O/C

adani

Ports and
Logistics

APSEZL/EnvCell/2021-22/022

Date: 18.05.2021

To
Deputy Director General of Forest (Central),
Ministry of Environment, Forest and Climate Change,
Regional Office (WZ), E-5, Kendriya
Paryavaran Bhawan, Arera Colony,
Link Road No. – 3, Bhopal – 462 016.
E-mail: rowz.bpl-mef@nic.in, eccomplinace-guj@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-2020 to March-2021 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**

25/05/2021

एकीकृत क्षेत्रीय कार्यालय
Integrated Regional Office
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
भारत सरकार, भोपाल / Govt. of India, Bhopal

Douglas Charles Smith
Chief Executive Officer
Mundra & Tuna Port

CD attached

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) Zonal Officer, Regional Office, CPCB – Western Region, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara – 390 023
3) Member Secretary, GPCB – Head Office, Paryavaran Bhavan, Sector 10 A, Gandhi Nagar – 382 010
4) The Director, Forests & Environment Department, Block – 14, 8th floor, Sachivalaya, Gandhi Nagar – 382 010
5) Regional Officer, Regional Office GPCB (Kutch-East), Gandhidham, 370201

Adani Ports and Special Economic Zone Ltd
Adani House,
PO Box No. 1
Mundra, Kutch 370 421
Gujarat, India
CIN: L63090GJ1998PLC034182

Tel +91 2838 25 5000
Fax +91 2838 25 51110
info@adani.com
www.adani.com

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

adani
Ports and Logistics

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-2020 to March-2021

Index

EC & CRZ Clearance Compliance Report

- The name of the company was changed from **"Adani Port Limited"** to **"Gujarat Adani Port Limited"** on 26th May, 1998.
- Further the name of the company was changed from **"Gujarat Adani Port Limited"** to **"Mundra Port and Special Economic Zone Limited"** on 7th July, 2006.
- Further the name of the company was changed from **"Mundra Port and Special Economic Zone Limited"** to **"Adani Ports and Special Economic Zone Limited"** on 6th January, 2012.

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.

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status as on 31-03-2021</th></tr>
<tr><td>2(i)</td><td>All construction designs / drawings relating to various project activities should have the approval of the concerned State Government departments / Agencies.</td><td>Complied

All construction and operation activities are being carried out in line with the CRZ recommendation and permissions granted.</td></tr>
<tr><td>2(ii)</td><td>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 shore line installation and special hose connections for ships to allow for discharge of sewage must be provided.</td><td>Complied

Ships berthing at Mundra Port comply with MARPOL regulations.

No discharge such as bilge wastes, sewage or any other liquid wastewater is allowed into marine environment inside port limits.

APSEZL does not receive sewage/liquid waste from ship.

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.</td></tr>
<tr><td>2(iii)</td><td>The quality of treated effluents, solid wastes, emissions and noise levels etc. must confirm to the standards laid down by the competent authorities including the central and State Pollution Control Boards under the Environment (Protection) act, 1986 whichever are more stringent.</td><td>Complied.

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 standard laid down by Gujarat Pollution Control Board.
<table>
<tr><th>Location</th><th>Capacity</th><th>Quantity of Wastewater Treated (Avg. from Oct'20 to Mar'21)</th><th>Type of ETP / STP</th></tr>
<tr><td>LT</td><td>265 KLD</td><td>63 KLD</td><td>Activated Sludge</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status as on 31-03-2021</th></tr>
<tr><td></td><td></td><td>
There was some minor modification work was going on in ETP for biological treatment, during that time entire wastewater from port premises was being sent to CETP operated by MPSEZ Utilities Ltd. (Co-developer of APSEZ) for treatment and final disposal on land for horticulture purpose within APSEZ premises. The same was intimated to the SPCB and details were submitted along with last half yearly compliance report for the period Apr'20 to Sep'20.

However, the ETP was recommissioned since 16th Nov, 2020 and the wastewater is being treated in to ETP and treated water is being discharged on land for horticulture purpose within port premises after achieving prescribed permissible limit. The same has already been informed to the state pollution control board. The details of the same is attached as Annexure – 1.

Summary of ETP treated water analysis results during compliance period as mentioned below.

<table>
<tr><th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th><th>Perm. Limit$</th></tr>
<tr><td>pH</td><td>--</td><td>7.13</td><td>7.56</td><td>6.5 – 8.5</td></tr>
<tr><td>SS</td><td>mg/L</td><td>25</td><td>43</td><td>100</td></tr>
<tr><td>TDS</td><td>mg/L</td><td>1703</td><td>2070</td><td>2100</td></tr>
<tr><td>COD</td><td>mg/L</td><td>61</td><td>78</td><td>100</td></tr>
<tr><td>BOD</td><td>mg/L</td><td>11</td><td>15</td><td>30</td></tr>
<tr><td>Ammonical Nitrogen as NH_3-N</td><td>mg/L</td><td>2.78</td><td>3.69</td><td>50</td></tr>
</table>
$ as per CC&A granted by GPCB

The quality of marine water, treated effluents, air emissions and noise levels are being regularly analyzed by NABL accredited and MoEF&CC approved agency. Please refer Annexure – 2 for detailed analysis reports for the period Oct'20 to Mar'21. Approx. INR 19.17 Lakh is spent for all environmental monitoring activities during the FY 2020-21 for overall APSEZ.

<u>Waste Management</u> – APSEZ has adopted 5R concept for environmentally sound management of different types of solid & liquid wastes. Please refer below details about management of each type of waste.
</td></tr>
</table>

Sr. No.	Conditions	Compliance Status as on 31-03-2021
		Solid Waste: A well-established system for segregation of dry & wet waste is in place. All wet waste (Organic waste) is being segregated & utilized for compost manufacturing and/or biogas generation for cooking purpose. The compost is further used by in house horticulture team for greenbelt development. Whereas dry recyclable waste is being sorted in various categories. Presently manual sorting is being done for sorting of different types of solid waste. Segregated recyclable materials such as Paper, Plastic, Cardboard, PET Bottles, and Glasses, etc. are then sent to respective recycling units, whereas remaining non-recyclable waste is bailed and sent to cement plant (M/s. Ambuja Cement Ltd., Kodinar) for Co-processing as RDF (Refused Derived Fuel). **Hazardous & Other Waste:** • 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. e-Processing House and Sabnam Enterprise respectively. • Solid Hazardous Waste is being disposed through co-processing / incineration through common facility i.e. M/s. Saurshtra Enviro Projects Pvt. Ltd., Bhachau and/or cement industries of Ambuja Cement Ltd., Kodinar. Used/Waste Oil is being sold to GPCB authorized recyclers / re-processors namely M/s. Aroma Petrochem, Bhavnagar & Aviation Corporation, Kutch. It is also being reused within organization for lubrication purpose. • Discarded drums / barrels are being sold to authorized decontamination facility i.e. M/s. Aroma Petrochem, Bhavnagar and 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. • Downgrade chemicals generated from cleaning of storage tanks / pipelines are being sold to authorized

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status as on 31-03-2021</th></tr>
<tr><td></td><td></td><td>
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. Aroma Petrochem, Bhavnagar & Aviation Corporation, Kutch and water is sent to ETP for further treatment. However during the compliance period, there was no received or disposal of Slope Oil.

Details of permissions / agreements of hazardous waste authorized vendors were submitted along with half yearly EC Compliance Report for the period Apr'18 to Sep'18. Renewed / Updated details (authorization / agreement) of hazardous / Non-hazardous handling approved agencies are attached as Annexure – 3.

The following table summarizes the waste management practice (from Oct'20 to Mar'21) for different types of wastes at APSEZ:
<table>
<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>5.87</td><td rowspan="3">Co-processing at cement industries</td></tr>
<tr><td>Oily Cotton waste</td><td>54.02</td></tr>
<tr><td>ETP Sludge</td><td>8.48</td></tr>
<tr><td>Tank Bottom Sludge</td><td>34.62</td><td>Sell to registered recycler</td></tr>
<tr><td rowspan="2">Used / Spent Oil</td><td>270.35</td><td>Sell to registered recycler</td></tr>
<tr><td>0.7</td><td>Reuse within premises</td></tr>
<tr><td rowspan="2">Discarded Containers</td><td>19.49</td><td>Sell to registered recycler</td></tr>
<tr><td>1.9</td><td>Reuse within premises</td></tr>
<tr><td>Expired Paints</td><td>13.34</td><td>Incineration at CHWIF Site</td></tr>
<tr><td colspan="3">Other Waste</td></tr>
<tr><td>Battery Waste</td><td>12</td><td>Sell to registered recycler</td></tr>
<tr><td>Bio Medical Waste</td><td>2.45</td><td>To approved CBWTF Site</td></tr>
<tr><td colspan="3">Non-Hazardous Waste</td></tr>
<tr><td rowspan="2">Recyclables Dry Waste</td><td>1797.52</td><td rowspan="2">After recovery sent for recycling / Reuse within premises</td></tr>
<tr><td>4 Nos. (Scrap Vehicle)</td></tr>
<tr><td>Non-Recyclable Dry Waste (RDF)</td><td>204.47</td><td>Co-processing at Cement Industries</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status as on 31-03-2021</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Wet Waste (Food waste + Organic waste)</td><td>448.97</td><td>Converted to Manure for Horticulture use / Biogas for cooking purpose</td></tr>
<tr><td>STP Sludge</td><td>15</td><td>Used as a Manure for horticulture purpose</td></tr>
</table>

<u>Ambient Air Quality</u> (twice in a week) and <u>Noise</u> (once in a month) monitoring are being carried out by NABL accredited and MoEF&CC approved agency namely M/s. Pollucon Laboratories Pvt. Ltd. Quality of Ambient Air and Noise level confirm to the standard laid down by SPCB / CPCB. Summary of the same for duration from Oct'20 to Mar'21 is mentioned below.

Total Ambient Air & Noise Sampling Locations: 4 Nos.
<table>
<tr><th>Parameter</th><th>Unit</th><th>Max</th><th>Min</th><th>Perm. Limit$</th></tr>
<tr><td>AAQM</td><td></td><td></td><td></td><td></td></tr>
<tr><td>PM_{10}</td><td>µg/m³</td><td>96.75</td><td>38.42</td><td>100</td></tr>
<tr><td>$PM_{2.5}$</td><td>µg/m³</td><td>56.35</td><td>18.58</td><td>60</td></tr>
<tr><td>SO_2</td><td>µg/m³</td><td>25.41</td><td>6.56</td><td>80</td></tr>
<tr><td>NO_2</td><td>µg/m³</td><td>44.53</td><td>14.22</td><td>80</td></tr>
<tr><th>Noise</th><th>Unit</th><th>Leq Max</th><th>Leq Min</th><th>Leq Perm. Limit*</th></tr>
<tr><td>Day Time</td><td>dB(A)</td><td>72.8</td><td>42.7</td><td>75</td></tr>
<tr><td>Night Time</td><td>dB(A)</td><td>69.7</td><td>41.2</td><td>70</td></tr>
</table>
$ as per NAAQ standards, 2009
* as per CC&A granted by SPCB
Values recorded confirms to the stipulated standards.

Please refer Annexure – 2 for detailed analysis reports for the period Oct'20 to Mar'21.
</td></tr>
<tr><td>2(iv)</td><td>Adequate provision for infrastructure facilities such as water supply, roads, sanitation etc. should be ensured so as to avoid environmental degradation in the surrounding areas. These facilities should be brought into existence during the construction phase and will remain in existence thereafter as part of the infrastructure build up in the area for local developmental purposes.</td><td>Complied.

Construction activity is already completed. Adequate infrastructure facility was provided to labours during construction phase and those are in existence.

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.</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status as on 31-03-2021</th></tr>
<tr><td>2(v)</td><td>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.</td><td>Complied.
Construction phase is completed.
For operation phase, following noise control measures are taken:
• All DG sets are installed with acoustic enclosure.
• Proper maintenance of equipments / plant machineries are 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.</td></tr>
<tr><td>2(vi)</td><td>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.</td><td>Complied.

ETP having 265 KLD capacity is provided for treatment of wastewater. Treated water is used for horticulture purpose. The watery sludge is transferred to sludge drying bed, where the excess wastewater is recirculated to ETP. During compliance period ETP was under modification. Please refer condition no. 2 (iii) for further details.

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. Pollucon Laboratories Pvt. Ltd. Summary of the same for duration of Oct'20 to Mar'21 is mentioned in compliance condition no. 2(iii) above.

<u>Marine Monitoring:</u>
Marine monitoring is being carried out once in a month by NABL accredited and MoEF&CC approved agency namely M/s. Pollucon Laboratory Pvt. Ltd. Summary of the same for duration from Oct'20 to Mar'21 is mentioned below. Monitoring Reports are attached as Annexure – 2 for the same.

Total Sampling Locations: 09 Nos.
<table>
<tr><th rowspan="2">Parameter</th><th rowspan="2">Unit</th><th colspan="2">Surface</th><th colspan="2">Bottom</th></tr>
<tr><th>Max</th><th>Min</th><th>Max</th><th>Min</th></tr>
<tr><td>pH</td><td>--</td><td>8.31</td><td>8.15</td><td>8.27</td><td>8.13</td></tr>
<tr><td>TSS</td><td>mg/L</td><td>197</td><td>104</td><td>235</td><td>104</td></tr>
<tr><td>BOD (3 Days @27 °C)</td><td>mg/L</td><td>3.9</td><td>3.3</td><td>ND*</td><td>ND*</td></tr>
</table>
</td></tr>
</table>

Sr. No.	Conditions	Compliance Status as on 31-03-2021
		<table><tr><td>DO</td><td>mg/L</td><td>6.1</td><td>5.8</td><td>5.9</td><td>5.5</td></tr><tr><td>Salinity</td><td>ppt</td><td>36.9</td><td>36.1</td><td>37.3</td><td>36.4</td></tr><tr><td>TDS</td><td>mg/L</td><td>38314</td><td>37294</td><td>38740</td><td>37708</td></tr></table>*ND = Not Detectable **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. Pollucon Laboratories Pvt. Ltd. Summary of the same for duration of Oct'20 to Mar'21 is mentioned below. **Sampling Locations: 5 Nos.**<table><tr><th>Parameter</th><th>Unit</th><th>Minimum</th><th>Maximum</th></tr><tr><td>pH</td><td>-</td><td>7.84</td><td>8.32</td></tr><tr><td>Salinity</td><td>ppt</td><td>1.44</td><td>11.6</td></tr><tr><td>Oil & Grease</td><td>mg/L</td><td>2.6</td><td>2.6</td></tr><tr><td>Hydrocarbon</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>Lead as Pb</td><td>mg/L</td><td>0.037</td><td>0.28</td></tr><tr><td>Arsenic as As</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>Nickel as Ni</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>Total Chromium as Cr</td><td>mg/L</td><td>0.029</td><td>0.033</td></tr><tr><td>Cadmium as Cd</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>Mercury as Hg</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>Zinc as Zn</td><td>mg/L</td><td>0.15</td><td>0.71</td></tr><tr><td>Copper as Cu</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>Iron as Fe</td><td>mg/L</td><td>0.28</td><td>4.2</td></tr><tr><td>Insecticides/Pesticides</td><td>--</td><td>Absent</td><td>Absent</td></tr><tr><td>Depth of Water Level from GL</td><td>meter</td><td>1.65</td><td>2.08</td></tr></table>*ND = Not Detectable Please refer **Annexure – 2** for detailed analysis reports. Approx. INR 19.17 Lakh is spent for all environmental monitoring activities during the FY 2020-21 for overall APSEZ, Mundra.
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.	Complied. 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).

