

APSEZL/EnvCell/2024-25/067

Date: 28.11.2024

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: eccompliance-guj@gov.in, iro.gandhingr-mefcc@gov.in

Sub : Half yearly Compliance report of Environment and CRZ Clearance for "Handling facility of General Cargo / LPG /Chemicals and their storage terminal at Navinal Island, Mundra taluka of Kutch district, Gujarat"

Ref : Environment and CRZ clearance granted to M/s Adani Ports & SEZ Limited vide letter dated 25th August 1995 bearing no. J-16011/13/95-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



Multi-Purpose Jetty and Storage
Facilities at Navinal Island,
Mundra, Dist. Kutch, Gujarat

of
Adani Ports and Special Economic Zone
Limited

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

Status of the Conditions Stipulated in Environment and CRZ Clearance

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EC & CRZ

Clearance

Compliance

Report

Status of the Conditions Stipulated in Environment and CRZ Clearance

- Chronology of company name change from **M/s. 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 Mar'21.

Status of the Conditions Stipulated in Environment and CRZ Clearance

Half yearly Compliance report of Environment and CRZ Clearance for "Handling facility of General Cargo / LPG /Chemicals and their storage terminal at Navinal Island, Mundra taluka of Kutch district, Gujarat" issued vide letter no. J-16011/13/95-IA.III dated 25th Aug. 1995.

Sr. No.	Conditions	Compliance Status as on 30-09-2024
2(i)	All construction designs / drawings relating to various project activities should have the approval of the concerned State Government departments / Agencies.	<p>Complied</p> <p>All construction and operation activities are being carried out in line with the CRZ recommendation and permissions granted.</p>
2(ii)	To prevent discharge of bilge wastes, sewage and other liquid wastes from the oil tankers / ships into marine environment, adequate system for collection, treatment and disposal of liquid wastes including shoreline installation and special hose connections for ships to allow for discharge of sewage must be provided.	<p>Complied</p> <p>Ships berthing at Mundra Port comply with MARPOL regulations.</p> <p>No discharge such as bilge wastes, sewage or any other liquid wastewater is allowed into marine environment inside port limits.</p> <p>APSEZ has adequate Waste Reception facility as per MARPOL and DG Shipping regulations. The port has reception facility for all MARPOL waste streams (Annex-I, Annex-II, Annex-IV & Annex-V) except Annex-VI that is generated from vessels.</p> <p>APSEZL has not received any sewage/liquid waste from ships / vessels till date.</p> <p>As a general practice APSEZ provide facility for receiving slop / waste oil from vessels through hose connection with oil tankers. These tankers divert slop / waste 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 slope / waste oil was received during the compliance period.</p>
2(iii)	The quality of treated effluents, solid wastes, emissions and noise levels etc. must confirm to the standards laid down by the	<p>Complied.</p> <p>ETP is provided to treat the wastewater/wash water. Also, the sewage generated from port is being treated in designated ETP. Treated water is used for</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

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		Location	Capacity	Quantity of Treated Water (Avg. from Apr'24 to Sep'24)	Type of ETP / STP																																													
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<p>horticultural purposes. Quality of treated water confirm to the standard laid down by Gujarat Pollution Control Board.</p> <table border="1"> <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> <p>Entire treated water from ETP / STP is being utilized on land for horticulture purpose within port premises after achieving prescribed permissible limit.</p> <p>Summary of ETP treated water analysis results during compliance period as mentioned below.</p> <p>Frequency of Analysis: Once in a month</p> <table border="1"> <thead> <tr> <th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th><th>Average</th><th>Perm. Limit^s</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>^s 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 recognized agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Please refer Annexure - 1.</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>	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	Parameter	Unit	Min	Max	Average	Perm. Limit ^s	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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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>Please refer Annexure – 1 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 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> <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 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.

Status of the Conditions Stipulated in Environment and CRZ Clearance

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		<ul style="list-style-type: none"> • 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 and S K Metal Industries, Rajkot. • Solid Hazardous Waste is being disposed through co-processing / incineration/landfilling through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau, M/s. Safe Enviro Private Limited, Bharuch 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, Aviation Corporation - Kutch & Aroma Petrochem - Bhavnagar. It is also being reused within organization for lubrication purpose. • Discarded drums / barrels are being sold to authorized decontamination facility i.e. M/s. Jawrawala Petroleum, Ahmedabad. It is also being reused within organization for filling hazardous waste. • Solid hazardous waste i.e. Tank bottom sludge is being sold to authorized recycler namely M/s. Mundra Oil Pvt. Ltd., Mundra for recycling. However during the compliance period. • Expired paint materials are being disposed by incineration through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau. However, during the compliance period i.e. Apr'24 to Sep'24 no expired was generated. • Downgrade chemicals generated from cleaning of storage tanks / pipelines are being sold to authorized solvent recovery facilities namely M/s. Acquire Chemicals, Ankleshwar. • Slop Oil received from vessels is treated to separate water and oil particles in Oil Water Separator system. Separated oil from the same is being sold to authorized recycler / reprocessor namely M/s. Western India Petro Chem Ind - Bhavnagar, Aviation Corporation - Kutch & Aroma Petrochem - Bhavnagar and water is sent to ETP for further treatment. However, during the compliance period

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024																																	
		<p>i.e. Apr'24 to Sep'24. No slope oil was received from vessels</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, Asbestoses Waste, Glass wool Waste (Thermal Insulation Material), Downgrade Chemicals, Waste Oil and Expired Paint Material. • Horticulture waste is collected from various green belt areas, and it is using for making of manure and manure is being utilizing in horticulture purpose within plant premises. <p>Details of permissions / agreements of hazardous waste authorized vendors were submitted along with previous half yearly EC Compliance Reports. And there is no further change. The LPG Terminal has renewed agreement with Ambuja cement for oily cotton waste disposal. The agreement is valid upto 18.04.2029 and attached as Annexure – 2.</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"> <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>147.39</td><td></td></tr> <tr> <td rowspan="2">Non-Hazardous Waste</td><td>Glass Waste</td><td>16.65</td><td>After recovery sent for recycling / Reuse within premises</td></tr> <tr> <td>Horticulture Waste</td><td>359.15</td><td>Used for making of manure and utilize for</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	Horticulture Waste	359.15	Used for making of manure and utilize for
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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024		
				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	
	<p>Ambient Air Quality (twice in a week) and Noise (once in a month) monitoring are being carried out by NABL accredited and MoEF&CC approved agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Quality of Ambient Air and Noise level confirm to the standard laid down by SPCB / CPCB.</p>			

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		<p>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^s</th></tr> </thead> <tbody> <tr> <td>AAQM</td><td></td><td></td><td></td><td></td><td></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>Noise</td><td>Unit</td><td>Leq Min</td><td>Leq Max</td><td>Leq Ave.</td><td>Leq Perm. Limit*</td></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>^s as per NAAQ standards, 2009 * as per CC&A granted by SPCB Values recorded confirms to the stipulated standards.</p> <p>Please refer Annexure – 1 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, Mundra.</p>	Parameter	Unit	Min	Max	Average	Perm. Limit ^s	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	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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2(iv)	Adequate provision for infrastructure facilities such as water supply, roads, sanitation etc. should be ensured so as to avoid environmental degradation in the surrounding areas. These facilities should be brought into existence during the construction phase and will remain in existence thereafter as part of the infrastructure build up in the area for local developmental purposes.	<p>Complied.</p> <p>Construction activity is already completed. Adequate infrastructure facility was provided to labours during construction phase and those are in existence.</p> <p>The facility for drinking water, toilet and rest shelter were provided for the dignity of operation labours. Photographs of the same were submitted along with the compliance report submission for the period Oct'16 to Mar'17.</p>																																																						
2(v)	Adequate noise control measures should be ensured in various project activities and due to increase in the traffic which is likely to take place during construction	<p>Complied.</p> <p>Construction phase is completed.</p> <p>For operation phase, following noise control measures are taken:</p> <ul style="list-style-type: none"> • All Emergency DG sets were installed with acoustic 																																																						

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
	and operational phases.	<p>enclosure confirming EPA norms.</p> <ul style="list-style-type: none"> • Proper maintenance of equipments / plant machineries is being done on regular basis. • Green Belt has been developed at roadsides and operational areas. • Traffic control measures such as signage, speed regulation, traffic guides etc. are in place to reduce the unnecessary honking by cargo vehicles.

