

Bhagwat Swaroop Sharma

From: Bhagwat Swaroop Sharma
Sent: Tuesday, May 30, 2023 7:40 PM
To: ecompliance-guj@gov.in; iro.gandhingr-mefcc@gov.in
Cc: ec-rdw.cpcb@gov.in; ro-gpcb-kute@gujarat.gov.in; ms-gpcb@gujarat.gov.in; mefcc.ia3@gmail.com; monitoring-ec@nic.in; direnv@gujarat.gov.in; Snehal Jariwala
Subject: Half Yearly EC Compliance Report Submission -MPT 1995 (Period : Oct.,2022 to March.'2023)
Attachments: EC Compliance Report_MPT 1995_Oct'22 to Mar'23.pdf



APSEZL/EnvCell/2023-24/005

Date:

To
The Inspector General of Forest / Scientist C,
Integrated Regional Office (IRO),
Ministry of Environment, Forest and Climate Change,
Aranya Bhawan, A Wing, Room No. 409,
Near CH 3 Circle, Sector – 10A,
Gandhinagar – 382007.
E-mail: ecompliance-guj@gov.in, iro.gandhingr-mefcc@gov.in

Sub : Half yearly Compliance report of Environment and CRZ Clearance for "Handling facilities for 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 1st 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 hereby submitted that copy of the compliance report for the Environmental and CRZ Clearance for the period of October 21, 2023 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 Paryavarar Bhawan, Bahadur Road, New Delhi-110003.

Thanks & Regards,

Bhagwat Swaroop Sharma
Sr. Manager - Environment
Mundra & Tuna port

Adani Ports & Special Economic Zone Ltd.

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adani

Growth
with
Goodness

Our Values: Courage | Trust | Commitment





Ports and
Logistics

APSEZL/EnvCell/2023-24/005

Date: 25.05.2023

To

The Inspector General of Forest / Scientist C,
Integrated Regional Office (IRO),
Ministry of Environment, Forest and Climate Change,
Aranya Bhawan, A Wing, Room No. 409,
Near CH 3 Circle, Sector - 10A,
Gandhinagar - 382007.
E-mail: ecompliance-gui@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 October 2022 to March 2023 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 Bhawan, Sector 10 A, Gandhi Nagar - 382010.
- 4) The Director, Forests & Environment Department, Block - 14, 8th floor, Sachivalaya, Gandhi Nagar - 382010.
- 5) The Regional Officer, Regional Office GPCB (Kutch-East), Gandhidham - 370201.

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Environmental Clearance Compliance Report



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:

October-2022 to March-2023

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'22 To : Mar'23
Status of the Conditions Stipulated in Environment and CRZ Clearance		

Index

Sr. No.	Particulars	Page no
1	EC & CRZ Clearance Compliance Report	1-16
2	Annexures	
	Annexure – 1 Half Yearly Environment Monitoring Summary Report	17-93
	Annexure – 2 Green Belt Development and Mangroves Afforestation Details	94-95
	Annexure – 3 Adani Foundation – CSR Report for the FY 2022-23	96-182
	Annexure – 4 Environmental Protection Expenditures	183
	Annexure – 5 Copy of Renewed Factory License	184-185

**EC & CRZ
Clearance
Compliance
Report**

 Ports and Logistics	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct'22 To : Mar'23
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 31-03-2023
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 competent authorities	<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 horticultural purposes. Quality of treated water confirm to the</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023																																																		
	including the central and State Pollution Control Boards under the Environment (Protection) act, 1986 whichever are more stringent.	<p>standard laid down by Gujarat Pollution Control Board.</p> <table><tr><th>Location</th><th>Capacity</th><th>Quantity of Treated Water (Avg. from Oct'22 to Mar'23)</th><th>Type of ETP / STP</th></tr><tr><td>LT</td><td>265 KLD</td><td>107 KLD</td><td>Activated Sludge</td></tr></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><tr><th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th><th>Average</th><th>Perm. Limit[§]</th></tr><tr><td>pH</td><td>--</td><td>6.94</td><td>7.48</td><td>7.19</td><td>6.5 – 8.5</td></tr><tr><td>TSS</td><td>mg/L</td><td>26</td><td>42</td><td>33</td><td>100</td></tr><tr><td>TDS</td><td>mg/L</td><td>904</td><td>1480</td><td>1226</td><td>2100</td></tr><tr><td>COD</td><td>mg/L</td><td>79</td><td>86</td><td>82</td><td>100</td></tr><tr><td>BOD</td><td>mg/L</td><td>21</td><td>23</td><td>22</td><td>30</td></tr><tr><td>Ammonical Nitrogen as NH₃-N</td><td>mg/L</td><td>18.60</td><td>29.80</td><td>24.72</td><td>50</td></tr></table> <p>§ 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 for detailed analysis reports for the period Oct'22 to Mar'23. Approx. INR 15.32 Lakh is spent for all environmental monitoring activities during the FY 2022-23 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</p>	Location	Capacity	Quantity of Treated Water (Avg. from Oct'22 to Mar'23)	Type of ETP / STP	LT	265 KLD	107 KLD	Activated Sludge	Parameter	Unit	Min	Max	Average	Perm. Limit [§]	pH	--	6.94	7.48	7.19	6.5 – 8.5	TSS	mg/L	26	42	33	100	TDS	mg/L	904	1480	1226	2100	COD	mg/L	79	86	82	100	BOD	mg/L	21	23	22	30	Ammonical Nitrogen as NH ₃ -N	mg/L	18.60	29.80	24.72	50
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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023
		<p>for environmentally sound management of different types of solid & liquid wastes. Please refer below details about management of each type of waste.</p> <p><u>Non-Hazardous Solid Waste:</u> 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 TUV Rheinland India Pvt. Ltd. (valid up to 31.05.2024). Details of the same were submitted as part of compliance report submission for the duration of Apr'21 to Sep'21.</p> <p><u>Hazardous & Other Waste:</u></p> <ul style="list-style-type: none"> • Bio medical waste generated from OHCs and Adani Hospital is being disposed at Common Bio Medical Waste Treatment Facility namely M/s. Distromed Kutch Services Pvt. Ltd., Bhuj. • E – Waste & Used Batteries are being sold to GPCB registered recyclers namely M/s. Galaxy Recycling, Rajkot and Sabnam Enterprise, Kutch respectively. • 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.

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023									
		<p>It is also being reused within organization for lubrication purpose.</p> <ul style="list-style-type: none"> Discarded drums / barrels are being sold to authorized decontamination facility i.e. M/s. Jawrawala Petroleum, Ahmedabad. It is also being reused within organization for filling hazardous waste. Solid hazardous waste i.e. Tank bottom sludge is being sold to authorized recycler namely M/s. Mundra Oil Pvt. Ltd., Mundra for recycling. Expired paint materials are being disposed by incineration through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau. Downgrade chemicals generated from cleaning of storage tanks / pipelines are being sold to authorized solvent recovery facilities namely M/s. Acquire Chemicals, Ankleshwar however during the compliance period, there was no disposal of downgrade chemicals. Slop Oil received from vessels is treated to separate water and oil particles in Oil Water Separator system. Separated oil from the same is being sold to authorized recycler / reprocessor namely M/s. Western India Petro Chem Ind - Bhavnagar, Aviation Corporation - Kutch & Aroma Petrochem - Bhavnagar and water is sent to ETP for further treatment. However, during the compliance period i.e. Oct'22 to Mar'23, there was no received or disposal of Slope Oil. Horticulture waste is collected from various green belt areas and it is using for making of manure and manure is being utilizing in horticulture purpose within plant premises. <p>Details of permissions / agreements of hazardous waste authorized vendors were submitted along with pervious half yearly EC Compliance Reports. And there is no further change.</p> <p>The following table summarizes the waste management practice (from Oct'22 to Mar'23) for different types of wastes at APSEZ:</p> <table data-bbox="698 1780 1474 1894"> <tr> <th>Type of Waste</th><th>Quantity in MT</th><th>Disposal method</th></tr> <tr> <td colspan="3">Hazardous Waste</td></tr> <tr> <td>Pig Waste</td><td>7.12</td><td></td></tr> </table>	Type of Waste	Quantity in MT	Disposal method	Hazardous Waste			Pig Waste	7.12	
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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023																																																									
		Oily Cotton waste	64.56	Co-processing at cement industries																																																							
		Used / Spent Oil	57.09	Sell to registered recycler																																																							
		Other Waste																																																									
		Bio Medical Waste	3.38	To approved CBWTF Site																																																							
		E-Waste	31.37	Sell to register recycler																																																							
		Non-Hazardous Waste																																																									
		Recyclables Dry Waste / Scrap	1413.91	After recovery sent for recycling / Reuse within premises																																																							
		Non-Recyclable Dry Waste (RDF)	230.01	Co-processing at Cement Industries																																																							
		Wet Waste (Food waste + Organic waste)	465.86	Converted to Manure for Horticulture use / Biogas for cooking purpose																																																							
		Horticulture Waste	385.7	Used for making of manure and utilize for horticulture purpose																																																							
<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. Summary of the same for duration from Oct'22 to Mar'23 is mentioned below.</p> <p>Total Ambient Air & Noise Sampling Locations: 4 Nos.</p> <table><tr><th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th><th>Average</th><th>Perm. Limit[§]</th></tr><tr><td colspan="6">AAQM</td></tr><tr><td>PM₁₀</td><td>µg/m³</td><td>62.18</td><td>89.79</td><td>80.06</td><td>100</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>21.25</td><td>49.12</td><td>35.29</td><td>60</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>11.24</td><td>36.28</td><td>25.71</td><td>80</td></tr><tr><td>NO₂</td><td>µg/m³</td><td>16.78</td><td>43.65</td><td>33.20</td><td>80</td></tr><tr><td>Noise</td><td>Unit</td><td>Leq Min</td><td>Leq Max</td><td>Leq Avg.</td><td>Leq Perm. Limit*</td></tr><tr><td>Day Time</td><td>dB(A)</td><td>58.20</td><td>69.80</td><td>64.75</td><td>75</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>54.20</td><td>64.50</td><td>59.93</td><td>70</td></tr></table> <p>§ 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 Oct'22 to Mar'23. Approx. INR 15.32 Lakh is spent for all environmental monitoring activities during the FY 2022-23 for overall APSEZ.</p>						Parameter	Unit	Min	Max	Average	Perm. Limit [§]	AAQM						PM ₁₀	µg/m ³	62.18	89.79	80.06	100	PM _{2.5}	µg/m ³	21.25	49.12	35.29	60	SO ₂	µg/m ³	11.24	36.28	25.71	80	NO ₂	µg/m ³	16.78	43.65	33.20	80	Noise	Unit	Leq Min	Leq Max	Leq Avg.	Leq Perm. Limit*	Day Time	dB(A)	58.20	69.80	64.75	75	Night Time	dB(A)	54.20	64.50	59.93	70
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2(iv)	Adequate provision for	Complied.																																																									

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023
	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>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 are 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 and operational phases.	<p>Complied. Construction phase is completed.</p> <p>For operation phase, following noise control measures are taken:</p> <ul style="list-style-type: none"> • All DG sets are installed with acoustic enclosure confirming EPA norms. • Proper maintenance of equipments / plant machineries is being done on regular basis. • Green Belt has been developed at road sides 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.
2(vi)	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>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.</p> <p>Third party analysis of the treated water is being carried out twice 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 Oct'22 to Mar'23 is mentioned in compliance condition no. 2(iii) above.</p> <p><u>Marine Monitoring:</u></p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023																																																																																																																															
		<p>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 Oct'22 to Mar'23 is mentioned below. Monitoring Reports are attached as Annexure – 1 for the same.</p> <p>Total Sampling Locations: 09 Nos.</p> <table><tr><th rowspan="2">Parameter</th><th rowspan="2">Unit</th><th colspan="3">Surface</th><th colspan="3">Bottom</th></tr><tr><th>Min</th><th>Max</th><th>Avg.</th><th>Min</th><th>Max</th><th>Avg.</th></tr><tr><td>pH</td><td>--</td><td>7.96</td><td>8.28</td><td>8.17</td><td>7.68</td><td>8.14</td><td>8.02</td></tr><tr><td>BOD (3 Days @ 27 °C)</td><td>mg/L</td><td>2.4</td><td>3.4</td><td>2.92</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>86</td><td>162</td><td>129.76</td><td>78</td><td>148</td><td>110.48</td></tr><tr><td>DO</td><td>mg/L</td><td>5.8</td><td>6.32</td><td>6.08</td><td>5.63</td><td>6.22</td><td>5.91</td></tr><tr><td>Salinity</td><td>ppt</td><td>35.02</td><td>36.82</td><td>35.71</td><td>35.56</td><td>37.02</td><td>36.24</td></tr><tr><td>TDS</td><td>mg/L</td><td>35108</td><td>37210</td><td>35902</td><td>35614</td><td>37840</td><td>36425</td></tr></table> <p>*BDL – Below Detection Limit *MDL – Minimum Detection Limit</p> <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 Oct'22 to Mar'23 is mentioned below.</p> <p>Sampling Locations: 5 Nos.</p> <table><tr><th>Parameters</th><th>Unit</th><th>MIN</th><th>MAX</th><th>AVERAGE</th></tr><tr><td>pH @ 25 ° C</td><td>--</td><td>7.98</td><td>8.01</td><td>8.00</td></tr><tr><td>Salinity</td><td>ppt</td><td>1.02</td><td>7.17</td><td>4.10</td></tr><tr><td>Oil & Grease</td><td>mg/L</td><td>*BDL</td><td>*BDL</td><td>*BDL</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</td><td>*BDL</td><td>*BDL</td></tr><tr><td>Arsenic as As</td><td>mg/L</td><td>*BDL</td><td>*BDL</td><td>*BDL</td></tr><tr><td>Nickel as Ni</td><td>mg/L</td><td>0.02</td><td>0.13</td><td>0.07</td></tr><tr><td>Total Chromium as Cr</td><td>mg/L</td><td>*BDL</td><td>*BDL</td><td>*BDL</td></tr><tr><td>Cadmium as Cd</td><td>mg/L</td><td>0.09</td><td>0.09</td><td>0.09</td></tr><tr><td>Mercury as Hg</td><td>mg/L</td><td>*BDL</td><td>*BDL</td><td>*BDL</td></tr><tr><td>Zinc as Zn</td><td>mg/L</td><td>0.05</td><td>0.05</td><td>0.05</td></tr><tr><td>Copper as Cu</td><td>mg/L</td><td>*BDL</td><td>*BDL</td><td>*BDL</td></tr></table>	Parameter	Unit	Surface			Bottom			Min	Max	Avg.	Min	Max	Avg.	pH	--	7.96	8.28	8.17	7.68	8.14	8.02	BOD (3 Days @ 27 °C)	mg/L	2.4	3.4	2.92	BDL(MDL:1.0)	BDL(MDL:1.0)	BDL(MDL:1.0)	TSS	mg/L	86	162	129.76	78	148	110.48	DO	mg/L	5.8	6.32	6.08	5.63	6.22	5.91	Salinity	ppt	35.02	36.82	35.71	35.56	37.02	36.24	TDS	mg/L	35108	37210	35902	35614	37840	36425	Parameters	Unit	MIN	MAX	AVERAGE	pH @ 25 ° C	--	7.98	8.01	8.00	Salinity	ppt	1.02	7.17	4.10	Oil & Grease	mg/L	*BDL	*BDL	*BDL	Hydrocarbon	mg/L	ND*	ND*	ND*	Lead as Pb	mg/L	*BDL	*BDL	*BDL	Arsenic as As	mg/L	*BDL	*BDL	*BDL	Nickel as Ni	mg/L	0.02	0.13	0.07	Total Chromium as Cr	mg/L	*BDL	*BDL	*BDL	Cadmium as Cd	mg/L	0.09	0.09	0.09	Mercury as Hg	mg/L	*BDL	*BDL	*BDL	Zinc as Zn	mg/L	0.05	0.05	0.05	Copper as Cu	mg/L	*BDL	*BDL	*BDL
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Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023					
		Iron as Fe	mg/L	0.34	0.34	0.34	
		Insecticides/Pesticides	µg/L	ND*	ND*	ND*	
		Depth of Water Level from Ground Level	meter	2.00	2.15	2.08	<p>ND*= Not Detectable *BDL – Below Detection Limit</p> <p>Please refer Annexure – 1 for detailed analysis reports. Approx. INR 15.32 Lakh is spent for all environmental monitoring activities during the compliance period i.e. FY 2022-23 for overall APSEZ, Mundra.</p>
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. APSEZL 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 and cost of INR 10 Crores. Photographs of the same were submitted as part of compliance report submission for the duration of Apr'17 to Sep'17.</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 149959 trees were planted with the density of 2060 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 3890 ha. area across the coast of Gujarat. Total expenditure for the same till date is INR 1070.8 lakh.</p>					

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023
		<p>Details on Mangroves afforestation & Green belt development carried out by APSEZ till date is annexed as Annexure – 2.</p> <p>Other than this Adani Foundation – CSR Arm of Adani Group at Mundra-Kutch has initiated multi-species plantation of mangroves in Luni village in association with GUIDE, Gujarat. During 2018-2019 (Phase-I) multi-species mangrove plantation was carried out in 10 ha, during Phase-II (2019-2020) it was 02 ha and during Phase III (2020-2021) it is 01 ha. During FY 2021-22, 03 ha area coastal stretches have been planted with species. During current FY 2022-23, 04 Hecter plantation has been planted with various species. Total 20 Ha. multi-species mangrove plantation has been carried out till March-23 association with M/s. GUIDE, Gujarat.</p> <p>Please refer attached Annexure – 3 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 4.52 MLD during compliance period i.e. Oct'22 to Mar'23.</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 2022-23 approx. 5.56 ML of rainwater has been recharged to increase the ground water table.</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023
		<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. Since 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain in current year 1.11 mtr ground water table increased as per increased in coastal belt of Mundra as per Government Figures.</p> <p>Our water conservation work is as below.</p> <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. • 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.

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023
		<ul style="list-style-type: none"> • Drip Irrigation approx. 1505 Farmers benefitted in coordination with Gujrat Green Revolution Company till date. • Bund construction on way of Nagmati River could save more than 575 MCFT water quantity which recharged in ground due to which borewell depth decreased by 50-100 Ft in Zarpara, Bhujpur and Navinal Vadi Vistar. • Pond Pipeline work at Prasla Vistar Zarpara which increase recharge capacity more than 25% in 100 hector area. • Check dam gate valve construction at Bhujpur which controlled more than 350 MCFT water to go into sea and get recharged current year. <p>With the objective of to preserve the rainwater to reduce the impact of salinity and recharge the ground water (the main source of water) to facilitate the Agricultural activities as well as for drinking water.</p> <p>Please refer Annexure – 3 for full details of CSR activities carried out by Adani Foundation in the Kutch region. Budget for CSR Activity for the FY 2022-23 is to the tune of INR 1894.42 lakh. Out of which, Approx. INR 1527.49 lakh is spent in FY 2022-23.</p>
2(x)	<p>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, 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>	<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> <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.</p> <p>Recommendations of the risk assessment have been implemented as part of the construction activity and</p>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023															
		details of the same were submitted along with half yearly compliance report for the period Oct'18 to Mar'19. 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.															
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><tr><th>Sr. No.</th><th>Permission</th><th>Project</th><th>Ref. No. / Order No.</th><th>Valid till</th></tr><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></table> <p>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.</p>	Sr. No.	Permission	Project	Ref. No. / Order No.	Valid till	1	CtO – Renewal	Mundra Port Terminal	AWH-117045	20.11.2026	2	CtE – Amendment	WFDP	17739 / 15618	18.05.2027
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													
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	<p>Complied.</p> <p>APSEZ has a well-structured Environment Management Cell, staffed with qualified manpower for</p>															

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023
	environmental and forestry activities through creation of Environmental cell. Adequate funds should be earmarked for this cell.	<p>implementation of the Environment Management Plan at site. Site team report to Sr. Manager (Environment), who heads the Environment Management Cell who directly reports to the top management. Environment Management Cell Organogram were submitted as part of previous compliance report submission for the duration of Apr'21 to Sep'21. And there is no further change.</p> <p>Budget for environmental management measures (including horticulture) for the FY 2022-23 is to the tune of INR 1448.06 lakh. Out of which, Approx. INR 1366.28 lakhs are spent during the year FY 2022-23. Detailed breakup of the expenditures for the past 3 years is attached as Annexure – 4.</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>
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> <p>Adani Foundation – CSR Arm of Adani Group is doing following activities as a part of Skill Development in surrounding communities in Kutch area.</p> <ul style="list-style-type: none"> • Adani Skill Development Center (ASDC), Mundra & Bhuj is providing skill development training to the locals for Soft Skill, Technical Training and Career Guidance & knowledge-based training. • Adani Skill Development Centre (ASDC) is playing a pivotal role in implementing sustainable development in the state. ASDC is envisioned to be playing a major role in elevating the socio-economic status of the people belonging to the lowest strata of the society by empowering them with various skill development training for employability and livelihood. • Over the last 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.

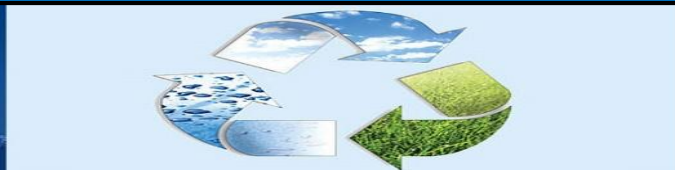
Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023
		<ul style="list-style-type: none"> ASDC imparted various soft skilled and technical training to make Atma Nirbhar India. During FY 2022-23, Total 4706 people trained in various trainings to enhance socio economic development. 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. Mangrove plantation and Nursery development work has created a two-facet impact by providing Livelihood to Fisherfolk during two months Fishing during Off season and developing 162 hector dense mangrove afforestation 5200 Men days' work provide to 285 Fisherfolk of Luni, Sekhdiya and Bhadreshwar Villages in coordination with Horticulture Department. <p>Details on skill development training imparted during compliance period i.e. Oct'22 to Mar'23 by Adani Foundation are available in CSR report enclosed as Annexure – 3.</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>

Status of the Conditions Stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 31-03-2023																					
		License under Factories Act is taken dated 07.10.1998 and last renewed vide license no. 0017 on 17.05.2019 is valid up to 31.12.2023. Same details is attached as Annexure-5.																					
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. Previous compliance report including results of monitoring data for the period of Apr'22 to Sep'22 was submitted to Integrated Regional Office (IRO) @ Gandhinagar, Zonal Office of CPCB @ Baroda, GPCB @ Gandhinagar & Gandhidham and Dept. of Forests & Env., Gandhinagar vide our letter dated 21.11.2022. Copy of the same is also available on our web site https://www.adaniports.com/ports-downloads. A soft copy of the same was also submitted through e-mail on 30.11.2022 to all the concern authorities. 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>Oct'19 to Mar'20</td><td>20.05.2020</td></tr> <tr> <td>2</td><td>Apr'20 to Sep'20</td><td>26.11.2020</td></tr> <tr> <td>3</td><td>Oct'20 to Mar'21</td><td>25.05.2021</td></tr> <tr> <td>4</td><td>Apr'21 to Sep'21</td><td>30.11.2021</td></tr> <tr> <td>5</td><td>Oct'21 to Mar'22</td><td>30.05.2022</td></tr> <tr> <td>6</td><td>Apr'22 to Sep'22</td><td>30.11.2022</td></tr> </tbody> </table>	Sr. No.	Compliance period	Date of submission	1	Oct'19 to Mar'20	20.05.2020	2	Apr'20 to Sep'20	26.11.2020	3	Oct'20 to Mar'21	25.05.2021	4	Apr'21 to Sep'21	30.11.2021	5	Oct'21 to Mar'22	30.05.2022	6	Apr'22 to Sep'22	30.11.2022
Sr. No.	Compliance period	Date of submission																					
1	Oct'19 to Mar'20	20.05.2020																					
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5	Oct'21 to Mar'22	30.05.2022																					
6	Apr'22 to Sep'22	30.11.2022																					
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,



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

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

Monitoring Period: October – 2022 to March - 2023

Submitted By



UniStar Environment & Research Labs Pvt. Ltd.

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



MARINE WATER MONITORING SUMMARY REPORT

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.12	8.02	8.14	8.06	8.17	8.02	8.14	7.98	8.16	8.02	8.28	7.94	IS 3025 (Part11)1983
2.	Temperature	°C	30.3	30.2	30	29.9	29.8	29.7	29.7	29.6	29.8	29.7	30	29.9	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	146	126	138	122	126	114	146	118	104	94	144	112	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL	2.8	BDL	2.9	BDL	2.8	BDL	2.9	BDL	3.1	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.22	6.02	6.1	5.9	6.2	6	6.2	5.99	6.09	5.88	6.13	5.83	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.36	35.88	35.32	36.12	36.02	36.44	35.86	36.12	35.46	36.11	36.12	36.84	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39) 1991, Amd. 2
8.	Nitrate as NO ₃	μmol/L	2.33	2.24	2.93	2.76	3.45	3.02	2.93	2.76	2.67	2.76	3.45	2.8	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.379	0.362	0.3	0.235	0.302	0.276	0.3	0.235	0.198	0.379	0.345	0.276	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.4	3.36	2.54	2.45	3.19	2.84	2.54	2.45	2.24	2.32	3.28	3.1	APHA 23 rd Ed., 2017,4500- NH ₃ B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	0.47	BDL	0.65	0.47	0.78	0.6	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.109	5.962	5.77	5.445	6.942	6.136	5.77	5.445	5.108	5.459	7.075	6.176	APHA 23 rd Ed., 2017,4500 NH ₃ - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	35912	36114	35864	36108	36086	36474	35864	36410	35108	35686	36640	37400	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	36.07	28.06	16.62	12.47	32.13	24.1	32.16	24.12	24.19	24.12	28.2	12.08	APHA 23 rd Ed.,2017, 5220-B

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

SR. NO.	TEST PARAMETERS	UNIT	Oct-22		Nov-22		Dec-22		Jan-23		Feb-23		Mar-23		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.4	2.36	2.51	3.25	3.21	2.56	3.15	2.51	2.8	3.14	2.45	3.24	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m³	1.02	1.23	0.98	2.1	1.3	1.65	1.11	1.6	1.23	2.11	0.96	1.36	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10³/L	90	78	140	87	152	120	162	118	128	129	142	142	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	<i>Odentella</i>	<i>Diploneis</i>	<i>Nitzschia</i>	<i>Navicula</i>	<i>Pinnularia</i>	<i>Grammatophora</i>	<i>Pinnularia</i>	<i>Grammatophora</i>	<i>Diploneis</i>	<i>Rhizosolenia</i>	<i>Navicula</i>	<i>Nitzschia</i>	APHA (23rd Ed. 2017)10200 F
			<i>Cyclotella</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Cyclotella</i>	<i>Surirella</i>	<i>Rhizosolenia</i>	<i>Surirella</i>	<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Cyclotella</i>	<i>Pinnularia</i>	
			<i>Pinnularia</i>	<i>Nitzschia</i>	<i>Odontella</i>	<i>Pinnularia</i>	<i>Odentella</i>	<i>Nitzschia</i>	<i>Odontella</i>	<i>Nitzschia</i>	<i>Nitzschia</i>	<i>Thalassiothrix</i>	<i>Pinnularia</i>	<i>Odontella</i>	
			<i>Biddulphia</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Skeletonema</i>	<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Cyclotella</i>	<i>Grammatophora</i>	<i>Skeletonema</i>	<i>Dinophysis</i>	
			<i>Thalassiosira</i>	<i>Pleurosigma</i>	<i>Surirella</i>	<i>Thalassiosira</i>	<i>Melosira</i>	<i>Pleurosigma</i>	<i>Melosira</i>	<i>Pleurosigma</i>	<i>Pleurosigma</i>	<i>Ceratium</i>	<i>Thalassiosira</i>	<i>Surirella</i>	

B									
Zooplankton									
1	Abundance(Population)	noX103/ 100 m3	52	69	87	92	69	53	APHA (23rd Ed. 2017)10200 G
2	Name of Group Number and name of group species of each group		<i>Copepods nauplii</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Copepods nauplii</i>	
			<i>Crustacean Larvae</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Crustacean Larvae</i>	
			<i>Oikoplura</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Oikoplura</i>	
			<i>Bivalve Larvae</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Bivalve Larvae</i>	
			<i>Oikoplura</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Oikoplura</i>	
3	Total Biomass	ml/100 m³	15.36	14.35	15.74	15.74	16.32	16.33	