Sr. No.	Conditions	Compliance Status as on 31-03-2021
		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.
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.	Complied. 24 hectare of Mangrove afforestation was carried out with a cost of INR 25.00 Lac at west of Navinal creek. All Mangrove plantations were done in consultation with Dr. Maity, Mangrove consultant of India. Green belt was developed 72.67 ha. Total 1,49,792 trees were planted with the density of 2061 trees per hectare within the port area. To enhance the marine biodiversity, till date APSEZ has carried out mangrove afforestation in 2890 ha. area across the coast of Gujarat. Total expenditure for the same till date is INR 832 lakh. 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. Please refer attached **Annexure – 4** for CSR activity report carried out by Adani Foundation. So, far APSEZ has developed 476.5 ha. area as greenbelt with plantation of more than 9.3 Lacs saplings within the APSEZ area. Details on mangroves afforestation & Green belt development carried out by APSEZ till date is annexed as **Annexure – 5**.
2(ix)	Arrangements should be made for ensuring fresh water availability for various	Complied. During the project phase, GWIL was the source of water

Sr. No.	Conditions	Compliance Status as on 31-03-2021
	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.	to ensure fresh water availability. Present source of water for various project activities is desalination plant of APSEZ and/or Narmada water through Gujarat Water Infrastructure Limited. Average water consumption for entire APSEZ area is 4.16 MLD during compliance period i.e. Oct'20 to Mar'21. Groundwater recharge cannot be done at the project site since the entire project is in the intertidal / sub tidal areas. Rain water within project area is managed through storm water drainage. We have installed Rain water 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 last monsoon Approx. 6.5 ML of rain water has been recharged to increase the ground water table. We have also connected roof top rain water duct of operational building (Tug berth building within MPT) with u/g water tank for utilization of collected rain water for gardening / horticulture purpose. Details of the same were submitted along with EC Compliance report for the period Oct'18 to Mar'19. However, Adani Foundation – CSR arm of Adani Group has carried out rainwater harvesting activities in the nearby villages for benefit of the locals. 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. Including this a big recharge operation by bunding was taken up for Zarpara village as rainfall was very good last FY 2020-21. 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.

Sr. No.	Conditions	Compliance Status as on 31-03-2021
		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 Government Figures. **Our water conservation work is as below.** • A large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) • Ground recharge activities (pond deepening work for more than 52 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 • Roof Top Rain Water Harvesting 54 Nos. which is having 10,000 liter storage which is sufficient for one year drinking water purpose for 5 people family. • Recharge Bore well 75 Nos which is best ever option to • 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. • AF has covered 295 farmers and 1422 acre drip irrigation area in last two years which is remarkable for water conservation in first phase–in this phase we have covered 66 farmers and 360 Acre land for the same. Total 968 Farmers and 5626 Acre Drip since 2011-12 to 2020-21. With the objective of to preserve the rain water 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. Please refer **Annexure – 4** for full details of CSR activities carried out by Adani Foundation in the Kutch region. Budget for CSR Activity for the FY 2020-21 is to the tune of INR 1429.33 lakh. Out of which, Approx. INR 1117.45 lakh are spent during the year FY 2020-21.
2(x)	While filling the storage tanks, compatibility of the chemicals should be ensured for chemical safety. Since 5000 MT capacity is proposed to be created for cryogenic conditions, necessary HAZOP study	Complied. 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.

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status as on 31-03-2021</th></tr>
<tr><td></td><td>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.</td><td>Risk assessment study was carried out by iFluids Engineering for handling and storage of LPG in three parts as mentioned below.
1. QRA for LPG Jetty Area
2. QRA for LPG Pipeline
3. QRA for LPG Tank farm

A copy of the same was submitted as part of compliance report for the duration of Apr'17 to Sep'17.

Recommendations of the risk assessment have been implemented as part of the construction activity and details of the same were submitted along with half yearly compliance report for the period Oct'18 to Mar'19.

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.</td></tr>
<tr><td>2(xi)</td><td>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.</td><td>Complied.

Consent to operate (CC&A) has been renewed from GPCB vide consent no. AWH-88317 valid till 20th November, 2021. The same was submitted along with compliance submission for the period of Oct'16 to Mar'17.

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.

<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-83561</td><td>20.11.2021</td></tr>
<tr><td>2</td><td>CtO - Amendment</td><td>Mundra Port Terminal</td><td>WH-88317</td><td>20.11.2021</td></tr>
<tr><td>3</td><td>CtO - Amendment</td><td>Mundra Port Terminal</td><td>GPCB/CCA-Kutch -39(5)/ ID-17739/473575</td><td>20.11.2021</td></tr>
<tr><td>4</td><td>CtO - Amendment</td><td>Mundra Port Terminal</td><td>H-98086</td><td>20.11.2021</td></tr>
<tr><td>5</td><td>CtO - Amendment</td><td>Mundra Port Terminal</td><td>H-105708</td><td>20.11.2021</td></tr>
</table>
</td></tr>
</table>

Sr. No.	Conditions	Compliance Status as on 31-03-2021
		6 | CtE – Amendment | WFDP | 17739 / 15618 | 18.05.2027 The permissions mentioned above were submitted along with earlier compliance report submission. And there is no further change.
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.	Complied. Resolution from the Panchayat has been obtained and submitted to the Ministry of Environment, Forest & Climate Change on 31st July, 2012.
2(xiii)	A permanent staff structure should be created with latest R&D facilities and suitable equipments for environmental and forestry activities through creation of Environmental cell. Adequate funds should be earmarked for this cell.	Complied. APSEZ has a well structured Environment Management Cell, staffed with qualified manpower for 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 is attached as **Annexure – 6**. Budget for environmental management measures (including horticulture) for the FY 2020-21 is to the tune of INR 1257 lakh. Out of which, Approx. INR 1086 lakh are spent during the year 2020-21. Detailed breakup of the expenditures for the past 3 years is attached as **Annexure – 7**.
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.	Complied. Project is in operation phase since many years and there is no change in the land use pattern.
2(xv)	With a view to providing adequate job opportunities to local people, facilities for technical training and	Complied. Adani Foundation – CSR Arm of Adani Group is doing following activities as a part of Skill Development in

Sr. No.	Conditions	Compliance Status as on 31-03-2021
	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.	surrounding communities in Kutch area. • Adani Skill Development Center (ASDC), Mundra & Bhuj is providing skill development training to the locals for Soft Skill, Technical Training and Carrier Guidance & knowledge based training. • Adani Skill Development Centre (ASDC) is playing a pivotal role in implementing sustainable development in the state. ASDC is envisioned to be playing a major role in elevating the socio-economic status of the people belonging to the lowest strata of the society by empowering them with various skill development training for employability and livelihood. • Over the 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. • ASDC imparted various soft skilled and technical training to make Atma Nirbhar India. Total 47 youth have been placed in various company and 37 youth are been self-employed. • During this year Total 606 people trained in various trainings to enhance socio economic development. • During COVID-19 pandemic, we have started virtually training on various trades like General Duty Assistant, Digital Literacy, GST with Tally, Basic Functional English etc. On Saksham Day we started E-learning training of Digital Literacy & Basic Functional English on free bases. • Till date we admitted 221 candidates in domain courses and 263 candidates in non-domain courses. Now we started offline training with following all Covid-19 related guidelines. • Arranged interview of DDU-GKY GDA students at Sterling Hospital –Gandhidham, GAIMS (Sodexo), Chanakya College, Accord Hospital, Fire Academy. 39 students get placement in GAIMS (sodexo), Alilance Hospital, Shreeji Hospital, Bhuj Fire Academy, Divine Hospital etc. • Online mud work training has been organized by ASDC Mundra, after training 28 students became self-employed. • Preference is given to local people for employment

Sr. No.	Conditions	Compliance Status as on 31-03-2021
		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. • 4830 Man-days work was provided over 236 Fishermen family during this year. The Foundation has also supported Pagadiya fishermen as painting laborers by providing them with employment and job in various field. Details on skill development training imparted during financial year of 2020-21 by Adani Foundation are enclosed as **Annexure – 4**.
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.	Complied. 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. Approval from the PESO is taken 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. License under Factories Act is taken dated 07.10.1998 and last renewed vide license no. 0102 on 20.04.2017 (Sr. No. 70707) is valid up to 31.12.2022. Copy of valid factory license is attached as **Annexure – 7**.

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status as on 31-03-2021</th></tr>
<tr><td>2(xvii)</td><td>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.</td><td>Complied.

Compliance report of EC conditions is uploaded regularly. Last compliance report including results of monitoring data for the period of Apr'20 to Sep'20 was submitted to Regional Office of MoEF&CC @ Bhopal, Zonal Office of CPCB @ Baroda, GPCB @ Gandhinagar & Gandhidham and Dept. of Forests & Env., Gandhinagar vide our letter dated 25.11.2020. 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 25.11.2020 to all the concern authorities. Please refer below for the details regarding past six compliance submissions.

<table>
<tr><th>Sr. No.</th><th>Compliance period</th><th>Date of submission</th></tr>
<tr><td>1</td><td>Oct'17 to Mar'18</td><td>29.05.2018</td></tr>
<tr><td>2</td><td>Apr'18 to Sep'18</td><td>30.11.2018</td></tr>
<tr><td>3</td><td>Oct'18 to Mar'19</td><td>31.05.2019</td></tr>
<tr><td>4</td><td>Apr'19 to Sep'19</td><td>28.11.2019</td></tr>
<tr><td>5</td><td>Oct'19 to Mar'20</td><td>20.05.2020</td></tr>
<tr><td>6</td><td>Apr'20 to Sep'20</td><td>26.11.2020</td></tr>
</table>
</td></tr>
<tr><td>2(xviii)</td><td>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.</td><td>Complied.

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.</td></tr>
</table>

Annexure – 1

adani
Ports and Logistics

PCB ID: 17739

APSEZL/EnvCell/2020-21/101

Date: 02.12.2020

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

Subject: Intimation regarding Re-commissioning of Liquid Terminal ETP

Reference:

1. **CC&A Order No. AWH – 83561, dated 09.01.2017, Valid till 20.11.2021**
2. **Our letter dated 14.09.2020 (Annexure – 1)**

Dear Sir,

With reference to above stated subject and references, we would like to inform you that our Effluent Treatment Plant was under maintenance due to modification of biological treatment scheme, which had been intimated to your good office vide our letter dated 14.09.2020.

The entire modification work has been completed and ETP is recommissioned from 16th November 2020. We are operating ETP regularly and efficiently to achieve the permissible norms and entire treated water from ETP is being utilized for horticulture purpose on land within APSEZ premises.

This is for your information and kind perusal.

Thanking you,
For, Adani Ports and Special Economic Zone Limited

Bhagwat Swaroop Sharma
(Head – Environment Mundra & Tuna Port)

Adani Ports and Special Economic Zone Limited * Adani Ports and Special Economic Zone Limited MUNDRA

CC To:
Unit Head (Kutch), Gujarat Pollution Control Board, Gandhinagar – 382010.

03/12/2020
Gujarat Pollution Control Board
Head Office
Sector No. 10-A,
Gandhinagar-382010

Adani Ports and Special Economic Zone Ltd
Adani House,
PO Box No. 1
Mundra, Kutch 370 421
Gujarat, India
CIN: L63090GJ1998PLC034182

Tel +91 2838 25 5000
Fax +91 2838 25 51110
info@adani.com
www.adani.com

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

adani
Ports and Logistics

PCB ID: 17739

APSEZL/EnvCell/2020-21/101

Date: 02.12.2020

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

Subject: Intimation regarding Re-commissioning of Liquid Terminal ETP

Reference:

1. **CC&A Order No. AWH – 83561, dated 09.01.2017, Valid till 20.11.2021**
2. **Our letter dated 14.09.2020 (Annexure – 1)**

Dear Sir,

With reference to above stated subject and references, we would like to inform you that our Effluent Treatment Plant was under maintenance due to modification of biological treatment scheme, which had been intimated to your good office vide our letter dated 14.09.2020.

The entire modification work has been completed and ETP is recommissioned from 16th November 2020. We are operating ETP regularly and efficiently to achieve the permissible norms and entire treated water from ETP is being utilized for horticulture purpose on land within APSEZ premises.

This is for your information and kind perusal.

Thanking you,
For, Adani Ports and Special Economic Zone Limited

Bhagwat Swaroop Sharma
(Head – Environment Mundra & Tuna Port)

Adani Ports and Special Economic Zone Limited * MUNDRA

CC To:
Unit Head (Kutch), Gujarat Pollution Control Board, Gandhinagar – 382010.

8-12-20
Received
Gujarat Pollution Control Board
Regional Office
Kutch (East)

Adani Ports and Special Economic Zone Ltd
Adani House,
PO Box No. 1
Mundra, Kutch 370 421
Gujarat, India
CIN: L63090GJ1998PLC034182

Tel +91 2838 25 5000
Fax +91 2838 25 51110
info@adani.com
www.adani.com

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

Annexure – 2

"HALF YEARLYENVIRONMENTAL MONITORING REPORT"

FOR

ADANI PORTS AND SPECIAL ECONOMIC ZONE LIMITED
TAL: MUNDRA, KUTCH, MUNDRA – 370 421

MONITORING PERIOD: OCTOBER 2020 TO MARCH 2021

PREPARED BY:

POLLUCON LABORATORIES PVT.LTD.

**PLOT NO.5/6 "POLLUCON HOUSE", OPP. BALAJI INDUSTRIAL SOCIETY,
OLD SHANTINATH SILK MILL LANE, NEAR GAYTRI FARSAN MART,
NAVJIVAN CIRCLE, UDHANA MAGDALLA ROAD, SURAT-395007.
PHONE/FAX – (+91 261) 2455 751, 2601 106, 2601 224.
E-mail: pollucon@gmail.comweb: www.polluconlab.com**

TC - 5945 **ISO 9001:2015** **ISO 14001:2015** **ISO 45001:2018**

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 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.24	8.19	8.20	8.18	8.27	8.22	8.23	8.2	8.28	8.25	8.25	8.21	IS3025(P11)83Re.02
2	Temperature	oC	30.3	30.1	30.2	30.1	30.4	30.1	29.7	29.5	30.1	29.8	30.3	30.1	IS3025(P9)84Re.02
3	Total Suspended Solids	mg/L	179	198	163	180	156	138	140	157	132	151	126	110	IS3025(P17)84Re.02
4	BOD (3 Days @ 27 °C)	mg/L	2.8	Not Detected	3	Not Detected	3.6	Not Detected	3.5	Not Detected	3.4	Not Detected	3.5	Not Detected	IS 3025 (P44)1993Re.03Edition2.1
5	Dissolved Oxygen	mg/L	6.0	5.8	5.9	5.7	5.9	5.6	5.8	5.5	6	5.8	5.9	5.7	IS3025(P38)89Re.99
6	Salinity	ppt	36.4	36.6	36.5	36.8	36.3	36.7	36.1	36.4	36.5	36.9	36.7	37	APHA (22nd Edi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22nd Edi)5520 D
8	Nitrate as NO_3	µmol/L	3.34	3.1	3.75	3.58	3.36	3.1	3.28	3.46	3.17	2.93	3.56	3.24	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.57	0.39	0.84	0.69	0.68	0.51	0.64	0.7	0.83	0.75	1.4	1.18	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.78	2.51	2.93	2.84	2.51	2.30	2.39	2.68	1.96	1.68	2.37	2.21	IS3025(P34)88Cla.2.3
11	Phosphates as PO_4	µmol/L	1.96	1.9	2.36	2.15	2.28	2.19	1.75	1.99	2.37	2.13	2.19	1.93	APHA(22nd Edi) 4500 C
12	Total Nitrogen	µmol/L	6.69	6.00	7.52	7.11	6.55	5.91	6.31	6.84	5.96	5.36	7.33	6.63	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	13	Not Detected	16	Not Detected	14	Not Detected	17	Not Detected	14.6	Not Detected	12	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37450	37698.0	37456	37740	37270	37639	37106	37410	37498	37834	38294	38514	IS3025(P16)84Re.02
15	COD	mg/L	24.6	19.2	23	Not Detected	25	Not Detected	30	21.0	31.4	23	32	25.0	APHA(22nd Edi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	2.93	2.72	2.99	2.56	3.2	2.67	2.56	2.45	3.07	2.83	2.75	2.42	APHA (22nd Edi) 10200-H
16.2	Phaeophytin	mg/m^3	2.0	1.8	1.8	2.1	1.6	2.0	1.25	0.87	0.46	0.50	0.02	0.03	APHA (22nd Edi)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