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2(vi)	<p>The water quality parameters such as dissolved oxygen, ammonical nitrogen and other nutrients etc. should be measured at regular intervals to ensure adherence to the prescribed standards of water qualities. Suitable ground water monitoring should also be undertaken around the sludge lagoons and regular reports to be submitted to the Ministry for evaluation.</p>	<p>Complied.</p> <p>ETP having 265 KLD capacity is provided for treatment of wastewater. Treated water is used for horticulture purpose within premises after confirming permissible limit. The watery sludge is transferred to sludge drying bed, where the excess wastewater is recirculated to ETP. 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>Third party analysis of the treated water is being carried out once in a month by NABL accredited and MoEF&CC approved agency namely M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi. Summary of the same for duration of Apr'24 to Sep'24 is mentioned in compliance condition no. 2(iii) above.</p> <p>Marine Monitoring: Marine monitoring (Surface, Bottom and Sediment) is being carried out once in a month by NABL accredited and MoEF&CC approved 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. Monitoring Reports are attached as Annexure – 1 for the same.</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 style="text-align: right;">*BDL – Below Detection Limit *MDL – Minimum Detection Limit</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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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																																																									
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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024																																																																																				
		<p>Ground Water Monitoring: There are no sludge lagoons however, 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 accredited and MoEF&CC approved agency namely M/s. Unistar Environment and Research Labs Private Limited., Vapi. Summary of the same for duration of Apr'24 to Sep'24 is mentioned below.</p> <p>Sampling Locations: 5 Nos.</p> <table border="1"> <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:0.0 5)</td><td>*BDL (MDL:0.0 5)</td><td>*BDL (MDL:0.0 5)</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:0.0 01)</td><td>*BDL (MDL:0.0 01)</td><td>*BDL (MDL:0.0 01)</td></tr> <tr> <td>Zinc as Zn</td><td>mg/L</td><td>*BDL (MDL:0.0 5)</td><td>*BDL (MDL:0.0 5)</td><td>*BDL (MDL:0.0 5)</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 Ground Level</td><td>meter</td><td>1.95</td><td>2.25</td><td>2.10</td></tr> </tbody> </table> <p>ND*= Not Detectable *BDL – Below Detection Limit</p> <p>Please refer Annexure – 1 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>	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:0.0 5)	*BDL (MDL:0.0 5)	*BDL (MDL:0.0 5)	Cadmium as Cd	mg/L	0.03	0.05	0.04	Mercury as Hg	mg/L	*BDL (MDL:0.0 01)	*BDL (MDL:0.0 01)	*BDL (MDL:0.0 01)	Zinc as Zn	mg/L	*BDL (MDL:0.0 5)	*BDL (MDL:0.0 5)	*BDL (MDL:0.0 5)	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 Ground Level	meter	1.95	2.25	2.10				
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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
2(vii)	Adequate culverts should be provided for smaller creeks so that breeding grounds for crabs, mud snappers and other marine organisms are not cut off by road construction activities.	<p>Complied.</p> <p>Adequate culverts are provided on prominent creek system named as (1) Kotdi (2) Baradimata (3) Navinal (4) Bocha (5) Mundra (Oldest port (Juna Bandar) leading to Bhukhi river).</p> <p>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.</p> <p>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.</p>
2(viii)	A hundred-meter-wide mangrove belt should be created all along the west of Navinal Creek till its junction up to new road. Green belt of 50 M width should also be provided all along the periphery of the plant site and along the roads, storage tanks etc. at 1500 trees per hectare. All details regarding the Mangrove belt and other afforestation work must be worked out in consultation with the State Forest Department, and details sent to the Ministry.	<p>Complied.</p> <p>24 hectare of Mangrove afforestation was carried out with a cost of INR 25.0 Lac at west of Navinal creek. All Mangrove plantations were done in consultation with Dr. Maity, Mangrove consultant of India.</p> <p>Green belt was developed 72.67 ha. Total 1,49,959 trees were planted with the density of 2063 trees 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 date APSEZ has carried out mangrove afforestation in 4140 ha. area across the coast of Gujarat. Total expenditure for the same till date is INR 1592.8 lakh.</p> <p>Details on Mangroves afforestation & Green belt development carried out by APSEZ till date is annexed as Annexure – 3.</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<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 Hector 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 – 4 for CSR activity report carried out by Adani Foundation.</p>
2(ix)	<p>Arrangements should be made for ensuring fresh water availability for various project related activities. Special water harvesting programs should be undertaken in the project impact area. Details of these activities should be reported to the Ministry.</p>	<p>Complied.</p> <p>During the project phase, GWIL was the source of water to ensure freshwater availability.</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 consumption for entire APSEZ area is 5.34 MLD during compliance period i.e. Apr'24 to Sep'24.</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. 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</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>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 Rain Water 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>Water Conservation Projects – Water Conservation Projects completed during last Compliance period:</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.

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024																																												
		<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" data-bbox="726 665 1444 960"> <thead> <tr> <th>Block Name</th><th>Water conservation structure</th><th>Total no. of Structure</th><th>Total Capacity Created (CUM)</th></tr> </thead> <tbody> <tr> <td>Mundra</td><td>Check Dam</td><td>23</td><td>6,07,332.80</td></tr> <tr> <td></td><td>Pond Deepening</td><td>66</td><td>1,89,121.08</td></tr> <tr> <td></td><td>RRWHS</td><td>275</td><td>2750</td></tr> <tr> <td></td><td>Recharge Borewell</td><td>209</td><td>-</td></tr> <tr> <td></td><td>Percolation Well</td><td>24</td><td>-</td></tr> </tbody> </table> <p>Water Conservation Projects completed during last Compliance period:</p> <table border="1" data-bbox="758 1087 1411 1510"> <thead> <tr> <th>Sr. No.</th><th>Project</th><th>Unit</th><th>Outcome</th><th>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>Borewell Recharge</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 nos. check dams. Ground recharge activities (pond deepening work for 61 ponds) individually and 26 ponds under Sujlam Suflam Jal Abhiyan were built leading to a significant increase in water table and higher returns to the farmers. 	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	Borewell Recharge	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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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<ul style="list-style-type: none"> • New Pond Deepening Under Ajadi ka Amrut Mahotsav done in Goyarsama village Approx Deepening Capacity is 12000 Cum. • Roof Top Rainwater Harvesting 145 Nos. (40 Nos. current FY 2022-23) which 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 Gujarat 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 hecter 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 - 4 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>
2(x)	While filling the storage tanks, compatibility of the chemicals should be ensured for chemical safety. Since 5000 MT capacity is proposed to be created for cryogenic conditions,	<p>Complied.</p> <p>Risk assessment study was carried out by M/s. Comet Consultancy Services in January 1995 as a part of EIA for storage of various chemicals in tanks for chemical safety and the same was submitted to MoEF&CC while processing EC application.</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024																				
	necessary HAZOP study should be initiated and submitted to the Ministry within three months. Calculations carried out on the basis of EFFECT MODEL for this storage should be rechecked for various accident scenarios. Keeping in view the safety aspects, Horton spheres of 1250 MT capacity each should be preferred.	<p>Risk assessment study was carried out by iFluids Engineering for handling and storage of LPG in three parts as mentioned below.</p> <ol style="list-style-type: none"> 1. QRA for LPG Jetty Area 2. QRA for LPG Pipeline 3. QRA for LPG Tank farm <p>A copy of the same was submitted as part of compliance report for the duration of Apr'17 to Sep'17. Recommendations of the risk assessment have been implemented as part of the construction activity and details of the same were submitted along with half yearly compliance report for the period Oct'18 to Mar'19.</p> <p>Implementation report of risk assessment recommendations during operational activity was submitted along with half yearly compliance report for the period Oct'19 to Mar'20.</p>																				
2(xi)	The measures suggested by the Gujarat State Pollution Control Board in February, 1995 while according "No Objection Certificate" should be strictly followed and authorization certificate required for converting NOC into "consent to operate" should be submitted within three months.	<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" data-bbox="709 1615 1460 1869"> <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>	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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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		The permission mentioned above (Sr. No. 2) was submitted along with earlier compliance report submission. The copy of CtO renewal order was submitted along with last half yearly compliance report for the period Oct'21 to Mar'22. A copy of CCA correction letter was submitted along with last half yearly compliance report for the period Apr'23 to Sep'23.
2(xii)	For ensuring the acceptance of the project by the local people, a Resolution of the Official Panchayat of the Region should be obtained offering their concurrence in writing by the project proponents and submitted to the Ministry by 31st October, 1995.	<p>Complied.</p> <p>Resolution from the Panchayat has been obtained and submitted to the Ministry of Environment, Forest & Climate Change on 31st July, 2012.</p>
2(xiii)	A permanent staff structure should be created with latest R&D facilities and suitable equipments for environmental and forestry activities through creation of Environmental cell. Adequate funds should be earmarked for this cell.	<p>Complied.</p> <p>APSEZL has a well-structured Environment 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.</p> <p>Budget for environmental management measures (including horticulture) for the FY 2024-25 is to the tune of INR 1340.21 lakh. Out of which, Approx. INR 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.</p>
2(xiv)	Landsat imagery should be obtained on a continuous basis covering various seasons to study the change in the land use pattern due to the project and project related activities.	<p>Complied.</p> <p>Project is in operation phase since many years and there is no change in the land use pattern.</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
2(xv)	With a view to providing adequate job opportunities to local people, facilities for technical training and development of skills should be made available in consultation with the state Harbour Department, and to this end it must be ensured that there is allocation of adequate funds. The local people should be involved in the afforestation program proposed for the scheme to ensure public participation and success of vegetation programmes.	<p>Complied</p> <ul style="list-style-type: none"> • 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 Carrier 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 industry demands through trained manpower. • 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