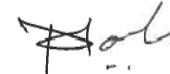
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RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-22		Nov-22		Dec-22		Jan-23		Feb-23		Mar-23		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C	Microbiological														
1	Total Bacterial Count	CFU/ml	210		140		152		150		168		148		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	32		58		44		42		40		41		APHA 23 rd Ed.2017,9222-B
3	Ecoli	/100ml	14		32		23		22		20		35		IS :15185:2016
4	Enterococcus	/100ml	12		20		12		14		11		20		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 23 rd Ed.2017,9260-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	OCTOBER-2022 SEDIMENT	NOVEMBER-2022 SEDIMENT	DECEMBER-2022 SEDIMENT	JANUARY-2023 SEDIMENT	FEBRUARY-2023 SEDIMENT	MARCH-2023 SEDIMENT	TEST METHOD
1.	Organic Matter	%	0.59	0.62	0.52	0.48	0.52	0.56	IS: 2720 (Part 22):1972 RA.2015, Amds.1
2.	Phosphorus as P	µg/g	534.2	542.4	590.2	520.4	562.2	548.6	IS: 10158 :1982, RA.2009 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 23rd ED,2017,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.52	3.64	3.82	3.88	3.97	3.86	IS3025(Part 55)2003
5.2	Total Chromium as Cr+3	µg/g	102.4	111.2	118.4	126.7	142.2	124.2	EPA 3050B/7190 (Extraction &Analytical Method): 1986
5.3	Manganese as Mn	µg/g	592.5	582.4	610.2	580.4	590.2	602.2	EPA 3050B/7460 (Extraction &Analytical Method): 1986
5.4	Iron as Fe	%	4.21	4.26	4.31	4.21	3.88	3.94	EPA 3050B/7380 (Extraction &Analytical Method): 1986
5.5	Nickel as Ni	µg/g	54.23	55.34	49.82	44.46	52.24	52.22	EPA 3050B/7520 (Extraction &Analytical Method): 1986
5.6	Copper as Cu	µg/g	42.59	44.64	38.25	42.42	40.15	44.36	EPA 3050B /7210 (Extraction &Analytical Method):1986
5.7	Zinc as Zn	µg/g	88.54	84.26	94.21	90.2	82.9	104.2	EPA 3050B/7950 (Extraction &Analytical Method): 1986
5.8	Lead as Pb	µg/g	2.84	2.82	2.54	2.62	2.86	2.36	EPA 3050B /7420 (Extraction &Analytical Method):1986
5.9	Mercury as Hg	µg/g	BDL	BDL	BDL	BDL	BDL	BDL	EPA 7471B (Extraction &Analytical Method) :2007

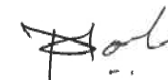
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RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022 SEDIMENT	NOVEMBER-2022 SEDIMENT	DECEMBER-2022 SEDIMENT	JANUARY-2023 SEDIMENT	FEBRUARY-2023 SEDIMENT	MARCH-2023 SEDIMENT	TEST METHOD
D	Benthic Organisms								
1	Macrobenthos	--	Isopods	Isopods	Amphipods	Amphipods	Amphipods	Isopods	APHA (23rd Ed. 2017)10500 C
			Polychates	Polychates	Sipunculids	Sipunculids	Sipunculids	Polychates	
			Sipunculids	Sipunculids	Isopods	Isopods	Isopods	Sipunculids	
			Amphipods	Amphipods	Gastropods	Gastropods	Gastropods	Amphipods	
2	MeioBenthos	--	Polychates	Polychates	Decapods Larvae	Decapods Larvae	Polychates	Polychates	
			Foraminiferan	Foraminiferan	Herpectacoids	Herpectacoids	Herpectacoids	Foraminiferan	
3	Population	no/m ²	312	300	245	242	263	236	



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 PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.18	8.11	8.16	8.04	8.21	8.09	8.18	8.11	8.22	8.14	8.06	7.72	IS 3025 (Part11)1983
2.	Temperature	°C	30.2	30	30.1	30	29.7	29.6	29.7	29.6	29.8	29.7	30	29.8	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	132	108	128	112	134	114	154	124	148	118	160	134	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3	BDL	3.1	BDL	3	BDL	3.1	BDL	3	BDL	2.8	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.12	5.92	6	5.8	5.9	5.8	6.1	5.89	6.19	5.99	5.93	5.73	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.34	35.92	36.14	36.58	35.98	36.51	35.46	36.24	35.52	36.14	36.18	36.9	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39) 1991, Amd. 2
8.	Nitrate as NO ₃	μmol/L	2.54	2.5	3.45	2.76	3.23	2.59	3.45	2.76	2.93	2.67	2.16	2.59	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.431	0.414	0.431	0.345	0.413	0.379	0.431	0.345	0.241	0.198	0.189	0.241	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.53	3.4	2.84	2.49	3.66	2.93	2.84	2.49	2.41	2.24	3.84	3.36	APHA 23 rd Ed., 2017,4500- NH3 B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.6	BDL	BDL	BDL	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.501	6.314	6.721	5.595	7.303	5.899	6.721	5.595	5.581	5.108	6.189	6.191	APHA 23 rd Ed., 2017,4500 NH3 - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	35844	36452	35746	36312	35988	36370	35280	35860	35188	35722	35940	36500	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	32.06	24.05	24.94	20.78	28.11	20.08	36.18	28.14	24.19	12.1	32.22	16.11	APHA 23 rd Ed.,2017, 5220-B

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.95	2.05	3.12	3.62	2.63	2.87	3.01	3.01	3.21	2.45	2.96	2.78	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m³	0.9	0.87	0.87	0.65	0.96	1.47	0.86	1.5	1.65	1.29	1.36	2.01	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10³/L	100	102	105	98	125	114	132	116	147	98	123	112	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	Diploneis	Pinnularia	Odontella	Surirella	Nitzschia	Coscinodiscus	Nitzschia	Coscinodiscus	Ceratium	Diploneis	Surirella	Odontella	APHA (23rd Ed. 2017)10200 F
			Rhizosolenia	Surirella	Rhizosolenia	Rhizosolenia	Pinnularia	Diploneis	Pinnularia	Diploneis	Coscinodiscus	Rhizosolenia	Rhizosolenia	Rhizosolenia	
			Nitzschia	Navicula	Coscinodiscus	Nitzschia	Odontella	Rhizosolenia	Odontella	Rhizosolenia	Odontella	Nitzschia	Nitzschia	Coscinodiscus	
			Cyclotella	Thalassiosira	Grammatophora	Thalassionema	Dinophysis	Dinophysis	Dinophysis	Dinophysis	Grammatophora	Thalassiothrix	Thalassionema	Grammatophora	
			Pleurosigma	Skeletonema	Thalassiosira	Pleurosigma	Surirella	Thalassionema	Surirella	Thalassionema	Melosira	Pleurosigma	Pleurosigma	Thalassiosira	

B			Zooplankton						APHA (23rd Ed. 2017)10200 G	
1	Abundance(Population)	noX103 / 100 m3	47	58	69	72	88	90		
2	Name of Group Number and name of group species of each group		Copepods	Decapoda	Decapoda	Decapoda	Decapoda	Decapoda		Copepods
			Oikoplura	Copepods	Copepods	Copepods	Copepods	Copepods		Oikoplura
			Crustacean Larvae	Crustacean Larvae	Crustacean Larvae	Crustacean Larvae	Crustacean Larvae	Crustacean Larvae		Crustacean Larvae
			Crustacean	Crustacean	Crustacean	Crustacean	Crustacean	Crustacean		Crustacean
		Bivalve Larvae	Oikoplura	Oikoplura	Oikoplura	Oikoplura	Oikoplura	Bivalve Larvae		
3	Total Biomass	ml/100 m³	14.89	15.98	17.69	17.69	18.52	17.44		

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MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to 17.03.2023)

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ISO 9001:2015 Certified Company

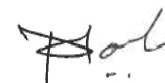
ISO 45001:2018 Certified Company

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C	Microbiological														
1	Total Bacterial Count	CFU/ml	200		200		220		218		236		230		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	44		44		68		65		37		44		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	22		22		41		42		29		31		IS :15185:2016
4	Enterococcus	/100ml	14		14		21		22		21		20		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 23 rd Ed.2017,9260-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	OCTOBER-2022	NOVEMBER-2022	DECEMBER-2022	JANUARY-2023	FEBRUARY-2023	MARCH-2023	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.53	0.58	0.51	0.46	0.51	0.62	IS: 2720 (Part 22):1972 RA.2015, Amds.1
2.	Phosphorus as P	µg/g	512.5	516.8	528.9	544.1	560.4	546.5	IS: 10158 :1982, RA.2009 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 23rd ED,2017,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.64	3.72	3.81	3.89	3.94	4.02	IS3025(Part 55)2003
5.2	Total Chromium as Cr+3	µg/g	102.6	111.8	124.2	134.2	138.6	144.2	EPA 3050B/7190 (Extraction &Analytical Method): 1986
5.3	Manganese as Mn	µg/g	582.4	574.6	602.1	624.5	629.3	594.4	EPA 3050B/7460 (Extraction &Analytical Method): 1986
5.4	Iron as Fe	%	3.74	3.82	3.91	3.94	3.96	4.08	EPA 3050B/7380 (Extraction &Analytical Method): 1986
5.5	Nickel as Ni	µg/g	48.9	52.2	48.62	44.52	46.44	42.35	EPA 3050B/7520 (Extraction &Analytical Method): 1986
5.6	Copper as Cu	µg/g	44.58	46.58	41.28	42.22	42.9	44.05	EPA 3050B /7210 (Extraction &Analytical Method):1986
5.7	Zinc as Zn	µg/g	84.25	84.11	90.8	88.46	86.5	88.29	EPA 3050B/7950 (Extraction &Analytical Method): 1986
5.8	Lead as Pb	µg/g	2.26	2.34	2.29	2.24	2.31	2.38	EPA 3050B /7420 (Extraction &Analytical Method):1986
5.9	Mercury as Hg	µg/g	BDL	BDL	BDL	BDL	BDL	BDL	EPA 7471B (Extraction &Analytical Method) :2007

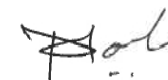
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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022	NOVEMBER-2022	DECEMBER-2022	JANUARY-2023	FEBRUARY-2023	MARCH-2023	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	<i>Amphipods</i>	<i>Foraminiferan</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Foraminiferan</i>	APHA (23rd Ed. 2017)10500 C
			<i>Decapod Larvae</i>	<i>Decapods Larvae</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Decapods Larvae</i>	
			<i>Isopods</i>	<i>Amphipods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Amphipods</i>	
			<i>Gastropods</i>	<i>Polychates</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Polychates</i>	
2	MeioBenthos	--	<i>Foraminiferan</i>	<i>Turbellarians</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Foraminiferan</i>	<i>Turbellarians</i>	
			<i>Herpectacoids</i>	<i>Foraminiferan</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Foraminiferan</i>	
3	Population	no/m ²	290	325	312	318	300	286	



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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.22	8.06	8.19	8.11	8.14	7.98	8.19	8.06	8.16	8.02	7.96	7.68	IS 3025 (Part11)1983
2.	Temperature	°C	30.2	30.1	30	29.9	29.8	29.7	29.7	29.6	29.8	29.7	30	29.9	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	94	78	86	80	98	82	118	94	104	94	128	114	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.6	BDL	2.9	BDL	2.8	BDL	2.9	BDL	2.9	BDL	2.8	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.02	5.81	6	5.9	5.9	5.7	5.99	5.79	6.09	5.88	5.83	5.63	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.39	36.05	35.4	36.14	35.64	36.22	35.72	35.98	35.46	36.11	36.23	37.02	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39) 1991, Amd. 2
8.	Nitrate as NO ₃	μmol/L	2.41	2.37	2.76	2.59	2.49	2.15	2.84	2.59	2.67	2.76	2.93	2.76	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.465	0.448	0.379	0.276	0.259	0.13	0.474	0.31	0.198	0.379	0.3	0.235	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.45	3.4	2.32	1.56	2.28	1.81	2.41	1.89	2.24	2.32	3.1	2.93	APHA 23 rd Ed., 2017,4500- NH3 B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.65	0.47	BDL	BDL	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.325	6.218	5.459	4.426	5.029	4.09	5.724	4.79	5.108	5.459	6.33	5.925	APHA 23 rd Ed., 2017,4500 NH3 - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	36110	36714	35890	36670	36112	36642	35240	35940	35108	35686	35860	36480	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	28.06	20.04	24.94	16.62	32.13	24.1	32.16	24.12	24.19	24.12	28.2	16.11	APHA 23 rd Ed.,2017, 5220-B

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.49	3.11	3.1	3.25	2.87	3.21	3.11	3.2	2.95	2.58	3.11	3.65	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m³	1.2	2.1	1.41	1.87	1.45	1.84	1.34	1.9	1.56	1.36	2.31	2.03	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10³/L	102	120	112	109	135	152	140	160	138	143	178	148	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	Ceratium	Coscinodiscus	Pinnularia	Coscinodiscus	Odontella	Rhizosolenia	Odontella	Rhizosolenia	Odontella	Surirella	Coscinodiscus	Pinnularia	APHA (23rd Ed. 2017)10200 F
			Diploneis	Thalassionema	Biddulphia	Thalassionema	Rhizosolenia	Pinnularia	Rhizosolenia	Pinnularia	Rhizosolenia	Rhizosolenia	Thalassionema	Biddulphia	
			Odontella	Rhizosolenia	Navicula	Rhizosolenia	Coscinodiscus	Thalassiothrix	Coscinodiscus	Thalassiothrix	Coscinodiscus	Nitzschia	Rhizosolenia	Navicula	
			Grammatophora	Dinophysis	Thallassiosira	Dinophysis	Grammatophora	Grammatophora	Grammatophora	Grammatophora	Grammatophora	Thalassionema	Dinophysis	Thallassiosira	
			Melosira	Skeletonema	Skeletonema	Skeletonema	Thallassiosira	Ceratium	Thallassiosira	Ceratium	Thallassiosira	Pleurosigma	Skeletonema	Skeletonema	

B			Zooplankton												
1	Abundance (Population)	noX10 ³ / 100 m ³	46	50	48	51	59	60	APHA (23rd Ed. 2017)10200 G						
2	Name of Group Number and name of group species of each group		<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Oikoplura</i>							
			<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<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>Crustacean Larvae</i>							
			<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</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/100 m ³	17.54	16.74	15.89	15.89	14.23	15.63							

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Laboratory under the EPA-1986 (12.01.2020 to 17.03.2023)

QCI-NABET Accredited EIA
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GPCB Recognized Environmental
Auditor (Schedule-II)

ISO 9001:2015
Certified Company

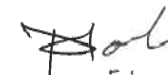
ISO 45001:2018
Certified Company

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	186		186		124		126		180		186		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	50		49		36		40		60		43		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	32		30		25		30		38		26		IS:15185:2016
4	Enterococcus	/100ml	20		25		15		18		23		17		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 23 rd Ed.2017,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022 SEDIMENT	NOVEMBER-2022 SEDIMENT	DECEMBER-2022 SEDIMENT	JANUARY-2023 SEDIMENT	FEBRUARY-2023 SEDIMENT	MARCH-2023 SEDIMENT	TEST METHOD
1.	Organic Matter	%	0.64	0.62	0.54	0.58	0.52	0.58	IS: 2720 (Part 22):1972 RA.2015, Amds.1
2.	Phosphorus as P	µg/g	562.4	542.2	569.8	542.2	562.2	574.4	IS: 10158 :1982, RA.2009 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 23rd ED,2017,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.72	3.78	3.82	3.91	3.97	3.78	IS3025(Part 55)2003
5.2	Total Chromium as Cr+3	µg/g	124.6	132.2	124.6	134.2	142.2	154.6	EPA 3050B/7190 (Extraction &Analytical Method): 1986
5.3	Manganese as Mn	µg/g	542.2	564.2	576.2	586.2	590.2	602.8	EPA 3050B/7460 (Extraction &Analytical Method): 1986
5.4	Iron as Fe	%	3.66	3.74	3.79	3.84	3.88	4.11	EPA 3050B/7380 (Extraction &Analytical Method): 1986
5.5	Nickel as Ni	µg/g	48.25	51.32	48.64	49.24	52.24	55.35	EPA 3050B/7520 (Extraction &Analytical Method): 1986
5.6	Copper as Cu	µg/g	38.69	40.25	38.42	39.25	40.15	38.24	EPA 3050B /7210 (Extraction &Analytical Method):1986
5.7	Zinc as Zn	µg/g	74.28	72.24	79.81	80.4	82.9	80.38	EPA 3050B/7950 (Extraction &Analytical Method): 1986
5.8	Lead as Pb	µg/g	3.12	2.98	2.84	2.81	2.86	2.75	EPA 3050B /7420 (Extraction &Analytical Method):1986
5.9	Mercury as Hg	µg/g	BDL	BDL	BDL	BDL	BDL	BDL	EPA 7471B (Extraction &Analytical Method) :2007

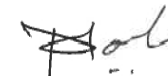
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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHASLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022 SEDIMENT	NOVEMBER-2022 SEDIMENT	DECEMBER-2022 SEDIMENT	JANUARY-2023 SEDIMENT	FEBRUARY-2023 SEDIMENT	MARCH-2023 SEDIMENT	TEST METHOD
D	Benthic Organisms								
1	Macrobenthos	--	Decapods Larvae	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Isopods</i>	<i>Amphipods</i>	APHA (23rd Ed. 2017)10500 C
			<i>Isopods</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Sipunculids</i>	<i>Decapod Larvae</i>	
			<i>Amphipods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Isopods</i>	
			<i>Sipunculids</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Gastropods</i>	
2	MeioBenthos	--	<i>Foraminiferan</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Foraminiferan</i>	
			<i>Herpectacoids</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Herpectacoids</i>	
3	Population	no/m ²	326	365	326	322	268	263	



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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.21	8.06	8.18	8.09	8.17	8.05	8.14	8.02	8.19	8.05	8.24	8.01	IS 3025 (Part11)1983
2.	Temperature	°C	30.2	30	29.9	29.8	29.7	29.6	29.6	29.5	29.8	29.7	30	29.8	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	134	114	118	102	126	112	160	114	142	108	118	110	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.5	BDL	2.8	BDL	3.1	BDL	3.3	BDL	3.1	BDL	3.2	BDL	IS 3025(Part 4)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.32	6.22	6.1	6	6	5.8	6.3	6.2	6.3	5.88	6.13	6.03	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.48	36.11	35.94	36.28	36.11	36.37	35.74	36.12	35.81	36.17	36.24	36.68	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39) 1991, Amd.2
8.	Nitrate as NO ₃	μmol/L	2.72	2.67	3.66	3.44	2.72	2.67	2.16	2.59	2.59	2.32	3.23	2.8	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.5	0.483	0.413	0.379	0.5	0.483	0.189	0.241	0.56	0.431	0.379	0.344	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.36	3.32	3.96	3.62	3.36	3.32	2.62	3.84	2.49	2.24	3.96	3.36	APHA 23 rd Ed., 2017,4500- NH3 B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	0.82	BDL	1.38	1.25	0.47	BDL	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.58	6.473	8.033	7.439	6.58	6.473	4.969	6.671	5.64	4.991	7.569	6.504	APHA 23 rd Ed., 2017,4500 NH3 - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	36118	35624	35812	36214	35864	36354	35120	35862	35244	36124	36350	37110	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	24.05	32.06	20.78	12.47	20.08	8.03	28.14	20.1	20.16	16.13	32.22	20.14	APHA 23 rd Ed.,2017, 5220-B

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.69	2.78	3.65	2.78	3.2	3.11	2.98	2.87	3.01	2.96	2.58	2.48	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytn	mg/m³	1.32	0.69	1.25	0.89	0.99	1.56	0.87	1.45	1.23	1.84	1.47	1.86	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10³/L	111	110	125	128	127	149	124	152	146	169	123	176	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	<i>Pinnularia</i>	<i>Pleurosigma</i>	<i>Coscinodiscus</i>	<i>Ceratium</i>	<i>Coscinodiscus</i>	<i>Diploneis</i>	<i>Coscinodiscus</i>	<i>Diploneis</i>	<i>Coscinodiscus</i>	<i>Coscinodiscus</i>	<i>Ceratium</i>	<i>Coscinodiscus</i>	APHA (23rd Ed. 2017)10200 F
			<i>Thalassionema</i>	<i>Cyclotella</i>	<i>Diploneis</i>	<i>Diploneis</i>	<i>Diploneis</i>	<i>Rhizosolenia</i>	<i>Diploneis</i>	<i>Rhizosolenia</i>	<i>Diploneis</i>	<i>Thalassionema</i>	<i>Diploneis</i>	<i>Thalassionema</i>	
			<i>Navicula</i>	<i>Biddulphia</i>	<i>Rhizosolenia</i>	<i>Odontella</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	<i>Odontella</i>	<i>Rhizosolenia</i>	
			<i>Thalassiosira</i>	<i>Skeletonema</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	
			<i>Skeletonema</i>	<i>Thalassiosira</i>	<i>Thalassionema</i>	<i>Melosira</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Skeletonema</i>	<i>Melosira</i>	<i>Skeletonema</i>	

B			Zooplankton												
1	Abundance(Population)	noX103 / 100 m ³	39	60	74	75	66	74							APHA (23rd Ed. 2017)10200 G
2	Name of Group Number and name of group species of each group		<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>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>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>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	
			<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	
			<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</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>	<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/100 m ³	15.63	15.96	15.64	15.64	16.52	15.89							

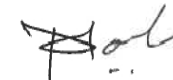
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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	194		194		222		220		250		262		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	30		30		40		38		42		52		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	22		22		31		33		22		36		IS :15185:2016
4	Enterococcus	/100ml	19		19		22		30		10		26		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 23 rd Ed.2017,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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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	OCTOBER-2022	NOVEMBER-2022	DECEMBER-2022	JANUARY-2023	FEBRUARY-2023	MARCH-2023	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.86	0.74	0.62	0.59	0.54	0.57	IS: 2720 (Part 22):1972 RA.2015, Amds.1
2.	Phosphorus as P	µg/g	580.4	538.4	546.7	534	552.4	562.4	IS: 10158 :1982, RA.2009 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 23rd ED,2017,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.52	3.62	3.69	3.62	3.74	3.92	IS3025(Part 55)2003
5.2	Total Chromium as Cr+3	µg/g	110.4	114.5	118.6	104	112	124.2	EPA 3050B/7190 (Extraction &Analytical Method): 1986
5.3	Manganese as Mn	µg/g	539.4	540.9	551.2	548.5	550.4	562.8	EPA 3050B/7460 (Extraction &Analytical Method): 1986
5.4	Iron as Fe	%	4.11	4.06	4.11	4.06	4.09	3.89	EPA 3050B/7380 (Extraction &Analytical Method): 1986
5.5	Nickel as Ni	µg/g	38.64	41.11	46.21	44.02	44.52	42.15	EPA 3050B/7520 (Extraction &Analytical Method): 1986
5.6	Copper as Cu	µg/g	42.61	44.25	46.33	48.26	51.24	48.65	EPA 3050B /7210 (Extraction &Analytical Method):1986
5.7	Zinc as Zn	µg/g	84.21	81.36	89.45	88.05	82.54	80.28	EPA 3050B/7950 (Extraction &Analytical Method): 1986
5.8	Lead as Pb	µg/g	2.56	2.46	2.42	2.51	2.42	2.28	EPA 3050B /7420 (Extraction &Analytical Method):1986
5.9	Mercury as Hg	µg/g	BDL	BDL	BDL	BDL	BDL	BDL	EPA 7471B (Extraction &Analytical Method) :2007

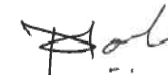
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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022 SEDIMENT	NOVEMBER-2022 SEDIMENT	DECEMBER-2022 SEDIMENT	JANUARY-2023 SEDIMENT	FEBRUARY-2023 SEDIMENT	MARCH-2023 SEDIMENT	TEST METHOD
D			Benthic Organisms						
1	Macrobenthos	--	<i>Polychates</i>	<i>Polychates</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	<i>Foraminiferan</i>	Decapods Larvae	APHA (23rd Ed. 2017)10500 C
			<i>Gastropods</i>	<i>Gastropods</i>	<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>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>Herpectacoids</i>	Decapods Larvae	<i>Foraminiferan</i>	
			<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Herpectacoids</i>	
3	Population	no/m ²	300	328	286	301	295	325	



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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.19	8.09	8.21	8.11	8.19	8.1	8.15	8.02	8.21	7.98	8.24	7.88	IS 3025 (Part11)1983
2.	Temperature	°C	30.3	30.2	30	29.9	29.8	29.7	29.7	29.6	29.8	29.7	30	29.8	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	144	126	134	122	128	112	146	116	132	118	102	92	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.8	BDL	2.7	BDL	2.9	BDL	3.4	BDL	2.8	BDL	2.6	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.32	6.12	6.2	6.1	6.1	6	6.3	6.1	6.3	6.19	6.13	5.93	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.49	35.98	35.64	36.24	35.82	36.34	35.44	35.89	35.64	36.08	36.11	36.72	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39)1991, Amd.2
8.	Nitrate as NO ₃	μmol/L	2.8	2.67	2.93	2.37	2.8	2.59	2.59	3.66	2.76	2.59	2.84	2.76	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.414	0.379	0.241	0.198	0.362	0.345	0.259	0.328	0.379	0.276	0.474	0.431	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.28	3.23	3.32	3.1	2.8	2.5	3.84	3.79	2.32	1.56	2.93	2.76	APHA 23 rd Ed., 2017,4500- NH3 B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.6	BDL	0.78	0.69	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.494	6.279	6.491	5.668	5.962	5.435	6.689	7.778	5.459	4.426	6.244	5.951	APHA 23 rd Ed., 2017,4500 NH3 - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	35980	36588	35868	36452	36002	36444	35266	36020	35348	36244	35800	36520	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	20.04	8.02	20.78	8.31	16.06	12.05	24.12	12.06	20.16	16.13	24.17	20.14	APHA 23 rd Ed.,2017, 5220-B

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.14	2.87	2.69	2.87	3.11	2.87	2.87	2.65	2.58	3.23	3.11	2.68	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m³	0.85	0.85	1.11	0.36	2.22	1.33	1.89	1.32	1.59	2.56	1.36	2.56	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10³/L	101	96	130	86	175	123	167	119	143	178	132	146	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	Pinnularia	Grammatophora	Pinnularia	Ceratium	Navicula	Nitzschia	Navicula	Nitzschia	Ceratium	Nitzschia	Ceratium	Pleurosigma	APHA (23rd Ed. 2017)10200 F
			Biddulphia	Rhizosolenia	Biddulphia	Pinnularia	Fragillaria	Grammatophora	Fragillaria	Grammatophora	Diploneis	Grammatophora	Diploneis	Cyclotella	
			Navicula	Nitzschia	Navicula	Odontella	Thalassiothrix	Diploneis	Thalassiothrix	Diploneis	Odontella	Diploneis	Odontella	Biddulphia	
			Thalassiosira	Thalassiosira	Thalassiosira	Thalassiothrix	Grammatophora	Thalassiothrix	Grammatophora	Thalassiothrix	Grammatophora	Thalassiothrix	Grammatophora	Skeletonema	
			Skeletonema	Pleurosigma	Skeletonema	Thalassiosira	Surirella	Pleurosigma	Surirella	Pleurosigma	Melosira	Pleurosigma	Melosira	Thalassiosira	

B			Zooplankton												
1	Abundance (Population)	noX10 ³ / 100 m ³	63	48	50	54	48	55							APHA (23rd Ed. 2017)10200 G
2	Name of Group Number and name of group species of each group		<i>Copepods nauplii</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>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Decapoda</i>							
			<i>Crustacean Larvae</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>							
			<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>							
3	Total Biomass	ml/100 m ³	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>							APHA (23rd Ed. 2017)10200 G
			17.54	16.35	14.88	14.88	15.68	16.23							

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

MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to 17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

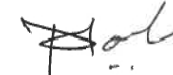
ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	190		216		256		254		178		196		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	36		30		65		70		56		63		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	27		17		41		45		49		42		IS:15185:2016
4	Enterococcus	/100ml	15		10		19		21		29		22		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 23 rd Ed.2017,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022 SEDIMENT	NOVEMBER-2022 SEDIMENT	DECEMBER-2022 SEDIMENT	JANUARY-2023 SEDIMENT	FEBRUARY-2023 SEDIMENT	MARCH-2023 SEDIMENT	TEST METHOD
1.	Organic Matter	%	0.56	0.52	0.48	0.41	0.46	0.54	IS: 2720 (Part 22):1972 RA.2015, Amds.1
2.	Phosphorus as P	µg/g	562.8	544.2	536.6	505.4	510.2	521.4	IS: 10158 :1982, RA.2009 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 23rd ED,2017,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.68	3.71	3.78	3.81	3.89	3.96	IS3025(Part 55)2003
5.2	Total Chromium as Cr+3	µg/g	68.4	69.5	74.8	78.4	80.2	84.4	EPA 3050B/7190 (Extraction &Analytical Method): 1986
5.3	Manganese as Mn	µg/g	448.6	456.6	470.4	501.2	520.2	522.7	EPA 3050B/7460 (Extraction &Analytical Method): 1986
5.4	Iron as Fe	%	3.54	3.63	3.75	3.81	3.88	4.06	EPA 3050B/7380 (Extraction &Analytical Method): 1986
5.5	Nickel as Ni	µg/g	44.67	45.58	42.64	44.25	45.28	41.39	EPA 3050B/7520 (Extraction &Analytical Method): 1986
5.6	Copper as Cu	µg/g	34.59	35.12	38.42	40.14	42.16	46.36	EPA 3050B /7210 (Extraction &Analytical Method):1986
5.7	Zinc as Zn	µg/g	84.56	85.24	89.42	80.28	82.24	80.33	EPA 3050B/7950 (Extraction &Analytical Method): 1986
5.8	Lead as Pb	µg/g	2.54	2.62	2.56	2.64	2.53	2.46	EPA 3050B /7420 (Extraction &Analytical Method):1986
5.9	Mercury as Hg	µg/g	BDL	BDL	BDL	BDL	BDL	BDL	EPA 7471B (Extraction &Analytical Method) :2007