															10200-H
16.3	Cell Count	No. x 10^3/L	142	98	134	94	148	102	164	104	186	118	172	104	APHA (22nd Edi) 10200-H
16.4	Name of Group Number and name of group species of each group	--	*Pinnularia sp. Biddulphia sp. Coscinodiscus sp. Skeletonema sp.*	*Fragillaria sp. Gyrosigma sp. Chaetognathes*	*Coscinodiscus sp. Pleurosigma sp. Fragillaria sp. Surirella sp. Thallasionema sp.*	*Navicula sp. Melosira sp. Cyclotella sp. Biddulphia sp.* --	*Melosira sp. Thallasiosira sp. Rhizosolenia sp. Skeletonema sp. Pleurosigma sp.*	*Nitzschia sp. Navicula sp. Thallasiosira sp.* -- --	Thallasiosira sp. Nitzschia sp. Coscinodiscus sp. Skeletonema sp. --	Synedra sp. Amphora sp. Navicula sp. Nitzschia sp. --	*Triceratium sp. Cymbella sp. Cheatoceros sp. Rhizosolenia sp. Skeletonema sp.*	*Nitzschia sp. Thalasionema sp. Biddulphia sp. Cymbella sp.* --	*Rhizosolenia sp. Synedra sp. Biddulphia sp. Skeletonema sp.*	*Nitzschia sp. Navicula sp. Pleurosigma sp.* --	APHA (22nd Edi) 10200-H
B	**Zooplanktons**														
17.1	Abundance (Population)	noX10^3/ 100 m^3	30		26		28		39		35		30		APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Gastropods Polychaetes Ostracods Mysids		Ostracods Polychaetes Gastropods Isopods		Copepods Polychaetes Decapods Isopods		Copepods Polychaetes Gastropods --		Copepods Polychaetes Decapods Gastropods		Decapods Polychaetes Amphipods Foraminiferans		APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	3.45		3.1		3		3.4		3.45		3.25		APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**														
18.1	Total Bacterial Count	CFU/ml	2380		2350		2410		2150		2290		2370		IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present		APHA(22ndEdi)9221-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:1622:1981Edi.2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present		IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020	NOVEMBER 2020	DECEMBER 2020	JANUARY 2021	FEBRUARY 2021	MARCH 2021	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1	Organic Matter	%	0.96	0.83	0.76	0.63	0.58	0.51	FCO:2007
2	Phosphorus as P	µg/g	412	390	487	514	463	576	APHA(22nd Edi) 4500 C
3	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	--
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	PLPL-TPH
5	**Heavy Metals**								
5.1	Aluminum as Al	%	4.46	4.38	4.7	5.16	4.92	5.24	AAS APHA 3111 B
5.2	Total Chromium as Cr^{+3}	µg/g	150	129	163	173	168	113	AAS 3111B
5.3	Manganese as Mn	µg/g	802	786	706	724	693	758	AAS APHA 3111 B
5.4	Iron as Fe	%	4.76	4.43	4.57	4.68	4.75	4.82	AAS APHA(22nd Edi)3111 B
5.5	Nickel as Ni	µg/g	39	51	63	56	38.9	27	AAS APHA(22nd Edi)3111 B
5.6	Copper as Cu	µg/g	23	36	27	43	58.2	39	AAS APHA(22nd Edi)3111 B
5.7	Zinc as Zn	µg/g	145	128	119	159	135	106	AAS APHA(22nd Edi)3111 B
5.8	Lead as Pb	µg/g	2.6	2.1	1.75	2.13	2.39	3.26	AAS APHA(22nd Edi)3111 B
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	AAS APHA- 3112 B
6	**Benthic Organisms**								
6.1	Macrobenthos	--	Amphipods Gastropods olychaetes	Polychaete worms Amphipods Gastropods	Polychaete worms Crustaceans Bivalves	Polychaete worms Crustaceans Amphipods	Polychaete worms Crustaceans Gastropods	Polychaetes Gastropods Amphipods Bivalves	APHA (22nd Edi) 10500-C
6.2	MeioBenthos	--	--	Nematodes	Foraminiferans	Nematodes Foraminiferans	Nematodes	--	APHA (22nd Edi) 10500-C
6.3	Population	no/m2	441	439	351	471	529	437	APHA (22nd Edi) 10500-C

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.25	8.21	8.23	8.20	8.27	8.24	8.23	8.18	8.17	8.14	8.15	8.13	IS3025(P11)83Re.02
2	Temperature	oC	30.0	29.8	30.2	30.0	30.3	30.1	29.9	29.6	30.1	29.9	30.2	30	IS3025(P9)84 Re.02
3	Total Suspended Solids	mg/L	173	187	160	187	146	163	153	139	142	163	135	114	IS3025(P17)84Re.02
4	BOD (3 Days @ 27 °C)	mg/L	3.4	Not Detected	3.2	Not Detected	3.4	Not Detected	3.2	Not Detected	3.5	Not Detected	3.4	Not Detected	IS 3025 (P44)1993Re. 03Edition2.1
5	Dissolved Oxygen	mg/L	5.9	5.7	5.9	5.8	5.9	5.7	6	5.8	6.1	5.9	5.9	5.8	IS3025(P38)89Re.99
6	Salinity	ppt	36.4	36.6	36.3	36.7	36.5	36.8	36.2	36.5	36.4	36.7	36.6	36.9	APHA (22ndEdi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22ndEdi) 5520D
8	Nitrate as NO_3	µmol/L	3.27	3.1	3.9	3.6	3.5	3.39	3.34	3.16	3.23	2.94	3.17	2.75	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.75	0.63	0.57	0.46	0.68	0.47	0.78	0.67	0.69	0.53	0.93	0.82	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.56	2.41	2.34	2.10	2.20	2.31	2.16	1.95	1.92	1.79	2.1	2.0	IS3025(P34)88Cla.2.3
11	Phosphates as PO_4	µmol/L	2.17	1.96	1.98	1.74	2.36	2.19	1.98	1.84	2.68	2.4	2.35	2.21	APHA(22ndEdi) 4500 C
12	Total Nitrogen	µmol/L	6.58	6.14	6.78	6.16	6.37	6.17	6.28	5.78	5.84	5.26	6.24	5.54	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	9.6	Not Detected	12.0	Not Detected	15.0	Not Detected	19	Not Detected	13.2	Not Detected	16	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37368	37560	37270	37694	37486	37809	37314	37498	37406	37689	38096	38374	IS3025(P16)84Re.02
15	COD	mg/L	25.0	19.0	21.0	Not Detected	23.0	Not Detected	25.0	18.0	28	21	29.0	23.0	APHA(22ndEdi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	3.04	2.77	2.93	2.72	3.36	2.61	3.09	2.56	3.28	2.75	2.83	2.67	APHA (22ndEdi) 10200-H
16.2	Phaeophytin	mg/m^3	1.3	2.2	1.4	2.3	3.0	2.5	0.6	0.69	0.10	0.02	0.9	0.15	APHA (22ndEdi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

16.3	Cell Count	No. x 10^3/L	144	102	130	90	158	118	171	90	178	114	166	114	APHA (22nd Edi) 10200-H
16.4	Name of Group Number and name of group species of each group	--	*Thallasionema sp. Biddulphia sp. Skeletonema sp. Rhizosolenia sp.*	*Nitzschia sp. Cyclotella sp. Amphora sp.*	*Coscinodiscus sp. Surirella sp. Thallasionema sp. Cyclotella sp. Biddulphia sp.*	*Fragillaria sp. Cyclotella sp. Navicula sp. Nitzschia sp.* --	*Coscinodiscus sp. Nitzschia sp. Skeletonema sp. Rhizosolenia sp.* --	*Navicula sp. Thallasionema sp. Fragillaria sp.* -- --	*Coscinodiscus sp. Skeletonema sp. Pleurosigma sp. Thallasionema sp.* --	*Nitzschia sp. Rhizosolenia sp. Fragillaria sp.* -- --	*Navicula sp. Rhizosolenia sp. Biddulphia sp. Skeletonema sp. Coscinodiscus sp.*	*Cymbella sp. Thalasionema sp. Nitzschia sp. Amphipora sp.* --	*Coscinodiscus sp. Cheatoceros sp. Navicula sp. Thalasiosira sp.*	*Nitzschia sp. Pleurosigma sp. Thalasiosira sp.* --	APHA (22nd Edi) 10200-H
B	**Zooplanktons**														
17.1	Abundance (Population)	noX10^3 / 100 m^3	35		30		36		42		34		31		APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Lamellibranches Ostracods Gastropods		Gastropods Bivalves Ostracods Isopods		Gastropods Bivalves Copepods --		Hydrozoans Polychaetes Gastropods --		Polychaetes Gastropods Bivalves		Gastropods Polychaetes Decapods Ostracods		APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	3.25		3.05		3.45		3.55		3.15		2.95		APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**														
18.1	Total Bacterial Count	CFU/ml	2140		2220		2290		2380		2150		2360		IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present		APHA(22ndEdi) 9221-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:1622:1981 Edi.2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present		IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020	NOVEMBER 2020	DECEMBER 2020	JANUARY 2021	FEBRUARY 2021	MARCH 2021	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1	Organic Matter	%	0.38	0.7	0.68	--	--	--	FCO:2007
2	Phosphorus as P	µg/g	329	410	524	--	--	--	APHA(22nd Edi) 4500 C
3	Texture	--	Sandy	Sandy	Sandy	--	--	--	--
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	--	--	--	PLPL-TPH
5	**Heavy Metals**								
5.1	Aluminum as Al	%	4.5	4.7	4.69	--	--	--	AAS APHA 3111 B
5.2	Total Chromium as Cr+3	µg/g	189	159	170	--	--	--	AAS 3111B
5.3	Manganese as Mn	µg/g	726	810	738	--	--	--	AAS APHA 3111 B
5.4	Iron as Fe	%	4.69	4.53	4.73	--	--	--	AAS APHA(22nd Edi)3111 B
5.5	Nickel as Ni	µg/g	32	56	64	--	--	--	AAS APHA(22nd Edi)3111 B
5.6	Copper as Cu	µg/g	25	37	43	--	--	--	AAS APHA(22nd Edi)3111 B
5.7	Zinc as Zn	µg/g	170	269	190	--	--	--	AAS APHA(22nd Edi)3111 B
5.8	Lead as Pb	µg/g	2.34	2.16	1.72	--	--	--	AAS APHA(22nd Edi)3111 B
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	--	--	--	AAS APHA- 3112 B
6	**Benthic Organisms**								
6.1	Macrobenthos	--	Polychaetes Crustaceans Amphipods	Polychaete worms Crustaceans Bivalves	Polychaetes Crustaceans Gastropods	--	--	--	APHA (22nd Edi) 10500-C
6.2	MeioBenthos	--	Foraminiferans	--	Foraminiferans	--	--	--	APHA (22nd Edi) 10500-C
6.3	Population	no/m^2	471	412	382	--	--	--	APHA (22nd Edi) 10500-C

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.27	8.24	8.23	8.20	8.28	8.24	8.21	8.17	8.19	8.23	8.23	8.2	IS3025(P11)83Re.02
2	Temperature	oC	30.1	29.8	30.2	30.0	30.4	30.1	30.1	29.8	30	30.1	30.1	30	IS3025(P9)84Re.02
3	Total Suspended Solids	mg/L	186	203	168	178	148	169	129	143	104	123	133	106	IS3025(P17)84Re.02
4	BOD (3 Days @ 27°C)	mg/L	3.5	Not Detected	3.3	Not Detected	3.4	Not Detected	3.7	Not Detected	3.5	Not Detected	3.4	Not Detected	IS 3025 (P44)1993Re.03Edition2.1
5	Dissolved Oxygen	mg/L	5.8	5.6	5.9	5.7	5.9	5.8	5.8	5.7	5.9	5.8	6	5.8	IS3025(P38)89Re.99
6	Salinity	ppt	36.5	36.8	36.4	36.8	36.5	36.8	36.2	36.6	36.5	36.9	36.7	37	APHA (22nd Edi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22nd Edi)5520D
8	Nitrate as NO_3	µmol/L	3.14	2.96	3.87	3.61	3.43	3.27	3.26	3.41	3.18	2.9	2.8	2.7	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.63	0.54	0.73	0.53	0.61	0.53	0.75	0.86	0.63	0.56	0.89	0.72	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.37	2.25	2.64	2.46	2.41	2.28	2.27	2.56	2.57	2.35	2.3	2.1	IS3025(P34)88Cla.2.3
11	Phosphates as PO_4	µmol/L	1.72	1.65	2.1	1.9	2.37	2.24	2.19	2.27	2.39	2.17	1.93	1.75	APHA(22nd Edi) 4500 C
12	Total Nitrogen	µmol/L	6.14	5.8	7.24	6.6	6.45	6.1	6.28	6.63	6.38	5.85	5.92	5.51	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	19.4	Not Detected	17.0	Not Detected	21.6	Not Detected	15.6	Not Detected	12	Not Detected	17	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37462	37734	37380	37740	37510	37798	37140	37586	37524	37816	38184	38492	IS3025(P16)84Re.02
15	COD	mg/L	23.0	18.6	20.4	Not Detected	23.4	Not Detected	27.0	18.0	29	21.4	27	13.0	APHA(22nd Edi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	3.09	2.99	2.88	2.72	3.2	2.93	2.67	2.13	2.79	2.42	2.68	2.42	APHA (22nd Edi) 10200-H
16.2	Phaeophytin	mg/m^3	2.3	1.4	2.5	1.7	2.2	1.5	1.14	2.1	0.26	0.03	0.44	0.0	APHA (22nd Edi) 10200-H
16.3	Cell Count	No. x 10^3/L	128	104	122	96	156	112	164	90	171	106	115	91	APHA (22nd Edi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

16.4	Name of Group Number and name of group species of each group	--	*Oscillatoria Pinnularia Biddulphia sp. Ceratium*	*Melosira Rhizosolenia sp. Gyro sigma sp.*	*Biddulphia sp. Coscinodiscus sp. Fragillaria sp. Surirella sp. Thallasionema sp.*	*Navicula sp. Nitzschia sp. Melosira sp. Pleurosigma sp.* --	*Rhizosolenia sp. Thallasionema sp. Skeletonema sp. Chaetognathes* --	*Nitzschia sp. Melosira sp. Synedra sp. Gyrosigma sp.* --	*Rhizosolenia sp.* Pleurosigma sp. Biddulphia sp. *Melosira sp. Thallasionema sp.*	*Nitzschia sp. Navicula sp. Chatognathes sp.* Cyclotella sp. --	*Triceratium sp. Cymbella sp. Thalasionema sp. Biddulphia sp.*	*Nitzschia sp. Pleurosigma sp. Pinnularia sp. Cyclotella sp.*	*Coscinodiscus sp. Thalasiosira sp. Rhizosolenia sp. Biddulphia sp.* --	*Nitzschia sp. Navicula sp. Synedra sp. Pleurosigma sp.* --	APHA (22nd Edi) 10200-H
B	**Zooplanktons**													
17.1	Abundance (Population)	noX10^3/ 100 m^3	21		24		30		43		37		33		APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Foraminiferans Ctenophores Gastropods Polychaetes		Polychaetes Chaetognathes Gastropods Ostracods		Copepods Gastropods Polychaetes Isopods		Cephalopods Polychaetes Ostracods Mysids		Copepods Polychaetes Amphipods Isopods Gastropods		Polychaetes Gastropods Decapods		APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	2.9		2.8		3.25		3.4		3.80		3.1		APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**													
18.1	Total Bacterial Count	CFU/ml	2190		2230		2310		2280		2250		2140		IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present		APHA(22ndEdi)9221-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:1622:1981Edi.2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present		IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