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024
		<p>India.</p> <ul style="list-style-type: none"> • 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. <p>Details on skill development training imparted during FY 2024-2025 till Sep'24 by Adani Foundation are available in CSR report enclosed as Annexure – 4.</p>
2(xvi)	Prior clearance must be taken under the Hazardous Chemicals (manufacture, import and storage) Rules 1989, as amended up to date, from the competent authority. Such clearance will have to be taken prior to the commissioning of the project.	<p>Complied.</p> <p>Permissions for storage of Hazardous Chemicals were obtained from MSIHC against the application made on 01.05.1999 through letter reference no. Kutch-HAZ/CHEM-23(2)/9713 while chemical storage permission against application made on 18.09.1999 was provided through letter reference no. Kutch-HAZ/CHEM-23(2)/9711.</p> <p>Approval from the PESO is obtained for import of hazardous chemicals as per License No. P/HQ/GJ/15/2050 (P12369) dated 18/07/2016 which is valid up to 31/12/2024 for Class A & Class C petroleum. A copy of the same was submitted along with the compliance report submission for the period of Oct'16 to Mar'17 and there is no further change. Please refer point no. 2 (xi) regarding GPCB permissions.</p> <p>License under Factories Act is taken dated 07.10.1998 and last renewed vide license no. 0017 and is valid up to 31.12.2027. The copy of renewed License under Factories Act was submitted along with the compliance report submission for the period of Oct'23 to Mar'24.</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30-09-2024																					
2(xvii)	A detailed progress report should be submitted to the Ministry on each of the conditions stipulated above in respect of the follow-up action taken every six months. The first of these two reports should be sent in by 31.3.1996.	<p>Complied.</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"> <thead> <tr> <th>Sr. No.</th><th>Compliance period</th><th>Date of submission</th></tr> </thead> <tbody> <tr> <td>1</td><td>Apr'21 to Sep'21</td><td>30.11.2021</td></tr> <tr> <td>2</td><td>Oct'21 to Mar'22</td><td>30.05.2022</td></tr> <tr> <td>3</td><td>Apr'22 to Sep'22</td><td>30.11.2022</td></tr> <tr> <td>4</td><td>Oct'22 to Mar'23</td><td>30.05.2023</td></tr> <tr> <td>5</td><td>Apr'23 to Sep'23</td><td>29.11.2023</td></tr> <tr> <td>6</td><td>Oct'23 to Mar'24</td><td>29.05.2024</td></tr> </tbody> </table>	Sr. No.	Compliance period	Date of submission	1	Apr'21 to Sep'21	30.11.2021	2	Oct'21 to Mar'22	30.05.2022	3	Apr'22 to Sep'22	30.11.2022	4	Oct'22 to Mar'23	30.05.2023	5	Apr'23 to Sep'23	29.11.2023	6	Oct'23 to Mar'24	29.05.2024
Sr. No.	Compliance period	Date of submission																					
1	Apr'21 to Sep'21	30.11.2021																					
2	Oct'21 to Mar'22	30.05.2022																					
3	Apr'22 to Sep'22	30.11.2022																					
4	Oct'22 to Mar'23	30.05.2023																					
5	Apr'23 to Sep'23	29.11.2023																					
6	Oct'23 to Mar'24	29.05.2024																					
2(xviii)	Financial requirements for implementation of the above indicated environmental mitigative measures should be worked out and included in the total cost of the project. Provision for enhancing this allocation in future should also be made.	<p>Complied.</p> <p>Separate budget for the Environment protection measures is earmarked every year. All the expenses are recorded in advanced accounting system of the organization. Details regarding environmental expenditures are as per compliance condition no. 2(xiii) above.</p>																					

Annexure - 1



"Half Yearly Environmental Monitoring Reports "

For,
adani
Ports and
Logistics

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 PARAM ETERS	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

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.2023,5520 F
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
			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	3.05	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>Odentella</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>Thalassiothrix</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>	

Zooplankton									APHA (24rd Ed. 2023)10200 G						
1	Abundance(P opulation)	noX103/ 100 m ³	66		65		64								
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>Egg(Fish and Shrimps)</i>		<i>Pinnularia</i>		<i>Pinnularia</i>		<i>Oikoplura</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>Copepods nauplii</i>			
		<i>Crustacean</i>		<i>Copepods nauplii</i>		<i>Copepods nauplii</i>		<i>Crustacean</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>	<i>Bivalve Larvae</i>			
3	Total Biomass	ml/100 m ³	13.64		13.65		13.64		13.66		13.67		13.67		

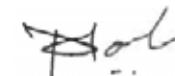
Continue...

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
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
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 24th Ed.2023,922-B
3	Ecoli	/100ml	10		12		9		8		7		8		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 24th Ed.2023,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF 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

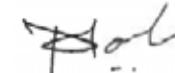
Continue...

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	
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	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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 NO ₃ -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.2023,4500 NO ₂
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- NH ₃ 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 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	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 PARAMET ERS	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD	
			SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M	SURFA CE	BOTTO M		
A			Phytoplankton													
1.	Chlorophyll	mg/m³	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/m³	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 10³/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>Thallasiosira</i>	<i>Rhizosolenia</i>	<i>Cyclotella</i>	<i>Rhizosolenia</i>	<i>Cyclotella</i>	<i>Rhizosolenia</i>	<i>Dinophysis</i>	<i>Thallasiosira</i>	<i>Dinophysis</i>	<i>Thallasiosira</i>	<i>Dinophysis</i>	<i>Thallasiosira</i>		
			<i>Skeletonema</i>	<i>Skeletonema</i>	<i>Skeletonema</i>	<i>Thallasiosira</i>	<i>Skeletonema</i>	<i>Thallasiosira</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Thallasiosira</i>	<i>Skeletonema</i>	<i>Thallasiosira</i>	<i>Skeletonema</i>		

Zooplankton									APHA (24rd Ed. 2023)10200 G
1	Abundance (Population)	noX10 3/ 100 m³	42	44	43	42	43	42	
2	Name of Group Number and name of group species of each group		Egg(Fish and Shrimps)	Egg(Fish and Shrimps)	Egg(Fish and Shrimps)	Crustacean Larvae	Crustacean Larvae	Crustacean Larvae	
			Copepods	Oikoplura	Nitzschia	Egg(Fish and Shrimps)	Egg(Fish and Shrimps)	Egg(Fish and Shrimps)	
			<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</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>Copepods nauplii</i>	
			<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	
3	Total Biomass	ml/10 0 m³	15.74	15.7	15.25	15.5	15.3	15.3	

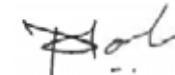
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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO	TEST PARAMETER	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD
			S		SURFACE	BOTTOM									
Microbiological															
1	Total Bacterial Count	CFU/m l		110		114		116		118		120		122	APHA 24 th Ed.2023,9215 -C
2	Total Coliform	/100m l		32		34		33		34		35		36	APHA 24thEd.2023, 9222-B
3	E.coli	/100m l		13		16		14		13		14		12	IS :15185:2016
4	Enterococcus	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF 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

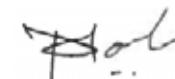
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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

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	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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 NO ₃ -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.2023,4500 NO 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 BOCHAIISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMET ERS	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	2.47	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	--	Pinnularia	Coscino discus	Pinnularia	Coscino discus	Pinnularia	Coscino discus	Melosira	Cyclotella	Melosira	Cyclotella	Melosira	Cyclotella	APHA (24th Ed. 2023)10200A-G	
			Biddulphia	Pinnularia	Biddulphia	Pinnularia	Biddulphia	Pinnularia	Pinnularia	Pinnularia	Pinnularia	Pinnularia	Pinnularia	Pinnularia		
			Navicula	Rhizosolenia	Navicula	Rhizosolenia	Navicula	Rhizosolenia	Skeletonema	Skeletonema	Rhizosolenia	Skeletonema	Rhizosolenia	Skeletonema		
			Thallassiosira	Dinophysis	Thallassiosira	Dinophysis	Thallassiosira	Dinophysis	Thalassiosira	Thalassiosira	Thallassiosira	Thalassiosira	Thallassiosira	Thallassiosira		
			Skeletonema	Thalassionema	Skeletonema	Thalassionema	Skeletonema	Thalassionema	Thalassionema	Thalassionema	Thalassionema	Thalassionema	Thalassionema	Thalassionema		

B										Zooplankton						
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>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</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/10 0 m ³	14.48		15.5		15.4		15.6		15.5		15.5			

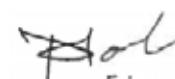
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RESULTS OF MARINE WATER [M3 EAST OF BOCHAILANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO	TEST PARAMETER	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	BOTTOM	SURFACE	BOTTO M	SURFACE	BOTTO M					
C			Microbiological														
1	Total Bacterial Count	CFU/m l	126		128		130		132		130		132		APHA 24 th Ed.2023,9215 -C		
2	Total Coliform	/100m l	28		27		29		30		31		30		APHA 24thEd.2023, 9222-B		
3	E.coli	/100m l	24		23		22		21		22		21		IS :15185:2016		
4	Enterococcus	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002		
5	Salmonella	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016		
6	Shigella	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E		
7	Vibrio	/100m l	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976		



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHAILANOT 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

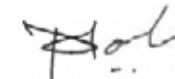
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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHAI SLANOT DETECTED - N 22°46'530" E 069°41'690"]

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	
Benthic Organisms									
1	MacroBenthos	--	<i>Polychates</i>	<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	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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 NO ₃ -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- NH ₃ 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 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	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

Continue...