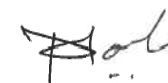
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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022 SEDIMENT	NOVEMBER-2022 SEDIMENT	DECEMBER-2022 SEDIMENT	JANUARY-2023 SEDIMENT	FEBRUARY-2023 SEDIMENT	MARCH-2023 SEDIMENT	TEST METHOD
D			Benthic Organisms						
1	Macrobenthos	--	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Polychates</i>	APHA (23rd Ed. 2017)10500 C
			<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Sipunculids</i>	<i>Gastropods</i>	
			<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	
			<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Gastropods</i>	<i>Sipunculids</i>	
2	MeioBenthos	--	Decapods Larvae	Decapods Larvae	Decapods Larvae	Decapods Larvae	Decapods Larvae	<i>Herpectacoids</i>	
			<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Polychates</i>	
3	Population	no/m ²	328	360	360	362	301	365	



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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.24	8.08	8.16	8.11	8.19	8.06	8.14	7.94	8.18	8.06	8.14	7.74	IS 3025 (Part11)1983
2.	Temperature	°C	30.2	30.1	29.9	29.8	29.7	29.6	29.6	29.5	29.7	29.6	30	29.8	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	148	128	134	106	130	112	124	108	144	118	162	148	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL	2.8	BDL	2.9	BDL	3.2	BDL	3.1	BDL	2.4	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.22	6.02	6	5.9	5.9	5.7	6.2	5.99	6.19	6.09	6.03	5.83	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.32	36.04	35.84	36.19	35.76	36.21	35.34	35.56	35.38	35.97	35.94	36.51	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39)1991, Amd. 2
8.	Nitrate as NO ₃	μmol/L	2.72	2.67	3.45	3.02	2.76	2.59	3.23	2.37	3.44	2.59	2.76	2.32	APHA 23 rd Ed., 2017,4500 NO ₃ -B
9.	Nitrite as NO ₂	μmol/L	0.379	0.362	0.302	0.276	0.379	0.276	0.345	0.302	0.344	0.293	0.379	0.431	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.45	3.36	3.19	2.84	2.32	1.56	3.62	3.28	3.83	2.75	3.19	3.02	APHA 23 rd Ed., 2017,4500- NH ₃ B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	0.52	BDL	0.86	0.78	1.29	1.12	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.549	6.392	6.942	6.136	5.459	4.426	7.195	5.952	7.614	5.633	6.329	5.771	APHA 23 rd Ed., 2017,4500 NH ₃ - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	36110	35614	35718	36214	35894	36338	36288	36582	36324	36842	37210	37840	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	16.03	12.02	37.4	29.09	24.1	20.08	20.1	16.08	32.26	20.16	36.25	24.17	APHA 23 rd Ed.,2017, 5220-B

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.87	2.89	2.87	3.69	3.25	3.25	3.24	2.8	3.11	3.68	2.78	2.58	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m³	0.78	1.95	0.74	2.48	1.56	1.75	1.45	1.8	2.13	2.21	1.58	2.36	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10³/L	90	125	121	142	147	168	140	155	176	93	125	100	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	Coscinodiscus	Coscinodiscus	Coscinodiscus	Surirella	Ceratium	Grammatophora	Ceratium	Grammatophora	Thalassiothrix	Odontella	Grammatophora	Grammatophora	APHA (23rd Ed. 2017)10200 F
			Diploneis	Diploneis	Diploneis	Thalassiothrix	Diploneis	Melosira	Diploneis	Melosira	Surirella	Rhizosolenia	Rhizosolenia	Rhizosolenia	
			Rhizosolenia	Rhizosolenia	Rhizosolenia	Navicula	Odontella	Odontella	Odontella	Odontella	Navicula	Coscinodiscus	Nitzschia	Nitzschia	
			Dinophysis	Dinophysis	Dinophysis	Skeletonema	Grammatophora	Pinnularia	Grammatophora	Pinnularia	Thalassiosira	Grammatophora	Thalassiosira	Thalassiosira	
			Thalassionema	Thalassionema	Thalassionema	Thalassiosira	Melosira	Pleurosigma	Melosira	Pleurosigma	Skeletonema	Thalassiosira	Pleurosigma	Pleurosigma	

B			Zooplankton												
1	Abundance (Population)	noX10 ³ / 100 m ³	50	38	44	52	57	59	APHA (23rd Ed. 2017)10200 G						
2	Name of Group Number and name of group species of each group		<i>Egg(Fish and Shrimps)</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Copepods nauplii</i>	<i>Crustacean Larvae</i>							
			<i>Oikoplura</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Egg(Fish and Shrimps)</i>	<i>Crustacean Larvae</i>	<i>Egg(Fish and Shrimps)</i>							
			<i>Copepods nauplii</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Oikoplura</i>	<i>Copepods</i>							
			<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Bivalve Larvae</i>	<i>Crustacean</i>							
			<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Oikoplura</i>	<i>Bivalve Larvae</i>							
3	Total Biomass	ml/100 m ³	15.78	15.28	16.89	16.89	15.55	17.23							

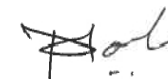
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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	250		184		242		240		290		244		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	36		33		36		40		55		36		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	29		29		29		31		41		25		IS :15185:2016
4	Enterococcus	/100ml	18		19		21		22		32		16		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 23 rd Ed.2017,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



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Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.18	7.98	8.22	8.12	8.18	8.07	8.21	8.12	8.19	8.11	8.28	8.04	IS 3025 (Part11)1983
2.	Temperature	°C	30.2	30.1	30	29.9	29.6	29.5	29.5	29.4	29.8	29.7	30	29.8	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	118	104	124	112	130	116	152	114	146	124	128	120	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL	3	BDL	2.8	BDL	3.1	BDL	2.9	BDL	2.8	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.12	5.92	5.8	5.7	5.9	5.7	6.1	5.89	6.09	5.99	5.93	5.73	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.64	36.12	35.61	36.24	36.82	36.19	36.12	36.32	35.86	36.17	36.18	36.74	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39) 1991, Amd. 2
8.	Nitrate as NO ₃	µmol/L	2.54	2.5	2.49	2.32	2.8	2.37	2.33	2.24	3.45	2.8	2.84	2.59	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	µmol/L	0.431	0.414	0.259	0.215	0.259	0.189	0.379	0.362	0.345	0.276	0.56	0.517	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	µmol/L	3.1	3.02	2.28	2.16	4.05	3.83	3.4	3.36	3.28	3.1	3.36	3.1	APHA 23 rd Ed., 2017,4500- NH ₃ B
11.	Phosphates as PO ₄	µmol/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.65	BDL	BDL	BDL	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	µmol/L	6.071	5.934	5.029	4.695	7.109	6.389	6.109	5.962	7.075	6.176	6.76	6.207	APHA 23 rd Ed., 2017,4500 NH ₃ - B
13.	Petroleum Hydrocarbon	µg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	36218	36684	36188	36522	36124	36514	35620	36080	35760	36240	36300	37050	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	24.05	20.04	33.25	24.94	24.1	16.06	28.14	24.12	28.22	24.19	32.22	28.2	APHA 23 rd Ed.,2017, 5220-B

Continue...

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	2.36	2.36	3.25	2.14	2.96	2.77	3.11	2.78	2.65	2.87	2.45	3.14	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m ³	1.86	0.75	0.95	0.89	1.11	1.28	0.98	1.32	1.12	1.66	1.69	2.13	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10 ³ /L	120	142	135	128	163	86	170	95	162	120	122	175	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	<i>Grammatophora</i>	<i>Rhizosolenia</i>	<i>Thalassiothrix</i>	<i>Rhizosolenia</i>	<i>Coscinodiscus</i>	<i>Skeletonema</i>	<i>Coscinodiscus</i>	<i>Skeletonema</i>	<i>Coscinodiscus</i>	<i>Dinophysis</i>	<i>Coscinodiscus</i>	<i>Coscinodiscus</i>	APHA (23rd Ed. 2017)10200 F
			<i>Rhizosolenia</i>	<i>Pinnularia</i>	<i>Surirella</i>	<i>Pinnularia</i>	<i>Diploneis</i>	<i>Grammatophora</i>	<i>Diploneis</i>	<i>Grammatophora</i>	<i>Diploneis</i>	<i>Pinnularia</i>	<i>Diploneis</i>	<i>Diploneis</i>	
			<i>Nitzschia</i>	<i>Thalassiothrix</i>	<i>Navicula</i>	<i>Thalassiothrix</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Nitzschia</i>	<i>Rhizosolenia</i>	<i>Thalassiothrix</i>	<i>Rhizosolenia</i>	<i>Rhizosolenia</i>	
			<i>Thalassionema</i>	<i>Grammatophora</i>	<i>Thalassiosira</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Thalassiothrix</i>	<i>Dinophysis</i>	<i>Grammatophora</i>	<i>Dinophysis</i>	<i>Dinophysis</i>	
			<i>Pleurosigma</i>	<i>Ceratium</i>	<i>Skeletonema</i>	<i>Ceratium</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Pleurosigma</i>	<i>Thalassionema</i>	<i>Ceratium</i>	<i>Thalassionema</i>	<i>Thalassionema</i>	

B			Zooplankton												
1	Abundance (Population)	noX10 ³ / 100 m ³	45	56	61	70	52	50	APHA (23rd Ed. 2017)10200 G						
2	Name of Group Number and name of group species of each group		<i>Crustacean</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods nauplii</i>	<i>Copepods</i>	<i>Copepods</i>							
			<i>Oikoplura</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Copepods</i>	<i>Oikoplura</i>	<i>Oikoplura</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>Oikoplura</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Crustacean</i>	<i>Crustacean</i>							
			<i>Bivalve Larvae</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>							
3	Total Biomass	ml/100 m ³	17.21	16.98	15.48	15.6	16.24	17.42							

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ISO 9001:2015 Certified Company

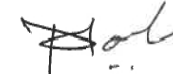
ISO 45001:2018 Certified Company

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	270		128		284		284		164		256		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	40		24		41		42		35		41		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	33		12		33		32		28		31		IS:15185:2016
4	Enterococcus	/100ml	20		8		16		18		11		23		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 23 rd Ed.2017,9260-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	OCTOBER-2022	NOVEMBER-2022	DECEMBER-2022	JANUARY-2023	FEBRUARY-2023	MARCH-2023	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.62	0.59	0.51	0.43	0.48	0.56	IS: 2720 (Part 22):1972 RA.2015, Amds.1
2.	Phosphorus as P	µg/g	541.2	525.2	532.4	506.4	514.2	523.6	IS: 10158 :1982, RA.2009 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 23rd ED,2017,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.49	3.55	3.64	3.71	3.46	3.62	IS3025(Part 55)2003
5.2	Total Chromium as Cr+3	µg/g	74.2	78.5	86.5	88.2	86.3	89.6	EPA 3050B/7190 (Extraction &Analytical Method): 1986
5.3	Manganese as Mn	µg/g	524.64	534.4	551.2	542.4	548.3	555.8	EPA 3050B/7460 (Extraction &Analytical Method): 1986
5.4	Iron as Fe	%	3.58	3.62	3.71	3.76	3.81	3.96	EPA 3050B/7380 (Extraction &Analytical Method): 1986
5.5	Nickel as Ni	µg/g	36.21	36.28	38.26	38.88	39.42	42.21	EPA 3050B/7520 (Extraction &Analytical Method): 1986
5.6	Copper as Cu	µg/g	28.64	29.22	34.21	35.06	36.28	37.21	EPA 3050B /7210 (Extraction &Analytical Method):1986
5.7	Zinc as Zn	µg/g	82.48	84.12	91.24	92.12	91.8	98.1	EPA 3050B/7950 (Extraction &Analytical Method): 1986
5.8	Lead as Pb	µg/g	3.11	2.86	2.81	2.74	2.46	2.52	EPA 3050B /7420 (Extraction &Analytical Method):1986
5.9	Mercury as Hg	µg/g	BDL	BDL	BDL	BDL	BDL	BDL	EPA 7471B (Extraction &Analytical Method) :2007

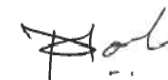
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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022	NOVEMBER-2022	DECEMBER-2022	JANUARY-2023	FEBRUARY-2023	MARCH-2023	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	<i>Gastropods</i>	<i>Gastropods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Isopods</i>	<i>Sipunculids</i>	APHA (23rd Ed. 2017)10500 C
			<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	<i>Polychates</i>	
			<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Sipunculids</i>	<i>Gastropods</i>	
			<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Amphipods</i>	<i>Isopods</i>	
2	MeioBenthos	--	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	<i>Herpectacoids</i>	
			<i>Foraminiferan</i>	<i>Foraminiferan</i>	Decapods Larvae	Decapods Larvae	Decapods Larvae	<i>Foraminiferan</i>	
3	Population	no/m ²	270	240	312	320	347	289	



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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.24	8.11	8.06	7.94	8.12	7.97	8.18	8.04	8.17	8.07	8.12	7.84	IS 3025 (Part11)1983
2.	Temperature	°C	30.3	30.2	29.9	29.8	29.7	29.6	29.6	29.5	29.8	29.7	29.9	28.8	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	134	116	128	106	134	118	124	108	111	102	118	94	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL	3.1	BDL	2.8	BDL	3.3	BDL	2.8	BDL	3	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.12	6.02	6	5.9	5.9	5.8	6.1	5.99	5.99	5.88	5.93	5.83	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.41	36.15	35.44	36.24	35.52	36.22	35.02	35.84	35.24	35.89	35.82	36.27	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39) 1991, Amd. 2
8.	Nitrate as NO ₃	μmol/L	2.5	2.41	2.84	2.59	3.66	3.02	2.76	2.59	2.72	2.67	2.93	2.67	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.448	0.431	0.345	0.3	0.328	0.259	0.379	0.276	0.5	0.483	0.241	0.198	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.36	3.28	2.49	2.06	3.79	3.36	2.32	1.56	3.36	3.32	2.84	2.67	APHA 23 rd Ed., 2017,4500- NH ₃ B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.47	BDL	BDL	BDL	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.308	6.121	5.675	4.95	7.778	6.639	5.459	4.426	6.58	6.473	6.011	5.538	APHA 23 rd Ed., 2017,4500 NH ₃ - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	35984	36594	35864	36486	35800	36470	35422	35940	35420	36260	36890	37400	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	24.05	16.03	29.09	20.78	20.08	12.05	28.14	20.1	24.19	20.16	28.2	24.17	APHA 23 rd Ed.,2017, 5220-B

Continue...

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m ³	3.21	2.6	3.21	3.21	3.26	3.14	3.33	3.17	3.02	3.64	3.25	2.88	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m ³	1.02	1.1	2.23	1.47	1.85	2	1.78	1.99	2.01	2.13	1.96	1.86	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10 ³ /L	86	135	90	96	152	135	149	132	140	155	152	146	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	Nitzschia	Melosira	Navicula	Pinnularia	Fragillaria	Ceratium	Fragillaria	Ceratium	Thalassiosira	Rhizosolenia	Rhizosolenia	Diploneis	APHA (23rd Ed. 2017)10200 F
			Pinnularia	Cyclotella	Skeletonema	Surirella	Thalassionema	Pinnularia	Thalassionema	Pinnularia	Melosira	Pinnularia	Pinnularia	Rhizosolenia	
			Odontella	Odontella	Rhizosolenia	Odontella	Navicula	Odontella	Navicula	Odontella	Nitzschia	Thalassiotrix	Thalassiotrix	Nitzschia	
			Dinophysis	Skeletonema	Dinophysis	Grammatophora	Thalassiosira	Thalassiotrix	Thalassiosira	Thalassiotrix	Rhizosolenia	Grammatophora	Grammatophora	Thalassiotrix	
			Surirella	Thalassiosira	Thalassionema	Melosira	Skeletonema	Thalassiosira	Skeletonema	Thalassiosira	Pleurosigma	Ceratium	Ceratium	Pleurosigma	

B			Zooplankton												
1	Abundance (Population)	noX10 ³ / 100 m ³	52	49	54	59	64	44	APHA (23rd Ed. 2017)10200 G						
2	Name of Group Number and name of group species of each group		Copepods nauplii	Copepods nauplii	Copepods nauplii	Copepods nauplii	Copepods nauplii	Copepods nauplii							
			Copepods	Oikoplura	Oikoplura	Oikoplura	Oikoplura	Oikoplura							
			Crustacean Larvae	Crustacean Larvae	Crustacean Larvae	Crustacean Larvae	Crustacean Larvae	Crustacean Larvae							
			Bivalve Larvae	Oikoplura	Oikoplura	Oikoplura	Oikoplura	Oikoplura							
3	Total Biomass	ml/100 m ³	Crustacean	Bivalve Larvae	Bivalve Larvae	Bivalve Larvae	Bivalve Larvae	Bivalve Larvae	Oikoplura						
			14.58	15.63	14.63	15.03	16.47	14.23							

Continue...

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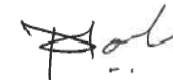
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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	248		200		200		211		186		202		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	35		39		39		41		50		47		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	30		29		29		32		26		30		IS :15185:2016
4	Enterococcus	/100ml	28		22		22		24		14		21		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 23 rd Ed.2017,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.22	8.1	8.14	8.06	8.19	8.07	8.16	8.01	8.12	8.03	8.17	7.96	IS 3025 (Part11)1983
2.	Temperature	°C	30.3	30.1	29.9	29.8	29.7	29.6	29.6	29.5	29.8	29.7	29.9	29.8	IS 3025 (Part 9)1984
3.	Total Suspended Solids	mg/L	128	116	114	98	120	102	144	112	128	116	112	84	APHA 23 rd Ed.,2017,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.9	BDL	2.8	BDL	2.9	BDL	3.1	BDL	2.7	BDL	3.1	BDL	IS 3025(Part 44)1993Amd.01
5.	Dissolved Oxygen	mg/L	6.02	5.92	6.1	6	6	5.9	5.99	5.89	6.09	5.99	5.83	5.63	APHA 23 rd Ed.,2017,4500-O, B
6.	Salinity	ppt	35.24	36.01	35.22	36.15	35.61	36.24	35.84	36.18	35.94	36.22	36.25	36.98	By Calculation
7.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39) 1991, Amd. 2
8.	Nitrate as NO ₃	μmol/L	2.67	2.54	2.67	2.33	2.84	2.59	2.76	2.59	2.84	2.59	3.66	3.44	APHA 23 rd Ed., 2017,4500 NO3-B
9.	Nitrite as NO ₂	μmol/L	0.414	0.362	0.325	0.235	0.474	0.31	0.379	0.276	0.474	0.31	0.413	0.379	APHA 23 rd Ed.,2017,4500NO ₂ B
10.	Ammonical Nitrogen as NH ₃	μmol/L	3.4	3.32	2.67	2.58	2.41	1.89	2.32	1.56	2.41	1.89	3.96	3.62	APHA 23 rd Ed., 2017,4500- NH3 B
11.	Phosphates as PO ₄	μmol/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.65	BDL	0.56	BDL	APHA 23 rd Ed.,2017,4500-P, D
12.	Total Nitrogen	μmol/L	6.484	6.222	5.665	5.145	5.724	4.79	5.459	4.426	5.724	4.79	8.033	7.439	APHA 23 rd Ed., 2017,4500 NH3 - B
13.	Petroleum Hydrocarbon	μg/L	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	APHA 23 rd ED,2017,5520 F
14.	Total Dissolved Solids	mg/L	36188	36806	36144	36582	36210	36690	35888	36310	35940	36480	36660	37340	APHA 23 rd Ed.,2017, 2540- C
15.	COD	mg/L	20.04	12.02	24.94	33.25	20.08	12.05	24.12	16.08	20.16	16.13	24.17	20.14	APHA 23 rd Ed.,2017, 5220-B

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.11	2.86	2.21	2.86	2.36	2.65	3.26	3.01	2.27	2.89	2.65	3.01	APHA (23rd Ed. 2017)10200 H
2.	Phaeophytin	mg/m³	1.43	0.97	1.87	1.25	0.85	1.49	0.89	1.88	1.11	2.1	1.63	2.44	APHA (23rd Ed. 2017)10200 H
3.	Cell Count	No. x 10³/L	95	97	102	98	140	127	134	130	134	106	145	152	APHA (23rd Ed. 2017)10200 F
4	Name of Group Number and name of group species of each group	--	Odontella	Diploneis	Melosira	Nitzschia	Thalassiosira	Melosira	Thalassiosira	Melosira	Dinophysis	Pinnularia	Nitzschia	Nitzschia	APHA (23rd Ed. 2017)10200 F
			Rhizosolenia	Rhizosolenia	Pinnularia	Pinnularia	Melosira	Cyclotella	Melosira	Cyclotella	Pinnularia	Surirella	Pinnularia	Grammatophora	
			Coscinodiscus	Nitzschia	Skeletonema	Odontella	Nitzschia	Odontella	Nitzschia	Odontella	Thalassiothrix	Odontella	Diploneis	Diploneis	
			Grammatophora	Thalassiothrix	Thalassiosira	Dinophysis	Rhizosolenia	Skeletonema	Rhizosolenia	Skeletonema	Grammatophora	Grammatophora	Grammatophora	Thalassiothrix	
			Thalassiosira	Pleurosigma	Thalassionema	Surirella	Pleurosigma	Thalassiosira	Pleurosigma	Thalassiosira	Ceratium	Melosira	Ceratium	Pleurosigma	

B			Zooplankton												
1	Abundance(Population)	noX103 / 100 m ³	40	54	70	72	44	42	APHA (23rd Ed. 2017)10200 G						
2	Name of Group Number and name of group species of each group		<i>Copepods nauplii</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Crustacean</i>	<i>Egg(Fish and Shrimps)</i>							
			<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>							
			<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Crustacean Larvae</i>	<i>Copepods nauplii</i>							
			<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Oikoplura</i>	<i>Crustacean</i>							
3	Total Biomass	ml/100 m ³	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>	<i>Bivalve Larvae</i>							
			16.54	17.36	16.32	16.45	13.25	13.45							

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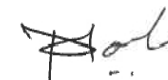
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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER-2022		NOVEMBER-2022		DECEMBER-2022		JANUARY-2023		FEBRUARY-2023		MARCH-2023		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	184		196		210		215		206		222		APHA 23 rd Ed.2017,9215-C
2	Total Coliform	/100ml	49		47		48		51		42		35		APHA 23 rd Ed.2017,9222-B
3	E.coli	/100ml	38		25		23		25		35		23		IS :15185:2016
4	Enterococcus	/100ml	27		20		20		18		22		14		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 23 rd Ed.2017,9260-E
7	Vibrio	/100ml	110		142		230		222		212		196		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
			OCTOBER-2022	NOVEMBER-2022	DECEMBER-2022	JANUARY-2023	FEBRUARY-2023	MARCH-2023		
			21-10-2022	21-11-2022	28-12-2022	28-01-2023	27-02-2023	29-03-2023		
1.	Colour	Pt. Co. Scale	30	25	30	20	40	50	100	IS 3025(Part 4)
2.	pH @ 27 ° C	--	7.05	7.35	7.24	7.48	6.94	7.08	6.5 to 8.5	APHA 23 rd Ed.,2017,4500-H*B
3.	Temperature	°C	30.5	30	29	28.5	29	29	40	IS 3025(Part 9)1984
4.	Total Suspended Solid	mg/L	36	32	30	34	42	26	100	APHA 23 rd Ed.,2017,2540 –D
5.	Total Dissolved Solids	mg/L	1480	1480	1460	1044	904	990	2100	APHA 23 rd Ed.,2017,2540- C
6.	COD	mg/L	81.1	78.6	86.4	82.4	84.2	80.6	100	IS 3025(Part 58)2006
7.	BOD (3 days at 27 °C)	mg/L	22	21	23	23	23	22	30	IS 3025(Part 44)1993Amd.01
8.	Chloride (as Cl) ⁻	mg/L	539.1	510.4	311.1	410.5	536	443.2	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(Part39)1991, Amd. 2
10.	Sulphate (as SO ₄)	mg/L	94	88	33.4	46	110	90	1000	IS 3025(Part 24)1986
11.	Ammonical Nitrogen	mg/L	29.8	25.4	25.3	18.6	22.4	26.8	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)1992, Amd.2
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)1992amd.01,
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 23 rd Ed.,2017,3111-B

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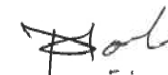
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SR.NO.	TEST PARAMETERS	UNIT	LIQUID TERMINAL						GPCB Limit	TEST METHOD
			OCTOBER-2022	NOVEMBER- 2022	DECEMBER- 2022	JANUARY-2023	FEBRUARY-2023	MARCH-2023		
			21-10-2022	21-11-2022	28-12-2022	28-01-2023	27-02-2023	29-03-2023		
15.	Sulphide as S	mg/L	0.12	0.64	0.6	0.94	0.86	0.58	2	APHA 23 rd Ed., 2017, 4500 S ⁻² F
16.	Cadmium as Cd	mg/L	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	2	APHA 23 rd Ed., 2017, 3111-B
17.	Fluoride as F	mg/L	0.84	0.64	1.1	1.15	0.94	0.86	2	APHA 23 rd Ed., 2017, 4500 F, D
18.	Residual Chlorine	mg/L	0.75	0.82	0.94	0.86	BDL(MDL:0.1)	0.92	0.5 Min.	APHA 23 rd Ed., 2017, 4500-Cl-B
19.	Percent Sodium	%	45.93	45.32	47.91	47.85	46.99	45.28	60	By Calculation
20.	Sodium Absorption ratio	--	6.5	5.73	4.86	5.03	3.46	3.3	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.	03-10-2022	84.41	39.33	22.47	29.33	0.92	NOT DETECTED	NOT DETECTED
2.	06-10-2022	76.53	34.26	19.89	26.34	1.15	NOT DETECTED	NOT DETECTED
3.	10-10-2022	85.65	38.93	26.69	37.18	1.00	NOT DETECTED	NOT DETECTED
4.	13-10-2022	86.38	28.63	34.27	41.13	1.20	NOT DETECTED	NOT DETECTED
5.	17-10-2022	72.97	37.23	31.92	36.48	1.15	NOT DETECTED	NOT DETECTED
6.	20-10-2022	78.29	42.35	23.74	33.63	1.23	NOT DETECTED	NOT DETECTED
7.	27-10-2022	82.36	31.12	26.48	36.82	1.00	NOT DETECTED	NOT DETECTED
8.	28-10-2022	79.19	29.70	34.86	38.62	0.95	NOT DETECTED	NOT DETECTED
9.	31-10-2022	88.69	34.26	29.85	36.73	1.15	NOT DETECTED	NOT DETECTED
10.	03-11-2022	85.45	45.12	17.68	29.34	1.00	2.94	NOT DETECTED
11.	07-11-2022	88.34	44.56	20.14	32.45	0.94	4.69	NOT DETECTED
12.	10-11-2022	86.78	49.12	19.87	34.12	1.15	3.27	NOT DETECTED
13.	14-11-2022	79.23	40.16	20.15	32.45	1.15	4.19	NOT DETECTED
14.	17-11-2022	85.34	47.12	17.89	27.89	1.00	6.83	NOT DETECTED
15.	21-11-2022	83.45	44.56	21.45	31.89	0.95	6.03	NOT DETECTED