RESULTS OF SEDIMENT ANALYSIS [M3 RIGHT SIDE OF BOCHA CREEK - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020	NOVEMBER 2020	DECEMBER 2020	JANUARY 2021	FEBRUARY 2021	MARCH 2021	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1	Organic Matter	%	0.4	0.63	0.7	0.65	0.61	0.53	FCO:2007
2	Phosphorus as P	µg/g	364	318	498	510	483	519	APHA(22nd Edi) 4500 C
3	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	--
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	PLPL-TPH
5	**Heavy Metals**								
5.1	Aluminum as Al	%	4.62	4.46	4.74	4.98	4.69	5.12	AAS APHA 3111 B
5.2	Total Chromium as Cr+3	µg/g	174	137	169	170	158	132	AAS 3111B
5.3	Manganese as Mn	µg/g	732	790	734	756	672	740	AAS APHA 3111 B
5.4	Iron as Fe	%	4.42	4.72	4.58	4.76	4.83	4.92	AAS APHA(22nd Edi)3111 B
5.5	Nickel as Ni	µg/g	30	59	64	53	64.5	48	AAS APHA(22nd Edi)3111 B
5.6	Copper as Cu	µg/g	26	37	41	47	53.2	35	AAS APHA(22nd Edi)3111 B
5.7	Zinc as Zn	µg/g	153	206	169	138	146	118	AAS APHA(22nd Edi)3111 B
5.8	Lead as Pb	µg/g	2.7	2.13	1.56	2.19	2.95	3.14	AAS APHA(22nd Edi)3111 B
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	AAS APHA- 3112 B
6	**Benthic Organisms**								
6.1	Macrobenthos	--	Crustaceans Gastropods Polychaetes	Polychaete worms Crustaceans Bivalves	Polychaetes Crustaceans Bivalves	Crustaceans Bivalves Amphipods	Polychaetes Gastropods Bivalves	Polychaetes Crustaceans Gastropods Nematodes	APHA (22nd Edi) 10500-C
6.2	MeioBenthos	--	--	--	--	Turbellarians Nematodes	Foraminiferans	--	APHA (22nd Edi) 10500-C
6.3	Population	no/m^2	497	439	409	460	471	412	APHA (22nd Edi) 10500-C

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.25	8.20	8.23	8.20	8.29	8.24	8.23	8.2	8.17	8.14	8.21	8.19	IS3025(P11)83Re.02
2	Temperature	oC	30.2	30.0	30.1	29.9	30.3	30.1	29.8	29.7	30.2	30	30.3	30.1	IS3025(P9)84Re.02
3	Total Suspended Solids	mg/L	197	216	164	183	138	154	120	108	107	136	125	107	IS3025(P17)84Re.02
4	BOD (3 Days @ 27 °C)	mg/L	3.2	Not Detected	3.5	Not Detected	3.9	Not Detected	3.4	Not Detected	3.5	Not Detected	3.2	Not Detected	IS 3025 (P44)1993Re.03 Edition2.1
5	Dissolved Oxygen	mg/L	5.9	5.8	5.8	5.6	5.8	5.7	5.9	5.7	5.8	5.9	5.9	5.7	IS3025(P38)89Re.99
6	Salinity	ppt	36.5	36.8	36.3	36.7	36.5	36.7	36.3	36.7	36.5	36.8	36.6	36.9	APHA (22nd Edi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22nd Edi)5520D
8	Nitrate as NO_3	µmol/L	3.52	3.4	3.98	3.74	3.46	3.38	3.19	3.28	3.36	3.27	3.17	2.96	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.68	0.53	0.87	0.7	0.67	0.51	0.75	0.81	0.58	0.41	0.93	0.85	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.32	2.17	2.59	2.38	2.43	2.30	2.26	2.17	1.87	1.53	2.2	1.9	IS3025(P34)88Cla.2.3
11	Phosphates as PO_4	µmol/L	1.94	1.83	2.27	2.1	2.19	1.96	2.34	2.14	2.18	1.94	1.86	1.72	APHA(22nd Edi) 4500 C
12	Total Nitrogen	µmol/L	6.52	6.10	7.44	6.82	6.56	6.19	6.20	6.26	5.81	5.21	6.27	5.71	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	12	Not Detected	16	Not Detected	20	Not Detected	17	Not Detected	15.2	Not Detected	17	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37586	37740	37294	37710	37618	37708	37318	37729	37728	37809	38098	38394	IS3025(P16)84Re.02
15	COD	mg/L	23.0	Not Detected	25	Not Detected	29	Not Detected	25.8	17	27.3	19.4	25.2	20.0	APHA(22nd Edi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	2.99	2.56	3.09	2.61	3.2	2.88	3.15	2.72	2.75	2.4	2.71	2.38	APHA (22nd Edi) 10200-H
16.2	Phaeophytin	mg/m^3	2.3	2.4	2.2	2.3	2.1	2.1	1.07	2.32	0.54	0.51	0.61	0.54	APHA (22nd Edi) 10200-H
16.3	Cell Count	No. x 10^3/L	150	102	170	103	190	120	169	97	180	109	153	89	APHA (22nd Edi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

16.4	Name of Group Number and name of group species of each group	--	*Oscillatoria sp. Pinnularia sp. Ceratium Rhizosolenia sp.*	*Coscinodiscus sp. Fragillaria sp. Rhizosolenia sp. Navicula sp.*	*Biddulphia sp. Coscinodiscus sp. Cyclotella sp. Nitzschia sp. Thallasiosira sp.*	*Nitzschia sp. Navicula sp. Pleurosigma sp. Surirella sp.* --	*Coscinodiscus sp. Skeletonema sp. Rhizosolenia sp. Odentalla sp.*	*Nitzschia sp. Thallasionema sp. Synedra sp. Navicula sp.*	*Amphipora sp. Nitzschia sp. Rhizosolenia sp. Biddulphia sp.*	*Cyclotella sp. Synedra sp. Skeletonema sp. Thallasionema sp.*	*Amphipora sp. Gyrosigma sp. Cheatocerous sp. Rhizosolenia sp. Triceratium sp.*	*Nitzschia sp. Cymbella sp. Surirella sp. Pinnularia sp.* --	*Rhizosolenia sp. Cheatocerous sp. Nitzschia sp. Biddulphia sp. Triceratium sp.*	*Synedra sp. Nitzschia sp. Pleurosigma sp. Stauroneis sp.* --	APHA (22nd Edi) 10200-H
B	**Zooplanktons**													
17.1	Abundance (Population)	noX10^3/ 100 m^3	34		28		32		40		46		35	APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Chaetognathes Ostracods Gastropods Foraminiferans		Chaetognathes Ostracods Gastropods Polychaetes		Polychaetes Copepods Bivalves Isopods		Polychaetes Decapods Gastropods Mysids		Polychaetes Gastropods Bivalves		Bivalves Polychates Ostracods Amphipods	APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	3.1		2.95		3.3		3.60		3.95		3.25	APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**													
18.1	Total Bacterial Count	CFU/ml	2130		2150		2220		2140		2180		2270	IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present	APHA(22nd Edi)9 221-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS:1622:1981Edi .2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present	IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020	NOVEMBER 2020	DECEMBER 2020	JANUARY 2021	FEBRUARY 2021	MARCH 2021	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1	Organic Matter	%	0.4	0.64	0.73	0.69	0.59	0.5	FCO:2007
2	Phosphorus as P	µg/g	379	410	568	591	532	586	APHA(22nd Edi) 4500 C
3	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	--
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	PLPL-TPH
5	**Heavy Metals**								
5.1	Aluminum as Al	%	4.58	4.79	4.67	4.93	4.73	4.9	AAS APHA 3111 B
5.2	Total Chromium as Cr^{+3}	µg/g	193	206	183	208	168	138	AAS 3111B
5.3	Manganese as Mn	µg/g	756	814	710	729	623	720	AAS APHA 3111 B
5.4	Iron as Fe	%	4.3	4.8	4.59	5.1	4.81	4.97	AAS APHA(22nd Edi)3111 B
5.5	Nickel as Ni	µg/g	39	53	65	58	63.2	45	AAS APHA(22nd Edi)3111 B
5.6	Copper as Cu	µg/g	27	36	41	45	54.4	38	AAS APHA(22nd Edi)3111 B
5.7	Zinc as Zn	µg/g	158	210	169	173	161	119	AAS APHA(22nd Edi)3111 B
5.8	Lead as Pb	µg/g	2.19	2.59	1.53	2.26	2.57	2.75	AAS APHA(22nd Edi)3111 B
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	AAS APHA- 3112 B
6	**Benthic Organisms**								
6.1	Macrobenthos	--	Polychaetes Bivalves Gastropods	Polychaete worms Crustaceans Amphipods	Polychaetes Isopods	Polychaete Amphipods Crustaceans	Polychaetes Gastropods Bivalves	Polychaetes Gastropods Amphipods	APHA (22nd Edi) 10500-C
6.2	MeioBenthos	--		Nematodes	Foraminiferans	Nematodes Harpacticoids	Nematodes	Foraminiferans	APHA (22nd Edi) 10500-C
6.3	Population	no/m^2	499	441	471	559	439	409	APHA (22nd Edi) 10500-C

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.25	8.21	8.20	8.17	8.28	8.26	8.22	8.19	8.25	8.21	8.21	8.19	IS3025(P11)83Re .02
2	Temperature	oC	30.2	29.9	30.1	29.9	30.0	29.8	29.9	29.6	30.3	30.1	30.2	30.1	IS3025(P9)84Re. 02
3	Total Suspended Solids	mg/L	187	215	164	173	135	149	117	128	105	119	116	104	IS3025(P17)84Re .02
4	BOD (3 Days @ 27 °C)	mg/L	3.3	Not Detected	3.0	Not Detected	3.3	Not Detected	3.5	Not Detected	3.4	Not Detected	3.5	Not Detected	IS 3025 (P44)1993Re.03E dition2.1
5	Dissolved Oxygen	mg/L	5.8	5.6	5.9	5.7	5.9	5.8	5.8	5.6	5.9	5.7	6	5.8	IS3025(P38)89Re .99
6	Salinity	ppt	36.5	36.8	36.3	36.7	36.5	36.7	36.3	36.5	36.6	36.9	36.7	37.1	APHA (22nd Edi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22nd Edi)55 20D
8	Nitrate as NO_3	µmol/L	3.49	3.12	3.93	3.8	3.71	3.58	3.36	3.27	3.57	3.41	3.18	2.83	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.86	0.73	0.75	0.69	0.69	0.47	0.70	0.64	0.63	0.52	0.74	0.61	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.39	2.14	2.47	2.36	2.34	2.26	2.18	2.36	1.90	1.83	1.68	1.52	IS3025(P34)88Cl a.2.3
11	Phosphates as PO_4	µmol/L	2.13	1.91	2.6	2.41	2.26	2.11	2.39	2.21	2.17	1.95	2.39	2.17	APHA(22nd Edi) 4500 C
12	Total Nitrogen	µmol/L	6.74	5.99	7.15	6.85	6.74	6.31	6.24	6.27	6.10	5.76	5.6	4.96	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	12.3	Not Detected	17.0	Not Detected	21.6	Not Detected	18	Not Detected	13.8	Not Detected	11.3	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37562	37840	37284	37646	37664	37684	37298	37702	37704	37905	38314	38624	IS3025(P16)84Re .02
15	COD	mg/L	22.0	Not Detected	25.0	Not Detected	27.8	Not Detected	30	18	31.2	23.2	28.0	21.0	APHA(22nd Edi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	3.31	2.88	2.93	2.56	3.25	2.93	2.99	2.83	2.91	2.61	2.8	2.67	APHA (22nd Edi) 10200-H
16.2	Phaeophytin	mg/m^3	2.0	2.1	2.3	2.4	2.0	2.0	2.69	1.58	2.0	1.08	2.17	0.99	APHA (22nd Edi) 10200-H
16.3	Cell Count	No. x 10^3/L	164	106	138	90	166	108	158	96	164	104	150	102	APHA (22nd Edi) 10200-H
16.4	Name of Group	--	*Navicula*	*Fragillaria*	*Biddulphi*	*Nitzschia*	*Skeletone*	*Nitzschia*	*Microcysti*	*Biddulphi*	*Triceratiu*	*Nitzschia*	*Melosira*	*Fragillaria*	APHA (22nd Edi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

	Number and name of group species of each group		*sp. Coscinodiscus sp. Oscillatoria sp. Polychaetes*	*sp. Pinnularia sp. Rhizosolenia sp. Melosira sp.*	*a sp. Melosira sp. Pleurosigma sp. Fragillaria sp. Cyclotella sp.*	*sp. Navicula sp. Thallasiosira sp. -- --*	*ma sp. Thallasionema sp. Coscinodiscus sp. Rhizosolenia sp. Melosira sp.*	*sp. Synedra sp. Navicula sp. Chaetognathes --*	*s sp. Cosmarium sp. Thallasiosira sp. Amphipora sp. Navicula sp.*	*a sp. Rhizosolenia sp. Cyclotella sp. Melosira sp. --*	*m sp. Skeletonema sp. Biddulphia sp. Rhizosolenia sp. Melosira sp.*	*sp. Navicula sp. Amphipora sp. Cyclotella sp. --*	*sp. Thalasiosira sp. Closterium sp. Biddulphia sp. Coscinodiscus sp.*	*sp. Nitzschia sp. Pleurosigma sp. Synedra sp. --*	
B	**Zooplanktons**												
17.1	Abundance (Population)	noX10^3/ 100 m^3	19		23		29		39		44	32		APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Foraminiferans Gastropods Polychaetes		Gastropods Ostracods Chaetognathes Polychaetes		Hydrozoans Gastropods Decapods Mysids		Polychaetes Gastropods Mysids Foraminiferans		Polychaetes Gastropods Decapods Chaetognathes	Polychates Ostracods Fish larvae Decapods		APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	2.4		2.65		3.25		3.45		4.0	2.85		APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**												
18.1	Total Bacterial Count	CFU/ml	2180		2230		2140		2210		2230	2450		IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent	Present		APHA(22ndEdi)9221-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent	Absent		IS:1622:1981Edi. 2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent	Present		IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent	Absent		IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent	Absent		IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent	Absent		IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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 2020	NOVEMBER 2020	DECEMBER 2020	JANUARY 2021	FEBRUARY 2021	MARCH 2021	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1	Organic Matter	%	0.41	0.59	0.68	0.58	0.62	0.52	FCO:2007
2	Phosphorus as P	µg/g	393	403	480	513	472	568	APHA(22nd Edi) 4500 C
3	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	--
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	PLPL-TPH
5	**Heavy Metals**								
5.1	Aluminum as Al	%	4.68	4.5	4.69	4.95	4.72	5.12	AAS APHA 3111 B
5.2	Total Chromium as Cr^{+3}	µg/g	170	213	183	218	168	128	AAS 3111B
5.3	Manganese as Mn	µg/g	759	820	756	734	623	765	AAS APHA 3111 B
5.4	Iron as Fe	%	4.7	4.46	4.79	5.1	4.85	4.92	AAS APHA(22nd Edi)3111 B
5.5	Nickel as Ni	µg/g	35	57	68	59	63.7	51	AAS APHA(22nd Edi)3111 B
5.6	Copper as Cu	µg/g	26	39	43	64	58.1	29	AAS APHA(22nd Edi)3111 B
5.7	Zinc as Zn	µg/g	184	213	169	187	170	138	AAS APHA(22nd Edi)3111 B
5.8	Lead as Pb	µg/g	2.37	1.94	1.51	2.3	2.43	2.76	AAS APHA(22nd Edi)3111 B
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	AAS APHA- 3112 B
6	**Benthic Organisms**								
6.1	Macrobenthos	--	Polychaetes Gastropods Bivalves	Polychaete worms Crustaceans Amphipods	Polychaetes Crustaceans Bivalves	Polychaete Amphipods Bivalves	Polychaetes Gastropods Amphipods	Polychaetes Crustaceans Gastropods	APHA (22nd Edi) 10500-C
6.2	MeioBenthos	--	Foraminiferans	Nematodes	--	Nematodes Turbellarians	Nematodes	Nematodes	APHA (22nd Edi) 10500-C
6.3	Population	no/m 2	471	440	412	528	439	380	APHA (22nd Edi) 10500-C