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

SR. NO.	TEST PARAMET ERS	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>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>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>			

Zooplankton										APHA (24rd Ed. 2023)10200 G
1	Abundance (Population)	noX10 3/ 100 m ³	37	36	37	36	37	37	38	
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>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/10 0 m ³	14.22	14.24	14.23	14.26	14.27	14.27		

Continue...

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

SR. NO .	TEST PARAMETER S	UNIT	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	
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 24thEd.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 24thEd.2023, 9260-E						
7	Vibrio	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS: 5887 (Part V):1976						

Mr. Nilesh Patel
Sr. Chemist



Mr. Nitin Tandel
Technical Manager

RESULTS OF 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

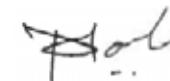
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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D Benthic Organisms									
1	Macrofauna	--	<i>Foraminifera</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>Foraminifera</i>	
2	Meiofauna	--	<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	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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 NO ₃ -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 PARAMET ERS	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	3.17	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	--	Diploneis	Navicula	Diploneis	Navicula	Diploneis	Navicula	Navicula	Pinnularia	Navicula	Pinnularia	Navicula	Pinnularia	APHA (24th Ed. 2023)10200A-G	
			Rhizosolenia	Skeletonema	Rhizosolenia	Skeletonema	Biddulphia	Skeletonema	Biddulphia	Biddulphia	Biddulphia	Biddulphia	Biddulphia	Rhizosolenia		
			Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	Nitzschia	Rhizosolenia	Nitzschia	Navicula	Nitzschia	Navicula	Odentella	Dinophysysis		
			Cyclotela	Dinophysysis	Cyclotela	Biddulphia	Cyclotela	Biddulphia	Cyclotela	Thalassiosira	Cyclotela	Thalassiosira	Cyclotela	Coscinodiscus		
			Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	Pleurosigma	Thalassionema	Pleurosigma	Skeletonema	Pleurosigma	Skeletonema	Pleurosigma	Skeletonema		

Zooplankton										APHA (24rd Ed. 2023)10200 G						
1	Abundance (Population)	noX10 3/ 100 m ³	48		49		48		50		52		51			
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/10 0 m ³	14.17		14.15		14.12		14.13		14.12		14.12			

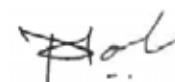
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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

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 24thEd.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:15186:2002	
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016	
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E	
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF 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

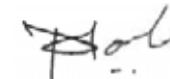
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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	TEST METHOD	
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT		
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	Herpectacoids		
			<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		



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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 NO ₃ -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.2023,4500 NO 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- NH ₃ 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 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	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 PARAMET ERS	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>Diplopneis</i>	<i>Coscinodiscus</i>	<i>Diplopneis</i>	<i>Coscinodiscus</i>	<i>Diplopneis</i>	<i>Coscinodiscus</i>	APHA (24th Ed. 2023)10200A-G	
			<i>Pinnularia</i>	<i>Surirellia</i>	<i>Pinnularia</i>	<i>Surirellia</i>	<i>Odontella</i>	<i>Surirellia</i>	<i>Rhizosolenia</i>	<i>Diplopneis</i>	<i>Rhizosolenia</i>	<i>Diplopneis</i>	<i>Rhizosolenia</i>	<i>Diplopneis</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>Thallassiosira</i>	<i>Pleurosoigma</i>	<i>Thalassionema</i>	<i>Pleurosoigma</i>	<i>Thalassionema</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>		
			<i>Surirellia</i>	<i>Skeletonema</i>	<i>Surirellia</i>	<i>Skeletonema</i>	<i>Cyclotella</i>	<i>Skeletonema</i>	<i>Pleurosoigma</i>	<i>Thalassionema</i>	<i>Pleurosoigma</i>	<i>Thalassionema</i>	<i>Cyclotella</i>	<i>Thalassionema</i>		

Zooplankton										APHA (24rd Ed. 2023)10200 G	
1	Abundance (Population)	noX10 3/ 100 m ³	41	42	42	43	42	43			
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>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>		
		<i>Odontella</i>	<i>Odontella</i>	<i>Odontella</i>	<i>Copepods nauplii</i>						
		<i>Dinophysis</i>	<i>Dinophysis</i>	<i>Dinophysis</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>		
		<i>Surirella</i>	<i>Surirella</i>	<i>Bivalve Larvae</i>							
3	Total Biomass	ml/10 0 m ³	16.54	16.55	16.57	16.58	16.59	16.59	16.59		

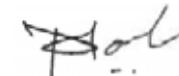
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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

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 24thEd.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 24thEd.2023, 9260-E						
7	Vibrio	/100ml	Absent	Absent	Absent	Absent	Absent	Absent	IS: 5887 (Part V):1976						



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF MARINE WATER [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 NO ₃ -
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 PARAMET ERS	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>Odontelia</i>	<i>Cyclotela</i>	<i>Odontelia</i>	<i>Cyclotela</i>	<i>Odontelia</i>	<i>Cyclotela</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>Coscinodiscus</i>	<i>Skeletonema</i>	<i>Coscinodiscus</i>	<i>Skeletonema</i>	<i>Coscinodiscus</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>Cyclotela</i>	<i>Thalassiothrix</i>	<i>Cyclotela</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>		

Zooplankton										APHA (24rd Ed. 2023)10200 G	
1	Abundance (Population)	noX10 3/ 100 m ³	34		33		31		32		
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>				APHA (24rd Ed. 2023)10200 G
		<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/10 0 m ³	14.78		14.77		14.78		14.78		

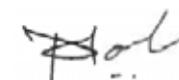
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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO	TEST PARAMETER	UNIT	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		TEST METHOD	
			S	CFU/ml	SURFACE	BOTTOM										
C			Microbiological													
1	Total Bacterial Count	/100ml		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



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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	
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

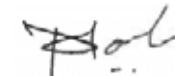
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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

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	
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	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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- NH3 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 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	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 PARAMET ERS	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>Skeletorhizosolenia</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Pinnularia</i>	<i>Skeletorhizosolenia</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>Skeletorhizosolenia</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>		

Zooplankton										APHA (24rd Ed. 2023)10200 G		
1	Abundance (Population)	noX10 3/ 100 m ³	31		36		35		34			
2	Name of Group Number and name of group species of each group		<i>Diploaneis</i>		<i>Diploaneis</i>		<i>Diploaneis</i>		<i>Decapoda</i>			
			<i>Rhizosolenia</i>		<i>Rhizosolenia</i>		<i>Rhizosolenia</i>		<i>Copepods</i>			
			<i>Nitzschia</i>		<i>Nitzschia</i>		<i>Nitzschia</i>		<i>Crustacean Larvae</i>			
			<i>Thalassiothrix</i>		<i>Coscinodiscus</i>		<i>Coscinodiscus</i>		<i>Crustacean</i>			
			<i>Pleurosigma</i>		<i>Pleurosigma</i>		<i>Pleurosigma</i>		<i>Oikoplura</i>			
3	Total Biomass	ml/10 0 m ³	15.23		15.22		15.23		15.23			

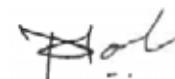
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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

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 24thEd.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 24thEd.2023, 9260-E	
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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

SR. NO .	TEST 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 NO ₃ -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

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

SR. NO.	TEST PARAMET ERS	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	--	Ceratiun	Melosira	Ceratiun	Rhizosolenia	Surirella	Rhizosolenia	Skeletoneema	Odontela	Skeletoneema	Odontela	Skeletoneema	Odontela	APHA (24th Ed. 2023)10200A-G	
			Pinnularia	Dinophysis	Pinnularia	Dinophysis	Pinnularia	Dinophysis	Grammatophora	Rhizosolenia	Grammatophora	Rhizosolenia	Grammatophora	Rhizosolenia		
			Odontela	Skeletoneema	Odontela	Skeletoneema	Grammatophora	Skeletoneema	Nitzschia	Coscino	Nitzschia	Coscino	Nitzschia	Coscino		
			Thalassiothrix	Thallassiosira	Thalassiothrix	Thallassiosira	Thalassiothrix	Thallassiosira	Thalassiothrix	Grammatophora	Thalassiothrix	Grammatophora	Coscino	Pinnularia		
			Thallassiosira	Thalassionema	Thallassiosira	Melosira	Rhizosolenia	Melosira	Pleurosigma	Thallassiosira	Pleurosigma	Thallassiosira	Pleurosigma	Thallassiosira		
B			Zooplankton													
1	Abundance (Population)	noX103 / 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>			
			<i>Pleurosigma</i>		<i>Pleurosigma</i>		<i>Pleurosigma</i>		<i>Bivalve Larvae</i>		<i>Bivalve Larvae</i>		<i>Egg(Fish and Shrimps)</i>			
3	Total Biomass	ml/100 m ³	14.56		14.55		14.54		14.57		14.54		14.57			

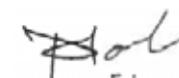
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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO	TEST PARAMETER	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	248		250		254		256		250		254		APHA 24 th Ed.2023,9215 -C	
2	Total Coliform	/100ml	50		52		50		52		51		50		APHA 24thEd.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 24thEd.2023, 9260-E	
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976	



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF ETP OUTLET WATER

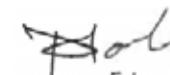
SR.NO.	TEST PARAMETERS	UNIT	LIQUID TERMINAL						GPCB Limit	TEST METHOD
			Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24		
			27-04-2024	25-05-2024	27-06-2024	24-07-2024	06-08-2024	20-09-2024		
1.	Colour	Pt. Co. Scale	40	40	40	60	50	50	100	IS 3025(Part 4):2021
2.	pH @ 27 ° C	--	7.35	6.97	7.11	6.96	6.87	7.51	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

Continue...

