed regarding commencement of drill.

1005 hrs.: Tug Ocean Citrine immediately reported to Marine Control and Diving Supervisor that due to internal explosion observed two 6 inches hole in 1st Wing starboard tank but no injury, no casualty and no fire occurred. Maneuvering capability is intact. There are 33 crew on board, head count taken and all present.

1006 hrs.: Marine Control informed Marine HOD/HOS and all concerned departments.

1007 hrs.: Ocean Citrine team was asked to take the sounding of damaged tanks and all other tanks.

1009 hrs.: Ocean Citrine commenced boom deployment.

1010 hrs.: Commenced internal transferring of oil from damaged tank to 3rd Wing starboard tank.

1011 hrs.: Ocean Citrine informed her company DPA about the incident.

1011 hrs.: Marine Control informed all vessels at anchor regarding oil spill near IOCL SPM area. The control room requested all underway vessels to pass 5 miles from IOCL SPM. Unberthing operations suspended.

1012 hrs.: Ocean Citrine requested Marine Control for Barge BB-10, tug and additional boom standby in case more support required.

1013 hrs.: Dredging head informed for the deployment of BB10 and make ready.

1014 hrs.: Marine Control informed Tug Dol 17 & 18 to standby with OSD for spraying.

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.

1016 hrs.: Marine Control informed Barge BB-10 along with Tug Dol 10 to be stand by.

1017 hrs.: Security department were informed to allow entry of authorized persons, emergency vehicles without any delay and OHS/Adani hospital to be on alert.

1018 hrs.: Barge BB-10 underway with Tug Dol 10 to IOCL SPM.

1019 hrs.: Ocean Citrine informed internal transferring in progress and spillage rate getting reduced and hole came up to half meter above water level.

1020 hrs.: Ocean Citrine reported 150m boom deployed and continued to deploy the remaining 100 meters and reported wind speed 12-14 knots and direction westerly.

1021 hrs.: Capt. Girish Chandra informed Commandant Konark Sharma ICGS Mundra about the incident through phone.

1023 hrs.: Marine Control informed jetty team to be stand by with crew for mooring the Barge BB-10 at B-6 berth. Jetty supervisor also informed to deploy one hydra for loading/unloading of OSR equipment at SPM Store and jetty.

1025 hrs.: Ocean Citrine informed that spill is spread in an area of around 35-50 m².

1039 hrs.: Ocean Citrine reported 250 m boom deployment completed and commenced J-formation.

1040 hrs.: Mr. Mahendra Singh Solanki from Corporate affairs informed DM Bhuj office about the incident.

1041 hrs.: Initial intimation mail sent to GMB/MMD Kandla/Coast Guard Station/MRCC.

1050 hrs.: Ocean Citrine 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.

1052 hrs.: Barge BB-10 arrived at IOCL SPM with Tug Dol 10.

1053 hrs.: Skimmer lowered and commenced recovering of spilled oil to floating tank.

1054 hrs.: Barge BB-10 secured P/S of Ocean Citrine and commenced transferring of oil in barge BB-10.

1055 hrs.: Liquid team informed Marine Control that motor pump and other equipment is standby at berth B-6.

1056 hrs.: Liquid team informed Marine Control that 6 no. of Tanker/bowser arrived and standby at berth B-6.

1100 hrs.: Ocean Citrine reported approx. 1 T of recovered oil loaded in barge BB-10.

1105 hrs.: Recovery of spilled oil completed (1 T).

1118 hrs.: Drill called off and at the same time informed all concerns.

1119 hrs.: BB-10 cast off and proceed to B-6 berth for transfer of oil for disposal.

1120 hrs.: Boom recovery started.

1125 hrs.: Area assessed by diving team for recovered oil and confirmed all clear.

1128 hrs.: Informed environment team for water sampling of spillage area.

1145 hrs.: Environment team informed that area is clear of oil and no harm for sea.

1147 hrs.: BB-10 arrived at B-6 berth.

1155 hrs.: Liquid team started loading oil from BB-10 to tankers for disposal.

1210 hrs.: Tanker loaded with oil departed from B-6 for disposal of oil at Oil Water Separator unit.

1235 hrs.: Tanker reached Oil Water Separator unit.

1240 hrs.: Recovered oil transfer from tanker to OWS unit completed.

1255 hrs.: Environment team informed that GPCB approved recycler has executed disposal.

1315 – 1330 hrs.: De-briefing carried out at Adani House in presence of Capt. Santosh Kumar Darokar, Principal Officer MMD Kandla.

Personnel & Boats Participated in Drill

Off Shore

1. Capt. Hemant Dhruv-APSEZL
2. Capt. Sonu Yadav-APSEZL
3. Capt. Lalji Meena - Harbor Master DPA
4. Mr. Vikram Pratap Singh-APSEZL
5. Mr. Ashok Tiwari - HMEL
6. Mr. MP Choudhary, APSEZL
7. Mr. Shashikant Padave-APSEZL
8. Mr Ayush Jha, APSEZL Mundra
9. Mr. Narayan -APSEZL
10. Mr. Dharamveer Yadav-APSEZL
11. Members from M/s Sea Care – 04
12. Crew of Tug Ocean Citrine
13. Crew of Tug KB 48
14. Tug Dol 10 and BB10
15. ICGS Mundra – 02

16. Mr. Abhishek -APSEZL/Environment

Onshore:

1. Capt. Girish Chandra
2. Sudhakar Singh
3. Mr. Shashank Badola
4. Mr. Rajeev Kumar
5. Mr. Om Prakash Yadav

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 Ocean citrine.
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 on tug should be streamlined specially between deck and bridge.	Point discussed during de-brief	10.05.2024	HMEL	
2	There should be pads on the roller to avoid chafing against metal at aft end of deck where lowering of boom deployment is done.	Point discussed during de-brief	31.07.2024	HMEL	
3	Bow thruster must be made readily available immediately in such emergencies.	Point discussed during de-brief	04.05.2024	HMEL	

Tabletop Exercise- 02 May 2024

Drill Scenario presented by ICG



Table top Discussion with the participants



PR Drill snap – 03 May 2024

Area Level Pollution Response Exercise at IOCL SPM

Boom laying from Tug Ocean Citrine



J formation making in progress



Skimmer Operations



Area Level Pollution Response Team on Tug Ocean Citrine

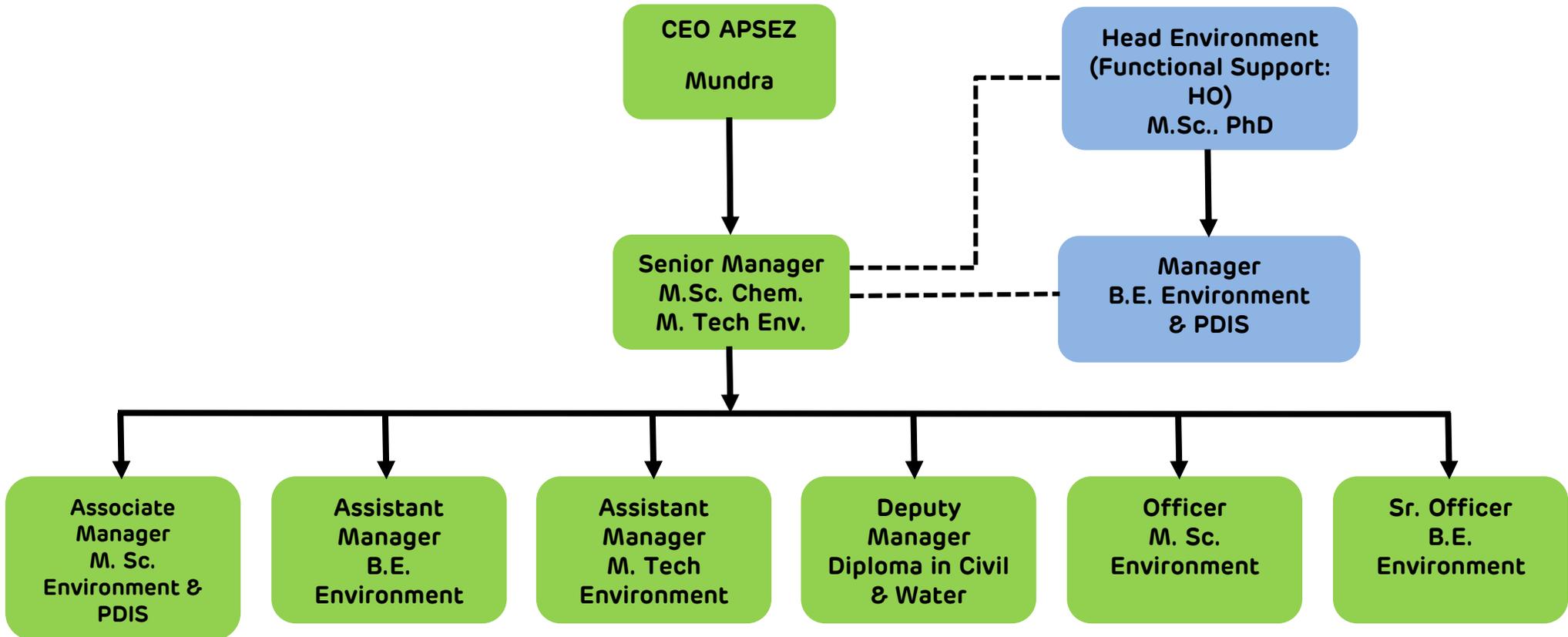


De-briefing at Adani House



Annexure – 5

Updated Organogram of Environment Management Cell, APSEZ, Mundra



Annexure – 6

Cost of Environmental Protection Measures

Sr. No.	Activity	Cost incurred (INR in Lacs)			Budgeted Cost (INR in Lacs)
		2022 - 23	2023 - 24	2024 - 25 (till Sep'24)	2024 - 25
1.	Environmental Study / Audit and Consultancy	7.32	22.67	1.88	27
2.	Legal & Statutory Expenses	12.32	8.60	5.00	13
3.	Environmental Monitoring Services	15.32	13.37	6.11	19.20
4.	Hazardous / Non-Hazardous Waste Management & Disposal	104.035	130.11	19.10	172.40
5.	Environment Days Celebration and Advertisement / Business development	2.53	3.42	2.80	4.00
6.	Treatment and Disposal of Bio-Medical Waste	2.29	2.28	1.20	2.28
7.	Mangrove Plantation, Monitoring & Conservation	35.0	15	0	0
8.	Other Horticulture Expenses	956	904	253	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	74.69	195.41
10.	Expenditure of Environment Dept. (Apart from above head)	90.136	80.39	2.19	75.92
Total		1366.28	1366.78	365.97	1340.21