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.26	8.23	8.23	8.19	8.27	8.23	8.24	8.20	8.20	8.17	8.23	8.14	IS3025(P11)83Re.02
2	Temperature	oC	30.2	29.9	30.1	30.0	30.2	29.9	29.7	29.6	30	29.8	30.2	30	IS3025(P9)84Re.02
3	Total Suspended Solids	mg/L	183	207	167	184	152	173	128	147	104	123	127	112	IS3025(P17)84Re.02
4	BOD (3 Days @ 27°C)	mg/L	3	Not Detected	3.3	Not Detected	3.5	Not Detected	3.9	Not Detected	3.5	Not Detected	3.4	Not Detected	IS 3025 (P44)1993Re.03Edition2.1
5	Dissolved Oxygen	mg/L	5.8	5.6	5.9	5.7	5.9	5.6	5.8	5.6	5.9	5.8	6	5.8	IS3025(P38)89Re.99
6	Salinity	ppt	36.5	36.7	36.4	36.8	36.6	36.9	36.2	36.5	36.6	36.8	36.7	37.2	APHA (22nd Edi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22nd Edi)5520D
8	Nitrate as NO_3	µmol/L	3.39	3.12	3.64	3.5	3.24	3	3.36	3.59	3.15	2.97	2.97	2.83	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.78	0.53	0.99	0.84	0.73	0.56	0.69	0.73	0.52	0.41	0.68	0.59	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.81	2.69	2.57	2.36	2.30	2.17	2.47	2.60	2.18	2.06	2.37	2.16	IS3025(P34)88Cla.2.3
11	Phosphates as PO_4	µmol/L	1.76	1.58	2.13	1.94	2.48	2.28	2.39	2.17	2.1	1.93	2.58	2.23	APHA(22nd Edi) 4500 C
12	Total Nitrogen	µmol/L	6.98	6.34	7.20	6.70	6.27	5.73	6.52	6.92	5.85	5.44	6.02	5.58	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	15.0	Not Detected	12.0	Not Detected	19.0	Not Detected	15	Not Detected	12.3	Not Detected	15	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37613	37662	37362	37740	37680	37906	37208	37593	37708	37850	38192	38702	IS3025(P16)84Re.02
15	COD	mg/L	21.0	Not Detected	24	Not Detected	27	18.3	31	18.7	29.7	21.3	28	23.0	APHA(22ndEdi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	3.2	2.72	2.99	2.61	3.04	2.93	3.20	2.8	2.81	2.7	2.64	2.57	APHA (22nd Edi) 10200-H
16.2	Phaeophytin	mg/m^3	2.5	2.1	2.7	2.2	2.6	1.9	0.72	1.28	0.10	0.11	0.39	0.27	APHA (22nd Edi) 10200-H
16.3	Cell Count	No. x 10^3/L	172	108	163	95	180	113	178	98	168	104	142	98	APHA (22nd Edi) 10200-H
16.4	Name of Group	--	*Pinnularia*	*Cymbella*	*Biddulphi*	*Coscinodi*	*Skeletone*	*Nitzschia*	*Rhizosole*	*Nitzschia*	*Thalasion*	*Nitzschia*	*Thalasiosi*	*Nitzschia*	APHA (22nd Edi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

	Number and name of group species of each group		*sp. Ceratium Rhizosolenia sp. Pleurosigma sp. Melosira sp.*	*sp. Fragillaria sp. Amphora sp. Navicula sp.*	*a sp. Cyclotella sp. Thallasionema sp. Melosira sp. Peridinium sp.*	*scus sp. Navicula sp. Nitzschia sp. Fragillaria sp. --*	*ma sp. Amphipora sp. Rhizosolenia sp. --*	*sp. Fragillaria sp. Synedra sp. Surirella sp.*	*nia sp. Cosmarium sp. Stauroneis sp. Microcystis sp. Biddulphia sp.*	*sp. Navicula sp. Ceratiump. Synedra sp. --*	*ema sp. Pleurosigma sp. Ceratium sp. Coscinodiscus sp. Biddulphia sp.*	*sp. Cymbella sp. Fragillaria sp. Navicula sp. --*	*ra sp. Melosira sp. Navicula sp. Skeletonema sp. --*	*sp. Pleurosigma sp. Synedra sp. Cyclotella sp. --*	
B	**Zooplanktons**												
17.1	Abundance (Population)	noX10^3/ 100 m^3	29		20		30		35		43		33	APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Foraminiferans Gastropods Amphipods Decapods		Polychaetes Chaetognathes Ostracods --		Gastropods Bivalves Forminifearns --		Decapods Mysids Polychaetes Bivalves Foraminiferans		Polychaetes Decapods Gastropods Copepods --		Gastropods Polychates Amphipods Copepods	APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	3.1		2.15		3.3		3.6		3.55		2.9	APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**													
18.1	Total Bacterial Count	CFU/ml	2200		2310		2350		2290		2140		2320	IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present	APHA(22ndEdi)9221-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS:1622:1981Edi.2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present	IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.24	8.19	8.21	8.17	8.29	8.25	8.23	8.19	8.19	8.15	8.24	8.23	IS3025(P11)83Re.02
2	Temperature	oC	30.2	30.0	30.2	30.0	30.1	29.8	29.9	29.6	30.2	30	30.3	30.1	IS3025(P9)84Re.02
3	Total Suspended Solids	mg/L	190	235	175	187	140	162	132	158	112	138	128	114	IS3025(P17)84Re.02
4	BOD (3 Days @ 27 °C)	mg/L	3.1	Not Detected	3.4	Not Detected	3.1	Not Detected	3.4	Not Detected	3.1	Not Detected	3.3	Not Detected	IS 3025 (P44)1993Re.03Edition2.1
5	Dissolved Oxygen	mg/L	5.8	5.6	5.8	5.7	5.9	5.7	5.8	5.7	5.9	5.8	5.9	5.7	IS3025(P38)89Re.99
6	Salinity	ppt	36.2	36.5	36.3	36.6	36.4	36.7	36.2	36.5	36.5	36.9	36.7	37.2	APHA (22ndEdi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22ndEdi)5520D
8	Nitrate as NO_3	µmol/L	3.48	3.19	3.95	3.7	3.48	3.19	3.29	3.48	3.17	2.96	2.73	2.58	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.85	0.63	0.87	0.89	0.67	0.53	0.75	0.69	0.68	0.53	0.81	0.69	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.10	1.95	2.59	2.37	2.39	2.16	2.18	1.93	2.35	2.17	2.27	2.18	IS3025(P34)88Cla.2.3
11	Phosphates as PO_4	µmol/L	2.39	2.21	2.68	2.436	2.41	2.3	2.3	2.16	2.19	1.99	2	1.83	APHA(22ndEdi) 4500 C
12	Total Nitrogen	µmol/L	6.43	5.77	7.41	6.76	6.54	5.88	6.22	6.10	6.20	5.66	5.81	5.45	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	15.0	Not Detected	17.0	Not Detected	19.0	Not Detected	15.6	Not Detected	13.6	Not Detected	15.3	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37204	37628	37286	37628	37394	37786	37314	37718	37694	37908	38206	38703	IS3025(P16)84Re.02
15	COD	mg/L	20.0	Not Detected	23.0	Not Detected	27.5	17.4	31	19	28.4	17	29	21	APHA(22ndEdi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	3.25	2.56	2.83	2.4	3.09	2.67	2.93	2.83	2.69	2.49	2.72	2.67	APHA (22ndEdi) 10200-H
16.2	Phaeophytin	mg/m^3	1.3	2.2	2.7	2.3	2.5	2.0	1.3	1.73	0.22	0.42	2.55	1.74	APHA (22ndEdi) 10200-H
16.3	Cell Count	No. x 10^3/L	178	110	155	118	195	133	163	94	158	96	162	96	APHA (22nd Edi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

16.4	Name of Group Number and name of group species of each group	--	*Skeletonema sp. Biddulphia sp. Pinnularia Cyclotella sp.*	*Nitzschia sp. Gyro sigma sp. Amphora sp. Melosira sp.*	*Thallasiosira sp. Surirella sp. Coscinodiscus sp. Fragillaria sp.* --	*Navicula sp. Cyclotella sp. Melosira sp. Nitzschia sp.* --	*Rhizosolenia sp. Coscinodiscus sp. Biddulphia sp. Ceratium sp. Melosira sp.*	*Nitzschia sp. Chaetoceros sp. Synedra sp. Pleurosigma sp.* --	*Skeletonema sp. Biddulphia sp. Thallasiosira sp. Rhizosolenia sp. Cosmarium sp.*	*Nitzschia sp. Synedra sp. stauroneis sp.* ***Fragillaria sp.*** --	*Biddulphia sp. Rhizosolenia sp. Thalasionema sp. Gyro sigma sp. Skeletonema sp.*	*Nitzschia sp. Navicula sp. Amphipora sp. Cyclotella sp.* --	*Rhizosolenia sp. Biddulphia sp. Thalasiosira sp. Closterium sp.* --	*Nitzschia sp. Navicula sp. Pleurosigma sp. Synedra sp.* --	APHA (22nd Edi) 10200-H
B	**Zooplanktons**													
17.1	Abundance (Population)	noX10^3/ 100 m^3	23		18		24		35		39		30	APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Ostracods Chaetognathes Gastropods		Siphonophores Gastropods Polychaetes --		Siphonophores Gastropods Polychaetes --		Gastropods Bivalves Mysids Polychaetes		Gastropods Polychaetes Bivalves Decapods		Polychates Gastropods Decapods Fish larvae	APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	2.55		2.1		2.55		3.9		3.5		2.95	APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**													
18.1	Total Bacterial Count	CFU/ml	2290		2210		2180		2230		2180		2250	IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present	APHA(22ndEdi)9221-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS:1622:1981Edi. 2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present	IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020	NOVEMBER 2020	DECEMBER 2020	JANUARY 2021	FEBRUARY 2021	MARCH 2021	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1	Organic Matter	%	0.42	0.64	0.69	0.57	0.62	0.52	FCO:2007
2	Phosphorus as P	µg/g	398	428	473	528	493	568	APHA(22nd Edi) 4500 C
3	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	--
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	PLPL-TPH
5	**Heavy Metals**								
5.1	Aluminum as Al	%	4.63	4.43	4.61	5.14	4.78	4.95	AAS APHA 3111 B
5.2	Total Chromium as Cr^{+3}	µg/g	170	209	179	168	153	113	AAS 3111B
5.3	Manganese as Mn	µg/g	768	804	738	701	689	712	AAS APHA 3111 B
5.4	Iron as Fe	%	4.52	4.7	4.59	4.87	4.65	4.86	AAS APHA(22nd Edi)3111 B
5.5	Nickel as Ni	µg/g	39.4	58	63	71	69.4	53	AAS APHA(22nd Edi)3111 B
5.6	Copper as Cu	µg/g	28.6	34	51	68	57.4	46	AAS APHA(22nd Edi)3111 B
5.7	Zinc as Zn	µg/g	170	213	180	159	135	123	AAS APHA(22nd Edi)3111 B
5.8	Lead as Pb	µg/g	2.14	1.9	1.59	2.3	2.49	2.75	AAS APHA(22nd Edi)3111 B
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	AAS APHA- 3112 B
6	**Benthic Organisms**								
6.1	Macrobenthos	--	Gastropods Crustaceans Polychaetes	Polychaete worms Bivalves Isopods	Crustaceans Gastropods	Crustaceans Polychaetes *Amphipods*	Crustaceans Polychaetes	Crustaceans Polychaetes Bivalves	APHA (22nd Edi) 10500-C
6.2	MeioBenthos	--	--	Nematodes	Foraminiferans	Harpacticoids Turbellarians	Nematodes Foraminiferans	Nematodes	APHA (22nd Edi) 10500-C
6.3	Population	no/m^2	439	409	352	559	471	469	APHA (22nd Edi) 10500-C

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.27	8.24	8.24	8.19	8.27	8.23	8.23	8.20	8.29	8.27	8.25	8.23	IS3025(P11)83Re.02
2	Temperature	oC	30.2	29.9	30.2	30.0	30.1	29.9	29.9	29.7	30.1	30	30.3	30.1	IS3025(P9)84Re.02
3	Total Suspended Solids	mg/L	197	228	180	199	167	181	150	173	132	146	127	106	IS3025(P17)84Re.02
4	BOD (3 Days @ 27 °C)	mg/L	3	Not Detected	3.2	Not Detected	3.5	Not Detected	3.4	Not Detected	3.0	Not Detected	3.2	Not Detected	IS 3025 (P44)1993Re.03Edition2.1
5	Dissolved Oxygen	mg/L	5.9	5.7	5.9	5.6	5.8	5.6	5.9	5.6	6.1	5.9	5.9	5.7	IS3025(P38)89Re.99
6	Salinity	ppt	36.5	36.9	36.2	36.6	36.3	36.7	36.1	36.5	36.9	37.3	36.7	37.2	APHA (22nd Edi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22nd Edi)5520D
8	Nitrate as NO_3	µmol/L	3.28	2.94	3.86	3.64	3.56	3.23	3.19	3.27	3.32	3.17	2.81	2.56	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.93	0.82	0.74	0.59	0.43	0.38	0.73	0.86	0.58	0.43	0.67	0.48	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.24	2.13	2.36	2.20	2.16	2.10	2.28	2.34	2.63	2.51	2.41	2.36	IS3025(P34)88Cla.2.3
11	Phosphates as PO_4	µmol/L	2.18	2.1	2.58	2.31	2.49	2.37	2.34	2.56	2.56	2.37	2.13	1.92	APHA(22nd Edi) 4500 C
12	Total Nitrogen	µmol/L	6.45	5.89	6.96	6.43	6.15	5.71	6.20	6.47	6.53	6.11	5.89	5.4	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	11.2	Not Detected	16.0	Not Detected	20.0	Not Detected	17	Not Detected	10.6	Not Detected	14.3	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37456	37824	37192	37566	37306	37716	36994	37538	37894	38740	38174	38658	IS3025(P16)84Re.02
15	COD	mg/L	21.0	Not Detected	23	Not Detected	26	Not Detected	28	19	25	18	28	22.0	APHA(22nd Edi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	3.15	2.67	2.67	2.35	3.15	2.99	3.04	2.72	3.25	2.83	2.88	2.72	APHA (22nd Edi) 10200-H
16.2	Phaeophytin	mg/m^3	1.5	2.1	2.1	2.3	1.3	1.8	1.89	1.91	1.53	1.84	2.16	2.02	APHA (22nd Edi) 10200-H
16.3	Cell Count	No. x 10^3/L	158	106	136	98	152	106	172	98	186	106	166	96	APHA (22nd Edi) 10200-H
16.4	Name of Group	--	*Pinnularia*	*Cyclotella*	*Melosira*	*Navicula*	*Skeletone*	*Nitzschia*	*Rhizosole*	*Navicula*	*Cyclotella*	*Nitzschia*	*Rhizosole*	*Synedra*	APHA (22nd Edi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

	Number and name of group species of each group		*Biddulphia sp. Skeletonema sp. Coscinodiscus sp. Gyro sigma sp.*	*sp. Nitzschia sp. Synedra sp. Fragillaria sp.*	*sp. Nitzschia sp. Coscinodiscus sp. Thallasionema sp. --*	*sp. Pleurosigma sp. Peridinium sp. -- --*	*ma sp. Coscinodiscus sp. Thallasionema sp. Ceratium sp. Biddulphia a sp.*	*sp. Navicula sp. Pleurosigma sp. Synedra sp. --*	*nia sp. Thallasiosira sp. Biddulphia sp. Amphipora sp.* ***Coscinodiscus sp.***	*sp. Synedra sp. Surirella sp.* ***Nitzschia sp.*** *--*	*sp. Skeletonema sp. Gyro sigma sp. Rhizosolenia sp. --*	*sp. Cheatoceros sp. Cymbella sp. Navicula sp. --*	*nia sp. Skeletonema sp. Coscinodiscus sp. Biddulphia sp. Navicula sp.*	*sp. Pleurosigma sp. Thalasiosira sp. Nitzschia sp. '--*	
B	**Zooplanktons**													
17.1	Abundance (Population)	noX10^3/ 100 m^3	23		19		27		35		39		30	APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Decapods Foraminiferans Gastropods		Chaetognathes Ostracods Gastropods --		Polychaetes Gastropods Decapods Ostracods Mysids		Polychaetes Bivalves Isopods Cephalopods		Polychaetes Gastropods Bivalves Ostracods		Amphipods Polychates Decapods Gastropods	APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	2.65		2.4		2.95		3.40		3.6		2.85	APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**													
18.1	Total Bacterial Count	CFU/ml	2360		2280		2150		2250		2280		2350	IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present	APHA(22ndEdi)92219.21-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS:1622:1981Edi. 2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present	IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent	IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