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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.	24-11-2022	81.26	39.12	22.17	34.12	1.18	3.35	NOT DETECTED
17.	28-11-2022	83.54	44.23	15.89	28.92	1.05	5.12	NOT DETECTED
18.	01-12-2022	83.26	36.38	24.75	36.68	1.15	4.21	NOT DETECTED
19.	05-12-2022	76.23	39.63	16.92	27.13	1.00	3.27	NOT DETECTED
20.	08-12-2022	85.39	42.39	26.46	32.04	1.19	2.19	NOT DETECTED
21.	12-12-2022	74.62	44.26	24.19	28.46	0.92	2.34	NOT DETECTED
22.	15-12-2022	89.34	37.85	24.74	38.19	1.15	4.31	NOT DETECTED
23.	19-12-2022	82.62	41.05	27.64	37.26	1.14	4.72	NOT DETECTED
24.	22-12-2022	75.44	34.97	16.54	29.91	1.00	4.86	NOT DETECTED
25.	26-12-2022	73.86	37.13	18.62	32.25	1.16	2.64	NOT DETECTED
26.	29-12-2022	87.63	32.57	22.39	36.47	1.00	3.18	NOT DETECTED
27.	02-01-2023	71.69	42.17	27.73	33.18	1.00	2.96	NOT DETECTED
28.	05-01-2023	82.11	32.92	24.84	34.79	1.13	3.26	NOT DETECTED
29.	09-01-2023	87.24	31.29	21.46	27.56	1.00	3.28	NOT DETECTED
30.	12-01-2023	85.24	38.37	28.84	34.1	1.15	2.98	NOT DETECTED
31.	16-01-2023	67.86	27.41	18.27	31.36	1.00	3.17	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.	19-01-2023	83.02	31.27	22.76	29.14	1.15	3.63	NOT DETECTED
33.	23-01-2023	68.39	38.49	21.27	37.56	1.12	5.72	NOT DETECTED
34.	26-01-2023	86.56	31.28	24.66	36.96	1.19	3.68	NOT DETECTED
35.	30-01-2023	73.42	26.58	28.93	33.41	1.15	2.39	NOT DETECTED
36.	02-02-2023	78.63	34.58	23.73	28.14	1.17	3.28	NOT DETECTED
37.	06-02-2023	64.18	37.16	31.47	39.02	1.00	4.26	NOT DETECTED
38.	09-02-2023	85.3	43.63	27.59	34.61	0.96	3.59	NOT DETECTED
39.	13-02-2023	72.44	31.63	26.56	31.29	1.00	3.73	NOT DETECTED
40.	16-02-2023	87.18	42.16	34.71	41.38	1.14	4.82	NOT DETECTED
41.	20-02-2023	76.28	36.28	31.39	37.86	1.15	2.69	NOT DETECTED
42.	23-02-2023	86.27	34.92	26.37	33.49	1.00	3.61	NOT DETECTED
43.	27-02-2023	71.32	36.47	28.62	32.17	1.12	4.79	NOT DETECTED
44.	02-03-2023	88.48	31.25	27.61	34.05	1.00	3.89	NOT DETECTED
45.	06-03-2023	81.97	43.76	36.28	41.83	1.14	4.79	NOT DETECTED
46.	09-03-2023	85.35	39.68	34.76	39.53	1.17	3.26	NOT DETECTED
47.	13-03-2023	78.12	36.62	29.76	34.14	1.13	3.15	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.	16-03-2023	86.39	38.11	27.36	32.89	1.00	4.16	NOT DETECTED
49.	20-03-2023	79.83	40.87	33.46	38.95	1.18	3.64	NOT DETECTED
50.	23-03-2023	85.76	42.86	36.14	42.47	1.14	4.28	NOT DETECTED
51.	27-03-2023	72.19	39.76	31.53	37.68	1.00	4.18	NOT DETECTED
52.	30-03-2023	78.84	36.17	28.73	35.66	1.15	3.57	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.	03-10-2022	87.35	37.24	24.92	32.24	1.00	NOT DETECTED	NOT DETECTED
2.	06-10-2022	72.06	32.21	27.58	34.39	1.15	NOT DETECTED	NOT DETECTED
3.	10-10-2022	82.91	28.36	23.93	28.64	0.92	NOT DETECTED	NOT DETECTED
4.	13-10-2022	75.31	38.95	28.37	37.81	0.95	NOT DETECTED	NOT DETECTED
5.	17-10-2022	83.28	36.82	31.29	38.62	1.10	NOT DETECTED	NOT DETECTED
6.	20-10-2022	83.23	31.06	34.22	41.27	1.14	NOT DETECTED	NOT DETECTED
7.	27-10-2022	79.42	29.24	28.39	36.74	0.90	NOT DETECTED	NOT DETECTED
8.	28-10-2022	81.29	37.86	28.19	32.68	1.15	NOT DETECTED	NOT DETECTED
9.	31-10-2022	88.67	38.72	33.26	39.93	1.00	NOT DETECTED	NOT DETECTED
10.	03-11-2022	81.23	38.76	21.34	26.51	1.00	3.95	NOT DETECTED
11.	07-11-2022	83.45	35.12	18.12	23.45	1.15	4.13	NOT DETECTED
12.	10-11-2022	80.12	30.89	25.23	29.23	0.94	4.74	NOT DETECTED
13.	14-11-2022	73.45	39.76	28.15	33.45	1.10	5.83	NOT DETECTED
14.	17-11-2022	77.34	31.25	25.66	30.12	1.15	3.89	NOT DETECTED
15.	21-11-2022	85.67	43.45	27.35	32.05	0.95	5.64	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.	24-11-2022	82.45	38.12	23.45	28.45	1.13	3.68	NOT DETECTED
17.	28-11-2022	73.45	29.53	27.15	32.45	1.15	4.13	NOT DETECTED
18.	01-12-2022	73.28	43.39	17.2	21.63	1.18	2.64	NOT DETECTED
19.	05-12-2022	78.64	39.17	24.36	32.87	1.00	2.39	NOT DETECTED
20.	08-12-2022	87.32	34.53	28.61	37.27	1.16	3.18	NOT DETECTED
21.	12-12-2022	82.59	44.16	21.67	31.46	1.00	4.4	NOT DETECTED
22.	15-12-2022	71.36	37.49	27.36	35.97	1.15	4.33	NOT DETECTED
23.	19-12-2022	89.61	36.83	29.72	38.49	1.15	2.97	NOT DETECTED
24.	22-12-2022	68.42	41.06	28.48	33.74	1.12	5.27	NOT DETECTED
25.	26-12-2022	78.26	36.11	24.17	29.55	1.00	2.41	NOT DETECTED
26.	29-12-2022	73.47	39.58	26.74	34.16	1.12	3.79	NOT DETECTED
27.	02-01-2023	87.55	29.38	14.45	27.52	1.00	3.73	NOT DETECTED
28.	05-01-2023	73.18	31.84	28.63	28.48	1.13	4.18	NOT DETECTED
29.	09-01-2023	64.83	38.61	21.99	34.17	1.15	2.48	NOT DETECTED
30.	12-01-2023	87.36	35.26	26.28	31.63	1.12	3.28	NOT DETECTED
31.	16-01-2023	69.58	27.42	31.24	39.29	1.00	3.77	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.	19-01-2023	81.27	31.48	23.59	36.92	1.00	3.39	NOT DETECTED
33.	23-01-2023	70.92	34.57	29.89	38.56	1.15	2.58	NOT DETECTED
34.	26-01-2023	79.68	29.72	16.27	24.36	1.14	3.85	NOT DETECTED
35.	30-01-2023	73.29	32.96	31.36	38.84	1.00	2.14	NOT DETECTED
36.	02-02-2023	76.38	31.62	18.14	21.28	0.92	3.27	NOT DETECTED
37.	06-02-2023	88.17	24.29	33.73	43.44	1.00	3.72	NOT DETECTED
38.	09-02-2023	71.63	31.62	27.38	39.74	1.12	3.86	NOT DETECTED
39.	13-02-2023	69.74	27.63	21.92	27.53	1.00	2.18	NOT DETECTED
40.	16-02-2023	85.41	39.84	28.66	32.19	1.17	4.52	NOT DETECTED
41.	20-02-2023	62.18	36.62	31.39	43.65	0.95	2.18	NOT DETECTED
42.	23-02-2023	75.37	28.18	19.32	26.17	1.00	4.38	NOT DETECTED
43.	27-02-2023	83.56	33.69	26.18	37.51	1.16	2.95	NOT DETECTED
44.	02-03-2023	84.38	26.15	23.89	31.27	1.14	3.57	NOT DETECTED
45.	06-03-2023	73.81	29.27	26.64	35.86	1	4.13	NOT DETECTED
46.	09-03-2023	89.64	39.55	34.28	42.46	0.96	4.27	NOT DETECTED
47.	13-03-2023	82.57	36.39	31.67	37.16	1.15	3.19	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.	16-03-2023	89.79	34.18	28.36	35.13	1.12	4.25	NOT DETECTED
49.	20-03-2023	77.73	39.13	34.88	41.29	1.00	2.69	NOT DETECTED
50.	23-03-2023	74.52	35.07	23.18	31.44	1.14	3.56	NOT DETECTED
51.	27-03-2023	85.36	37.48	29.67	34.89	1.1	3.21	NOT DETECTED
52.	30-03-2023	81.29	41.35	32.58	38.1	1.17	4.24	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.	03-10-2022	83.26	32.68	21.38	34.27	1.00	NOT DETECTED	NOT DETECTED
2.	06-10-2022	79.54	36.82	26.32	34.86	1.12	NOT DETECTED	NOT DETECTED
3.	10-10-2022	88.31	33.96	28.64	34.72	1.00	NOT DETECTED	NOT DETECTED
4.	13-10-2022	78.47	29.81	29.94	41.65	0.95	NOT DETECTED	NOT DETECTED
5.	17-10-2022	83.27	27.38	32.16	39.89	1.00	NOT DETECTED	NOT DETECTED
6.	20-10-2022	82.86	36.32	24.28	27.13	1.15	NOT DETECTED	NOT DETECTED
7.	27-10-2022	69.89	38.24	31.46	39.03	1.00	NOT DETECTED	NOT DETECTED
8.	28-10-2022	79.84	27.38	19.24	26.86	0.95	NOT DETECTED	NOT DETECTED
9.	31-10-2022	81.29	29.17	32.23	37.2	1.00	NOT DETECTED	NOT DETECTED
10.	03-11-2022	86.78	37.65	22.43	28.25	1.00	2.97	NOT DETECTED
11.	07-11-2022	83.45	43.45	24.14	30.25	1.09	4.28	NOT DETECTED
12.	10-11-2022	88.76	44.12	21.34	27.12	1.15	3.16	NOT DETECTED
13.	14-11-2022	83.45	45.67	25.67	32.45	1.00	6.79	NOT DETECTED
14.	17-11-2022	80.68	37.83	26.74	33.89	1.12	3.57	NOT DETECTED
15.	21-11-2022	84.21	36.46	22.35	28.95	0.95	2.86	NOT DETECTED

Continue...

Name of Location		ADANI PORT – TUG Berth 600 KL Pupm House						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
16.	24-11-2022	86.53	43.15	27.69	35.15	1.00	3.29	NOT DETECTED
17.	28-11-2022	83.24	40.15	22.45	27.86	0.94	4.69	NOT DETECTED
18.	01-12-2022	72.18	31.63	28.46	35.27	1.15	3.14	NOT DETECTED
19.	05-12-2022	85.42	37.89	21.75	32.84	1.00	3.28	NOT DETECTED
20.	08-12-2022	83.81	41.52	26.34	38.91	1.00	2.68	NOT DETECTED
21.	12-12-2022	88.57	37.6	29.49	31.06	1.17	4.52	NOT DETECTED
22.	15-12-2022	86.77	34.28	19.96	26.43	0.94	2.16	NOT DETECTED
23.	19-12-2022	76.23	46.16	27.28	37.67	1.13	4.66	NOT DETECTED
24.	22-12-2022	82.94	38.58	32.13	39.64	1.00	2.79	NOT DETECTED
25.	26-12-2022	86.41	34.24	28.44	34.59	1.15	3.83	NOT DETECTED
26.	29-12-2022	79.67	36.79	23.46	31.37	1.00	2.65	NOT DETECTED
27.	02-01-2023	66.17	36.24	21.45	32.19	1.12	2.37	NOT DETECTED
28.	05-01-2023	79.46	27.52	16.38	28.74	1.00	2.96	NOT DETECTED
29.	09-01-2023	74.61	36.74	29.64	36.78	1.15	3.17	NOT DETECTED
30.	12-01-2023	76.24	32.82	24.79	39.83	1.00	2.68	NOT DETECTED
31.	16-01-2023	82.47	27.17	27.54	19.99	1.00	4.27	NOT DETECTED

Continue...

Name of Location		ADANI PORT – TUG Berth 600 KL Pupm House						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
32.	19-01-2023	78.52	39.36	26.17	28.14	1.15	3.95	NOT DETECTED
33.	23-01-2023	85.35	31.24	24.39	31.57	1.12	4.68	NOT DETECTED
34.	26-01-2023	78.31	38.57	26.73	33.87	1.00	2.52	NOT DETECTED
35.	30-01-2023	87.49	29.63	25.44	36.26	1.17	3.47	NOT DETECTED
36.	02-02-2023	83.26	31.59	16.72	24.14	1.15	3.62	NOT DETECTED
37.	06-02-2023	86.72	37.52	28.68	36.89	0.95	3.79	NOT DETECTED
38.	09-02-2023	67.38	44.74	34.54	41.38	1.00	4.62	NOT DETECTED
39.	13-02-2023	75.18	38.57	29.84	37.49	1.14	3.96	NOT DETECTED
40.	16-02-2023	81.38	36.62	26.81	29.75	1.00	2.85	NOT DETECTED
41.	20-02-2023	80.32	31.28	33.49	38.16	1.13	2.59	NOT DETECTED
42.	23-02-2023	74.91	37.26	28.81	36.57	0.97	3.66	NOT DETECTED
43.	27-02-2023	87.74	35.96	31.63	38.27	1.00	3.74	NOT DETECTED
44.	02-03-2023	70.69	42.58	23.34	29.75	1.00	3.88	NOT DETECTED
45.	06-03-2023	87.43	44.51	32.74	39.46	1.14	4.15	NOT DETECTED
46.	09-03-2023	76.57	37.59	28.17	34.15	1.12	4.86	NOT DETECTED
47.	13-03-2023	72.45	34.21	31.42	38.76	1.00	2.98	NOT DETECTED

Continue...

Name of Location		ADANI PORT – TUG Berth 600 KL Pupm House						
Sr. No.	Date of Monitoring	Parameter with Results						
		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³	HC µg/m ³	Benzene µg/m ³
48.	16-03-2023	78.82	39.76	29.57	32.56	1.12	3.12	NOT DETECTED
49.	20-03-2023	87.05	42.95	32.47	41.2	1.15	3.26	NOT DETECTED
50.	23-03-2023	85.26	34.18	30.88	38.65	1.00	4.62	NOT DETECTED
51.	27-03-2023	74.24	38.65	29.74	34.71	1.13	4.42	NOT DETECTED
52.	30-03-2023	83.28	32.41	24.25	29.48	1.15	3.78	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.	03-10-2022	79.37	28.34	17.38	26.86	0.92	NOT DETECTED	NOT DETECTED
2.	06-10-2022	83.47	36.86	19.63	23.26	1.15	NOT DETECTED	NOT DETECTED
3.	10-10-2022	82.38	32.12	17.88	29.10	1.00	NOT DETECTED	NOT DETECTED
4.	13-10-2022	73.48	29.73	18.39	26.24	1.12	NOT DETECTED	NOT DETECTED
5.	17-10-2022	84.32	26.46	24.96	31.82	1.00	NOT DETECTED	NOT DETECTED
6.	20-10-2022	88.74	37.94	23.58	29.39	1.10	NOT DETECTED	NOT DETECTED
7.	27-10-2022	75.93	23.63	29.34	37.43	0.96	NOT DETECTED	NOT DETECTED
8.	28-10-2022	81.29	32.45	22.25	31.98	1.13	NOT DETECTED	NOT DETECTED
9.	31-10-2022	78.64	39.41	31.48	38.71	1.00	NOT DETECTED	NOT DETECTED
10.	03-11-2022	83.21	27.43	11.24	16.78	1.00	4.72	NOT DETECTED
11.	07-11-2022	78.23	21.25	14.78	20.15	1.15	3.29	NOT DETECTED
12.	10-11-2022	65.78	31.16	17.89	24.56	0.94	5.63	NOT DETECTED
13.	14-11-2022	77.58	22.47	23.45	31.36	1.00	5.09	NOT DETECTED
14.	17-11-2022	81.24	26.28	26.78	30.15	1.00	4.37	NOT DETECTED
15.	21-11-2022	83.45	34.56	23.10	28.15	1.15	4.86	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.	24-11-2022	73.45	28.51	22.45	27.14	0.95	2.98	NOT DETECTED
17.	28-11-2022	80.12	23.83	19.25	22.53	1.00	4.12	NOT DETECTED
18.	01-12-2022	84.42	23.57	16.38	26.47	1.16	3.72	NOT DETECTED
19.	05-12-2022	68.54	21.75	19.43	25.79	1.00	4.76	NOT DETECTED
20.	08-12-2022	82.71	24.17	26.19	34.27	1.10	4.88	NOT DETECTED
21.	12-12-2022	76.83	29.96	28.77	37.36	1.13	4.26	NOT DETECTED
22.	15-12-2022	86.53	32.78	21.91	27.52	1.00	3.57	NOT DETECTED
23.	19-12-2022	83.36	31.26	27.62	33.13	1.16	3.72	NOT DETECTED
24.	22-12-2022	79.16	34.04	25.12	31.98	1.00	3.14	NOT DETECTED
25.	26-12-2022	73.58	29.36	22.65	29.07	1.00	3.64	NOT DETECTED
26.	29-12-2022	85.63	36.42	26.83	36.17	1.15	4.12	NOT DETECTED
27.	02-01-2023	72.36	29.62	13.28	31.34	1.00	2.96	NOT DETECTED
28.	05-01-2023	84.27	24.38	26.73	34.86	1.12	3.59	NOT DETECTED
29.	09-01-2023	81.63	27.47	17.38	26.47	1.00	3.26	NOT DETECTED
30.	12-01-2023	75.38	37.24	26.77	32.14	1.00	4.83	NOT DETECTED
31.	16-01-2023	87.31	26.48	16.64	27.92	1.15	4.89	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.	19-01-2023	64.38	39.63	21.94	31.23	1.13	3.26	NOT DETECTED
33.	23-01-2023	73.29	32.47	29.58	38.96	1.17	2.13	NOT DETECTED
34.	26-01-2023	69.04	36.72	26.16	37.53	1.13	2.79	NOT DETECTED
35.	30-01-2023	84.27	27.84	18.24	26.48	1.12	3.74	NOT DETECTED
36.	02-02-2023	89.28	34.79	23.85	27.13	1.17	4.83	NOT DETECTED
37.	06-02-2023	73.59	29.82	21.29	29.75	1.00	2.37	NOT DETECTED
38.	09-02-2023	86.27	39.84	32.06	43.27	1.17	4.72	NOT DETECTED
39.	13-02-2023	77.33	32.61	31.29	37.55	0.95	2.79	NOT DETECTED
40.	16-02-2023	76.52	31.28	24.66	31.74	1.00	3.16	NOT DETECTED
41.	20-02-2023	63.38	34.39	28.17	37.93	1.00	4.33	NOT DETECTED
42.	23-02-2023	88.56	41.39	23.72	33.84	1.15	3.69	NOT DETECTED
43.	27-02-2023	73.41	38.69	31.43	36.16	1.00	3.48	NOT DETECTED
44.	02-03-2023	75.41	40.62	27.17	34.29	0.95	4.03	NOT DETECTED
45.	06-03-2023	86.36	36.17	25.74	31.58	0.98	3.12	NOT DETECTED
46.	09-03-2023	78.72	32.96	24.68	28.49	1.14	4.18	NOT DETECTED
47.	13-03-2023	74.17	41.22	28.54	35.25	1.12	2.96	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.	16-03-2023	84.23	36.71	28.16	34.86	1.00	3.55	NOT DETECTED
49.	20-03-2023	88.98	42.58	31.32	39.13	1.12	3.75	NOT DETECTED
50.	23-03-2023	76.63	35.93	29.65	36.29	1.00	4.25	NOT DETECTED
51.	27-03-2023	86.24	31.47	26.96	31.83	1.14	3.38	NOT DETECTED
52.	30-03-2023	89.58	38.25	19.63	25.58	1.11	3.15	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					
		13-10-2022	14-11-2022	12-12-2022	12-01-2023	13-02-2023	13-03-2023
1	06:00 to 07:00	63.4	62.8	61.2	59.9	61.9	64.6
2	07:00 to 08:00	66.9	68.5	63.8	61.4	68.5	68.2
3	08:00 to 09:00	63.2	67.4	62.8	68.6	64.7	66.7
4	09:00 to 10:00	69.6	64.7	64.3	65.5	62.1	64.9
5	10:00 to 11:00	61.2	64.1	68.5	66.1	67.5	63.6
6	11:00 to 12:00	67.4	68.9	69.1	69.1	65.7	64.2
7	12:00 to 13:00	68.8	67.1	64.2	64.2	62.4	64.9
8	13:00 to 14:00	67.5	68.3	66.9	68.3	69.0	68.7
9	14:00 to 15:00	65.2	64.2	63.6	63.6	64.2	63.6
10	15:00 to 16:00	69.5	62.3	64.2	62.6	62.3	61.9
11	16:00 to 17:00	65.5	69.4	63.9	63.9	68.6	68.4
12	17:00 to 18:00	68.2	61.2	66.8	62.9	61.2	67.4
13	18:00 to 19:00	68.7	68.4	64.4	63.7	67.2	63.4
14	19:00 to 20:00	65.5	65.5	63.6	62.2	65.5	62.7
15	20:00 to 21:00	60.7	65.4	65.4	65.4	63.4	60.5
16	21:00 to 22:00	62.9	64.8	63.1	62.7	64.7	63.8
Day Time		<75 dB (A)					

Continue...

Location Name		CT3 RMU-2					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) – Night Time					
		13-10-2022	14-11-2022	12-12-2022	12-01-2023	13-02-2023	13-03-2023
1	22:00 to 23:00	62.4	59.2	59.6	59.0	60.3	62.4
2	23:00 to 24:00	63.1	62.5	60.3	60.8	61.3	60.5
3	24:00 to 01:00	57.5	61.2	63.2	62.2	61.2	58.5
4	01:00 to 02:00	61.1	57.9	61.7	60.8	57.4	59.3
5	02:00 to 03:00	62.7	57.4	62.1	62.1	58.3	56.8
6	03:00 to 04:00	60.9	60.2	60.4	60.4	61.9	60.9
7	04:00 to 05:00	58.4	61.8	64.5	63.1	61.8	62.6
8	05:00 to 06:00	59.9	63.9	62.5	61.9	58.6	60.7
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		Near Fire Station					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		06-10-2022	07-11-2022	05-12-2022	05-01-2023	06-02-2023	06-03-2023
1	06:00 to 07:00	63.5	63.4	62.3	61.4	64.8	61.9
2	07:00 to 08:00	64.3	67.8	63.6	66.8	61.6	63.6
3	08:00 to 09:00	66.7	69.3	67.2	65.3	68.4	67.3
4	09:00 to 10:00	62.8	61.3	63.0	67.5	65.3	66.8
5	10:00 to 11:00	68.1	65.1	64.4	61.3	68.1	63.2
6	11:00 to 12:00	63.2	68.3	66.8	62.8	67.2	65.1
7	12:00 to 13:00	64.2	68.9	65.9	62.9	64.7	67.3
8	13:00 to 14:00	66.9	66.7	63.5	61.4	68.3	68.1
9	14:00 to 15:00	61.2	58.7	68.2	66.3	59.7	60.2
10	15:00 to 16:00	64.8	67.5	62.6	65.7	68.4	65.3
11	16:00 to 17:00	63.1	66.3	67.9	67.9	67.7	68.3
12	17:00 to 18:00	60.8	67.1	61.4	64.7	61.0	63.2
13	18:00 to 19:00	66.9	65.9	66.8	62.4	66.3	67.5
14	19:00 to 20:00	61.3	64.2	64.2	64.2	65.1	63.9
15	20:00 to 21:00	63.3	63.2	62.1	64.1	64.8	63.2
16	21:00 to 22:00	58.7	61.3	61.3	63.6	62.6	64.8
Day Time		<75 dB (A)					

Continue...

Location Name		Near Fire Station					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time					
		06-10-2022	07-11-2022	05-12-2022	05-01-2023	06-02-2023	06-03-2023
1	22:00 to 23:00	59.2	58.6	60.9	58.4	56.8	54.8
2	23:00 to 24:00	62.5	57.8	61.3	61.3	58.4	56.6
3	24:00 to 01:00	62.3	61.2	59.6	59.3	60.2	58.5
4	01:00 to 02:00	57.9	59.8	61.3	60.2	56.4	57.4
5	02:00 to 03:00	60.3	60.4	59.8	59.8	57.3	58.4
6	03:00 to 04:00	62.4	58.6	60.3	61.3	61.3	60.4
7	04:00 to 05:00	61.5	61.3	59.5	59.5	60.2	58.7
8	05:00 to 06:00	61.7	59.8	58.6	58.1	59.8	55.2
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		ADANI PORT – TUG Berth 600 KL Pump House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Day Time					
		10-10-2022	10-11-2022	08-12-2022	09-01-2023	09-02-2023	09-03-2023
1	06:00 to 07:00	63.8	61.3	59.7	62.3	63.1	62.7
2	07:00 to 08:00	65.4	65.4	62.7	64.8	64.4	61.3
3	08:00 to 09:00	61.2	67.3	63.9	61.8	66.3	64.8
4	09:00 to 10:00	67.4	64.3	63.2	62.3	67.5	68.3
5	10:00 to 11:00	63.3	68.9	68.6	65.9	67.9	64.7
6	11:00 to 12:00	68.8	67.3	63.6	68.1	68.4	67.5
7	12:00 to 13:00	67.2	64.3	68.1	67.4	62.1	64.8
8	13:00 to 14:00	61.5	67.1	65.4	68.2	68.3	67.2
9	14:00 to 15:00	67.1	66.2	61.3	65.8	65.3	67.9
10	15:00 to 16:00	60.4	69.8	64.9	64.9	68.1	66.5
11	16:00 to 17:00	62.6	68.2	67.4	67.4	67.4	68.3
12	17:00 to 18:00	68.2	65.3	67.3	64.2	61.7	62.5
13	18:00 to 19:00	68.1	66.4	66.2	66.2	64.3	66.8
14	19:00 to 20:00	65.2	61.3	69.7	69.7	63.2	64.1
15	20:00 to 21:00	64.1	64.3	64.8	64.8	65.8	63.8
16	21:00 to 22:00	62.3	63.9	63.4	58.4	62.8	60.9
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					
		10-10-2022	10-11-2022	08-12-2022	09-01-2023	09-02-2023	09-03-2023
1	22:00 to 23:00	60.8	61.4	61.2	61.2	58.5	56.7
2	23:00 to 24:00	63.5	62.3	61.8	61.8	61.8	60.4
3	24:00 to 01:00	63.8	56.8	62.3	62.8	56.8	57.2
4	01:00 to 02:00	62.7	59.5	60.9	60.7	58.5	57.7
5	02:00 to 03:00	60.6	56.5	60.3	61.4	56.5	58.5
6	03:00 to 04:00	61.4	58.8	61.5	61.5	57.3	58.5
7	04:00 to 05:00	58.7	60.7	63.8	64.5	60.7	58.4
8	05:00 to 06:00	54.7	61.4	62.4	62.7	62.4	59.9
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					
		03-10-2022	03-11-2022	01-12-2022	02-01-2023	02-02-2023	02-03-2023
1	06:00 to 07:00	62.5	63.8	62.7	61.8	60.6	62.4
2	07:00 to 08:00	66.1	61.4	64.2	63.5	62.5	61.8
3	08:00 to 09:00	68.2	58.7	63.1	62.8	60.9	63.7
4	09:00 to 10:00	62.4	62.6	65.6	62.4	63.2	63.2
5	10:00 to 11:00	67.8	68.7	64.2	63.4	67.4	64.2
6	11:00 to 12:00	64.0	63.4	67.9	69.6	65.2	61.8
7	12:00 to 13:00	61.3	69.7	64.3	65.7	68.9	65.9
8	13:00 to 14:00	65.9	62.1	63.2	64.2	64.8	63.1
9	14:00 to 15:00	64.2	62.5	66.5	67.5	63.6	66.3
10	15:00 to 16:00	63.7	61.8	65.2	67.1	61.8	62.9
11	16:00 to 17:00	67.0	65.5	64.5	63.8	66.4	64.7
12	17:00 to 18:00	65.3	64.1	65.1	64.9	67.9	64.3
13	18:00 to 19:00	69.1	59.2	62.7	63.8	58.2	60.1
14	19:00 to 20:00	66.7	68.3	61.3	65.4	67.0	63.4
15	20:00 to 21:00	61.8	63.3	60.2	63.9	61.9	62.7
16	21:00 to 22:00	60.4	66.3	60.8	62.5	65.3	61.2
Day Time		<75 dB (A)					

Continue...