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



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
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 Pump 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 Pump 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 Pump 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	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/Nm3	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			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/Nm3	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 LIMI T	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/m3	5 µg/m3
2	Particulate Matter (PM2.5)	µg/m3	5 µg/m3
3	Sulphur Dioxide (SO2)	µg/m3	4 µg/m3
4	Nitrogen Dioxide (NO2)	µg/m3	5 µg/m3
5	Carbon Monoxide (CO)	mg/m3	0.01 mg/m3
6	Ammonia (NH3)	µg/m3	5 µg/m3
7	Ozone (O3)	µg/m3	5 µg/m3
8	Lead (Pb)	µg/m3	0.5 µg/m3
9	Nickle (Ni)	ng/m3	1 ng/m3
10	Arsenic (As)	ng/m3	1 ng/m3
11	Benzene	µg/m3	1µg/m3
12	Benzo(o)Pyrene	ng/m3	0.1 ng/m3
14	Hydro Carbon	µg/m3	1 µg/m3

Stack Emission Monitoring

Sr. No.	Test Parameter	Unit	MDL
1	Suspended particulate matter	mg/Nm3	2 mg/Nm3
2	Sulphur Dioxide SOX	mg/Nm3	4 mg/Nm3
3	Oxides of Nitrogen NOX	mg/Nm3	5 mg/Nm3

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 - 2



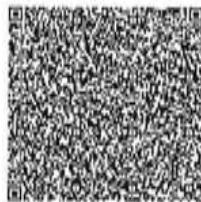
INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	: IN-DL76078645300396W
Certificate Issued Date	: 19-Apr-2024 02:03 PM
Account Reference	: IMPACC (IV)/ dl834903/ DELHI/ DL-DLH
Unique Doc. Reference	: SUBIN-DLDL83490310609418632356W
Purchased by	: AMBUJA
Description of Document	: Article 5 General Agreement
Property Description	: Not Applicable
Consideration Price (Rs.)	: 0 (Zero)
First Party	: AMBUJA
Second Party	: MUNDRA LPG TERMINAL PVT LTD AHMEDABAD GUJARAT
Stamp Duty Paid By	: AMBUJA
Stamp Duty Amount(Rs.)	: 100 (One Hundred only)



₹100

THIS ADDENDUM TO THE SERVICE AGREEMENT is made on this 19th April 2024.

BETWEEN

Mundra LPG Terminal Pvt. Ltd. (MLTPL), a Company incorporated under the Indian Companies Act, 1956 having CIN No. U40106GJ2015PTC084303 and its Registered Office at **Adani Corporate House, Shantigram, Near Vaishnav Devi Circle, S. G. Highway, Khodiyar, Ahmedabad – 382421, Gujarat**, (here in after referred to as "**MLTPL**", which expression shall, unless repugnant to the context or meaning thereof, mean and include its legal representatives, administrators, executors, successors & permitted assigns) of the One part.

Statutory Alert:

- The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
- The onus of checking the legitimacy is on the users of the certificate.
- In case of any discrepancy please inform the Competent Authority.



106

AND

MLTPL and ACL shall be collectively addressed as "**the parties**" and individually as "**Party**" hereinafter in this Addendum.

WHEREAS, a Service Agreement (herein after known as "**Agreement**"), was entered into between **MLTPL & ACL** on **15th January 2021** for co-processing of **(I) Oily Cotton Waste**, Hazardous in nature as per HOWM Rules 2016 (herein after referred as "**Waste material**") as mentioned in Annexure A of the Agreement from its Manufacturing unit to ACL's Ambuja Nagar Cement Plant valid till **30th November 2023** from the date of signing and execution;

AND WHEREAS, upon expiry of the Agreement validity, both Parties discussed and agreed to extend the agreement validity for **next Five Years**;

AND WHEREAS, to record and give effect to their mutual understanding, **MLTPL and ACL**, have decided to execute this Addendum (**Addendum No. 1**) to the Agreement;

NOW IT IS HEREBY MUTUALLY AGREED BY AND BETWEEN MLTPL AND ACL AS FOLLOWS:

1. Definitions and Effective Date

1.1 Definitions

Unless otherwise defined in this Addendum (No. 1), capitalized words and expressions used in this Addendum shall have the meaning specified in the Agreement.

1.2 Effective Date

This Addendum to the Agreement shall become effective from **18th April 2024** after **signing and execution** and will be valid **for next Five Years, i.e. 18th April 2029**.

2. Annexure I & K, Co-processing Certificate and Health & safety Policy of ACL respectively attached herewith this Addendum No. 1 shall replace the same from the Agreement.

3. Except as expressly modified and mentioned above in this Addendum No. 1, all other terms and conditions of the Agreement remain unchanged and are hereby ratified and confirmed.

4. On execution hereof, this **Addendum (No. 1) shall form an integral part of the Agreement.**



ANNEXURE I

CERTIFICATE OF CO-PROCESSING

geoclean

Certificate of Co-Processing

Issued To: Mundra LPG Terminal Pvt. Ltd. (MLTPL)

Invoice No:

Date: 30/04/2024

This is to certify that we have taken receipt of the following quantities of **Oily Cotton Waste** sent by **Mundra LPG Terminal Pvt. Ltd. (MLTPL)** for Pre and / Or Co-processing in our Cement Kiln during the period XX/XX/2024 to XX/XX/2024. The same would be safely and completely disposed off within 90 days of receipt and thereafter will not exist.

Waste Name: Mundra LPG Terminal Pvt. Ltd. (MLTPL)

Quantity (Tons):

SAMPLE

**Authorized Signatory
Ambuja Nagar Cement Plant**



ANNEXURE K – HEALTH & SAFETY POLICY OF ACL

Ambuja
Cement

adani
Cement

OCCUPATIONAL HEALTH & SAFETY (OH&S) POLICY

Ambuja Cements Limited, part of the diversified Adani Group, is India's foremost manufacturer of cement and building material, with countrywide network of manufacturing infrastructure, mines, waste management platform and office establishments. We conduct our business in a manner that creates a sustainable, healthy and safe environment for our employees, business associates, suppliers, visitors, customers and communities.

We firmly believe that Occupational Health & Safety (OH&S) is a business imperative to achieve our purpose of **commitment to building nations with goodness**. We work with belief that **Zero Harm** is achievable and '**nothing we do is worth getting hurt for**'. Employee engagement and involvement is key to create, promote and sustain the culture of '**We Care**' which is vital to achieve our growth and sustainability ambitions.

To meet our commitment, we shall:

- Promote the concept of safety leadership wherein each one demonstrates visible personal commitment towards safety and wellbeing of everyone around us.
- Work with fundamental belief that all injuries and occupational illness can and must be prevented. Working safely is a condition of employment at our business operations.
- Integrate OH&S aspects in our decision-making process throughout the business life cycle.
- Comply and sustain with applicable legal, regulatory, industry and group OH&S requirements.
- Ensure all employees and business associates are competent to perform their tasks safely by giving them adequate training.
- Apply risk management principles to assess and reduce vulnerabilities through hierarchy of controls in operational, infrastructural, and behavioral risks.
- Set annual objectives and target to continually strengthen OH&S assurance through audits, compliance monitoring and timely action closure.
- Report all incidents, investigate, and implement control measures to prevent reoccurrence across our business operations.
- Provide adequate resources to ensure continual improvement of OH&S performance.
- Empower every employee and business associate to stop any unsafe work.

The Policy shall be communicated and made available to all our employees, business associates, suppliers, visitors, customers, and other stakeholders. We shall seek accountabilities at various levels to ensure safe and sustainable business performance.

Any violation or breach of this policy shall be dealt with procedures framed by the Company from time to time. This policy shall be reviewed periodically for its suitability and relevance to our operations and updated as deemed necessary.



Ajay Kapur

Chief Executive Officer
Cement Business, Adani Group

Date: 24th June 2023



IN WITNESS WHEREOF the Parties hereto have hereunto set and subscribed their respective hands and seals on the day, month and year first above-written.