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

SR. NO.	TEST PARAMETERS	UNIT	OCTOBER 2020		NOVEMBER 2020		DECEMBER 2020		JANUARY 2021		FEBRUARY 2021		MARCH 2021		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1	pH	--	8.26	8.23	8.25	8.20	8.27	8.18	8.26	8.21	8.31	8.27	8.25	8.21	IS3025(P11)83Re .02
2	Temperature	oC	30.2	30.1	30.3	30.0	30.1	29.9	29.9	29.8	30	30.1	30.2	30	IS3025(P9)84Re. 02
3	Total Suspended Solids	mg/L	187	209	157	179	168	180	137	158	120	143	138	115	IS3025(P17)84Re .02
4	BOD (3 Days @ 27 °C)	mg/L	3.2	Not Detected	3.4	Not Detected	3.1	Not Detected	3.3	Not Detected	3.1	Not Detected	3.2	Not Detected	IS 3025 (P44)1993Re.03E dition2.1
5	Dissolved Oxygen	mg/L	5.8	5.6	5.9	5.7	5.9	5.8	5.9	5.7	6.1	5.9	5.9	5.7	IS3025(P38)89Re .99
6	Salinity	ppt	36.6	36.9	36.5	36.8	36.4	36.9	36.1	36.6	36.8	37.3	36.7	37.1	APHA (22nd Edi) 2550 B
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	APHA(22nd Edi)552 0D
8	Nitrate as NO_3	µmol/L	3.28	2.97	4.13	3.86	3.64	3.49	3.34	3.53	3.25	3.19	2.93	2.75	IS3025(P34)88
9	Nitrite as NO_2	µmol/L	0.74	0.56	0.94	0.73	0.78	0.63	0.71	0.86	0.56	0.43	0.61	0.58	IS3025(P34)88 NEDA
10	Ammonical Nitrogen as NH_3	µmol/L	2.10	1.87	2.18	1.96	2.10	1.70	2.26	2.41	2.73	2.56	2.49	2.3	IS3025(P34)88Cla .2.3
11	Phosphates as PO_4	µmol/L	1.8	1.56	2.36	2.14	2.34	1.9	2.17	2.06	2.5	2.39	2.16	1.95	APHA(22nd Edi) 4500 C
12	Total Nitrogen	µmol/L	6.12	5.40	7.25	6.55	6.52	5.82	6.31	6.80	6.54	6.18	6.03	5.63	IS3025(P34)88
13	Petroleum Hydrocarbon	µg/L	15.0	Not Detected	20.0	Not Detected	22.0	Not Detected	13	Not Detected	11.8	Not Detected	12.9	Not Detected	PLPL-TPH
14	Total Dissolved Solids	mg/L	37568	37834	37456	37746	37416	37906	37118	37706	37803	38714	38209	38604	IS3025(P16)84Re .02
15	COD	mg/L	23.0	Not Detected	25	Not Detected	24	19.0	28	17	26	17.3	27	21	APHA(22nd Edi) 5520-D Open Reflux
A	**Phytoplankton**														
16.1	Chlorophyll	mg/m^3	2.99	2.83	2.72	2.61	2.93	2.77	3.15	2.83	3.20	2.99	2.86	2.61	APHA (22nd Edi) 10200-H
16.2	Phaeophytin	mg/m^3	2.1	2.0	2.1	2.5	2.2	2.1	1.75	2.22	1.73	1.20	2.3	1.83	APHA (22nd Edi) 10200-H
16.3	Cell Count	No. x 10^3/L	150	106	158	102	166	108	196	104	198	104	152	127	APHA (22nd Edi) 10200-H
16.4	Name of Group Number	--	*Pinnularia sp.*	*Cymbella sp.*	*Amphipro ra sp.*	*Navicula sp.*	*Cyclotella sp.*	*Nitzschia sp.*	*Nitzschia sp.*	*Navicula sp.*	*Skeletone ma sp.*	*Cymbella sp.*	*Coscinodi scus sp.*	*Nitzschia sp.*	APHA (22nd Edi) 10200-H

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

	and name of group species of each group		*Melosira sp. Skeletonema sp. Ceratium Nitzschia sp.*	*Amphora sp. Fragillaria sp. Navicula sp.*	*Biddulphia sp. Coscinodiscus sp. Gyro sigma sp. Nitzschia sp.*	*Rhizosolenia sp. Synedra sp. Cyclotella sp.* --	*Biddulphia sp. Skeletonema sp. Thallasionema sp. Pleurosigma sp.*	*Navicula sp. Coscinodiscus sp. Synedra sp.* --	*Skeletonema sp. Thallasiosira sp. Pleurosigma sp.*	*Synedra sp. Biddulphia sp.* --	*Rhizosolenia sp. Biddulphia sp. Coscinodiscus sp. Pleurosigma sp.*	*Nitzschia sp. Pinnularia sp. Cyclotella sp.* --	*Rhizosolenia sp. Thalasiosira sp. Cheatoceros sp.* --	*Synedra sp. Pleurosigma sp. Navicula sp.* --	
B	**Zooplanktons**														
17.1	Abundance (Population)	noX10^3/ 100 m^3	25		21		24		39		34		27		APHA (22nd Edi) 10200-G
17.2	Name of Group Number and name of group species of each group	--	Amphipods Mysids Gastropods Chaetognaths		Siphonophores Gastropods Ostracods Isopods		Gastropods Polychaetes Decapods Forminiferans		Gastropods Polychaetes Decapods Mysids		Gastropods Polychaetes Decapods Copepods		Ostracods Decapods Polychates Foraminiferans		APHA (22nd Edi) 10200-G
17.3	Total Biomass	ml/100 m^3	3.1		2.9		2.75		3.55		3.60		2.7		APHA (22nd Edi) 10200-G
C	**Microbiological Parameters**														
18.1	Total Bacterial Count	CFU/ml	2300		2410		2360		2270		2340		2410		IS 5402:2002
18.2	Total Coliform	/ml	Absent		Absent		Absent		Absent		Absent		Present		APHA(22ndEdi)92219.21-D
18.3	Ecoli	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:1622:1981Edi. 2.4(2003-05)
18.4	Enterococcus	/ml	Absent		Absent		Absent		Absent		Absent		Present		IS : 15186 :2002
18.5	Salmonella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-3)
18.6	Shigella	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 1887 (P-7)
18.7	Vibrio	/ml	Absent		Absent		Absent		Absent		Absent		Absent		IS : 5887 (P-5)

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai

Lab Manager (Q)

RESULTS OF ETP OUTLET

SR. NO.	TEST PARAMETERS	UNIT	Liquid Terminal ETP Outlet						GPCB Permissible Limit
			Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	
1	Colour	Co-pt	--	--	--	30	20	25	100
2	pH	--	--	--	--	7.28	7.56	7.13	6.5 to 8.5
3	Temperature	°C	--	--	--	29.9	30.1	30.3	40
4	Total Suspended Solids	mg/L	--	--	--	43	37	25	100
5	Total Dissolved Solids	mg/L	--	--	--	1703	1823	2070	2100
6	COD	mg/L	--	--	--	68	61	78	100
7	BOD (3 Days @ 27 °C)	mg/L	--	--	--	11	12	15	30
8	Chloride as Cl	mg/L	--	--	--	498	453	432	600
9	Oil & Grease	mg/L	--	--	--	3.6	4.1	3.1	10
10	Sulphate as SO_4	mg/L	--	--	--	472	428	398	1000
11	Ammonical Nitrogen as NH_3	mg/L	--	--	--	3.69	2.78	3.1	50
12	Phenolic Compound	mg/L	--	--	--	Not Detected	Not Detected	Not Detected	1
13	Copper as Cu	mg/L	--	--	--	Not Detected	Not Detected	Not Detected	3
14	Lead as Pb	mg/L	--	--	--	Not Detected	Not Detected	Not Detected	0.1
15	Sulphide as S	mg/L	--	--	--	1.24	1.68	1.4	2
16	Cadmium as Cd	mg/L	--	--	--	Not Detected	Not Detected	Not Detected	2
17	Fluoride as F	mg/L	--	--	--	0.36	0.27	0.24	2
18	Residual Chlorine	mg/L	--	--	--	0.60	0.6	0.7	0.5 min

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF AMBIENT AIR QUALITY MONITORING

ADANI PORT – TUG BERTH 600 KL PUMP HOUSE								
Sr. No.	Date of Sampling	Particulate Matter (PM10) $\mu g/m^3$	Particulate Matter (PM 2.5) $\mu g/m^3$	Sulphur Dioxide (SO2) $\mu g/m^3$	Oxides of Nitrogen (NO2) $\mu g/m^3$	Carbon Monoxide as CO mg/m^3	Hydrocarbon as CH_4 mg/m^3	Benzene as C_6H_6 $\mu g/m^3$
1	02/10/2020	72.68	31.57	24.24	40.20	0.74	ND*	ND*
2	06/10/2020	91.22	48.65	18.64	34.23	0.93	ND*	ND*
3	09/10/2020	84.27	45.69	22.43	42.56	0.50	ND*	ND*
4	13/10/2020	79.56	36.28	15.25	38.29	0.64	ND*	ND*
5	16/10/2020	87.23	44.19	19.82	41.26	0.88	ND*	ND*
6	20/10/2020	92.46	51.27	23.46	44.20	0.70	ND*	ND*
7	23/10/2020	85.63	40.57	21.58	35.75	0.57	ND*	ND*
8	27/10/2020	74.23	42.57	12.64	30.23	0.73	ND*	ND*
9	30/10/2020	82.46	37.28	17.38	33.29	0.80	ND*	ND*
10	03/11/2020	68.36	29.37	21.54	38.67	0.53	ND*	ND*
11	06/11/2020	76.35	47.22	17.52	33.31	0.78	ND*	ND*
12	10/11/2020	80.22	44.56	11.24	28.44	0.32	ND*	ND*
13	13/11/2020	74.55	49.26	23.50	39.52	0.54	ND*	ND*
14	17/11/2020	83.42	41.35	14.23	21.57	0.76	ND*	ND*
15	20/11/2020	78.37	37.57	18.57	34.28	0.52	ND*	ND*
16	24/11/2020	84.25	50.22	20.59	40.22	0.71	ND*	ND*
17	27/11/2020	62.46	26.46	8.59	31.63	0.61	ND*	ND*
18	01/12/2020	85.37	49.34	11.22	23.49	0.65	ND*	ND*
19	04/12/2020	61.52	28.62	21.62	41.30	0.57	ND*	ND*
20	08/12/2020	82.63	50.22	19.64	37.58	0.88	ND*	ND*
21	11/12/2020	75.35	39.57	12.81	28.50	0.46	ND*	ND*
22	15/12/2020	88.21	46.35	18.63	25.68	0.96	ND*	ND*
23	18/12/2020	70.31	33.62	20.24	35.36	0.73	ND*	ND*
24	22/12/2020	86.27	48.34	14.57	30.25	0.63	ND*	ND*
25	25/12/2020	93.53	54.34	22.21	39.56	0.72	ND*	ND*
26	29/12/2020	83.64	42.64	17.26	42.32	1.01	ND*	ND*
27	01/01/2021	75.62	48.39	18.32	22.69	0.42	ND*	ND*
28	05/01/2021	81.76	44.31	13.59	26.26	0.70	ND*	ND*
29	08/01/2021	79.34	52.34	11.70	23.24	0.62	ND*	ND*
30	12/01/2021	73.58	32.53	20.25	25.55	0.73	ND*	ND*

Continue …

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF AMBIENT AIR QUALITY MONITORING

ADANI PORT – TUG BERTH 600 KL PUMP HOUSE								
Sr.No.	Date of Sampling	Particulate Matter (PM10) µg/m³	Particulate Matter (PM 2.5) µg/m³	Sulphur Dioxide (SO2) µg/m³	Oxides of Nitrogen (NO2) µg/m³	Carbon Monoxide as CO mg/m³	Hydrocarbon as CH_4 mg/m³	Benzene as C_6H_6 µg/m³
31	15/01/2021	41.42	35.61	12.56	28.51	0.31	ND*	ND*
32	19/01/2021	70.65	47.55	14.28	19.62	0.54	ND*	ND*
33	22/01/2021	60.51	24.59	19.64	33.49	0.53	ND*	ND*
34	26/01/2021	80.64	43.77	21.30	38.42	0.80	ND*	ND*
35	29/01/2021	88.51	51.26	15.54	31.81	0.64	ND*	ND*
36	02/02/2021	62.53	29.54	10.31	24.29	0.31	ND*	ND*
37	05/02/2021	78.33	25.42	12.57	21.19	0.66	ND*	ND*
38	09/02/2021	68.34	39.40	9.29	22.62	0.34	ND*	ND*
39	12/02/2021	70.36	36.53	14.53	26.48	0.17	ND*	ND*
40	16/02/2021	50.52	23.42	16.24	19.60	0.48	ND*	ND*
41	19/02/2021	65.34	33.57	13.51	30.18	0.65	ND*	ND*
42	23/02/2021	58.31	28.37	15.45	34.19	0.60	ND*	ND*
43	26/02/2021	86.32	44.27	8.60	17.54	0.49	ND*	ND*
44	02/03/2021	68.26	26.34	18.65	35.68	0.49	ND*	ND*
45	05/03/2021	95.37	49.59	14.59	28.55	0.16	ND*	ND*
46	09/03/2021	73.57	23.59	22.69	38.44	0.17	ND*	ND*
47	12/03/2021	84.63	52.63	12.72	30.24	0.27	ND*	ND*
48	16/03/2021	72.62	37.36	11.56	24.49	0.62	ND*	ND*
49	19/03/2021	92.42	51.63	15.82	29.57	0.29	ND*	ND*
50	23/03/2021	86.26	47.55	13.42	32.67	0.47	ND*	ND*
51	26/03/2021	78.25	43.56	17.22	31.57	0.11	ND*	ND*
52	30/03/2021	82.43	33.41	9.46	23.62	0.42	ND*	ND*
LIMIT#		**100**	**60**	**80**	**80**	**4**	**Not Specified**	**5**
TEST METHOD		**IS:5182(Part 23):Gravimetric CPCB - Method (Vol.I,May-2011)**	**Gravimetric-CPCB - Method (Vol.I,May-2011)**	**IS:5182(Part II):Improved West and Gaeke**	**IS:5182(Part VI):Modified Jacob &Hochheiser (NaOH-NaAsO2)**	**NDIR Digital Gas Analyzer**	**SOP: HC: GC/GCMS/Gas analyzer**	**IS 5182 (Part XI):2006/CPCB Method**

*Not Detected
#: Industrial, Residential, Rural and other Area Notification Dated 16th Nov.2009 as per national Ambient Air Quality Standards, CPCB New Delhi.