Location Name		PUB/Adani House					
Sr. No.	Sampling Date and Time	Noise Level Leq. dB(A) - Night Time					
		03-10-2022	03-11-2022	01-12-2022	02-01-2023	02-02-2023	02-03-2023
1	22:00 to 23:00	63.6	56.3	58.7	60.3	57.3	58.4
2	23:00 to 24:00	64.2	57.8	61.6	62.3	56.2	54.2
3	24:00 to 01:00	63.4	54.3	60.7	59.8	54.3	55.7
4	01:00 to 02:00	64.1	58.6	60.6	60.6	57.4	58.3
5	02:00 to 03:00	58.6	59.3	59.3	58.1	60.1	59.2
6	03:00 to 04:00	58.2	55.8	60.5	59.2	56.3	57.9
7	04:00 to 05:00	64.2	59.2	61.3	60.5	59.2	55.4
8	05:00 to 06:00	61.3	57.4	62.7	61.3	58.3	57.8
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
Oct-22								
1	Particulate Matter	mg/Nm ³	21.19	23.64	23.72	22.96	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	6.63	7.24	9.03	9.84	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	18.47	23.36	22.38	21.29	50	IS 11255 (Part - 7)
Nov-22								
1	Particulate Matter	mg/Nm ³	22.79	21.44	22.37	21.47	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.26	6.63	8.69	8.32	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	20.19	21.79	21.52	22.16	50	IS 11255 (Part - 7)
Dec-22								
1	Particulate Matter	mg/Nm ³	22.48	22.92	22.89	22.36	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	6.84	6.89	9.08	9.16	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	19.72	22.31	22.14	22.68	50	IS 11255 (Part - 7)
Jan-23								
1	Particulate Matter	mg/Nm ³	22.83	23.18	23.48	22.79	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.12	7.13	9.83	9.58	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	21.26	22.58	22.94	23.13	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
Feb-23								
1	Particulate Matter	mg/Nm ³	21.36	22.39	21.72	19.79	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	6.27	7.58	8.36	8.68	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	19.89	22.94	20.52	21.56	50	IS 11255 (Part - 7)
Mar-23								
1	Particulate Matter	mg/Nm ³	21.14	21.85	19.38	18.78	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	6.58	7.32	8.14	7.46	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	20.36	22.58	19.69	20.83	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)	GPCB LIMIT	Method of Test
			Mar-23	Feb-23				
			17-03-2023	03-02-2023	03-02-2023	03-02-2023		
1	Particulate Matter	mg/Nm ³	22.48	13.49	17.28	14.96	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	8.26	9.84	13.63	13.37	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	17.85	21.69	24.71	17.81	50	IS 11255 (Part - 7)
4	Carbon Monoxide	mg/Nm3	3.27	4.6	4.8	4.2	--	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	GPCB LIMIT	Method of Test
			Feb-23			Dec-22		
			01-02-2023	01-02-2023	01-02-2023	18-12-2022		
1	Particulate Matter	mg/Nm ³	19.27	22.39	19.36	18.73	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO ₂	ppm	7.84	8.68	7.73	7.42	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NO _x	ppm	15.96	19.52	15.24	24.38	50	IS 11255 (Part - 7)
4	Carbon Monoxide	mg/Nm3	4.13	4.46	3.92	2.69	--	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	GPCB LIMIT	Method of Test
			Dec-22					
			18-12-2022	18-12-2022	18-12-2022	18-12-2022		
1	Particulate Matter	mg/Nm³	23.74	21.47	26.68	23.74	150	IS 11255 (Part - 1)
2	Sulphur Dioxide as SO₂	ppm	6.84	9.39	8.36	9.37	100	IS 11255 (Part - 2)
3	Oxides of Nitrogen as NOₓ	ppm	26.72	27.51	26.64	28.58	50	IS 11255 (Part - 7)
4	Carbon Monoxide	mg/Nm3	3.26	4.17	4.79	4.15	--	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)



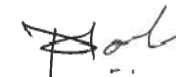

Jaivik S. Tandel
(Manager - Operations)

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
			14-02-2023	14-02-2023	14-02-2023	14-02-2023	14-02-2023	
1.	pH @ 25 ° C	--	8.11	7.78	7.89	7.98	8.01	IS 3025(Part 11)1983
2.	Salinity	ppt	3.37	1.06	1.81	1.02	7.17	APHA 23 rd Ed.,2017,2520 B
3.	Oil & Grease	mg/L	BDL(MDL:2.0)	BDL(MDL:2.0)	BDL(MDL:2.0)	BDL(MDL:2.0)	BDL(MDL:2.0)	IS 3025(Part39)1991, Amd. 2
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)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	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 23 rd Ed.,2017,3114-C
7.	Nickel as Ni	mg/L	0.076	0.022	0.033	0.015	0.127	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	0.042	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	0.094	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 23 rd Ed.,2017, 3112-B
11.	Zinc as Zn	mg/L	0.102	0.061	BDL(MDL:0.05)	BDL(MDL:0.05)	0.054	IS 3025(PART 49) 1994
12.	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)	IS 3025 (PART 42) 1992
13.	Iron as Fe	mg/L	0.835	0.516	BDL(MDL:0.1)	BDL(MDL:0.1)	0.342	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	1.9	2.1	1.95	2.15	2	--



Mr. Nilesh Patel
Sr. Chemist

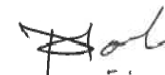
Mr. Nitin Tandel
Technical Manager

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
			04-08-2022	04-08-2022	04-08-2022	04-08-2022	04-08-2022	
1.	pH @ 25 ° C	--	8.44	8.02	8.06	7.79	7.6	IS 3025(Part 11)1983
2.	Salinity	ppt	3.4	0.79	0.81	1.12	11.64	APHA 23 rd Ed.,2017,2520 B
3.	Oil & Grease	mg/L	BDL	BDL	BDL	BDL	BDL	IS 3025(Part39)1991, Amd. 2
4.	Hydrocarbon	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	GC/GCMS
5.	Lead as Pb	mg/L	0.064	0.072	0.044	0.034	0.042	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 23 rd Ed.,2017,3114-C
7.	Nickel as Ni	mg/L	0.114	0.101	0.09	0.069	0.105	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	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	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 23 rd Ed.,2017, 3112-B
11.	Zinc as Zn	mg/L	0.132	0.246	0.129	0.122	0.197	IS 3025(PART 49) 1994
12.	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)	IS 3025 (PART 42) 1992
13.	Iron as Fe	mg/L	0.12	0.85	0.79	1.12	0.94	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	1.9	2.1	1.95	2.15	2	--



Mr. Nilesh Patel
Sr. Chemist

Mr. Nitin Tandel
Technical Manager

Minimum Detection Limit

Ambient Air Quality Monitoring

Sr. No.	Test Parameter	Unit	MDL
1	Particulate Matter (PM10)	µg/m ³	5 µg/m ³
2	Particulate Matter (PM2.5)	µg/m ³	5 µg/m ³
3	Sulphur Dioxide (SO ₂)	µg/m ³	4 µg/m ³
4	Nitrogen Dioxide (NO ₂)	µg/m ³	5 µg/m ³
5	Carbon Monoxide (CO)	mg/m ³	0.01 mg/m ³
6	Ammonia (NH ₃)	µg/m ³	5 µg/m ³
7	Ozone (O ₃)	µg/m ³	5 µg/m ³
8	Lead (Pb)	µg/m ³	0.5 µg/m ³
9	Nickle (Ni)	ng/m ³	1 ng/m ³
10	Arsenic (As)	ng/m ³	1 ng/m ³
11	Benzene	µg/m ³	1µg/m ³
12	Benzo(o)Pyrene	ng/m ³	0.1 ng/m ³
14	Hydro Carbon	µg/m ³	1 µg/m ³

Stack Emission Monitoring

Sr. No.	Test Parameter	Unit	MDL
1	Suspended particulate matter	mg/Nm ³	2 mg/Nm ³
2	Sulphur Dioxide SO ₂	mg/Nm ³	4 mg/Nm ³
3	Oxides of Nitrogen NO _x	mg/Nm ³	5 mg/Nm ³

ETP Water			
Sr. No.	Test Parameter	Unit	MDL
1	Colour	Pt. Co. Scale	5
2	pH @ 27 ° C	--	2
3	Temperature	OC	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 OC)	mg/L	1
8	Chloride (as Cl) -	mg/L	1
9	Oil & Grease	mg/L	2
10	Sulphate (as SO ₄)	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

Details of Greenbelt Development at APSEZ, Mundra

	Total Green Zone Detail till Up to March 2023				
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	775082.00	131156.00	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
Total			3890			

Annexure – 3

Annual Report 2022-23

CSR Kutch

Adani Foundation

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



Our Journey by Mr. Rakshit Shah Executive Director APSEZ

The year 2022-23 has passed off with motivation through recognition by ASSOCHAM for health care awards which shows courage to work for the commitment given to the community. It is necessary that sustained growth is achieved at rural level along with the industrial development. This can be made possible by involving more and more people in the rural development programme.

Since beginning, The Adani Foundation Mundra is committed to the cause of the deprived and underprivileged. It has been working relentlessly across 6 Talukas, covering 92 villages, to uplift the lives of more than 60,000 families with a multi-faceted approach.

This year conceded with more streamline and scalable project of Education i.e. Utthan – to enhance primary education of 70 schools of Mundra including 8 High Schools, milestone achievement in Fisherman amenities project by Providing skill and livelihood to 34 fisherfolk youth, 225 Homebiogas with partnership approach with objective to reduce chemical fertilizer usage in seven villages of Mundra , considerable impact created by Mangroves Biodiversity projects and new era defined in agriculture projects i.e. Super Napier, dates offshoots and Dragon Fruit Cultivation

Gram Bharti has proved a benchmark platform for Self help groups at PAN India which is true support with promoting skill & sustainability. Massavie Tree plantation drive “Vriksh Se Vikas” initiated with aim of plantation 1 Lac Trees in Mundra Taluka in upcoming year.

Jyoti ben Tank – one of the best women farmer of Mundra awarded by “Amazing Indian Award by Vice President of India”. District Animal Welfare Department recognized Adani Foundation for best contribution during Lumpy outbreak.

The people of Kutch have generously supported the activities carried out by the Adani Group or else this wouldn't have been possible. Their determination, understanding and commitment have strengthened the development even more.

Our Achievement would not be possible without the ultimate support by Mr. Gowda (COO, AF), Mr. V S Gadhvi, Executive Director – AF, Ms. Shilin R Adani (Managing Trustee) **and generous faith and passionate support by Dr. (Mrs.) Priti G Adani, Chairperson- Adani Foundation**

index

CSR Kutch	
Environment Sustainability	5
Education	14
Sustainable Livelihood Projects	25
Community health Project	41
Community Infrastructure Development	45
Community Resource Center-CRC	48
Adani Skill Development –Bhuj	51
Dignity of Work Force Program – EVP	55
CSR Tuna	59
CSR Abdasa	61
Community Speaks	62
Events and Day Celebration	71
Awards and Accolades	81
Beneficiaries Count	83
Budget Utilization	84
Media Coverage	85

CSR KUTCH

Demographic Details

Block	Villages	No. of HHs	Population
Mundra	61 Village and 9 Fishermen Vasahat	35192	153179
Anjar	3 Villages	4350	18500
Nakhtrana	8 Villages	4093	16373
Bite – Abdasa	12 Villages	2415	9660

1. Adani Ports and SEZ Limited
2. Adani Power Mundra Limited
3. Adani Wilmar Limited
4. Adani Wilmar – Caster Limited
5. Kutchh Copper Limited
6. Mundra Solar Panel Making Unit
7. Green to PVC Mundra Limited
8. Adani Kandla Bulk Terminal Port Pvt Limited
9. Adani Solar Limited – Bitta, Abdasa
10. Adani Green Energy Limited – Nakhatrana
11. Adani Cementation Limited – Lakhpat
12. Adani Transmission Limited – Mandvi

ENVIRONMENT SUSTAINABILITY PROJECTS



ENVIRONMENT SUSTAINABILITY

Environmental sustainability is the responsibility to conserve natural resources and protect global ecosystems to support health and wellbeing for present and future. These components are closely interrelated and mutually re-enforcing Under Corporate Environmental responsibility.

To make connections between human actions Environment & biological diversity found within a habitat and/or ecosystem, Adani Foundation executing various Project i.e. massive tree plantation drive, Mangroves, biogas provision, forest development and drip irrigation

Biodiversity conservation: to preserve biodiversity and Natural Resources.

Regenerative capacity: Protect the depletion of natural resources and keep the harvest rate of renewable resources within the capacity of regeneration.

Environment Sustainability Projects : Ensuring ecological balance, protection of flora and fauna, terrestrial and coastal species conservation, welfare, agro forestry, conservation of natural resources and maintaining quality of soil, air and water



REDUCING CARBON FOOTPRINT

1. Miyawaki – Nana Kapaya

Miyawaki- Dense Plantation is developed in year 2021-22 at Nana Kapaya Village in 2.0 acre land. Miyawaki plot is very close to sewage water tank so watering to plantation by the same. From current year GP has taken ownership for monitoring and watering.

Plantation of 5880 saplings of different 42 species is completed which will result in dense forest due to good rain this year.

2. Smritivan Memorial park– Bhuj

The memorial will occupy around 406 acres of space of the Bhujia Dungar near Bhuj, Kutch that will show people's oppressive response to a natural disaster.

Adani Foundation has supported for 47000 saplings in Smriti van @ 100 Lacs INR.



REDUCING CARBON FOOTPRINT

With a vision to Enhance the diversity of mangrove and its associated species in suitable coastal region of Kachchh, which in turn would enhance the faunal diversity and fishery resources of the area by providing suitable habitats and breeding ground. The ultimate aim of the project is to improve overall coastal biodiversity of the region which in turn assist in improving the livelihood of the coastal populace

Total five mangrove species, such as *Ceriops*, *Aegiceras* and *Rhizophora* were selected which in turn enhanced the dependent faunal diversity of the area. Thereby, there will be an increase considerable biodiversity of the area. **The initial pilot trails were undertaken in an area of approximately 16 hector during the period between 2019 and 2023 with the active participation of local communities.** Current year 4 Hector plantation is in progress which will be resulted in 20 Hector Mangroves Biodiversity Park within one year

S. NO	Mangrove Associate	Life form
1	<i>Suaeda</i> Spp.	Herb
2	<i>Porteresia coarctata</i>	Herb
3	<i>Opuntia elatior</i>	Shrub
4	<i>Sesuvium portulacastrum</i>	Herb
5	<i>Ipomoea biloba</i>	Climber
6	<i>Salvadora persica</i> L.	Shrub
7	<i>Urochondra setulosa</i>	Herb



REDUCING CARBON FOOTPRINT

Home biogas is the Israel based company was founded in 2012 manufactures dynamic biogas unit not only for farm waste but for kitchen waste too. Under Gram Utthan Project, Adani Foundation is supporting home biogas to farmers periphery Villages.

Promotion of Natural Farming–Home biogas And Improving the health and living conditions for the millions of families that are still cooking on charcoal and wood. Adani Foundation is not only supporting but creating awareness to save environment and health of the community who regularly cooking on Chula. **It is proven that one hour cooking on Chula is as dangerous as smoking 40 cigrates.**

Till date 225 farmers are utilizing it with satisfaction and considerable outcome by saving Average Rs. 23,400 for gas and fertilizer as well – with Economic benefit of Rs. 52.65 Lacs.

100 Farmers are linked up with Gobardhan Yojana in which DRDA is providing Biogas with Rs. 5000 Contribution. Adani Foundation has worked as a facilitator between DRDA and Beneficiaries farmers in filling and submission of forms. Total 325 farmers are supported with Biogas as sustainable environment protection



4,176 TONS OF ANIMAL MANURE TREATED

359,687 HOURS OF CLEAN COOKING;
9.3 TONS OF BIOGAS CREATED
325 TONS OF FIREWOOD REPLACED;

47,375 HOURS SAVED ON REDUCTION OF
FIREWOOD & COLLECTION
1225 TONS CO2 EMISSION REDUCTION



Reducing organic waste + Transitioning to renewable energy + Motivation for reduction in use for fertilizer

REDUCING CARBON FOOTPRINT

5. Water Conservation Project - CSR

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 in coastal belt of Mundra as per Government Figures. Our water conservation work is as Below.

- Large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) and Augmentation of 3 check dams
- Ground recharge activities (pond deepening work for 61 ponds) individually and 26 ponds under Sujlam Suflam Jal Abhiyan were built leading to a significant increase in water table and higher returns to the farmers
- New Pond Deepening Under Ajadi ka Amrut Mahotsav done in Goyarsama village. Approx Deepening Capacity is 12000 Cum.
- Roof Top Rain Water Harvesting 145 Nos. **(40 Nos current year)** which is having 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family.
- Recharge Bore well 208 Nos which is best ever option to direct recharge the soil
- Drip Irrigation approx. 1505 Farmers benefitted in coordination with Gujrat Green Revolution Company till date
- Bund construction on way of Nagmati River could save more than 575 MCFT water quantity which recharged in ground due to which bore well depth decreased by 50-100 Ft in Zarpara, Bhujpur and Navinal Vadi Vistar.
- **Check dam gate valve construction at Bhujpur which controlled more than 350 MCFT water to go into sea and get recharged current year.**
- **Pond Pipe line work at Prasla Vistar Zarpara which increase recharge capacity more than 25% in 100 hector area.**



REDUCING CARBON FOOTPRINT

- **Impact**

- 218500 men, women, children, and elderly impacted by this initiative.
- Total Dissolved Solids (TDS) in the ground water down by 16.7%.
- Ground water table up by 4.2 ft. over the last 5 years.
- In four villages water levels have increased by 15-20 ft. through bore-well recharging facility
- Storage capacities of check dams and ponds increased by 106.44 MCFT. Total area benefited 2857 hectares.
- Annually 10000 Liters of water saved and up to INR 10000 saved per family.
- 80% reduction in money spent on labour.
- Up to 20% less money spent on electricity bills.
- 50% less water used as compared to conventional methods.
- Potable water available at doorstep. Earlier on an average women used to walk 1.3 kms to fetch water.
- On an average there has been up to 25% decrease in expenses on healthcare.
- Water availability has also ensured safety, security and overall well-being of women and children in the area.
- Initiatives and efforts made under water projects by Adani Foundation continues to provides sustainable solutions for community for their improved farming and ease of living.



Water conservation and Management

Process Flow for Rooftop Rain Water Harvesting System



Social Survey & TDS mapping

Community Contribution



RRWHS



Impact

- Portable water at door step
- Cost saving for portable water
- Improved water quality with
- Creates water conservation awareness in rural community
- Improves standard of living of rural community

Total RRWHS :- 145

RRWHS Constructed in 2022-23 :- 40

Population Impacted :- 500+

Savings per household :- 10000+

TDS difference between Ground water and RRWHS water



REDUCING CARBON FOOTPRINT

6. Tree Plantation

Till the date 70,540 Tree have been planted at various Public places , Schools, GP and crematorium with their responsibility to nurture and maintain regularly.

For this passionate work our team Member Mr. Karshan Gadhvi was Felicitated with Van Mitra Award by Forest department and GOG.

Adani Foundation has planted 1100+ fruit bearing trees at Bhujpur and 2100+ neem, pipal and native spices at Dhrub in coordination with District Forest Department and community with partnership approach



EDUCATION

EDUCATION



PROJECT UTTHAN



PROJECT UTTHAN

The Adani Foundation set out an innovative intervention in year 2018–19 through project Utthan to improve students' learning capabilities, provide facilities to schools to improve environment and achieve better learning outcomes at the grassroots level with the help of Utthan sahayak. This extensive intervention involves adopting government primary schools, tutoring Priya Vidyarthi's (progressive learners), introducing English as a Third Language, with various academic activities as well co-curriculum activities to end the dropout rates, and working together for staff capacity building. In order to improve children' basic literacy and numeracy skills, it has also engaged the help of educators and parents, especially mothers.

Key Aspect of Project Utthan

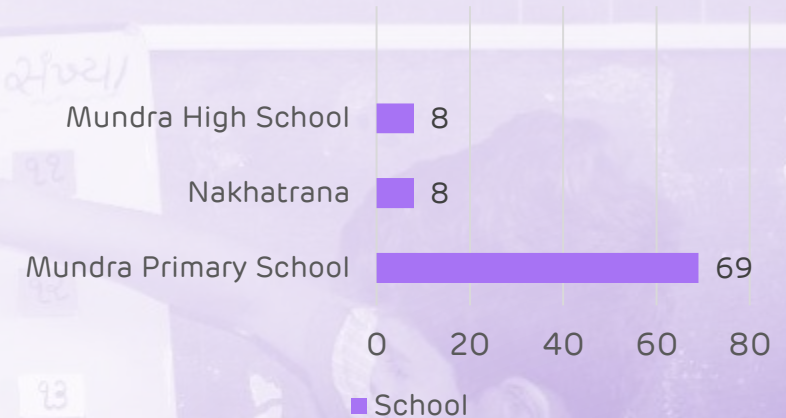
- ✓ Adopting government primary schools.
- ✓ Main streaming Progressive learners
- ✓ Enhancing Learning Outcomes
- ✓ Arresting dropout rates
- ✓ Introducing English as a Third Language
- ✓ Enabling Joyful Learning Spaces
- ✓ Collaborating for teachers' capacity building

Gunotsav is a quality enhancement initiative of the Government of Gujarat for bringing about improvement in learning levels of students at Elementary level

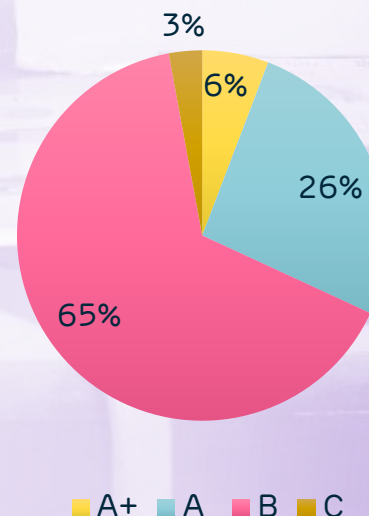
Assessment is based on four core areas :

- ✓ Teaching learning outcomes
- ✓ School management
- ✓ Co-Scholastic activities
- ✓ Usage of resources.

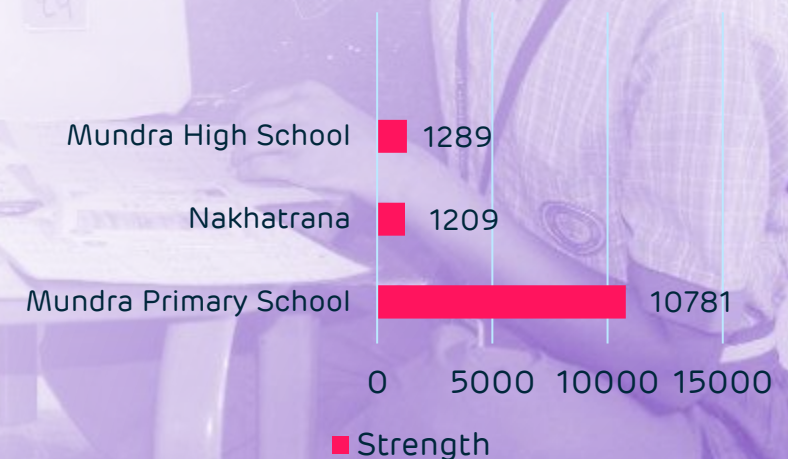
Utthan Schools in Kutch



Gunotsav 2021-22 (Kutch) : An Affirmation on Utthan Schools



No's of Students in Kutch



PROJECT UTTHAN



Conduct baseline assessment of 7034 Students, 3364 Students were progressive learner, 1403 Students mainstreamed.

Location	Total Strength	Baseline Assessment	Progressive learner	Mainstream Students
Mundra	10799	6047	3029	1247
Nakhatrana	1267	987	335	156

Facilitating English from Classes 1-4 : 7500 + are taking the advantage of this intervention.

Cultivating Reading Culture

Introduced DEAR (Drop Everything and Read) period on every first and third Saturdays for an hour; Library activities on every Second & fourth Saturdays.



Year 2020-21 22890 books

Year 2021-22 60780 books

Year 2022-23 110205 books

PROJECT UTTHAN



IT on Wheels : 2 Dedicative Van, 55 Laptops Empowering 2620 Students of 5-8 Std. In Gujarat

IT on wheel program is run to teach them basic emphasizes elementary school digital literacy. In early schooling is the first step to addressing access disparities in this evolving digital environment which is not feasible for rural students. Customize basic syllabus impede their development.

Day Celebration every Month : Summer Camp & Diwali Mela in Vacation

Every month Utthan sahayak celebrates day in which encourage students to

participate in co-curriculum Activity which create opportunity to learn and experience new things. Also planned 15 days Summer camp & 10 days Diwali mela during vacation. 2800+ students participated with more than 4000 handmade traditional products, 3500+ footfalls during exhibition cum sale. Diwali mela attracted 7363 students. That included 12 Activities, 28529 Total Expenses & 37529 earn students. Sarpanch, SMC members, Mothers, and Parents all take part enthusiastically.

Competitive exam Preparation

Location	JNV	NMMS	PSE
Mundra	227	324	347
Nakhatrana	23	48	48

500+ Mothers meet with 11000+ Mothers

Every month, on the Fourth Saturday, Utthan Sahayaks conduct Mothers meets. A child grows a most during the first few years of school, when both the mother and the teacher are crucial in developing their character and personality. Many of the kids are first-generation learners with uneducated parents; in these circumstances, Mother's Meet encourages mothers and teachers in working together to support the education of the child. Also, mothers get a sense of empowerment and value and regularly updates on school activities. Recreational activities during the meeting add an element of surprise and rejuvenation among the Mothers.



PROJECT UTTHAN

International School Library Month (ISLM)

ISLM (International School Library Month) was celebrated by 69 Utthan schools. And school from Russia joined with us in zoom to engage under the virtual connection around the world.

Students from Samaghogha School No.1 performed Garba, while students from Vandh school gave information about library activities. Bookmarks' & Digital bookmarks were distributed with partner schools. This is continuing, 3rd time Utthan schools participated in ISLM.

Signed MoU with 18 more Government Primary Schools at Mundra

Signed MoU with 8 Government High Schools : 8 Village 8 High Schools, 2 Adani Education Evening Center

To overcome challenges of High schools and improve the quality of education, Utthan appointed 2 Utthan sahayak at High schools. 1 for Science/Math's & 1 for English as most of the students facing problems in this subjects. Utthan organized a Parents Teachers Meeting at 8 schools in 8 villages, there were over 450 parents gathered.

After school, children get the opportunity to study at three levels at the Adani Education Evening Center. (AEEC) Remedialcoaching.



Project Title	Participation of Utthan School	Partner Schools	Partner Countries
Bookmark	51	63	08
Digital Bookmark	37	78	10
Virtual Connection Around the World	10	10	09
Total	98	151	27

PROJECT UTTHAN

Utthan's outreach strategies to Increase children's learning

- ✓ Project Utthan has been studied and selected as 'University Practice Connect' by Azim Premji University, Bengaluru.
- ✓ Project is in alignment with NIPUN Bharat (National Initiative for Proficiency in Reading with Understanding and Numeracy Bharat Program) & FLN (Foundational Literacy & Numeracy)
- ✓ Navneet e-Sense software updated in all schools.
- ✓ 100 hours capacity building programs for Utthan sahayak and school Teachers. specially focusing on Foundational Literacy and Numeracy. Utthan sahayak attend CBP (Capacity building program) once in every month.
- ✓ 100% participation in 100 days reading campaign.
- ✓ Google Map : All Utthan schools added in Google map. Utthan sahayak upload photos continuously. that's uploaded Photos got 200k+ views.
- ✓ Utthan sahayak create content for Reading, Writing & Numeracy.
- ✓ Utthan sahayak create 150 Worksheets on Yoga In the run-up to India's 75th Independence day celebrated across India's Azadi Ka Amrit Mahotsav. The tour covers 75 heritage, tourist and archaeological sites and landmark architectural sites across Gujarat.
- ✓ Utthan Sahayak, Hetalba Vaghela encouraged students from Mokha Primary School to write the story. Saptahik Phulwadi, Ahemdabad published the story written by student.
- ✓ TLM, Sports, Music & Science kit distributed to create joyful environment.
- ✓ Inter school competition organized to encourage physical activity & develop talent.
- ✓ Utthan sahayak encouraged & trained students in various competition organized by GoG.



EDUCATION PROJECT

Adani Vidya Mandir, Bhadreshwar



EDUCATION: FREE AND COMPULSORY - vision of Adani Foundation to provide cost-free education, food, uniform, books to the children of economically challenged families of Mundra Bock. Adani Vidya Mandir, Bhadreshwar was established in June 2012, with aim of uplifting the communities through education. The school is equipped with excellent infrastructure and resources required for all-round development of the student. The child is given admission in class 1 and is molded to be an educated and a good human being by experienced and compassionate teachers. The school follows a curriculum designed by GSEB. **507 underprivileged students of Fisherman & Maldhari communities from 8 villages benefitted costfree education at the school**

Teachers Day Celebration with facilitation of all teachers and awarded 5 best teachers in academics. District Education Officer Mr. Prajapati graced the occasion and motivated the staff.

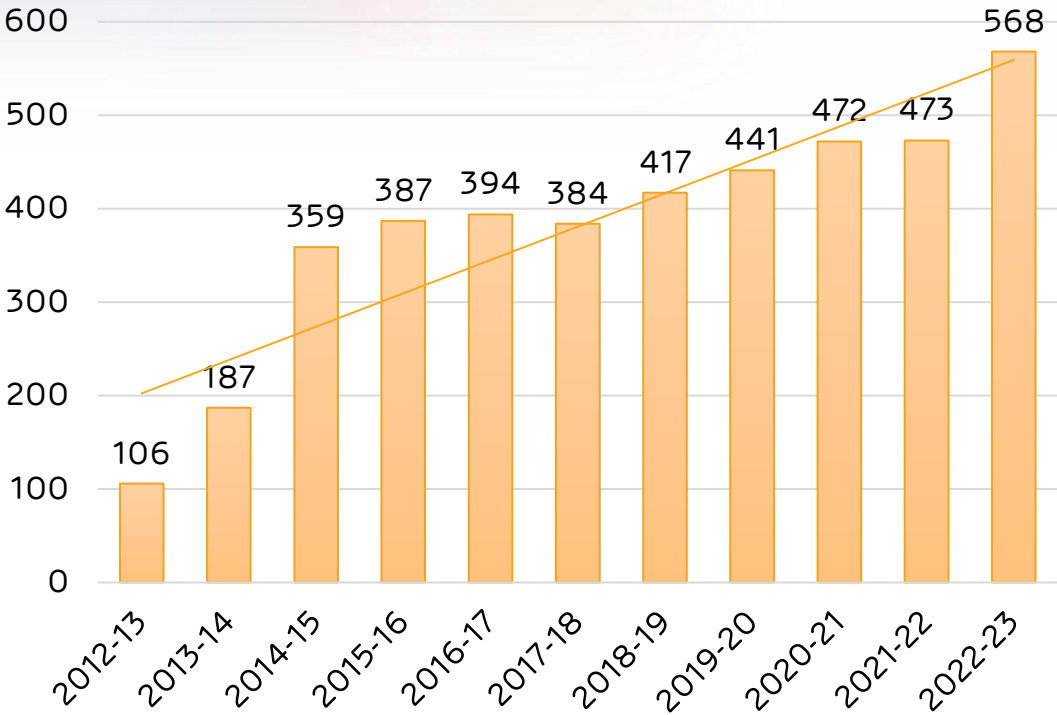
ADANI VIDYA MANDIR, BHADRESHWAR



milestone achievement of Adani Vidya Mandir Bhadreshwar Gujrat Board Standard 10th Examination Result is 100%.