Mundra LPG Terminal Pvt. Ltd. (MLTPL), by the hand of its authorized signatory,

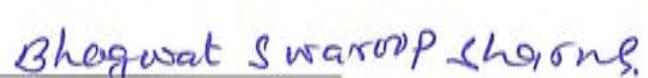
in the presence of:

1. 
Signature of Witness 1,





2. 
Signature of Witness 2,


(Name of Witness 2)

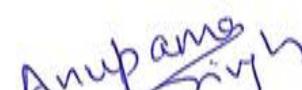
SIGNED AND DELIVERED for and on behalf of

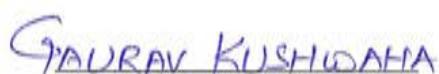
Ambuja Cements Limited, by the hand of its authorized signatory,

in the presence of:

1. 
Signature of Witness 1,



2. 
Signature of Witness 2,


(Name of Witness 1)


(Name of Witness 2)

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



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%	
Fodder Support- 1 Cr +											56.42%	

Key programmatic accomplishments



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

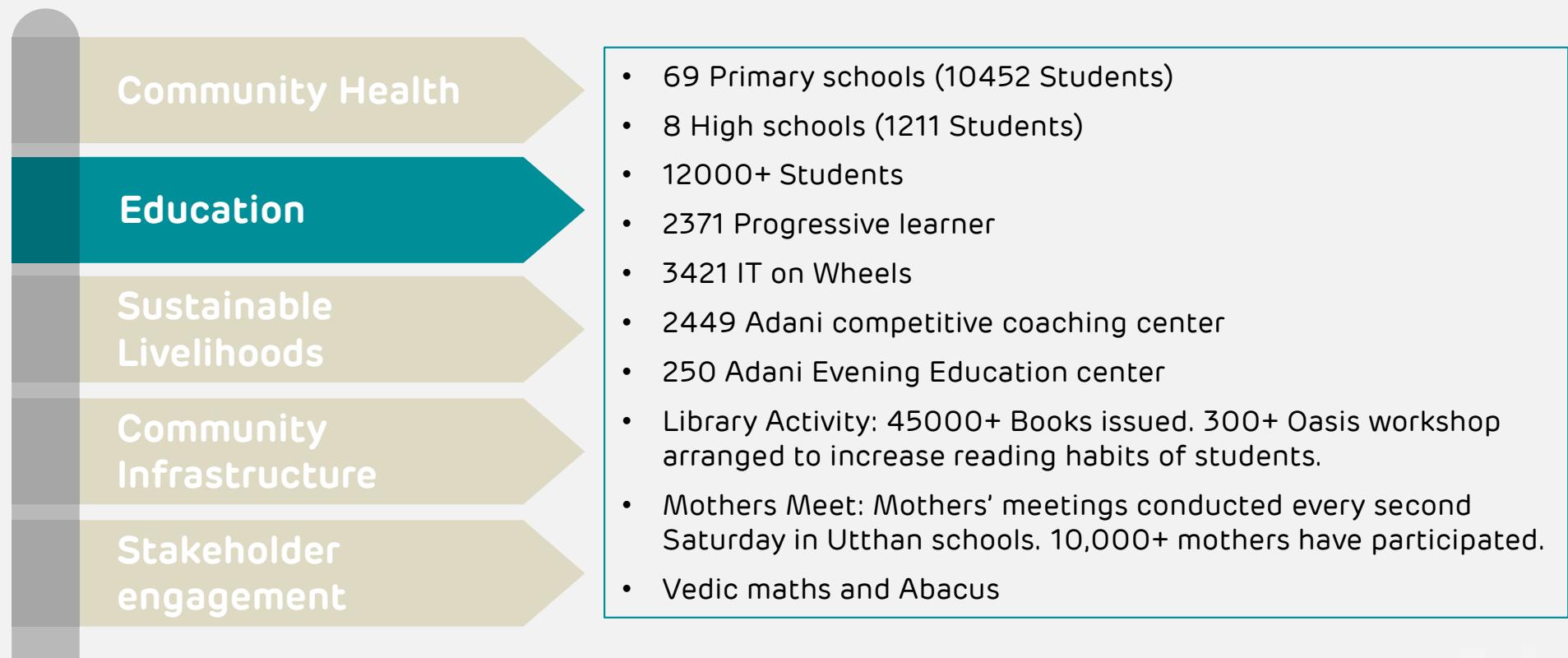


Cataract Surgery



Nutritional kits to 153
children with thalassemia

Key programmatic accomplishments



Highlights: Education



Abacus Mathematics

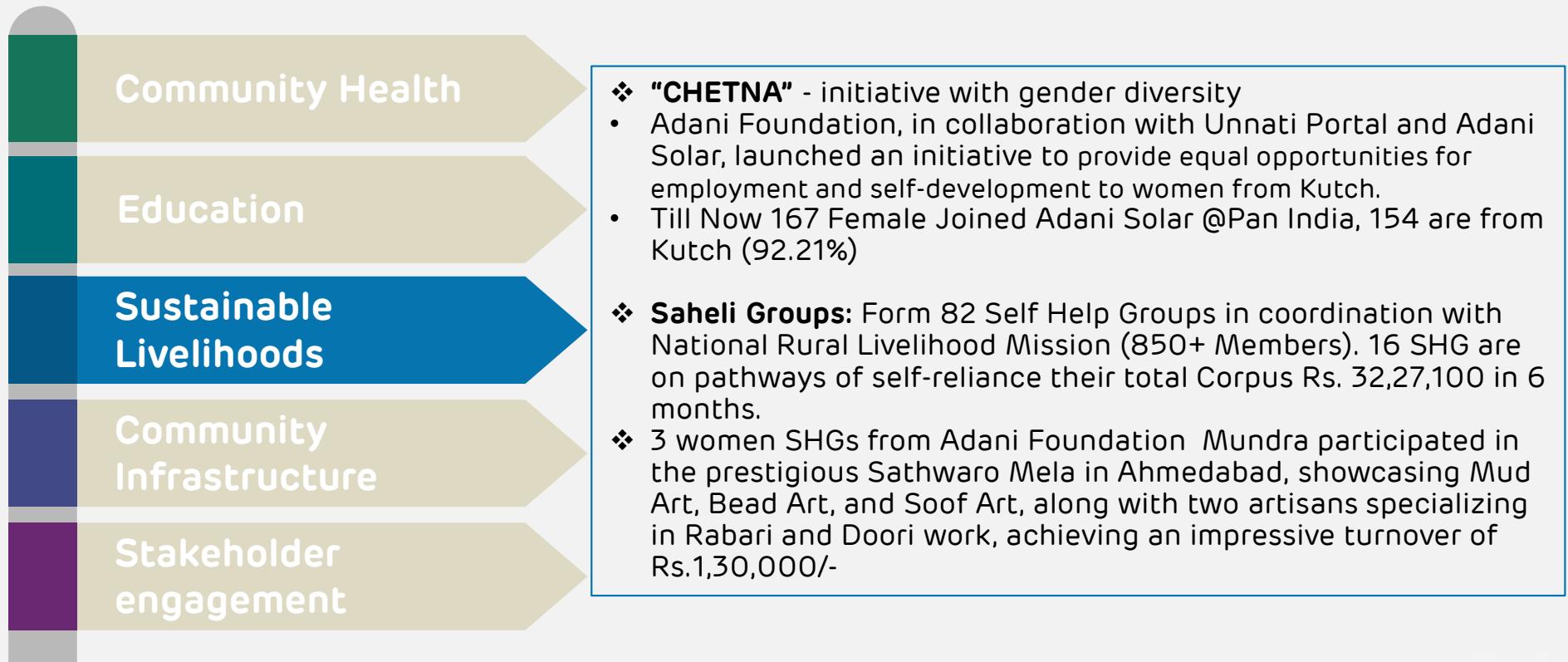


Eye Vision Care in Utthan School



Green School Initiative – plastic collection

Key programmatic accomplishments



Key programmatic accomplishments



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



Educational and Job
Support to Fisherfolk youth

Key programmatic accomplishments



- ❖ 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



- ❖ **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 Dhrub 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

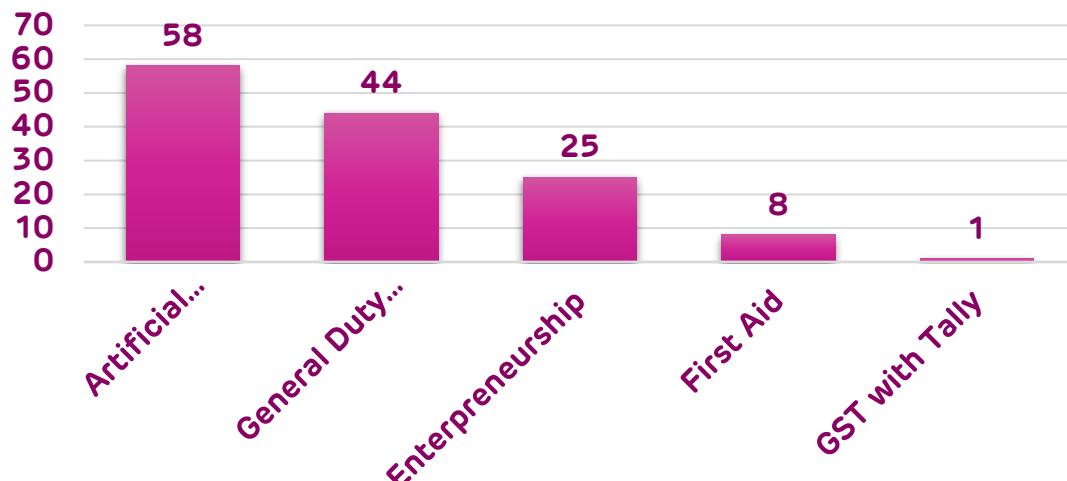


Adani Skill Development Centre (ASDC) plays a pivotal role in empowering individuals through skill enhancement. By offering a wide range of training programs, ASDC aims to bridge the gap between industry requirements and workforce capabilities. This initiative not only helps individuals stay adaptable 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.