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF AMBIENT AIR QUALITY MONITORING

NEAR FIRE STATION								
Sr. No.	Date of Sampling	Particulate Matter (PM10) µg/m³	Particulate Matter (PM 2.5) µg/m³	Sulphur Dioxide (SO2) µg/m³	Oxides of Nitrogen (NO2) µg/m³	Carbon Monoxide as CO mg/m³	Hydrocarbon as CH_4 mg/m³	Benzene as C_6H_6 µg/m³
1	02/10/2020	62.55	24.56	10.67	19.55	0.57	ND*	ND*
2	06/10/2020	50.21	27.22	14.25	25.65	0.77	ND*	ND*
3	09/10/2020	71.58	41.63	17.33	31.75	0.30	ND*	ND*
4	13/10/2020	68.55	28.43	6.56	34.52	0.72	ND*	ND*
5	16/10/2020	73.53	38.42	13.53	24.59	0.61	ND*	ND*
6	20/10/2020	67.56	33.59	15.19	18.54	0.74	ND*	ND*
7	23/10/2020	70.25	36.55	11.25	29.69	0.47	ND*	ND*
8	27/10/2020	52.61	23.43	20.29	22.80	0.39	ND*	ND*
9	30/10/2020	66.37	29.39	8.88	15.68	0.46	ND*	ND*
10	03/11/2020	55.64	23.38	14.51	29.56	0.60	ND*	ND*
11	06/11/2020	63.21	31.58	8.58	16.26	0.46	ND*	ND*
12	10/11/2020	72.64	40.23	15.66	24.68	0.66	ND*	ND*
13	13/11/2020	66.22	29.61	17.22	36.26	0.48	ND*	ND*
14	17/11/2020	70.55	26.43	23.40	33.43	0.58	ND*	ND*
15	20/11/2020	62.75	30.40	20.45	38.67	0.84	ND*	ND*
16	24/11/2020	79.31	47.34	18.86	18.98	0.79	ND*	ND*
17	27/11/2020	68.44	28.61	12.60	23.89	0.47	ND*	ND*
18	01/12/2020	65.32	34.54	13.61	26.37	0.55	ND*	ND*
19	04/12/2020	50.35	39.27	19.30	33.66	0.64	ND*	ND*
20	08/12/2020	67.70	36.51	17.49	29.61	0.78	ND*	ND*
21	11/12/2020	53.44	22.67	14.31	32.36	0.24	ND*	ND*
22	15/12/2020	73.66	29.32	11.57	21.83	0.76	ND*	ND*
23	18/12/2020	78.76	49.77	9.58	18.72	0.40	ND*	ND*
24	22/12/2020	89.62	35.51	12.64	25.81	0.80	ND*	ND*
25	25/12/2020	71.62	31.53	10.88	22.61	0.61	ND*	ND*
26	29/12/2020	64.27	30.40	15.59	28.60	0.70	ND*	ND*
27	01/01/2021	80.36	38.43	14.57	18.61	0.60	ND*	ND*
28	05/01/2021	63.67	33.46	11.53	15.62	0.52	ND*	ND*
29	08/01/2021	72.51	35.67	9.63	20.61	0.46	ND*	ND*
30	12/01/2021	69.42	40.36	16.40	33.28	0.50	ND*	ND*

Continue ...

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF AMBIENT AIR QUALITY MONITORING

NEAR FIRE STATION								
Sr.No.	Date of Sampling	Particulate Matter (PM10) µg/m³	Particulate Matter (PM 2.5) µg/m³	Sulphur Dioxide (SO2) µg/m³	Oxides of Nitrogen (NO2) µg/m³	Carbon Monoxide as CO mg/m³	Hydrocarbon as CH_4 mg/m³	Benzene as C_6H_6 µg/m³
31	15/01/2021	75.62	43.83	6.66	14.22	0.16	ND*	ND*
32	19/01/2021	86.30	52.74	10.61	25.67	0.23	ND*	ND*
33	22/01/2021	49.36	21.62	17.67	36.53	0.63	ND*	ND*
34	26/01/2021	68.62	47.55	18.64	29.49	0.56	ND*	ND*
35	29/01/2021	43.76	27.69	13.98	27.62	0.24	ND*	ND*
36	02/02/2021	56.28	25.43	17.23	20.59	0.16	ND*	ND*
37	05/02/2021	84.38	40.36	15.65	18.42	0.45	ND*	ND*
38	09/02/2021	89.75	50.35	12.45	26.41	0.22	ND*	ND*
39	12/02/2021	80.46	45.63	18.43	21.49	0.38	ND*	ND*
40	16/02/2021	69.36	39.27	21.30	39.49	0.36	ND*	ND*
41	19/02/2021	73.60	28.44	11.27	23.58	0.41	ND*	ND*
42	23/02/2021	82.63	46.34	13.23	29.30	0.26	ND*	ND*
43	26/02/2021	43.52	25.43	16.23	24.52	0.63	ND*	ND*
44	02/03/2021	70.63	23.59	15.30	24.28	0.46	ND*	ND*
45	05/03/2021	76.86	26.47	10.57	21.37	0.31	ND*	ND*
46	09/03/2021	87.82	42.41	16.53	25.64	0.37	ND*	ND*
47	12/03/2021	73.46	36.22	20.33	34.35	0.13	ND*	ND*
48	16/03/2021	65.62	34.59	17.64	23.46	0.22	ND*	ND*
49	19/03/2021	77.12	43.41	13.36	33.33	0.15	ND*	ND*
50	23/03/2021	68.62	40.36	19.21	30.57	0.36	ND*	ND*
51	26/03/2021	58.76	48.64	12.49	26.38	0.53	ND*	ND*
52	30/03/2021	78.12	20.58	11.24	29.35	0.40	ND*	ND*
LIMIT#		**100**	**60**	**80**	**80**	**4**	**Not Specified**	**5**
TEST METHOD		**IS:5182(Part 23):Gravimetric CPCB - Method (Vol.I,May-2011)**	**Gravimetric-CPCB - Method (Vol.I,May-2011)**	**IS:5182(Part II):Improved West and Gaeke**	**IS:5182(Part VI):Modified Jacob &Hochheiser (NaOH-NaAsO2)**	**NDIR Digital Gas Analyzer**	**SOP: HC: GC/GCMS/Gas analyzer**	**IS 5182 (Part XI):2006/CPCB Method**

*Not Detected
#: Industrial, Residential, Rural and other Area Notification Dated 16th Nov.2009 as per national Ambient Air Quality Standards, CPCB New Delhi.

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF AMBIENT AIR QUALITY MONITORING

ADANI HOUSE								
Sr. No.	Date of Sampling	Particulate Matter (PM10) µg/m³	Particulate Matter (PM 2.5) µg/m³	Sulphur Dioxide (SO2) µg/m³	Oxides of Nitrogen (NO2) µg/m³	Carbon Monoxide as CO mg/m³	Hydrocarbon as CH_4 mg/m³	Benzene as C_6H_6 µg/m³
1	02/10/2020	57.56	18.58	20.55	35.61	0.49	ND*	ND*
2	06/10/2020	65.61	37.61	8.30	17.52	0.37	ND*	ND*
3	09/10/2020	60.37	30.24	22.30	27.54	0.44	ND*	ND*
4	13/10/2020	55.22	25.36	11.23	30.80	0.55	ND*	ND*
5	16/10/2020	62.65	32.57	15.39	37.25	0.31	ND*	ND*
6	20/10/2020	78.25	43.57	19.21	32.50	0.41	ND*	ND*
7	23/10/2020	64.27	29.57	12.55	33.56	0.76	ND*	ND*
8	27/10/2020	59.24	33.57	21.24	34.54	0.62	ND*	ND*
9	30/10/2020	71.24	31.49	13.90	20.69	0.53	ND*	ND*
10	03/11/2020	62.58	26.20	8.70	19.58	0.79	ND*	ND*
11	06/11/2020	70.67	41.22	12.36	22.76	0.62	ND*	ND*
12	10/11/2020	66.23	32.49	19.87	32.43	0.36	ND*	ND*
13	13/11/2020	58.68	27.55	9.60	20.45	0.60	ND*	ND*
14	17/11/2020	65.47	23.45	20.23	28.61	0.44	ND*	ND*
15	20/11/2020	72.53	34.62	16.42	25.64	0.70	ND*	ND*
16	24/11/2020	68.36	36.29	13.44	36.48	0.87	ND*	ND*
17	27/11/2020	55.21	20.53	6.90	15.61	0.72	ND*	ND*
18	01/12/2020	60.51	30.23	17.51	34.51	0.46	ND*	ND*
19	04/12/2020	72.38	35.66	15.35	38.34	0.39	ND*	ND*
20	08/12/2020	55.66	43.56	13.67	23.52	0.69	ND*	ND*
21	11/12/2020	66.27	26.34	16.34	35.67	0.38	ND*	ND*
22	15/12/2020	78.68	34.53	9.54	18.66	0.71	ND*	ND*
23	18/12/2020	62.86	45.53	7.55	26.19	0.27	ND*	ND*
24	22/12/2020	96.75	52.76	10.23	22.32	0.56	ND*	ND*
25	25/12/2020	76.48	44.53	12.51	19.55	0.42	ND*	ND*
26	29/12/2020	58.66	24.37	8.66	27.56	0.77	ND*	ND*
27	01/01/2021	69.36	32.69	11.53	25.88	0.29	ND*	ND*
28	05/01/2021	52.42	38.76	8.63	19.32	0.47	ND*	ND*
29	08/01/2021	85.76	49.63	16.46	31.50	0.33	ND*	ND*
30	12/01/2021	90.60	51.63	12.68	21.07	0.45	ND*	ND*

Continue …

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

ADANI HOUSE								
Sr. No.	Date of Sampling	Particulate Matter (PM10) µg/m^3	Particulate Matter (PM 2.5) µg/m^3	Sulphur Dioxide (SO2) µg/m^3	Oxides of Nitrogen (NO2) µg/m^3	Carbon Monoxide as CO mg/m^3	Hydrocarbon as CH_4 mg/m^3	Benzene as C_6H_6 µg/m^3
31	15/01/2021	63.52	37.67	15.25	28.24	0.40	ND*	ND*
32	19/01/2021	95.84	43.52	17.53	32.57	0.17	ND*	ND*
33	22/01/2021	38.42	18.77	13.83	30.48	0.39	ND*	ND*
34	26/01/2021	70.36	31.61	14.57	35.38	0.60	ND*	ND*
35	29/01/2021	77.54	39.43	9.21	24.56	0.69	ND*	ND*
36	02/02/2021	76.34	36.25	19.45	28.28	0.19	ND*	ND*
37	05/02/2021	71.52	24.31	17.22	25.37	0.31	ND*	ND*
38	09/02/2021	58.63	26.84	15.34	30.39	0.57	ND*	ND*
39	12/02/2021	66.22	29.48	7.71	18.61	0.27	ND*	ND*
40	16/02/2021	57.33	33.49	10.24	15.40	0.64	ND*	ND*
41	19/02/2021	60.36	30.44	8.66	21.51	0.53	ND*	ND*
42	23/02/2021	52.42	21.24	11.54	31.20	0.44	ND*	ND*
43	26/02/2021	69.32	34.20	13.53	22.38	0.21	ND*	ND*
44	02/03/2021	57.28	19.65	12.66	20.34	0.52	ND*	ND*
45	05/03/2021	69.24	41.27	18.30	36.88	0.44	ND*	ND*
46	09/03/2021	77.55	33.66	8.68	21.56	0.48	ND*	ND*
47	12/03/2021	63.56	26.51	11.51	23.62	0.41	ND*	ND*
48	16/03/2021	79.22	31.52	13.85	29.67	0.25	ND*	ND*
49	19/03/2021	55.64	20.28	9.63	25.49	0.39	ND*	ND*
50	23/03/2021	67.52	37.59	16.41	28.44	0.14	ND*	ND*
51	26/03/2021	62.66	32.65	10.61	18.66	0.56	ND*	ND*
52	30/03/2021	74.31	27.51	6.81	22.32	0.23	ND*	ND*
LIMIT#		**100**	**60**	**80**	**80**	**4**	**Not Specified**	**5**
TEST METHOD		**IS:5182(Part 23):Gravimetric CPCB - Method (Vol.I,May-2011)**	**Gravimetric-CPCB - Method (Vol.I,May-2011)**	**IS:5182(Part II):Improved West and Gaeke**	**IS:5182(Part VI):Modified Jacob &Hochheiser (NaOH-NaAsO2)**	**NDIR Digital Gas Analyzer**	**SOP: HC: GC/GCMS/Gas analyzer**	**IS 5182 (Part XI):2006/CPCB Method**

*Not Detected
#: Industrial, Residential, Rural and other Area Notification Dated 16th Nov.2009 as per national Ambient Air Quality Standards, CPCB New Delhi.

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF AMBIENT AIR QUALITY MONITORING

CT-3 RMU-2								
Sr.No.	Date of Sampling	Particulate Matter (PM10) $\mu g/m^3$	Particulate Matter (PM 2.5) $\mu g/m^3$	Sulphur Dioxide (SO2) $\mu g/m^3$	Oxides of Nitrogen (NO2) $\mu g/m^3$	Carbon Monoxide as CO mg/m^3	Hydrocarbon as CH_4 mg/m^3	Benzene as C_6H_6 $\mu g/m^3$
1	02/10/2020	66.32	28.47	14.22	22.61	0.86	ND*	ND*
2	06/10/2020	81.24	45.36	11.84	29.34	0.60	ND*	ND*
3	09/10/2020	76.67	40.27	20.65	35.61	0.81	ND*	ND*
4	13/10/2020	83.58	36.43	8.42	15.64	0.79	ND*	ND*
5	16/10/2020	78.66	41.23	21.26	34.67	0.48	ND*	ND*
6	20/10/2020	82.65	46.31	17.84	28.64	0.63	ND*	ND*
7	23/10/2020	75.65	34.23	19.54	25.34	0.52	ND*	ND*
8	27/10/2020	84.21	47.57	23.43	39.45	0.68	ND*	ND*
9	30/10/2020	77.55	33.73	15.89	30.40	0.40	ND*	ND*
10	03/11/2020	85.76	44.37	18.58	26.33	0.64	ND*	ND*
11	06/11/2020	79.36	36.51	16.21	30.42	0.26	ND*	ND*
12	10/11/2020	92.68	54.27	24.26	40.86	0.55	ND*	ND*
13	13/11/2020	80.78	46.25	11.20	24.64	0.30	ND*	ND*
14	17/11/2020	75.67	37.22	20.42	31.60	0.38	ND*	ND*
15	20/11/2020	83.68	45.58	14.84	23.42	0.80	ND*	ND*
16	24/11/2020	90.44	53.44	9.53	22.66	0.45	ND*	ND*
17	27/11/2020	72.64	32.48	17.59	37.56	0.41	ND*	ND*
18	01/12/2020	78.62	46.33	20.89	39.48	0.74	ND*	ND*
19	04/12/2020	65.65	31.57	11.36	26.36	0.65	ND*	ND*
20	08/12/2020	88.36	55.39	15.67	32.46	0.86	ND*	ND*
21	11/12/2020	79.68	43.38	9.62	27.50	0.41	ND*	ND*
22	15/12/2020	82.41	40.34	16.29	33.52	0.58	ND*	ND*
23	18/12/2020	90.62	42.63	13.80	29.32	0.92	ND*	ND*
24	22/12/2020	80.34	45.62	17.79	34.26	0.66	ND*	ND*
25	25/12/2020	87.36	48.74	14.36	36.21	0.52	ND*	ND*
26	29/12/2020	76.35	32.65	10.71	30.62	0.37	ND*	ND*
27	01/01/2021	85.62	43.67	16.29	31.52	0.53	ND*	ND*
28	05/01/2021	76.62	24.83	21.63	35.63	0.57	ND*	ND*
29	08/01/2021	92.76	44.67	18.59	29.66	0.42	ND*	ND*
30	12/01/2021	86.50	33.77	14.60	30.69	0.61	ND*	ND*

Continue ...