- The grand celebration of the year 2022-23 at AVMB was Shri Gautam Adani sir's Birthday.
- Promoting the harmony across all communities, Special Assemblies are conducted on a regular basis where all the Festivals irrespective of the religion & following are fondly celebrated.
- Periodical assessments and evaluations are conducted for the students and their progress are informed to the parents frequently.

Total Strength



Adani Vidya Mandir Bhadreshwar		
2021-22 (10 th Board)		
NO	GRADE	STUDENTS
1	Above 80 %	3
2	60-80%	18
3	40-60%	10
	TOTAL	31
	Result	100%

PROJECT UDAAN

Vision : To create a pool of inspired young mind

Mission : To motivate young students to dream big



Udaan is a special project inspired by the life changing story of Mr. Gautam Adani. As a child, he had visited the Kandla port in Gujarat, and after looking at the expanse of the port, he dreamt of having his own port one day. The rest is history. Under this project exposure tours are organized where school students are given a chance to visit the Adani Group facilities such as Adani Port, Adani Power and Adani Wilmar refinery at Mundra to get an insight into the large-scale business operations and thus get inspired to dream big in life. The exercise stimulates the young minds to dream big and help them become entrepreneurs, innovators and achievers of tomorrow, and thus play an active role in the process of nation building

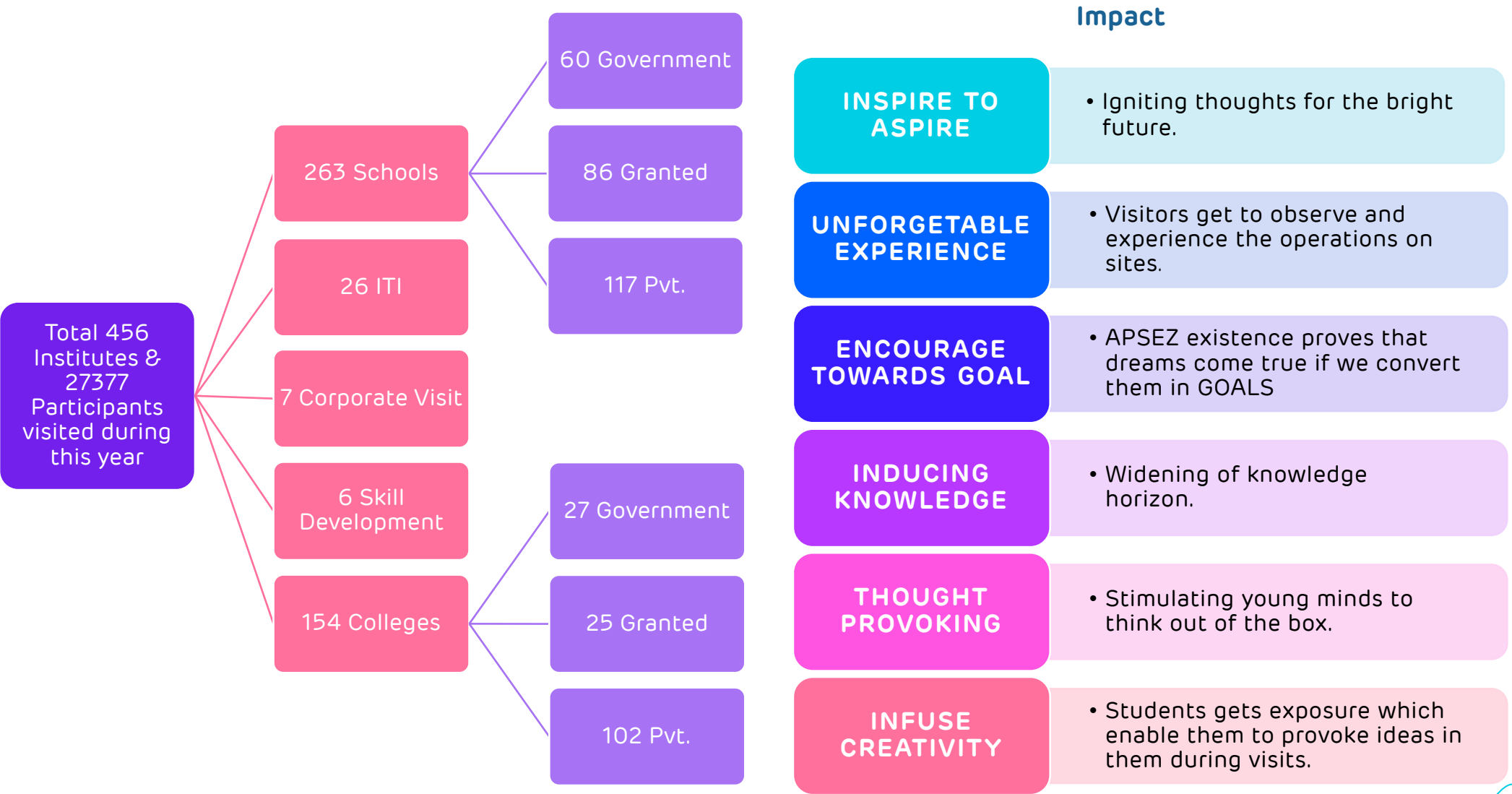
Adani Foundation, Udaan Project invited the members of self-finance School Association, Gujarat for an exposure visit. 90 participants were facilitated with extraordinary experience of Port, Power, Wilmar and Solar plants visit.

Under Project Udaan total revenue generation is Rs.218.77 lacs.



PROJECT UDAAN

Dashboard Sustainable project revenue generated



SUSTAINABLE LIVELIHOOD DEVELOPMENT



SUSTAINABLE LIVELIHOOD DEVELOPMENT

The Pashudhan & Preventive Health care management

Program is a revolutionary initiative by Adani Foundation to provide support and aid to farmers in managing their cattle's health and nutrition needs. The program aims to bring about a positive change in the lives of farmers of Mundra ,who heavily rely on their livestock for income and sustenance.

One of the key components of the Pashudhan Program is providing fodder support to farmers, especially during periods of drought or crop failure. Adani Foundation provides good Quality of dry and green fodder which covered 14116 Cattle of 24 Villages / 3008 farmers. This Program help them to feed their cattle with good quality of fodder that meets all nutritional requirements which increase the productivity of livestock and improve their overall health. In turn, this has resulted in increased income for farmers and improved food security for families.

In addition to this, we also focuses on farmers training for effective cattle health management techniques and Vaccination Drive as prevention measures.



SUSTAINABLE LIVELIHOOD DEVELOPMENT

Grass Land development

AF converted 205 acres of denuded village common pastureland (gauchar) into fertile and productive grassland in Zarpara and siracha village to transform into Fodder Sustain village with Community participation and responsibility for maintain and Monitoring.

Among that 18 Acre of Guchar land is fenced and sowed with Multispecies Green Fodder with Having Good nutritive value. More than 2250 Cattle will sustain with Improving quality and Quantity Of Milk.

Average 2450 cattle get benefitted by green fodder for 72 days –which increase 0.5 litre milk quantity of 50% cattle.

(1225 cattle x 0.5-liter milk quantity Increase x 40 INR per liter=Rs.1592000).

Apart that Open grazing Benefit save farmer cost to purchase Fodder .(2450 cattle x 7kg /Day X 72 Days = Rs. 37,04,400 (Rs. 3 per kg)

This Intervention could save Rs.52,96,400.00

It would be highlighted as best Demonstration and replicate in the other villages as sustainable fodder development project.

Individual Fodder Cultivation

Farmers were Aware ,Convince and trained to cultivate super Napier Grass- as on farm projects to reduce their Fodder Dependency and expense. its update Varity of grass and Can be harvested three time in year with Good growth and Nutritive Value. With that effort 192 farmers have Adopted and Cultivated Super NAPIER Grass in **190-acre area and produce 3800 Fodder Tonnes Yield annually, lead to save Approx. Rs.52 Lacs of farmers.**



SUSTAINABLE LIVELIHOOD DEVELOPMENT

Cattle health camp

Adani Foundation and Animal Husbandry department Veterinary Jointly organizing cattle health Awareness and vaccination programs in 24 Villages of our periphery villages. A cattle health camp typically involves a team of Government veterinary Doctor who provide check-ups and treatments for common ailments and remaining Medicines and Vaccine was provided by AF

Program is very effective to maintaining the optimal health of livestock and help to protect the cattle from deadly diseases such as Foot-and-Mouth Disease (FMD) and Clostridial infections. The vaccines used in these programs are specifically designed to provide long-lasting immunity against specific diseases, ensuring that the animals remain healthy even in harsh environmental conditions.

Total 17299 cattle of 19 Villages had benefitted With different kind of medicines and vaccines.

Apart that 973 camels kharai camels were vaccinated with fitodas and Antisaras in the Phulai-Chhari Dhandh area of Nakhtrana taluka.



Lumpy Disease Vaccination Drive.

An effective and Immediate step was taken to Mitigate lumpy Skin disease outbreak in the Kutch In co-ordination of District Animal Husbandry department through Vaccination and awareness drive at grass Root level. Total 40,000+ cattle were covered through therapeutic and ayurvedic treatment and Nutritive Cattle feed Support.

SUSTAINABLE LIVELIHOOD DEVELOPMENT

Bovine brucellosis is a chronic infectious disease of cattle that causes abortion, the birth of weak or dead calves, infertility and, as a consequence, reduced milk production. Cattle and buffaloes of all ages are susceptible, and infection can persist for many years.

This disease is also zoonotic (a disease that can be transmitted from animals to people)
Hence to protect Cattles against Bovine Brucellosis AF Started Awareness and vaccination program with Kutch fodder fruit & Forest development trust (KFFT) in our 11 Villages.

Under this project following activities were carried out,

- Meeting with Gram Panchayat, Farmers and Livestock Owners
- Development and Distribution of the Awareness Materials among the stakeholders
- Mass Level awareness by pasting the poster and meetings with Village Gram Panchayat's
- Primary Survey and Sample Collections i.e. , Milk Ring Test, Blood Collection and testing
- Brucella Vaccination and Ear Tagging etc. Brucellosis Control Project 2020 Cumulative Progress of various important

No	Name of Activity	2020-21	2021-22	2022-23	Total
1	Awareness Meetings	19	23	18	60
2	Milk Ring Test	48	11	34	93
3	Blood Sample Collection	29	23	18	70
4	Vaccination	2132	2951	2970	8053
5	Family Covered (Direct)	287	379	484	1150
6	Total Benefited (in Direct) Families	1435	1895	2420	5750



Promotion of Natural Farming

Natural farming is a method of agriculture that prioritizes soil health and sustainability. Instead of relying on synthetic fertilizers and pesticides, one key aspect of natural farming is the use of cow-based preparation like Jivamrut, Gau Krupa, Amrutam, and wormy Compost Fertilizers.

Adani Foundation Promote Farmers to adopt Cow based farming with end to End Program from Awareness to Market Linkage. 1392 farmers benefitted by training from which 60% farmers chemical usage is reduced to half extent in 500 Acres approximately.

Impact

- I. Production Cost- 20% Reduced
- II. Chemical & pesticide exposure- 30 to 40% Reduced
- III. Premium product price-5% increase
- IV. Crop Yield & Taste - Better taste and quality-

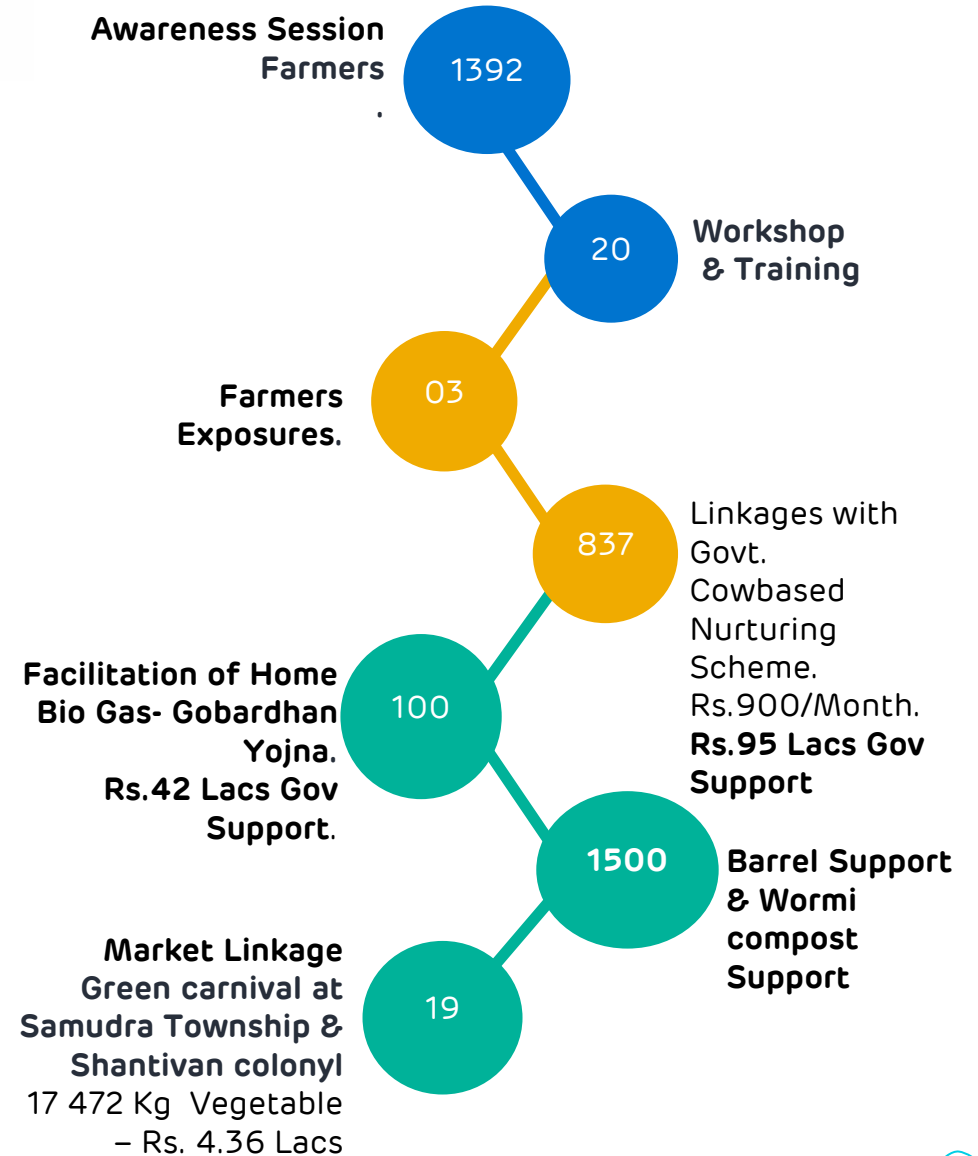


SUSTAINABLE LIVELIHOOD DEVELOPMENT



Natural Farming

Implementation Process of Projects



SUSTAINABLE LIVELIHOOD DEVELOPMENT



Prakrutik Sahkari Mandli

Formation of Shree Raj Shakti Prakrutik Kheti sahkari Mandali Limited Mangara and register Under Gujarat Co-operative Society act-1961 with 60 Members which is the First Organic Company of Registered across Kutch.

AF Started an Initiatives **"Green carnival"** an initiatives to Provide Marketing Platform to farmers to sell Natural Farming Vegetable & Agri Produce at Shantivan and Samdudra town Ship ,Mundra on Weekly base.

We provides resources, and technical assistance to help farmers to market their products successfully.

Farmer's Producer Organization

Kutch Kutch Kalpaturu Producer Entity (KKPC) was established in the year 2020 to address the interests of farmers, particularly to provide an entrance for outputs and inputs. The company was founded with 237 farmers

KKPC served for Date Packaging box, Milk Supply to Colonies, NB 21 Off suits Supply, Vegetable Seed ,Mineral Mixtureand Cattle feed supply and plan to extend more service.

KKPC Current Year turnover is. Rs.28.89 lacs by started Different Kind of Initiatives



SUSTAINABLE LIVELIHOOD – FISHERFOLK COMMUNITY



Access of Pre-primary
education.to 3 Vashat –
125 Students



Transportation Facilities to Govt.
& AVMB School- 33 Students



Free AVMB –School Education -
147 Students



Book Support -43 High School
Students



Scholarship Support -43
Students of SMJ School Luni



Coaching for 10th Exam OF 8th
.9th Failed Students -28
Students

**Fisherfolk education has
had a significant impact on
communities to shaping
individuals' lives By
providing Access of quality
education for Pre- primary
to Higher Education.
More than 500+ Fisherfolk
children are getting
Education**

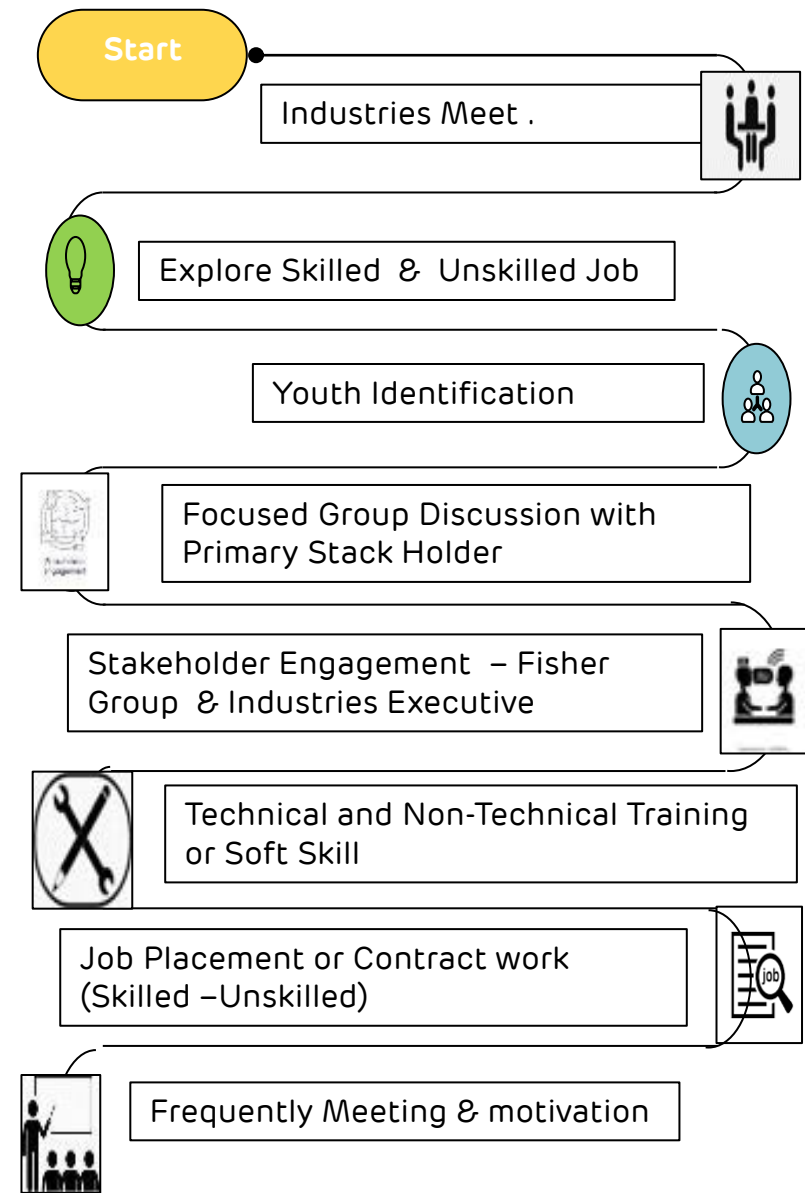
Impact

1. Access Of Quality Education
2. Promoting Girl Child Education.
3. Increase Economic Productivity
4. Creating Employment Opportunity
5. Social Development & Networking

SUSTAINABLE LIVELIHOOD DEVELOPMENT

- ❖ 194 fishermen and women are engaged through Contract adani Group Company on regular base.
- ❖ 23 Youth have been Placed in Different company after Completion of Technical training.

Total 217 Fisherfolk are Employed and earning on Monthly Base.
Average Monthly Income Rs.14500/ Individual



SUSTAINABLE LIVELIHOOD DEVELOPMENT

Fisherfolk Livelihood

Mangrove plantation and Nursery development work has created a two facet impact by providing Livelihood to Fisherfolk during two months Fishing during Off season and developing 162 hector dense mangrove afforestation. **5200 Men days** work provide to **285 Fisherfolk** of Luni ,Sekhdiya and Bhadreshwar Villages in coordination with Horticulture Det.

Formed **Sagar Saheli SHG of** Navinal Fisherfolk Women and Linked With DRDA after completion of Stitching Training ,received first order of Rs.80,000 to prepare Cotton Bags. Total 12 Women are engaged and planning to expand with more Women and Order. Liaising with Fisheries department to Facilitate Fishermen welfare Scheme and Form Filling Process. Pagdiya Fisherfolk Kit, Boat Licence renewal, Boat Token Process.



WOMEN EMPOWERMENT PROJECT

Women are essential to the entire development process, whether in a single household, a village, a state, or a nation. Adani Foundation provides a platform for Community women to overcome the social barriers by becoming change - makers in their communities and societies while maintaining their traditions. Mundra has witnessed a significant shift in the development of women beneficiaries in various fields of occupation including such agriculture, self-employment, horticulture, and so on. The Adani Foundation has a strong emphasis on strengthening rural women and betterment through sustainable livelihood support, resulting to socioeconomic shifts in the rural population.



WOMEN EMPOWERMENT PROJECT

Strategy & Process of Empowering Women by SHG Group

Identification of target Group

Mobilization and formation

Capacity building & Training

Saving & Credit Activity

Income generating Activities

Connect with Government & other organization

Monitoring & Evaluation

Adani Foundation has been working towards empowering women through various programs and initiatives. Here is a brief overview of our work in women empowerment :

- ✓ **Self Help Groups (SHGs)** : We have established 82 self-help groups in various rural and urban areas to provide financial and social support to women. We provided training and capacity building workshops to members of these SHGs to help them develop income-generating activities and improve their livelihoods. Through this initiative, we have empowered over 850 women to become self-reliant with Savings of Rs. 30.42 Lacs
- ✓ **Training & Skill Development** : We conducted skill development programs for women in various fields such as tailoring, handicrafts, and food processing. These training programs helped women develop their skills and start their own businesses. We have trained over 320 women in various skills, and many of them have started their own businesses.
- ✓ **Women's Health** : We organized several health camps and awareness programs for women, with a special focus on menstrual Hygiene. These programs aimed to educate women about their health and empower them to make informed decisions. We provided health services to over 1150 women through these camps.
- ✓ **Assistance in Job & Government scheme** : We empower 256 women by help them to seek Job, they all earn average 9288/- Monthly. Also Gave awareness about government scheme which directly benefit to woman & helped them in the process to apply.
- ✓ **Advocacy and Awareness** : We conduct awareness campaigns and advocacy programs to promote gender equality and women's rights. We aim to challenge the social norms and cultural practices that prevent women from achieving their full potential.

WOMEN EMPOWERMENT PROJECT

1. 56+ women by Gram Bharati Platform

2. 102 + Menstrual Hygiene workshops

3. 12+ Advocacy and Domestic violence sessions

4. 82 SHG - Saving & Credit Activity

5. 220 + Job Placement



WOMEN EMPOWERMENT PROJECT

SHG Name	Our Intervention	No. of Woman	Get Order from	Order of	Total Order (lac)	Grambharati (lac)	Till today Turnover
Jyot Saheli Swa Sahay Juth	Collaboration with RSETI & trained woman by Rural Self Employment Training institute	10	Mundra Navratri Celebration	Moti work, Bead work neckless as well as Panjo	0.42	0.75	1.17
Saheli Swa Sahay Juth	Help them for tender process	10	Jilla Mahila ane Bal Adhikari Kutch,Bhuj	Sanitary Pad	1.20	0.00	2.50
Tejashvi Saheli Swa Sahay juth	Help them to increase variety in stitching related work, Wall Hangings, folder bag, Uniform	15	AVMB – Bhadreshwar	Uniform, Folder bag,Jatt bag	9.12	1.10	20.25
Food Sister Saheli group	Help them to start the Canteen at Rangoli Gate	10	APSEZ + Rangoli Driver Shed	Food	3.00	0.00	3.50
Shradhha Saheli	Tender from ATMA + Various ordered of Food + Snacks provided to various Balvadi	10	ATMA, Adani Public school & Balavadi	Lunch + snacks	8.63	0.20	15.00
Meghadhanush Saheli	organized an exhibition of Eco-friendly Ganpati	11	Utthan Project	Mud frames	1.39	0.60	12.00
Radhe Saheli Swa Sahay Juth	Exhibition cum sale & Inspire them to participate in Grambharti	16	Gram bharati order	various type of Dhadaki	0.40	0.20	2.00
Sonal Saheli Groups	Training them for Making Phynial & Washing Powder	10	Port & Wilmar	Sale washing powder	3.60	0.00	12.00
Karimbhai Mansuri	Namda Craft				1.80	0.00	9.80
Over All Corporate	Marketing & Gift packing Training	35	corporate order	Various order from all SHG	9.76		9.76
Total	-	127	-	-	39.32	2.85	87.98

WOMEN EMPOWERMENT PROJECT

Training, Awareness programs, Exhibition and Certificate courses can play a critical role in the development of women by providing them with the skills, knowledge, and resources they need to succeed in their personal and professional lives. Adani foundation is providing that opportunity to rural women by

exposure. This initiative more than 500 woman trained in subject like how to run business, Personal hygiene, Woman rights, social media marketing etc. 30 Women got the Artisan card though the RSETI (Rural self Employment Training Institutes) Adani foundation celebrated International women's by

motivating 150 Woman from different 82 SHG's. Current year theme was **Digital ALL : Innovation & technology for gender equality.**



Community Health

Access to quality healthcare is a fundamental right of every individual

Health plays a crucial role in transforming people's lives. We all realized importance of health after facing challenging situation during Pandemic. Access to quality health care gives a fair chance to lead healthy, productive lives. Healthy people can utilize opportunities available to them.

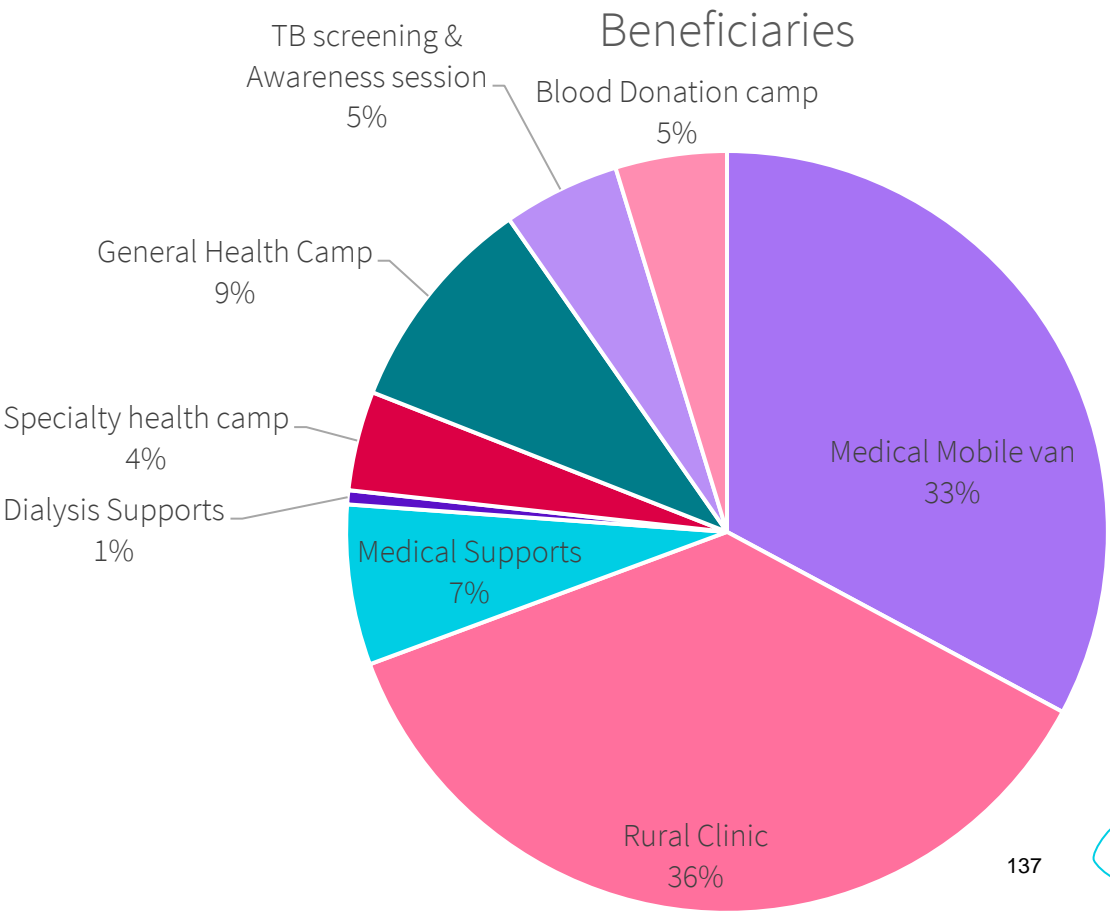


Community Health

Sr. No.	Project	Beneficiaries	
1	Medical Mobile van	11879	32 village
2	Rural Clinic	13209	9 village
3	Medical Supports	2460	63 village
4	Dialysis Supports	216	63 village
5	Specialty health camp	1527	
6	General Health Camp	3379	
7	TB screening & Awareness session	1795	
8	Blood Donation camp	1710	
Total		36175	

“Healthy mind remain in healthy body which create health community to make healthy Nation.”