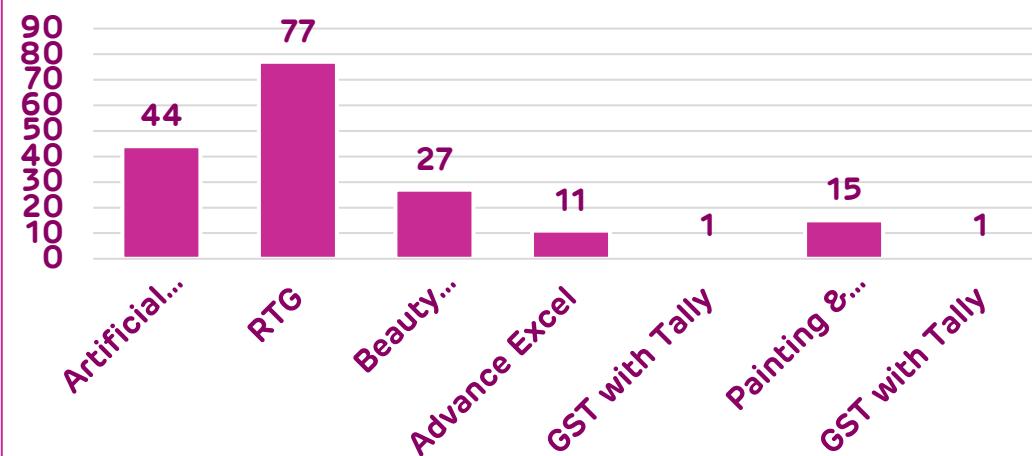
Empowering Youth : Impact of ASDC in Mundra and Bhuj Center

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



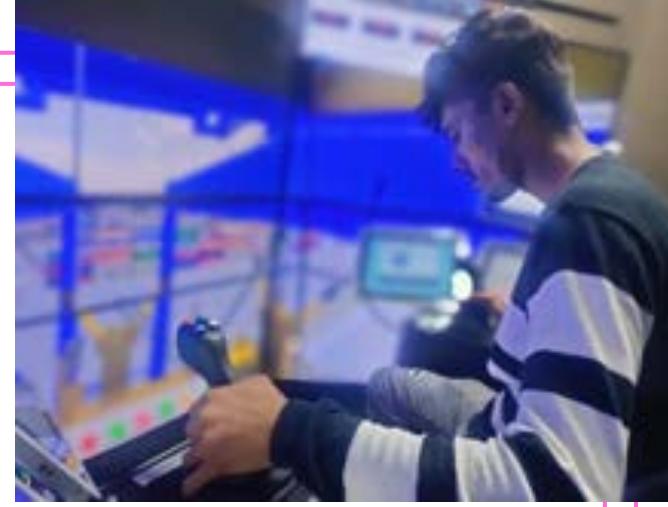
Percentage of Students in course, Mundra



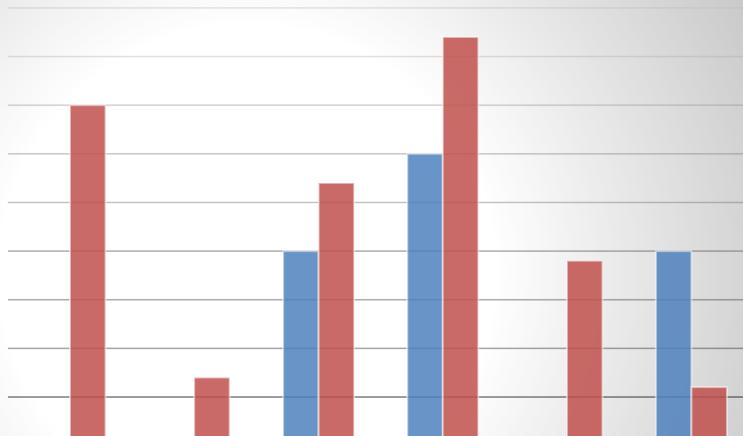
- Artificial Intelligence/DDEO ■ General Duty Assistant
- Entrepreneurship ■ First Aid
- GST with Tally

- Artificial Intelligence/DDEO ■ RTG
- Beauty Therapist ■ Advance Excel
- GST with Tally ■ Painting & Drawing
- GST with Tally

Some glimpse of ASDC Mundra and Bhuj



Half Yearly Target Vs Achievement Bhuj

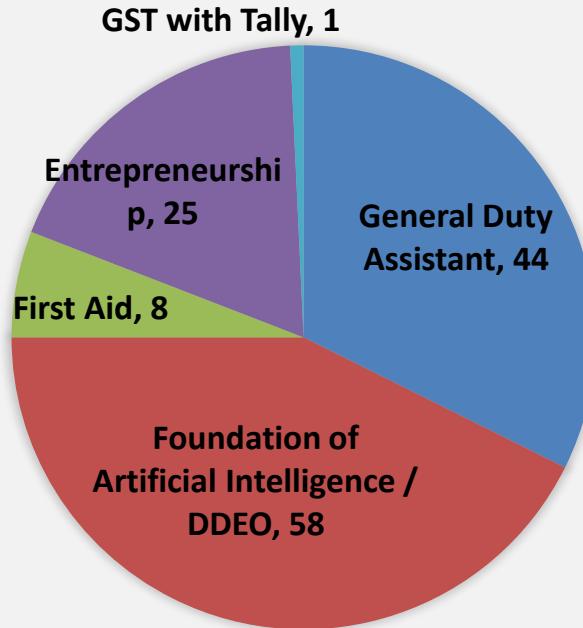


	Apr	May	Jun	Jul	Aug	Sep
■ Target	0	0	20	30	0	20
■ Achivement	35	7	27	42	19	6

Half Yearly Target Vs Achievement



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

જવાનોની જીવનશૈલી અનુરૂપ રાંધણ કળા વિકાસ માટે ૨૪ બહેનોએ તાલીમ લીધી



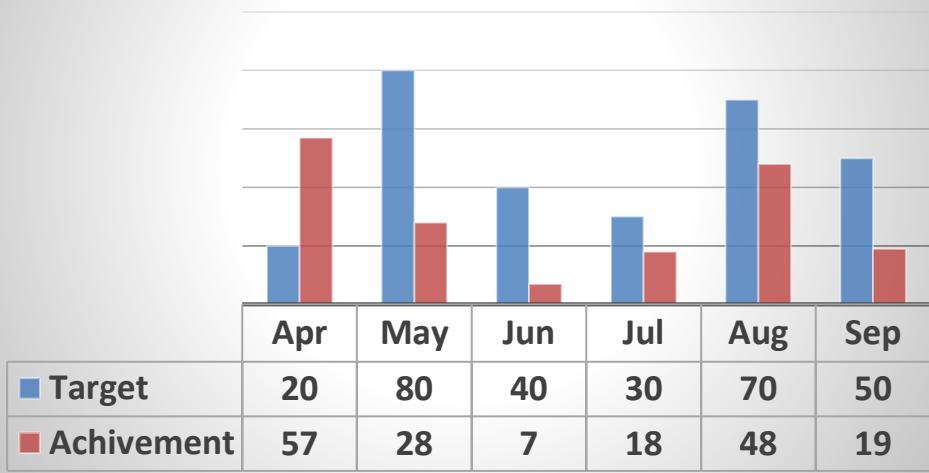
। ଶ୍ରୀ କାନ୍ତିକାଳ । ମୁଦ୍ରଣ

କୁଳ ଖାତେ ଆଶାରୀ ଶର୍କି
ଦେବପାତ୍ରମନ୍ ସେନ୍ଟର କାହା ଯାଇଲା
ବିବିଧ ତଥାମୁଖ ବ୍ୟାଙ୍ଗ ଅନେକଙ୍କ
ଆମ୍ବାଣ କାହାରୀଙ୍କ କେବଳିଲାକିନେ
ନୂହିପୁ ପୋଷକ ଆମାର ତେବେ
କରୁ ମାତ୍ର କାହାରୀଙ୍କ ପାଇଁଥିଲେ
କୁଳ ଖାତେ ଲକ୍ଷଣାବ୍ୟାପ୍ତି ହିନ୍ଦିବେ
କୁଳ ଖାତେ ଲକ୍ଷଣାବ୍ୟାପ୍ତି ହିନ୍ଦିବେ
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କୁଳ ଖାତେ ଲକ୍ଷଣାବ୍ୟାପ୍ତି ହିନ୍ଦିବେ
କୁଳ ଖାତେ ଲକ୍ଷଣାବ୍ୟାପ୍ତି ହିନ୍ଦିବେ

આગ્રી મણ્ઠક ખાતે
આદાયી રહીલ
ડેપલમેન્ટરોન્ટર
દ્વારા રાષ્ટ્રગતપૂર્વક
ટ્રેનિંગ પૂર્ણ રૂચા બદલ
પ્રમાણપત્રો અપાયા