Adani Foundation is relentlessly working to Provide access of quality health facilities at Doorstep level to create health Society for healthy nation development through various kind of health Projects



Community Health

Rural Clinic & Mobile Health Care unit

Adani Foundation focuses on ensuring good health for better contribution to growth and progress. During this pandemic situation health is the basic need for development of community. Their objective is to live healthier lives by promoting healthcare seeking behavior.

Mobile Health Care Units and Rural Clinic Services are deployed with the objective of providing basic healthcare facilities to remote rural areas as well as poor peoples. The service being executed by Adani foundation is to reduce travel time, hardships and expenses.

The mobile health care unit covers 25 villages and 07 fishermen settlements. Around 90 types of general life saving medicines are available in these units. This service becomes a boon for women, elderly and children as the service is available at their doorstep.

Rural Dispensaries are established where there is a gap in the healthcare services. The Adani Foundation operates Rural Dispensaries in 6 villages of Mundra block, 02 villages of Anjar block and 1 clinic in Mandvi Block. Mobile dispensary and rural clinics provide health services with token charge of 20/- rupees per patient daily by a doctor and a volunteer.

During this year total 11879 beneficiaries were benefitted by Mobile van and total 13209 beneficiaries were benefitted by Rural clinics where female ratio is 65%.



Community Health

Medical Support Detail

Adani Foundation provides primary health care and financial assistance to needy poor people for ailments such as kidney related problems, paralysis, cancerous and tumor surgeries, neurological and heart problems, blood pressure, diabetes etc.

Partial Medical Support had been given to 2000+ beneficiaries of Mundra, Mandvi and Anjar Block at Adani hospital, Mundra. where as in the Critical cases after stable them we refer them to GKGH, BHUJ for further treatment.

Dialysis Support

The drinking water of Mundra contains high TDS (Total Dissolved Solids). Hence, the proportion of patients with urinary stones and kidney failure is more. Patients suffering from kidney-related diseases require regular dialysis which is costly and adds to the financial burden of the family.

Hence, the Foundation has undertaken a programme to providing dialysis treatment to help the extremely needy patients to live a healthy life. During this

year, 4 patients were supported for regular dialysis (twice a week) with partial support.

NCD Awareness and Prevention

MHCU and Rural Clinic Doctors are working parallelly for creating awareness and prevention measures for Non Communicable diseases, Awareness sessions scheduled in 8 High Schools and 2 community places. More than 110+ patients were supported and counselled for Hypertension and Diabetes. Due to early intervention their life span increased and quality of life became better

Machhimar Shudhh Jal Yojana

To reduce water born disease and women drudgery to get water, Potable water is provided to the fishermen communities at different vasahat through water tanker since 9 years. Coordination done with Gujrat Water Infrastructure Limited For Juna Bandar, Kutadi Bandar, Veera Bandar and Ghavar Bandar. Adani foundation is supporting to 3 fisherfolk settlements.



COMMUNITY INFRASTRUCTURE DEVELOPMENT

The Adani Foundation's Community Infrastructure Development (CID) program is the keystone initiative focus on improving infrastructure facilities of rural and urban area with proper designing and implementation to built robust infrastructure, This project impacted Thousand of life toward health care, education, agriculture, water and sanitation and other basic facilities for sustainable rural development



COMMUNITY INFRASTRUCTURE DEVELOPMENT



40
Construction
Of RRWHS

19 Bore
Recharge

2 Pond
Deepening
under SSJY

Pond
Beatification -
Bund
Strengthenin
g at Bhujpur

2 Percolation
Bore
Recharge

3 Re-
strengthening
of Approach
Road

Cricket
Ground at
Hatdi

Construction
of house for
needy
fisherman

3
Construction
of Water Tank
at Luni
Bandar

Construction
Common
gathering
open shed

Renovation
Approach
Road

4 Common
gathering
Open Shed

Construction & Development, Repairing & Maintenance and Support Work covered during the year

Community
Training
center
Shekadiya

Vegetable
Market at
Mundra

Development
of Gate Valve
at Checkdam

School
Compound
wall at Rampar

Fisherman
approach
Road
restoration

Bund Strengt-
hening at
Bhujpur

2 Pond
Deepening -
Azadi ka
Amrut
Mahotsav

Renovation
Training
center Mundra

Renovation
Blood storage
Lab CHC
Mundra

2 Disable
Widow Toilet
Block

2 CC Road of
700 mtr.

R.O. Plant
Mokha 1000ltr
/HR

JCB & Hitachi
Support for
Pre-Monsoon
Activity

Check dam Re
-
strengthening
Bharudiya

Pond Pipeline
work 800 Mtr

Flood Water
Control Sluice
Gate at
Zarpara

Construction & Development, Repairing & Maintenance and Support Work covered during the year

CRC MUNDRA

Community Resource Center

Community resource Center is the bridge between Government Schemes and real Beneficiaries. It is situated at Adani Field Office, Baroi with the motive to be **Single window point solution (Online Application & Documentation) to Facilitate Government Schemes leveraged to needy and Eligible people.**

**Key Achievements of
Community Resource
Center
Monthly Base**



Government Scheme Facilitation				
Sr. No	Gove Scheme	Gov. Support Rs/Month.	Total Beneficiaries	Total Amount/ year
1	Widow Pension	1250	641	18496350
2	Bal seva Ayog	2000	49	2254000
3	Divyang pension	1000	19	323000
4	Divang Bus pass	300	439	
5	Niradhar Pension	750	126	2808750
6	Palak Mata Pita	3000	5	516000
	Total		840	2,43,98,100

CRC MUNDRA

Widow Pension Yojna

Objective of this Yojana is to provide Financial support Rs.1250/Month to widow to made Them Financial independent. Parallely, we are conducting Motivation Session with them to raise their Value and Positivity to create healthy family Environment.

Till The date Total 641 Widow have been Linked with Government Widow pension Scheme.

Monthly Pension and other allied Scheme

Under This Program disabled Person are supported with Monthly Pension @ Rs.1000 As well allied facilities like Bus pass, Railway pass to made them Self sustain and Confident.

Till the date total 458 Divayang are linked with Different Government Scheme.

Bal Sakha Yojna

Aim Of the Yojna is to Provide Financial support Rs.2000/Month for Education Purpose to below 18 year Students who lost their Parents due to Life threatening Disease Including Covid. Total 49 Students are getting benefit of the scheme.

Palak Mata Pita Yojna:-

Motive of this scheme is to promote parents who is taking care and Nurture the child who is Below 18 year and lost their parents.@ Rs.3000/Month. Total 5 children are being supported under the scheme.

Niradhar Pension Scheme

Under this Scheme Financial Assistance 750/Month is provide to Senior citizen who don't have Surviving Children (Son) or Below 21 year son. Till The date 126 senior Citizen availing schematic benefit.



CRC MUNDRA

Some Glimpse of Cow Nutrition Support scheme Biogas Under Gobardhan scheme



Key Achievements of Community Resource Center One time

Sr. No	Gove Scheme one Time	Gov. Support	Total Beneficiaries	Total Amount/Year
1	Covid Support One Time	50000	12	6,00,000
2	Vahali Dikri @ 18 Year	110000	113	1,24,30,000
3	Divayang Sadhan Sahay one time	5000	176	8,80,000
4	Manrega (NB21)	22000	32	7,04,000
5	Pagadiya Sadhan Sahay Yojana	9000	9	81,000
6	Gau Dattak Yojana	10800	857	92,55,600
7	Gobardhan Yojana	42000	100	42,00,000
8	Fishermen Shram Yogi Yojna		163	
			1487	2,81,50,600



ADANI SKILL DEVELOPMENT CENTRE

**Total Centre
Admissions
FY 22 - 23**

Mundra

Courses	Female	Male	Total	Revenue Generated
Pedicurist and Manicurist	68	0	68	68000
Beauty Therapist	18	0	18	36000
Self Employed Tailor	31	0	31	38850
Assistant Electrician	0	50	50	188800
Bar Bender and Steel Fixer	0	29	29	0
Meson General	0	29	29	0
Domestic Data Entry Operator	47	11	58	239000
Junior Crane Operator	0	23	23	642000
Interview Skills	14	18	32	0
Mudwork	71	0	71	61600
Solar PV Manufacturing Technician	0	25	25	109500
Basic Functional English	562	670	1232	707300
Digital Literacy	391	461	852	454290
Total	1202	1316	2518	2545340

Bhuj

Courses	Female	Male	Total	Revenue Generated
Interview Skills	21	9	30	0
General Duty Assistant	45	8	53	3,09,734
Disaster Management	0	2	2	4000
Basic Functional English	1077	352	1429	8,57,400
Beauty Therapist	2	0	2	4000
Assistant Beauty Therapist	1	0	1	1500
Self Employed Tailor	8	0	8	8000
Digital Literacy	231	270	501	3,00,400
Domestic Data Entry Operator	0	1	1	4,720
Non Domain Employability Skills	21	11	32	0
Diet & Nutrition	02	00	02	9440
GST with Tally	16	01	17	98000
Understanding Operating System	21	7	28	0
Entrepreneurship	23	7	30	20,800
Financial Literacy	51	1	52	3600
Total	1519	669	2188	16,21,594

ADANI SKILL DEVELOPMENT CENTRE BHUJ

Soft Launching of Self-Employed Tailor – Outreach Batch at Meghpar

Soft Launched Self-Employed Tailor Batch at Meghpar (Out-reach). Total 25 candidates are enrolled.

Soft Launch of Entrepreneurship Development Program

Soft Launch of Entrepreneurship Development Program Training at Centre under CED with 30 candidates.

Soft Launch of General Duty Assistant Batch

Soft launched General Duty Assistant Batch with 30 candidates under DDU-GKY scheme as per instruction by GLPC.

Soft Launch of FL Training under Special Project

Launching Special Project Jointly with KMVS NGO for FSW (Female Sex Worker) Financial Literacy training Inaugurated on 22-07-2022
Total 46 women participant



ADANI SKILL DEVELOPMENT CENTRE MUNDRA

Mud Work Training– Outreach Batch at Samundra township

Total 45 candidates are enrolled.

Soft Launch of Data Entry Operator Batch

Soft launched Data Entry Operator Batch with 50 candidates under Thermax Foundation Tie-up

Soft Launch of Solar Panel Manufacturing Technician Training of Solar Panel Manufacturing Technician Training at Bhuj, ITI with 25 candidates.

Soft Launch of DL Training under DEO Project

Soft Launch of DL Training at AVMB School with 61 Students

Tie Ups with (Thermax Foundation, Empazer, Navin Group and DEO Kutch @ Rs.24.25 lacs.



ADANI SKILL DEVELOPMENT CENTRE MUNDRA

DEO Project

MOU with Kachchh District Education Office. In this MOU ASDC has provided training of Digital Literacy and Basic Functional English in Kachchh District Schools. As per MOU Kachchh District Education Office has provided 4000 candidates to us for training (Adani Skill Development Centre). Funding from Thermax, CFS and DEO made it possible

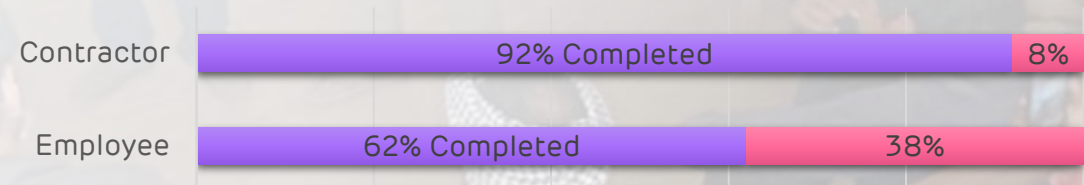
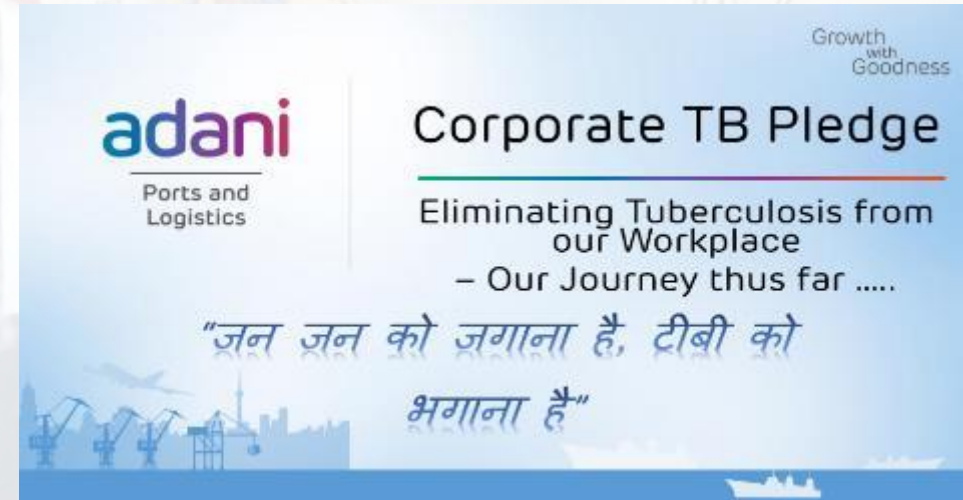
Courses	Total Students Trained
Basic Functional English	2659
Digital Literacy	1341
Total	4000



Dignity of Work Force Programme - EVP

India's National TB Elimination Programme (NTEP) aims to meet the ambitious goal, announced by the **Honorable Prime Minister Shri. Narendra Modi**, of **ending the TB epidemic by 2025**, five years ahead of the UN Sustainable Development Goals (SDG) of 2030. In response to this call, the Government of India and USAID jointly launched the Corporate TB pledge (CTP), in April 2019 to galvanized corporate support to end TB.

To continue the momentum and efforts, the USAID-supported iDEFEAT TB project, which is working towards institutional strengthening to accelerate actions for Tuberculosis (TB) and drug resistant TB (DR-TB) in India; was launched as USAID/India's flagship TB project. The project works in collaboration with the Central TB Division (CTD), Ministry of Health and Family Welfare (Mo HFW) of the Government of India across a network of diagnostic, treatment, and program management institutions.



No of sessions
200+



No of Trainers:
89



No of days
144



Total no covered:
8000

Dignity of Work Force Programme - EVP

The CTP secretariat, hosted at The Union under the iDEFEAT TB project, provides technical assistance to government and corporates to adapt, implement TB interventions, and guide corporate resources for TB and DR-TB care.

Early diagnostics and treatment initiation are key to saving lives and minimizing disease transmission. In 2019, India reached a milestone of 24 lakh notified cases in India, an increase of 12% compared with 2018. Even then, an estimated 5.4 lakh were 'missing' across India, a serious drawback to our TB elimination efforts as what is not measured is unlikely to be improved. Diagnostic delays are also prevalent in India, with studies indicating that these can be attributed to patients as well as health systems.

Adani foundation with APSEZ, APML, AWL and MSPVL HR department in coordination of FOKIA has launched cluster based screening program to eliminate TB in labors under Dignity of workforce program. Adani Ports and SEZ Limited has completed screening with 8000+ work force.

USAID/India team including Director – Health Office has visited Adani Foundation CSR Activities related to community health. He visited Adani Hospital, GKGH Hospital and related activities.



Dignity of Work Force Programme - EVP



Central TB Division | #TBMuk...
@TbDivision

TB-Free Workplace models were showcased in Multisectoral Corporate Engagement towards TB elimination in India conference. @Adaniports through @AdaniFoundation covered a population of over 8000 people comprising employees, family members & contractual workers at Mundra port.



Health Camp for workforce and Green Carinal Celebration



It is true that we cannot achieve our goal of development unless and until we support to bring up the lives of this community. Basic needs of this work force need to be considered. In labour Vasahats they were not getting even the facility of pure drinking water, proper living condition, sanitation which Adani Foundation has addressed one by one within last years five years span.

With the objective to build up trust and transparency in labour community, union Labours and Smooth business operations, Adani Foundation had organized 45+ labour camps for 2000+ workforce beneficiaries in coordination with Adani Wilmar Limited

18 Green carnivals

17472 Kg Fruits and Vegetable

436000 INR



Started the great initiative from world Soil Day - Biggest Employee volunteering program of Adani Ports and SEZ Limited with more than 56 employees as supporter of event organizer and 225 employees with family as a supporter of Farmers n SHGs.

Children used to enjoyed Games and Dance ! Lucky Draw surprise gift was organic ghee..

HR department, IT department and Admin department has supported a lot and will support every fortnight for this sale every sunday

ADANI KANDLA BULK TERMINAL PVT LTD - TUNA

Water at Fisherfolk settlement

Potable water (18 KL per Day)
Distribution to Vira and Dhavlvaro
Bandar through Water tanker Regularly
which improve Hygiene and Health
standard and reduce Women drudgery
,Cost and Time to get water by
**Linkages through AKBTPL and GWIL
daily bases.**

Fodder Support

Support of Dry & Green Fodder to Tuna
and Rampar Village Gaushala Cattles
during Scarcity which impacted on
Cattle health and Milk Productivity
ultimately Farmers Income as well. Total
643825 Kg green Fodder Supported for
900 Cattles of Tuna & Rampar.

Tree -Plantation

Total 200 Tree was planted and ensure
responsibility for watering and caring.
This initiative involved Community and
School students and sensitized to plant
more trees and nurture. After our
plantation, Gram Panchayat also
planted 55 Neem trees in same
premises.



ADANI KANDLA BULK TERMINAL PVT LTD - TUNA

School Renovation work Rampar

More than 800 students are studying in Rampar near Tuna port. School did great coordination to approve 3 new rooms from Sarv Shiksha Abhiyan. Other part was required renovation which was taken care by Adani Foundation. Due to this Total 6 Rooms are now in full utilization.

CC Road Wandi

Wandi is 1 km away from Adani Kandla Bulk Terminal Port Limited and 100 % Population of Fisherfolk. 1 Km Drainage line is done by WASMO – CC road request received in year 2021. Adani Foundation guided for CC road work after drainage work.

Common Gathering Flooring work, Tuna

Tuna Village is 2 Kms away from AKBTPL. In Tuna Village, community gathering shed was constructed from MLA Grant. Flooring work was not included in the same, which was taken up by Adani Foundation. Shed is well utilized in SHG meetings, Farmer meetings and Gram Sabha



ADANI GREEN ENERGY LTD - ABDASA

Adani Solar Plant Bitta is under Adani Green Energy Limited. Adani Foundation is doing regular support of JCB during monsoon or any accident cases as and when required.

Apart from it Celebrated Chairperson's Birthday by distribution of school bags to the children taking admission in class 1 along with necessary books and Education Material. Which includes Bitta School, Nani Dhufi School and Moti Dhufi School.

Deputy Collector of Abdasa taluka place, called for a meeting to all major industries of taluka area. Agenda of the meeting is to develop 7no's "Amrut Sarovar" in Abdasa taluka area under government proposal at every district level.

As per the proposed identified locations by Deputy collector, one of the location he has asked to develop by Adani Power Limited. He has proposed, "Amrut Sarovar" is developed nearby our plant area with amount Rs 20 lacs as per pond size All such proposed "Amrut Sarovar" are new only, not to develop available old pond in nearby area.



Impact Story



Ratanbhai Keshavbhai Gadhavi is a farmer of Moti Khakhar. On 17th May 2022, he purchased NB Super Grass Stalk to cultivate it in 1 acre of his land. After maintaining, nurturing and hard work the grass thrived lush green with a tremendous height that's when he performed his first mowing of it.

Ratanbhai had to feed fodder to his 35 cattle regularly. While interacting, we came to know that he used to require 16kg of dry grass during summer and winter at an estimated cost of ₹1,60,000 but after planting NB Super Grass, he has saved 80-90,000rs which is approximately 50-55%. Apart from this, Ratan bhai also mentioned that during this period, he usually had a demand for 2 to 3 farm trucks of fodder which he used to order from the market but after cultivation of NB Super, not a single farm truck loaded with fodder is demanded from him.

Moreover, due to the cultivation of NB Super Grass fuel and fare expenses on farm trucks have nearly come to end. Also, Ratan bhai has already mowed the grass twice and 3rd mowing is going on having the height of grass 12-14 ft.

Lastly, Ratan bhai stated that his cattle relishes and is habituated with NB Super Grass more than any distinct fodder.

Impact Story



Amrutaben desired to ask God for one thing, a new pushcart! -

Jiluben is an elderly woman with physical limitations and a terrible economic state. She's been widowed for thirty years. Jiluben's son is 50 years old, unmarried, and almost face continuously ill. while her daughter Amrutaben is divorced (she got married 20 years ago). Jiluben, who is 70 years old only has her daughter Amrutaben is working. Amrutaben used to use her old pushcart, but it was heavy and too old for her to carry around everywhere, plus she didn't have enough money to buy a new one. Amrutaben only desired to ask God for one thing, a new pushcart! because everything else she could take care of on her own despite such bad situation.

An employee of the Adani foundation has spoken with Sarpanch Hawaben about the work being done by the Foundation on support of people with disabilities. As soon as she informed & requested that to make visit at Jiluben house. Their pushcart needs were discussed by representative from the visited, verified all the necessary paperwork, and spoke with Jiluben and her family about government programs for widows and people with disabilities. And a week later the entire process was completed, and the new pushcart was provided to them. She is now able to work promptly and help their family in overcoming this difficulty.

Impact Story



Hiruben Karsan Tharu lives with her parents in Nani Bhujpur village. She fell very ill when she was three years old. After treatment, she recovered, but her both legs were affected by the paralysis in both legs. At such a young age, she started coping up with her disability. Adani Foundation provided platform to women of Nani Bhujpur village by providing them with Sewing Machine and enrolling her in sewing machine training. Moreover, she was provided with Wheelchair and Calipers to help Hiruben move comfortably and attend class regularly.

Presently, she earns Rs. 5,000 to Rs. 6,000 a month from stitching work which is much appreciated and admired by her neighbors and relative.

Impact Story



Empowered Women, empowered nation!

India is a land of culture and traditions. These traditions are kept alive in rural locations. One such tradition is gifting daughter during her marriage for her happy married life. Sonalben too received a cow from her maternal family during her wedding. This was given with a purpose of livelihood generation at the time of crises. For sonalben, this gift was priceless, she decided to utilize income received from one cow to buy more cows. She continued to sell milk, buttermilk, Ghee, and other cow-based products and retain income to buy more cows. Gradually she increased her livestock to 66 cows which provides 165 liters of milk per month. Within 7 years of her marriage her livestock increased from 1 cow to 66 cows.

Looking at her zeal and passion towards animal husbandry, Adani Foundation provided her with Biogas kit so that she can save cooking fuel cost and fertilizer cost as waste slurry from biogas acts as a natural fertilizer.

Recently, On Kisan Divas she was felicitated by Adani Foundation for doing exceptional work in Animal Husbandry. She has now become a guide for all those women who wish to make living out of limited means.

Impact Story



"Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness." – Thomas Jefferson

It is said that one can do everything if he or she has direction and clarity towards the goal. Geetaben, a loving wife, responsible mother of 3 daughters and a son and an amazing farmer has always supported her husband in his farming occupation. Her life took a transformational turn when her husband passed away in 2018 due to severe heart attack leaving all responsibilities on her shoulder. Of course, she was working on farm keeping shoulder to shoulder with her husband before he passed away but managing farming single handedly was a tough business for her. Moreover, raising 4 daughters and a son for a widow is a somber task too. It took couple of months for her to hold herself up for the sake of her children and to make her husband's dream true. Her husband Late. Bharat Bhai Jethva hold recognition to be a first farmer in Mundra district who has initiated to cultivate Kamalam (Dragon fruit) in his farm. He had a dream to cultivate best of organic Kamalam and sell his organic fruit to a larger market. He was on cloud nine when his first harvested kamalam blossomed beautifully. But unfortunately, his heart attack pushed him to changed realm. It was her determination to continue his husband's dream and take kamalam cultivation to the next level.

As Geetaben started inclining towards chemical-free farming, she started getting higher value for her crops resulting more income. With foundation's support and guidance, she understood which crops/vegetable to sow for high returns.

Impact Story

Jethva family holds 4 acres of land and Geetaben took charge of cultivating seasonal fruits and vegetables in that farm. Being a female farmer, the use of chemical-based farming impacted her health a bit but still she used to cope up with daily chores until she had an encounter with Adani Foundation in her village Mangra. Team members Mavji Baraiya, SLD Head and Kalyan Gadhavi, Community Mobiliser from Adani Foundation organized Natural Farming training at Mangra village of Mundra district. All farmers of Mangra village participated in that training. she also attended the training in which she got insights of all techniques of natural farming and proposed support from Adani Foundation. She approached foundation team and expressed her willingness to learn more on natural farming techniques for crops, vegetables, and fruits. Before that Jethva family used to cultivate only Kamalam organically but after the intervention and continuous trainings by foundation, she decided to turn her complete farming through natural techniques by gradually taking baby steps toward this new endeavor.

Looking at her zeal and dedication for 0 chemical farming, Foundation provided her with Biogas Kit, Drip Irrigation system, Development of Vermicompost and Jivaamrut. Presently she has 6 to 7 livestock. With the installation of biogas, the slurry produced by biogas digesters makes excellent fertilizer when applied to farms. Moreover, Geetaben learnt how to make Jivaamrut from Adani Foundation's natural farming trainings, which she then applied to her farm where she noticed significant improvements, including a reduction in nutrient deficiencies, an increase in crop size without the use of chemical fertilizers and the presence of lush green, healthy crops. In addition, the Adani foundation brought knowledge of vermicompost to her farm, which she says has already made a big difference in the soil's fertility. Also, setup of drip irrigation system was done in order to save water, nutrients loss, and to provide the water direct to the soil root zone of the plant.

Prosperity knocked her door, and she provided best education to her children. Her daughters completed Engineering and Son is presently studying in Anand Agriculture University. On asking him about his future, Hariom (Son of Geetaben) shares *"My father is recognized as first farmer of Kamalam in Kutch and my mother is epitome of strength and a proud farmer. My mother has achieved lot dignity and respect in our society since she received foundation's guidance for practicing natural farming and I will follow her footsteps in same direction by establishing natural farming agriculture business to provide best quality crops to the society."* Geetaben continues to strive excellence in learning farming training regularly and become a promoter of same to encourage other farmers to adopt Natural Farming for better cultivation and higher returns.

Impact Story



At Ratadia Ganesh wala village in Mundra taluka, Rabari Megha Vanka lives with 60 percent of his legs divyang.

Meghabhai was working in a garment shop in Mundra two years ago. Bhabhi Ben used to help in running the house by making several pedas. Meghabhai lost his job during Corona time. Then Meghabhai started selling pedas in nearby villages. With the help of Adani Foundation, he was given small help for home based industry and also helped him in the process for obtaining medical certificate and bus pass. Now, Meghabhai with the help of his wife Pabi Ben started home industry 'Pena Home Udyog' and made it as the main means of livelihood. They sell 300 kilos of pedas every month. On an average they earns 18000/- per month.

When the bus pass will come he can save more money by traveling by bus for orders from Gandhidham, Bhuj, Mandvi and nearby areas.

Impact Story



Only a teacher can turn the disability into a talent ! - Mundra

Challenges are what make life interesting. Overcoming them is what makes life meaningful". Halepotra sadiya studying in class 4 of Dhrub primary school is the SEN - special education needed .she is not able to see clearly through her eyes that is having the problem of vision by birth , she underwent 4 operations but have a great IQ level which never stopped her from learning new things. sadiya's parents never stopped her coming to school. she had a problem in basic maths ,gujarati reading and writing but within an year she worked continuously during her free time and now is able to read write and perform basic calculation. Her favourite hobby is learning new things , colouring and listening new rhymes from YouTube. she can now stand up in morning assembly and give her introduction in English . "only a teacher can turn the disability into a talent through hard work and self confidence". Her dream is to become a teacher.

Impact Story



Health care service is to save the lives !

Mohammad Sadik Turk, 16, of Dhrub arrived in critical condition because of pain in the area of his kidneys. The condition was treated as an intestinal problem by doctors. The specialists tried their best to treat him & offering variety of medications. Support him for his routine dialysis for six to eight months while paying attention to his condition. He no longer needs dialysis after complete therapy, but he still needs to regularly administer injections three times every month.