तांत्र अभी वेळे कर
मौर्यवंशिक्षणाते देवपत्रल
मालिके लिए जलान्ति,
क्षमा-नी क्षमानीसीदो अनुरूप
क्षमा क्षमा विकास कर्त्ता अने
क्षमा-नी क्षमा विकास पाते आ तालीम
क्षमा क्षमा ले के उड़ा उत्तम पर्याप्त
क्षमा क्षमा। तेवें
क्षमा-नी क्षमानी अभाव भान्यो
हो, अज्ञ क्षमानी द्वारा दुर्गति
मालिक दा, पूर्वी वास्तवीये
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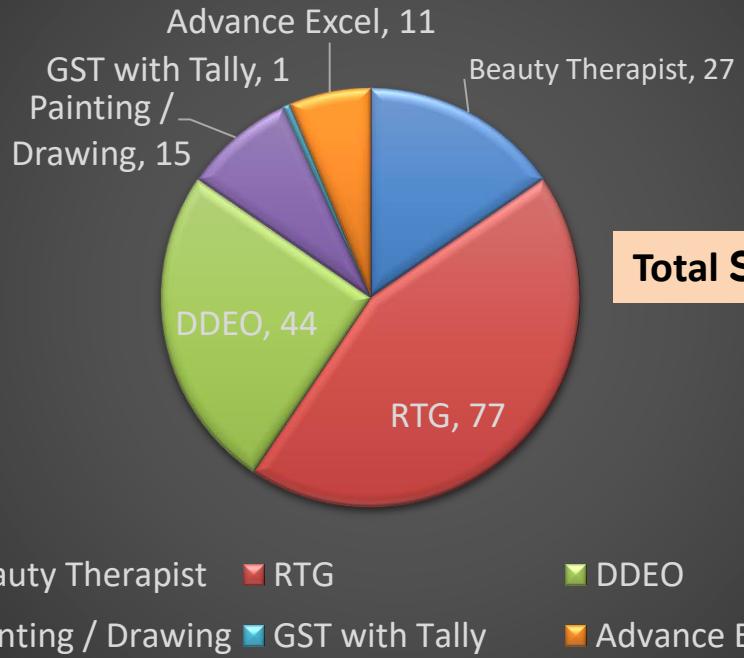
Half Yearly Target Vs Achievement Mundra



Yearly Target Vs Achievement Mundra



Job Role Wise Details Mundra



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



મુન્ડ્રામાં યુવાનો કેન ઓપરેટરની તાલીમ

પ્રાપ્ત કરી રોજગાર મેળવવા બન્યા સૂસજી

અદાણી કૌશલ્ય વિકાસ કેન્દ્ર દ્વારા સફળ તાલીમાર્થનિ પ્રમાણપત્રનં કરાયું વિતરણ

ભાસ્કર વ્યૂહ | મણદ



તાજેતરમાં મુન્ડા ખાતે આદારી
ક્લોલ ટેવલોપમેન્ટ સેન્ટર દ્વારા
નવી બેચના ઉદ્ઘાટન સાથે
તાવીમાથીઓને આરાણી કેન
ઓપરેટર પ્રમાણપત્ર વિશીર્ણ
કરવાના આવ્યા હતા. આમ સંકળતા
પૂર્વક તાલીમપ્રાણ કરનાર વ્યવાયો
હવે રોજગાર મેધિવાય સુસક્રજ્જ
આવ્યા હૈ.

અદાણી કૌશળ્ય વિકાસ કેન્દ્ર દ્વારા સર્જણ
તાલીમાર્થીઓને પ્રમાણપત્ર વિતરણ કરાયા
એએસડીસી યુવાઓને આત્મનિર્ભર બનાવવાની દિશામાં અગ્રેસર

四

मदापाति काउंटरन
ज्ञानपात्रोन प्रायां अपारा
प्रतिकृष्णो मृगुणे तथा
विद्वांसी विद्वांसे तथा
यावद् एव नवी बेष्टा उद्घाटन
लिम्पिद्युषाने आदर्शो
प्रेपरेट प्रभावपाने
उद्योगाभ्यासा, कैनोपो
तालम सकलापूर्वक पूर्ण
वारो आभाविन्द्रियां अस-
मान अपार्वती अलोचना
मदापाति कृश्च उद्गत
उद्यनु पृष्ठ युक्ताने योग-
क्षिकापात्रीतमी क्रियाव-



परिपूर्ण आधा कही, तेमने
विनाशों अवधारणेवाला
दूसरे प्रेषण में सत्ता नहीं
मिला, यहाँ भेदोंका उत्तम
उत्तम भेदोंका उत्तम

ମୁଖ୍ୟ ପାତ୍ର
ଶ୍ରୀ କୃତ୍ତବ୍ୟାନନ୍ଦ
ଲେଖନୀ ଏକାଡେମୀ
ପ୍ରକାଶନ ଓ
ମାନ୍ୟବିଜ୍ଞାନ
ପାଠ୍ୟକ୍ରମିକ
ଅଧ୍ୟକ୍ଷକ
ମହାବିଦ୍ୟାଳୟ
ପାଠ୍ୟ ପାତ୍ର
ପାଠ୍ୟ ପାତ୍ର

ની કરતું
અને એથે યુવાનાને
અધ્યક્ષ પ્રાણીઓ આપ્યો
અને શાળાના પદ્ધતિઓ
બાબતી હતી ૧૦ અને
જે અધ્યક્ષ પાઠ્યકાર એ રહે
દેખાના વિભાગીઓ
માટે સાચા લાયકી
ના સાથે જોની હોઈ
હિન્દુટ પાઠ્યકાર એ રહે
કાર્યાને પ્રાણી

ମେଲକାରୀ କାହାରେ
ନେଇବୁଦ୍ଧିମେଳନ
ଅନ୍ୟା ଛେ ନାହିଁ
ମେଲକାରୀ କାହାରେ
ଅନ୍ୟ ୩୦ ରେ
ଖଲାଗାନ୍ତିରେ କେମାନ୍ତି

ସଂପର୍କବିଧି

ବିନାରମ୍ଭ ଆପଣଙ୍କ
ପାଇଁ ଯୁଦ୍ଧମାନ୍ଦି
ରହୁଥାଏ ନାହାଯା
ଯଦୁପାଦି ପ୍ରୋତ୍ସବ



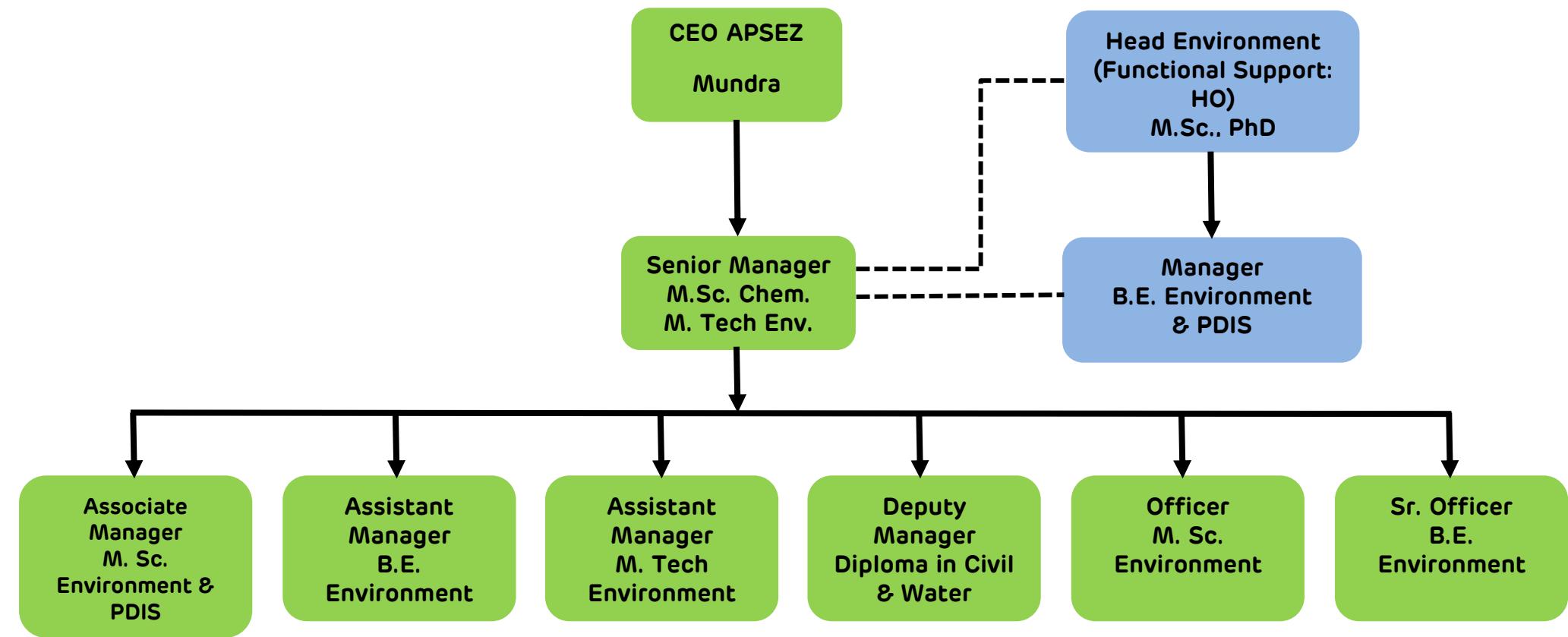
અદાએણી કૌશલ્ય વિકાસ કેન્દ્ર દ્વારા
કેન્દ્રો઱ની ૧૨૦ ઉમેદવારને તાલીમ



અદ્યારી કોરાન કેન્દ્ર દ્વારા તાત્કાલિનિકિઓને પ્રમાણપત્ર વિતરણ પ્રાર્થક્યનું દર્શાવે

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