Many young children pass away each year from insufficient medical care and inability to pay for necessary treatments. As long as there is only one source of income for the family and everyone depends on him, it is hard to provide costs for those who are living below the poverty line. Although India has more than 50,000 patients who receive long term dialysis, it has only a thousand kidney specialists in the entire country. Furthermore, treatment can be expensive. In situation like this Foundation pays for the child's injections in light of his financial situation and wishes him a quick recovery and a long and healthy life. The main goal of the Adani Foundation's community health care service is to save the lives of children like Sadik.

EVENTS



World water day was celebrated on 22nd March in coordination by Adani Foundation at Bhuj.

Program was designed on District level awareness on participatory ground water management on the theme of accelerating the change to solve the water and sanitation crises with exhibition of water saving tool, equipment and IEC material.

On this Occasion Mr Dilip Rana (collector Kutch) was the chief guest and guiding force. He emphasized on RRWHS with assurance to provide 50% Support from government to developed single village as model drinking water sustain village with having 100% RRWHS facilities.

Shri Dobariya Sir administrative officer of Atal Bhujal Yojana and Mr.Nimish Padke Director - Fokia also shared about sustainable management of fresh water sources for future generation. Mr.Mahendra Gadhvi (Pramukh, Jilla panchayat) also shared his views. More than 200 farmers + Women and Sarpanch of Mundra.



Project Pragati :- Success of completion of Project Pragati 1st batch was celebrated on 29th April at Adani House, Mundra in esteemed presence of Mr Vikram Tandon, Chief Human Resource Officer, Adani Group, Shri Vasant Gadhavi ,Executive Director, Adani Foundation and Mr Rakshit Shah, Executive Director, APSEZ. Other dignitaries who graced the occasion were Mr AnilKumar Kalaga, , Mr. Charles Douglas, CEO, Mundra and Tuna Ports, Jatin Trivedi, COO, Adani Skill Development Centre and all HR and Department heads of APSEZ, Power, Solar and Wilmar.

The event celebrated by distributing skill training certificate to 52 fisherfolk students, who were trained under Mason and Assistant Electrician job roles under Adani Saksham. All training along with their community leaders shared heartwarming testimonials and expressed emotion of gratitude towards Adani Foundation for providing them skill training opportunities.

EVENTS



Adani Foundation ,Mundra celebrated **World Earth Day on 22nd April 2022** by distributing 'HomeBio-Gas Kits' to 100 farmers Program intense is to gather 'ધરતી પુત્રો' who share similar mindset and have determined to use Home Bio-Gas to witness social, economical and environmental impact.

Program was graced by Rakshit Shah, Executive Director, APSEZ along with below mentioned esteemed Guests.

1. Manojbhai Solanki, Trustee, Shree Ram krushna Trust, KUKMA
2. Prof. Mrugesh Trivedi , Scientist, Kutch University
3. Kalpesh Maheshwari, Project Officer, Atma, Bhuj
4. Dr. U.N Tank, KVK, Mundra
5. Ms. Riddhi Patel, Officer, kutch
6. Shaileshbhai Vyas, Satvik Sanstha, Kutch
7. Shantilal Patel, Officer, Mundra



Adani Foundation Mundra has celebrated the **International Disability day on 3rd Dec** since 2011 with lots of enthusiasm and Zeal in coordination with District Social Welfare office by planning various support to divyang people.

Current year in line of the international Disable day Theme "Transformative solutions for inclusive development: the role of innovation in fueling an accessible and equitable world." Adani Foundation has organized "Divyang Job Fair" in coordination with 11 SEZ Industries at Mundra on 2nd December 2022. More than 50 Divyang had applied for interview out of them 06 were selected For Job.

Apart that Divayand Aid and equipment (Limb, Chair was Supported In the Esteem Presence of Respected Rakshit sir-EDM, APSEZ, Mundra.

EVENTS



World Environment Day was celebrated on 5th June in association with Ayi Shree Vishrimata Seva Trust and Gram Panchayat, Moti Bhujpur at Vishri mata Temple and pledged to plant 51000 for which Gram Panchayat will take responsibility to nurture trees throughout this year.

program was organized at Vishrimata mandir with tree planation activity on this occasion Shree P T Prajapati - Sub Divisional Magistrate remain present and address Public to Nurture environment for Future.



Adani foundation Mundra has celebrated **International women day** on 8th march at different location of Mundra and Bhuj in coordination with District Animal health department and Sarhad Dairy the day was celebrated at Mundra with Appreciation of best 10 cattle owner women of Mundra who did remarkable work with Sarhad dairy. On this Occasion Dr Thakkar (DAHO) and Dr Lalani (cheif Sarhad dairy) appreciated efforts of Adani foundation in animal vaccination and Animal health care in Mundra. More than 210 cattle owner women remained present.

District Level celebration was done at Bhuj GKGH with Lunching OF Punya sloka book (Stories of 37 empowered women), A Book Written By Adani foundation employee Mrs. Purvi Goswami on The successful women of Kutch. More than 300 Women had participated.

EVENTS



National Farmer day on 22 dec with Honoring Women Farmers.



Animal Husbandry Awareness Program



International wet land ay Celebration Through Poster presentation Competition



Teacher Day & Youth Day Celebration



No Tobacco day celebrated by creating awareness to take preventive measures for workforce



International Yoga Day celebration in coordination with sub divisional Magistrate Mundra.

EVENTS



International coastal Day celebration
at Mandavi with Cleanliness Drive



Adani foundation and Agri
Department jointly organized
district level workshop on Natural
Farming Practice with Gram Seval



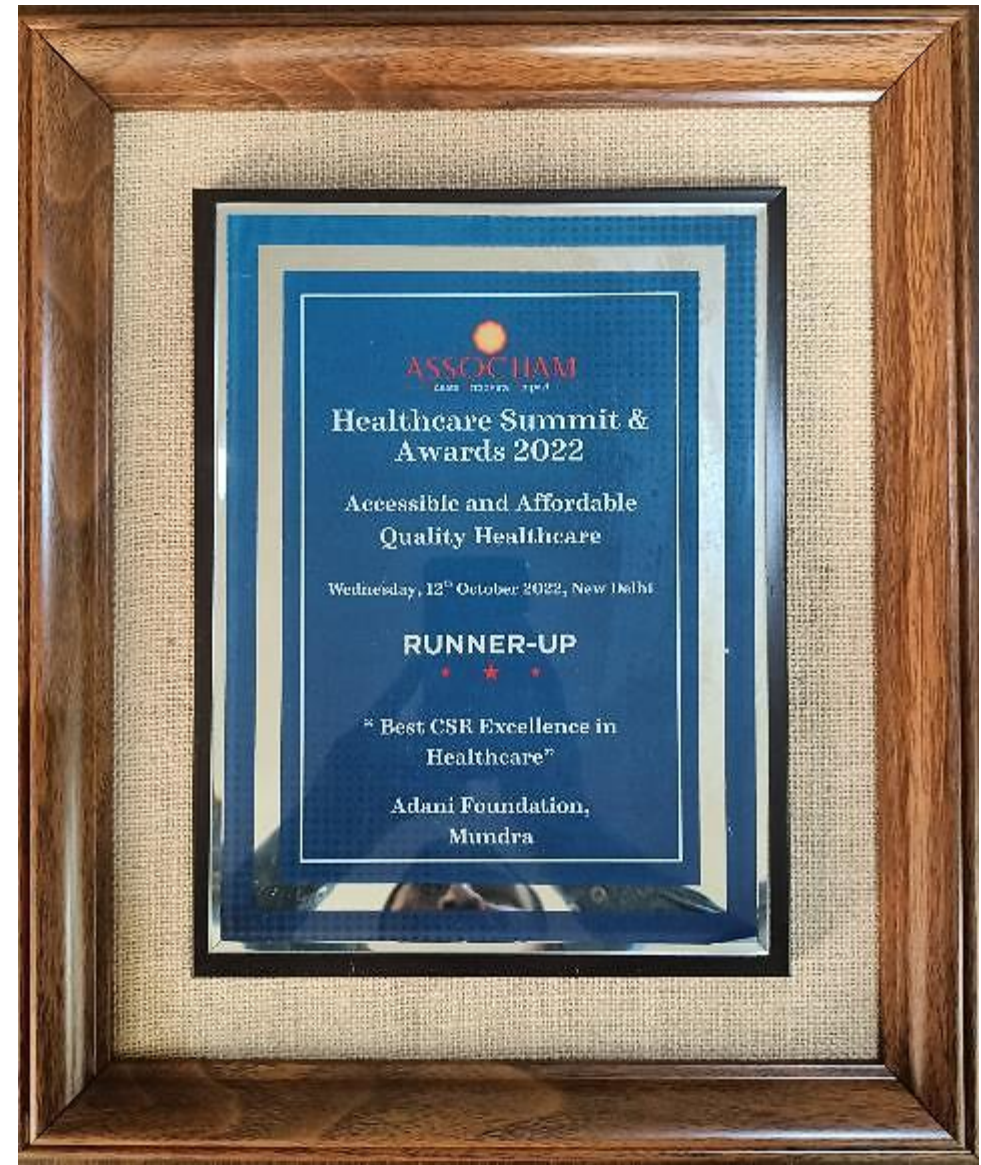
The International Mangrove Day for
the Conservation of the Mangrove
Ecosystem is celebrated

AWARDS

ASSOCHAM AWARD FOR HEALTH CARE

Adani Foundation's Community Health project received runner-up position in 'Best CSR excellence award in Healthcare' Associated Chamber of Commerce and Industry of India (ASSOCHAM) in Award ceremony organized at Delhi on 12th October 2022. Community Health project has participated in the grand event to accept the Award on behalf of Adani Foundation, Mundra site.

The award was presented by Chief Guest - Ms Roli Singh, Additional Secretary & Mission Director (NHM), Ministry of Health and Family Welfare, Govt. of India and Dr. Upasana Arora, Co-Chairperson, ASSOCHAM Healthcare Council and Chairperson, Yashoda Super Specialty Hospital.



Awards and Recognition



Adani Foundation participated in QCFL awards on 4th Feb 2023.

Presented Women Empowerment initiatives and received Diamond award for exemplary work done by Adani Foundation for empowering rural women.



our services were appreciated by representative of Ministry of Health Government India, WHO, Union and more than 52 corporate companies present in the National conference on Multisectoral corporate engagement towards TB elimination.

Awards and Recognition



Received appreciation letter from District
Animal Welfare Departent for
commendable work for Cattles affected
by Lumpy Virus



Jyoti ben tank received Awaard from Vice President in Amazing Indians Awards who is member of Prakrutik Sahkari Mandali supported by Adani Foundation.

Support to children lost their parents in Morbi bridge collapsed incidence



Adani Foundation supported 25 Lacs each for 20 children who lost their single/both the parents. Adani foundation was honored by IAS G T Pandya Collector and District magistrate of Morbi district for helping children who lost their parents in Morbi bridge accident.

One step forward towards growth with goodness...

Children residing at Morbi, Kutch, Ahmedabad, Rajkot and Dwarka who lost their single or both parents in Morbi Julta Bridge collapse incidence received support of 25 lacs each from Adani Foundation.

Representatives from Adani Foundation, Karsanbhai and Jagrutiben visited above districts to check on the affected children and also met with SBI bank officials, collectors regarding disbursal of amount. 10 Children received amount in their respective bank accounts. For others, work is under process.



Capacity Building Training



Adani foundation team visited Lakhond and Chandrani plant of sarhad Dairy. These three plant out of which two plant milk processing and packing and another plant cattle feed plant were Mr.Nilesh Jalankar, General Manager provided information about how cooperatives work in the field and about their supply chain management.



Adani Foundation team attended Capacity Building Training Program on 3rd and 4th of October on Adani Competency building and mapping. The training session was conducted by expert trainer Mr Kamal Dabbawala. Two days sessions were filled with theory sessions, Activity based learning and discussion-based learning.

Awards and Recognition

[illegible][illegible][illegible][illegible]

Beneficiaries List

Sr. No	Program	Direct	Indirect	Remarks
1	Education	3505	14020	UT than Mundra
2	AVMB-Vidhya mandir	568	2840	AVMB -Students
3	Community Health-Mundra	35832	141130	Rural clinic, MHCU,Health camp, AHMUPL
5	AHMUPL	42455	127365	OPD & IPD Patients
6	SLD-Women	1359	6795	SHG Group & Individual Income Generation
7	SLD-Agri & Animal Husbandry	7718	30768	Fooder,Home biogas, Farmers training, Cow based farming -20,Cattle camp Etc.
8	SLD -Fisherfolk	5957	4476	Education, Mangrove, Potable -Water and Livelihood
9	CRC-Gov Schemes	1106	5530	Government Schemes
10	CID	11767	47054	Fishermen Amenities & Other Rural Infra Work
11	Nakhtrana	1209	4836	UT than
12	AKBTPL,Tuna	10071	16373	Rural clinic, MHCU,Health camp, Drinking Water,Fooder Support, Infra Work
13	Bite	2500		Pond deepening Dhrubhi and Bitu
15	ASDC,Bhuj	2188	10940	soft skill and DL .GDA & Online Training
16	ASDC,Mundra	2518	32590	Technical & Non-Tech DL .GDA Training
17	Uddan	27377		Students
Total		156130	444417	

Financial overview – Adani Foundation Mundrta

Executive Summary – Budget Utiliaztion FY 2022-23

Sr No	Particulars	Approved Budget F.Y. 2022-23			Utilization 2022-23	% of utilization
		CAPEX	OPEX	Total		
A	General Management and Administration	1.80	92.35	94.15	98.45	104.56%
B	Education	0.40	141.93	142.33	124.36	87.37%
C	Community Health	-	294.97	294.97	242.16	82.10%
D	Sustainable Livelihood Development	-	466.40	466.40	359.85	77.15%
E	Community Infrastructure Development	-	219.51	219.51	133.88	60.99%
F	EDM Recommended Projects	-	100.00	100.00	98.83	98.83%
	Total AF CSR Budget :	2.20	1,315.16	1,317.36	1,057.53	80.28%
[I]	Adani Vidya Mandir-Bhadreshwar	6.88	255.44	262.32	221.76	84.54%
[II]	Project Udaan-Mundra	-	314.74	314.74	248.20	78.86%
	TOTAL Budget with AVMB & UDAAN F.Y. 2022-23 :	9.08	1,885.34	1,894.42	1,527.49	80.63%



સર્વે સંતુ નિરામયા, સર્વ ભદ્રાણી પચયન્તુ અદાણી ફાઉ. દ્વારા સ્ત્રીરોગ નિદાન કેમ્પમાં ૩૦૦ જેટલી બહેનોને નિઃશુલ્ક નિદાન અને સારવાર

મુન્દ્રા સ્થિત 'અદાણી ફાઉન્ડેશન-મુન્દ્રા' અને આશાની ફાઉ. દ્વારા સ્ત્રીરોગ નિદાન કેમ્પમાં ૩૦૦ જેટલી બહેનોને નિઃશુલ્ક નિદાન અને સારવાર આપવામાં આવ્યું હતું. આ કેમ્પમાં સ્ત્રીઓને નિઃશુલ્ક નિદાન અને સારવાર આપવામાં આવ્યું હતું. આ કેમ્પમાં સ્ત્રીઓને નિઃશુલ્ક નિદાન અને સારવાર આપવામાં આવ્યું હતું.

મુખરાપ સમાચાર



મચ્છરના પોરા અને પોરા ભક્ષક માછલીનું નિદર્શન વિશ્વ મેલેરિયા દિનની ઉજવણીએ સંપૂર્ણ સારવાર પર ભાર મૂકાયો

મચ્છરના પોરા અને પોરા ભક્ષક માછલીનું નિદર્શન વિશ્વ મેલેરિયા દિનની ઉજવણીએ સંપૂર્ણ સારવાર પર ભાર મૂકાયો. આ કાર્યક્રમમાં મચ્છરના પોરા અને પોરા ભક્ષક માછલીનું નિદર્શન કરવામાં આવ્યું હતું.

મુન્દ્રા સેઝમાં રોજગારીની તક આપીને દિવ્યાંગોને પગભર કરવાનો પ્રયાસ

અદાણી ફાઉન્ડેશને વિશ્વ દિવ્યાંગ દિવસની કરી અને પોલી ઉજવણી કરવામાં આવી હતી. આ કાર્યક્રમમાં વિશ્વ દિવ્યાંગ દિવસની ઉજવણી કરવામાં આવી હતી.



અદાણી ફાઉન્ડેશને વિશ્વ દિવ્યાંગ દિવસની કરી અને પોલી ઉજવણી કરવામાં આવી હતી. આ કાર્યક્રમમાં વિશ્વ દિવ્યાંગ દિવસની ઉજવણી કરવામાં આવી હતી.



માછીમાર સમુદાયના છાત્રોને શિશ્યવૃત્તિ

માછીમાર સમુદાયના છાત્રોને શિશ્યવૃત્તિ આપવામાં આવી હતી. આ કાર્યક્રમમાં માછીમાર સમુદાયના છાત્રોને શિશ્યવૃત્તિ આપવામાં આવી હતી.

કચ્છની ગ્રામીણ મહિલાઓમાં 'પેડ વૂમન' માસિક અંગે જાગૃતિ ફેલાવી રહી છે મુન્દ્રાની પેડ વૂમન: સેનેટરી નેપકીન બનાવવાના સ્ટાર્ટ-અપ થકી આઠ મહિલાઓ પગભર બની

કચ્છની ગ્રામીણ મહિલાઓમાં 'પેડ વૂમન' માસિક અંગે જાગૃતિ ફેલાવી રહી છે. મુન્દ્રાની પેડ વૂમન: સેનેટરી નેપકીન બનાવવાના સ્ટાર્ટ-અપ થકી આઠ મહિલાઓ પગભર બની. આ કાર્યક્રમમાં મહિલાઓને જાગૃતિ ફેલાવવામાં આવી હતી.

વિશ્વ પ્રતિષ્ઠા પરાવતા નખત્રાણના ફુલાય-છાત્રીદંબ વિસ્તાર ૯૭૩ જેટલા બીટોનું રસીકરણ કર

વિશ્વ પ્રતિષ્ઠા પરાવતા નખત્રાણના ફુલાય-છાત્રીદંબ વિસ્તાર ૯૭૩ જેટલા બીટોનું રસીકરણ કરવામાં આવ્યું હતું. આ કાર્યક્રમમાં નખત્રાણના ફુલાય-છાત્રીદંબ વિસ્તાર ૯૭૩ જેટલા બીટોનું રસીકરણ કરવામાં આવ્યું હતું.

અદાણી ફાઉન્ડેશન, આત્મા અને ખેતીવાડી વિભાગ દ્વારા પ્રાકૃતિક ખેતી માટે તાલીમ આંતરરાષ્ટ્રીય મિલેટ વર્ષ-૨૦૨૨ને સુસંગત કાર્યક્રમનું સફળ આયોજન

અદાણી ફાઉન્ડેશન, આત્મા અને ખેતીવાડી વિભાગ દ્વારા પ્રાકૃતિક ખેતી માટે તાલીમ આંતરરાષ્ટ્રીય મિલેટ વર્ષ-૨૦૨૨ને સુસંગત કાર્યક્રમનું સફળ આયોજન કરવામાં આવ્યું હતું. આ કાર્યક્રમમાં પ્રાકૃતિક ખેતી માટે તાલીમ આપવામાં આવી હતી.

અદાણી ફાઉન્ડેશન દ્વારા "લમ્પી સ્ક્રીન ડીસીઝ" થી બચાવવા સારવાર ચાલુ કરાઈ

અદાણી ફાઉન્ડેશન દ્વારા "લમ્પી સ્ક્રીન ડીસીઝ" થી બચાવવા સારવાર ચાલુ કરાઈ. આ કાર્યક્રમમાં લમ્પી સ્ક્રીન ડીસીઝ થી બચાવવા સારવાર ચાલુ કરવામાં આવ્યું હતું.

અદાણી કોર્પોરેટ હાઉસમાં ગામડાની કળાને ઉજાગર કરતું 'ગ્રામ ભારતી' રચનું પ્રદર્શન

મહિલા શક્તિની આત્મનિર્ભરતાને સલામ! : ગ્રામીણ ભારતની કળાને ગ્લોબલ બનાવવાનો પ્રયાસ



અદાણી કોર્પોરેટ હાઉસમાં ગામડાની કળાને ઉજાગર કરતું 'ગ્રામ ભારતી' રચનું પ્રદર્શન. આ કાર્યક્રમમાં ગામડાની કળાને ઉજાગર કરવામાં આવ્યું હતું.



અદાણી ફાઉન્ડેશનના સહકારથી મુંદરાના બી.આર.સી. ભવનમાં ગ્રામીણ તાલુકા વિજ્ઞાનમેળામાં કૃતિ પ્રિદાનમાં અવકાશો મળ્યાં.

મુંદરા તાલુકા કક્ષાના વિજ્ઞાનમેળામાં ૧૧ શાળાના છાત્રે કરાવ્યાં પ્રતિભાનાં દર્શન

ભુજ, તા. ૫ : આજે સરસ્વતી શ્રીમંત્રી, અધ્યાપકા કરે, નવુ તાલુકા ખાંભી ખડાવે એ હાલના નાના-મોટા આયોજન થતા રહે એ આશયક છે. એ સંદર્ભે મુંદરા તાલુકા કક્ષાએ એક બી.આર.સી. કક્ષાના વિજ્ઞાન મેળાનું આયોજન પ્રમુખ હાઈસ્કૂલના પ્રાધ્યાપક કરાવ્યાં આજે મુંદરામાં આયોજન કરાવવામાં આવ્યું.

આ અવકાશને કાંઈક અદાણી સી. આઈ.આર.સી. અને કમ્પ્યુટર ભુજના માનવદાન હેઠળ કરવામાં આવ્યું.

પરિશિષ્ટ અને નાનિય, વર્તમાન નાનિય હાથે એકાદિક વિજ્ઞાન હાથે સજિત થવા વિષયોના અદાણી ફાઉન્ડેશનના સહયોગથી કરાવવામાં આવ્યું. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ કૃતિ રજૂ કરી.

સમાવેશ કરવામાં આવ્યો હતો. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ

અદાણી ફાઉન્ડેશન દ્વારા મુંદરા તાલુકાની ૧૪ શાળામાં પ્રોજેક્ટ ઉત્થાન અંતર્ગત દિવાળી મેળો યોજાયો.

અદાણી ફાઉન્ડેશનના પ્રોજેક્ટ અંતર્ગત દિવાળી મેળાનું આયોજન વાગરા તાલુકાની ૧૪ શાળામાં પ્રોજેક્ટ અંતર્ગત દિવાળી મેળો યોજાયો. આ મેળામાં ૧૪ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ

રશિયાના વિદ્યાર્થીઓ કચ્છ અને અહીંની સંસ્કૃતિથી વાકેફ થયા

ભુજ, તા. ૫ : ઉત્થાન પ્રોજેક્ટ એ અદાણી ફાઉન્ડેશન દ્વારા ૩૧ ઓગસ્ટ ૨૦૨૨ સુધી કચ્છના ૧૦૨ શાળામાં ૧૦૨ વિદ્યાર્થીઓને રજૂ કરવામાં આવ્યું. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ



અદાણી ફાઉન્ડેશન દ્વારા ઉમરપાડાના આદિવાસી ખેડૂતો માટે જાગૃતિ શિબિર.

અદાણી ફાઉન્ડેશન દ્વારા ઉમરપાડાના આદિવાસી ખેડૂતો માટે જાગૃતિ શિબિર. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ

અદાણી ફાઉન્ડેશન દ્વારા ઉમરપાડાના આદિવાસી ખેડૂતો માટે જાગૃતિ શિબિર. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ

અદાણી ફાઉન્ડેશન ને ઉમરપાડા તાલુકા કે ચોંચવાડા ગાંવ મેં મુક્ત સ્વાસ્થ્ય શિવિર કા આયોજન કિયા



અદાણી ફાઉન્ડેશન દ્વારા ઉમરપાડા તાલુકા કે ચોંચવાડા ગાંવ મેં મુક્ત સ્વાસ્થ્ય શિવિર કા આયોજન કિયા. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ

અદાણી ફાઉન્ડેશન દ્વારા ઉમરપાડા તાલુકા કે ચોંચવાડા ગાંવ મેં મુક્ત સ્વાસ્થ્ય શિવિર કા આયોજન કિયા. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ

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નેત્રંગના કોટવાળિયાએ બનાવેલી વાંસની બનાવટો અદાણી શુપના ગ્રામ ભારતીમાં પ્રદર્શિત થઈ



અદાણી ફાઉન્ડેશન દ્વારા નેત્રંગના કોટવાળિયાએ બનાવેલી વાંસની બનાવટો અદાણી શુપના ગ્રામ ભારતીમાં પ્રદર્શિત થઈ. આ મેળામાં ૧૧ શાળાના ૧૦૨ વિદ્યાર્થીએ ભાગ લીધો હતો. જેમાં સી.આર.સી. કક્ષાએ

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લોકતેજ
Newspaper Loketaj.com
12 Nov 2022 Page 2



THANK YOU

Annexure – 4

Cost of Environmental Protection Measures

Sr. No.	Activity	Cost incurred (INR in Lacs)			Budgeted Cost (INR in Lacs)
		2020 – 21	2021 – 22	2022 – 23	2022 – 23
1.	Environmental Study / Audit and Consultancy	6.2	6.82	7.32	11.05
2.	Legal & Statutory Expenses	10.58	10.52	12.32	12
3.	Environmental Monitoring Services	19.17	14.31	15.32	33
4.	Hazardous / Non-Hazardous Waste Management & Disposal	83.55	107.09	104.035	127.72
5.	Environment Days Celebration and Advertisement / Business development	5.3	4.04	2.53	8.00
6.	Treatment and Disposal of Bio-Medical Waste	2.09	2.14	2.29	2.04
7.	Mangrove Plantation, Monitoring & Conservation	32.59	53.6	35.0	35.0
8.	Other Horticulture Expenses	689	921	956	979
9.	O&M of Sewage Treatment Plant and Effluent Treatment Plant (including STP, ETP of Port & SEZ & Common Effluent Treatment Plant)	148.49	252.27	141.33	164.46
10.	Expenditure of Environment Dept. (Apart from above head)	89.11	149.8	90.136	75.79
Total		1086.08	1371.79	1366.28	1448.06

Annexure – 5

65/1310

गुजरात विशेष आर्थिक क्षेत्र अधिनियम २००४ के
अध्याय ७ की शर्तों के आधीन

फॉर्म नं. ४

0017

(नियम ५ के अनुसार)

कारखाना चलाने के लिये नामांकन और लाइसेंस

अधपन्ना

नामांकन संख्या

52109

Udayan Jain +1

लाइसेंस नं.

सविनय MUNDRA LPG TERMINAL PVT. LTD.

१९४८ के कारखाना के अधिनियम

और उसके अंतर्गत बनाये गये नियमों के आधीन निम्न लिखित मकान विस्तारका वर्ष के दौरान किसीभी कार्य दिवसमें 250 से अधिक/अधिक
नहीं व्यक्तियों को कार्य पर रखने और 5000 होर्स पावर से अधिक/अधिक नहीं विद्युत शक्ति रखनेवाले कारखानों को नियमनुसार
लाइसेंस दिया जाता है।

यह लाइसेंस ३१ दिसंबर 2020 तक मान्य रहेगा।

दिया गया भुगतान शुल्क 66,000/-

बाकी भुगतान शुल्क

अधिक भुगतान शुल्क

ता. - - २०

का. धा. दिनांक : 20/03/2019

Deputy Director
Industrial Safety & Health
Kutch

विकास अधिकारी
गुजरात विशेष आर्थिक क्षेत्र

Post Box No. 1,

दिनांक 17-05-2019

का नकशा नं.

लाइसेंस दिए गए मकान विस्तार की रूपरेखा

APSE 2/105/Approval/

ALP/T/1920/80

में दर्शित लाइसेंस दिए गए मकान

Village - Navinal Island, Tal - Mundra, Dist - Kutch
PVT. LTD.

जगह पर आया है और उसमें

है।

MUNDRA LPG TERMINAL

नवीकरण

नवीकरण दिनांक	कामगारों की संख्या के लिये	होर्स पावर के लिये	कुल शुल्क	अधिक भुगतान शुल्क	लाइसेंस समाप्ति की तारीख ३१ दिसंबर,	लाइसेंस देनेवाले अधिकारी के हस्ताक्षर
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25/1/19	250	से अधिक नहीं	5000	से अधिक नहीं	250/-	250/-	२०	C. M. G. M.
11-01-2021	250	से अधिक नहीं	5000	से अधिक नहीं	41250	25000/-	२०२१	
24-1-2022	250	से अधिक नहीं	5000	से अधिक नहीं	66000	40000/-	२०२२	B. A. Ch.
		से अधिक नहीं		से अधिक नहीं			२०	
		से अधिक नहीं		से अधिक नहीं			२०	
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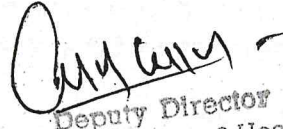
Licence Transferred in the

Name : Udayan Jain +1

Occupier of : Mandva LPG Terminal P. Lt

Vide letter Dt. Encl. 2 dt. 24/10/2019 JJA

Dt. 25/11/2019



Deputy Director
Industrial Safety & Health
Adipur (Kutchh)