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF AMBIENT AIR QUALITY MONITORING

CT-3 RMU-2								
Sr.No.	Date of Sampling	Particulate Matter (PM10) µg/m³	Particulate Matter (PM 2.5) µg/m³	Sulphur Dioxide (SO2) µg/m³	Oxides of Nitrogen (NO2) µg/m³	Carbon Monoxide as CO mg/m³	Hydrocarbon as CH_4 mg/m³	Benzene as C_6H_6 µg/m³
31	15/01/2021	80.34	41.67	8.82	22.66	0.25	ND*	ND*
32	19/01/2021	90.62	39.63	19.55	36.81	0.37	ND*	ND*
33	22/01/2021	55.76	36.51	15.71	40.26	0.71	ND*	ND*
34	26/01/2021	87.62	51.57	10.86	25.65	0.65	ND*	ND*
35	29/01/2021	82.62	46.58	17.24	34.59	0.58	ND*	ND*
36	02/02/2021	82.65	44.33	21.64	36.60	0.27	ND*	ND*
37	05/02/2021	89.35	48.53	19.41	28.60	0.39	ND*	ND*
38	09/02/2021	94.36	55.39	16.48	33.47	0.32	ND*	ND*
39	12/02/2021	85.76	51.28	22.43	29.43	0.42	ND*	ND*
40	16/02/2021	78.84	45.33	12.62	26.28	0.52	ND*	ND*
41	19/02/2021	92.52	54.36	17.53	38.65	0.62	ND*	ND*
42	23/02/2021	87.56	49.82	20.31	20.43	0.40	ND*	ND*
43	26/02/2021	91.76	52.40	18.57	27.63	0.37	ND*	ND*
44	02/03/2021	80.36	35.64	23.69	44.53	0.57	ND*	ND*
45	05/03/2021	70.42	30.40	21.20	40.26	0.66	ND*	ND*
46	09/03/2021	93.42	47.62	18.41	29.46	0.74	ND*	ND*
47	12/03/2021	78.62	55.39	10.51	38.63	0.54	ND*	ND*
48	16/03/2021	60.24	43.63	19.39	34.51	0.68	ND*	ND*
49	19/03/2021	87.62	56.35	16.36	39.53	0.50	ND*	ND*
50	23/03/2021	94.36	50.32	25.41	42.45	0.71	ND*	ND*
51	26/03/2021	72.52	40.34	15.52	33.43	0.60	ND*	ND*
52	30/03/2021	88.62	53.44	20.25	36.28	0.33	ND*	ND*
LIMIT#		**100**	**60**	**80**	**80**	**4**	**Not Specified**	**5**
TEST METHOD		**IS:5182(Part 23):Gravimetric CPCB - Method (Vol.I,May-2011)**	**Gravimetric-CPCB - Method (Vol.I,May-2011)**	**IS:5182(Part II):Improved West and Gaeke**	**IS:5182(Part VI):Modified Jacob &Hochheiser (NaOH-NaAsO2)**	**NDIR Digital Gas Analyzer**	**SOP: HC: GC/GCMS/Gas analyzer**	**IS 5182 (Part XI):2006/CPCB Method**

*Not Detected
#: Industrial, Residential, Rural and other Area Notification Dated 16th Nov.2009 as per national Ambient Air Quality Standards, CPCB New Delhi.

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULTS OF NOISE LEVEL MONITORING

Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	ADANI PORT – TUG BERTH 600 KL PUPM HOUSE					
		Result [Leq dB(A)]					
	Sampling Date & Time	23/10/2020	17/11/2020	09/12/2020	20/01/2021	20/02/2021	11/03/2021
1	6:00-7:00	59.1	60.4	58.6	53.7	58.8	62.4
2	7:00-8:00	62.4	65.4	64.1	51.8	60.2	67.4
3	8:00-9:00	68.4	68.1	65.7	56.9	62.4	67.2
4	9:00-10:00	64.4	61.8	63.8	59.7	63.8	69.2
5	10:00-11:00	62.1	70.6	68.5	47.3	65.6	61.4
6	11:00-12:00	61.8	65.2	66.6	61.7	58.4	60.4
7	12:00-13:00	67.4	68.4	65.1	63.4	69.4	68.4
8	13:00-14:00	69.8	62.9	63.6	64.4	65.2	72.4
9	14:00-15:00	62.1	66.7	67.2	63.2	66.1	69.4
10	15:00-16:00	61.5	63.1	64.5	62.8	68.1	70.5
11	16:00-17:00	68.4	63.4	62.9	62.4	61.4	65.4
12	17:00-18:00	65.1	62.2	64.3	58.3	67.8	63.4
13	18:00-19:00	62.8	68.8	66.2	64.3	72.1	61.5
14	19:00-20:00	61.0	68.4	65.8	54.8	70.6	62.8
15	20:00-21:00	62.8	65.5	64.6	58.7	65.5	68.1
16	21:00-22:00	61.8	61.7	63.2	53.5	68.8	63.8
Day Time Limit*		75 Leq dB(A)					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	ADANI PORT – TUG BERTH 600 KL PUPM HOUSE					
		Result [Leq dB(A)]					
1	Sampling Date & Time	23/10/2020	17/11/2020	09/12/2020	20/01/2021	20/02/2021	11/03/2021
2	22:00-23:00	62.4	65.3	64.5	63.7	62.2	60.1
3	23:00-00:00	68.4	65.2	67.3	56.4	61.2	62.5
4	00:00-01:00	62.1	61.5	64.9	51.2	63.8	68.4
5	01:00-02:00	63.1	62.5	61.5	56.7	67.4	69.1
6	02:00-03:00	65.8	68.4	66.2	59.4	62.4	62.4
7	03:00-04:00	62.8	63.4	64.8	45.4	63.9	65.2
8	04:00-05:00	61.4	62.8	65.1	46.9	62.8	63.1
9	05:00-06:00	62.8	60.4	61.4	47.8	61.8	60.8
Night Time Limit*		70 Leq dB(A)					

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULTS OF NOISE LEVEL MONITORING

Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	NEAR FIRE STATION					
		Result [Leq dB(A)]					
	Sampling Date & Time	09/10/2020	20/11/2020	08/12/2020	06/01/2021	10/02/2021	25/03/2021
1	6:00-7:00	60.8	60.4	61.7	56.8	60.1	68.4
2	7:00-8:00	65.2	68.5	67.2	62.4	64.8	62.1
3	8:00-9:00	62.1	65.4	64.6	53.7	62.5	66.8
4	9:00-10:00	61.4	63.8	62.8	61.4	69.3	69.5
5	10:00-11:00	64.1	72.4	70.2	65.7	70.2	64.1
6	11:00-12:00	63.2	62.5	61.1	67.4	63.2	60.2
7	12:00-13:00	68.4	61.5	60.3	69.8	69.4	65.3
8	13:00-14:00	62.5	63.4	64.5	63.4	70.5	63.4
9	14:00-15:00	61.2	65.4	63.9	71.4	65.4	69.7
10	15:00-16:00	69.4	68.5	65.8	67.8	72.8	60.1
11	16:00-17:00	65.1	69.4	66.2	68.5	63.5	63.1
12	17:00-18:00	66.8	62.1	71.3	70.3	62.4	65.5
13	18:00-19:00	70.2	62.8	68.7	66.5	65.1	60.4
14	19:00-20:00	68.5	62.8	65.2	68.8	62.8	61.8
15	20:00-21:00	64.1	64.8	62.4	61.8	68.4	65.8
16	21:00-22:00	62.1	68.7	65.1	55.8	63.8	62.7
Day Time Limit*		75 Leq dB(A)					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	NEAR FIRE STATION					
		Result [Leq dB(A)]					
1	Sampling Date & Time	09/10/2020	20/11/2020	08/12/2020	06/01/2021	10/02/2021	25/03/2021
2	22:00-23:00	69.5	65.5	64.2	61.4	66.5	65.5
3	23:00-00:00	65.2	62.4	63.8	52.4	65.1	62.1
4	00:00-01:00	67.4	64.2	66.1	48.3	62.5	60.1
5	01:00-02:00	62.5	63.5	65.9	47.3	63.4	63.8
6	02:00-03:00	66.9	65.8	63.4	44.2	59.1	59.4
7	03:00-04:00	62.4	62.5	60.3	43.1	62.8	61.5
8	04:00-05:00	61.8	68.4	63.2	49.2	60.2	65.1
9	05:00-06:00	63.4	63.8	61.6	51.3	68.1	62.4
Night Time Limit*		70 Leq dB(A)					

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULTS OF NOISE LEVEL MONITORING

Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	ADANI HOUSE					
		Result [Leq dB(A)]					
	Sampling Date & Time	20/10/2020	10/11/2020	15/12/2020	14/01/2021	11/02/2021	04/03/2021
1	6:00-7:00	63.1	63.8	62.4	46.8	62.4	60.1
2	7:00-8:00	68.8	65.1	66.1	47.3	60.5	65.1
3	8:00-9:00	72.1	68.4	70.9	49.3	68.4	66.8
4	9:00-10:00	69.5	62.5	68.8	42.7	71.4	70.1
5	10:00-11:00	64.2	63.4	66.6	55.8	62.5	68.5
6	11:00-12:00	61.5	68.4	65.4	59.7	72.5	66.1
7	12:00-13:00	62.8	66.1	71.3	54.9	70.1	62.5
8	13:00-14:00	69.5	62.8	68.2	57.3	62.1	64.5
9	14:00-15:00	63.1	69.8	62.8	55.2	69.7	69.5
10	15:00-16:00	62.4	62.4	64.7	54.4	66.1	71.4
11	16:00-17:00	66.1	69.5	68.1	56.7	67.4	68.3
12	17:00-18:00	68.4	62.1	65.9	53.8	69.3	63.4
13	18:00-19:00	65.2	61.5	64.3	58.3	63.5	68.2
14	19:00-20:00	63.1	63.4	65.2	51.8	61.4	62.2
15	20:00-21:00	69.5	68.4	67.4	53.7	60.4	63.1
16	21:00-22:00	66.4	62.8	65.1	49.7	65.4	61.5
Day Time Limit*		75 Leq dB(A)					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	ADANI HOUSE					
		Result [Leq dB(A)]					
1	Sampling Date & Time	20/10/2020	10/11/2020	15/12/2020	15/01/2021	11/02/2021	04/03/2021
2	22:00-23:00	65.8	67.4	66.8	58.7	63.8	60.1
3	23:00-00:00	68.4	65.2	67.2	69.7	68.4	62.5
4	00:00-01:00	61.2	62.5	63.1	41.2	60.1	67.4
5	01:00-02:00	62.3	68.4	65.4	46.8	59.4	60.3
6	02:00-03:00	68.1	61.5	65.3	45.2	55.1	60.2
7	03:00-04:00	60.4	66.2	64.7	46.1	53.8	65.4
8	04:00-05:00	63.2	62.7	63.2	44.8	62.1	61.2
9	05:00-06:00	62.8	68.4	61.6	42.8	60.5	63.8
Night Time Limit*		70 Leq dB(A)					

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULTS OF NOISE LEVEL MONITORING

Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	CT-3 RMU-2					
		Result [Leq dB(A)]					
	Sampling Date & Time	10/06/2020	06/11/2020	16/12/2020	25/01/2021	17/02/2021	10/03/2021
1	6:00-7:00	58.8	59.2	60.2	52.4	57.4	58.4
2	7:00-8:00	60.4	63.1	61.7	56.8	56.4	65.6
3	8:00-9:00	68.4	61.8	62.8	49.7	60.4	60.1
4	9:00-10:00	65.2	61.4	63.8	51.5	67.9	62.5
5	10:00-11:00	62.4	69.7	64.3	55.8	65.2	65.3
6	11:00-12:00	63.8	71.5	70.6	53.8	63.8	62.3
7	12:00-13:00	67.4	63.8	68.2	59.2	68.4	65.1
8	13:00-14:00	62.8	65.4	66.1	61.7	62.8	68.5
9	14:00-15:00	64.5	69.1	67.9	68.7	69.9	64.2
10	15:00-16:00	66.1	68.4	65.8	63.7	62.3	61.7
11	16:00-17:00	62.1	68.7	67.2	69.8	70.4	63.4
12	17:00-18:00	61.5	64.1	64.6	57.8	66.7	66.1
13	18:00-19:00	68.4	62.8	65.1	56.9	62.4	68.4
14	19:00-20:00	63.2	61.7	66.3	61.4	62.5	69.4
15	20:00-21:00	62.8	60.1	64.2	52.7	66.8	62.4
16	21:00-22:00	63.4	62.7	63.1	48.7	68.1	62.8
Day Time Limit*		75 Leq dB(A)					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	CT-3 RMU-2					
		Result [Leq dB(A)]					
1	Sampling Date & Time	06/10/2020	06/11/2020	16/12/2020	25/01/2021	17/02/2021	10/03/2021
2	22:00-23:00	68.4	65.8	67.1	68.2	64.4	63.8
3	23:00-00:00	65.2	65.4	64.4	61.8	61.2	58.4
4	00:00-01:00	63.4	62.4	65.3	48.9	63.4	55.1
5	01:00-02:00	65.8	68.4	66.2	41.8	61.4	62.1
6	02:00-03:00	62.4	63.4	64.6	43.7	62.5	60.4
7	03:00-04:00	61.4	61.4	62.3	43.2	68.4	58.1
8	04:00-05:00	62.3	62.8	63.2	47.1	64.2	62.4
9	05:00-06:00	63.7	62.7	61.9	49.2	62.8	59.2
Night Time Limit*		70 Leq dB(A)					

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULT OF STACK MONITORING

SR. NO.	TEST PARAMETERS	UNIT	STD. LIMIT	THERMIC FLUID HEATER (BITUMEN-01)	THERMIC FLUID HEATER (BITUMEN-02)	HOT WATER SYSTEM-1	HOT WATER SYSTEM-2	TEST METHOD
				OCTOBER 2020				
1	Particulate Matter	mg/Nm^3	**150**	19.36	--	28.38	30.61	IS:11255 (Part-I):1985
2	Sulfur dioxide	ppm	**100**	4.74	--	6.57	7.45	IS:11255 (Part-II):1985
3	Oxides of Nitrogen	ppm	**50**	25.37	--	34.22	38.62	IS:11255 (Part-VII):2005
				NOVEMBER 2020				
1	Particulate Matter	mg/Nm^3	**150**	26.41	--	32.41	--	IS:11255 (Part-I):1985
2	Sulfur dioxide	ppm	**100**	6.27	--	5.73	--	IS:11255 (Part-II):1985
3	Oxides of Nitrogen	ppm	**50**	28.78	--	30.73	--	IS:11255 (Part-VII):2005
				DECEMBER 2020				
1	Particulate Matter	mg/Nm^3	**150**	--	--	37.62	--	IS:11255 (Part-I):1985
2	Sulfur dioxide	ppm	**100**	--	--	7.63	--	IS:11255 (Part-II):1985
3	Oxides of Nitrogen	ppm	**50**	--	--	35.52	--	IS:11255 (Part-VII):2005
				JANUARY 2021				
1	Particulate Matter	mg/Nm^3	**150**	--	--	--	--	IS:11255 (Part-I):1985
2	Sulfur dioxide	ppm	**100**	--	--	--	--	IS:11255 (Part-II):1985
3	Oxides of Nitrogen	ppm	**50**	--	--	--	--	IS:11255 (Part-VII):2005
				FEBRUARY 2021				
1	Particulate Matter	mg/Nm^3	**150**	--	--	32.42	--	IS:11255 (Part-I):1985
2	Sulfur dioxide	ppm	**100**	--	--	5.71	--	IS:11255 (Part-II):1985
3	Oxides of Nitrogen	ppm	**50**	--	--	33.54	--	IS:11255 (Part-VII):2005
				MARCH 2021				
1	Particulate Matter	mg/Nm^3	**150**	21.29	--	35.71	--	IS:11255 (Part-I):1985
2	Sulfur dioxide	ppm	**100**	5.76	--	7.76	--	IS:11255 (Part-II):1985
3	Oxides of Nitrogen	ppm	**50**	30.71	--	37.56	--	IS:11255 (Part-VII):2005

*Below detection limit
Results on 11 % O_2 Correction when Oxygen is greater than 11 %. And 12% CO_2correction when $CO_2$is less thsn 12%

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

RESULTS OF D.G. STACK MONITORING

31/01/2021							
SR. NO.	TEST PARAMETERS	Unit	Adani Port			GPCB Limit	Test Method
			D.G. Set-1 (500 KVA)	D.G. Set-2 (500 KVA)	D.G. Set-3 (500 KVA)		
1	Particulate Matter	mg/Nm^3	25.36	17.53	22.31	150	IS:11255 (Part-I):1985
2	Sulphur Dioxide	ppm	5.05	4.49	7.52	100	IS:11255 (Part-II):1985
3	Oxide of Nitrogen	ppm	34.55	37.57	31.52	50	IS:11255 (Part-VII):2005

*DG sets are used as standby, so stack monitoring is done on quarterly basis. Results on 15 % O2 Correction when Oxygen is greater than 15 %

			31/01/2021	25/03/2021			
SR. NO.	TEST PARAMETERS	Unit	Adani Port			GPCB Limit	Test Method
			D.G. Set-4 (500 KVA)	D.G. Set-5 (500 KVA)	D.G. Set -6, 7 & 8 (1250 KVA, each)		
1	Particulate Matter	mg/Nm^3	18.50	22.64	22.61	150	IS:11255 (Part-I):1985
2	Sulphur Dioxide	ppm	6.49	5.29	6.76	100	IS:11255 (Part-II):1985
3	Oxide of Nitrogen	ppm	36.24	31.29	35.42	50	IS:11255 (Part-VII):2005

*DG sets are used as standby, so stack monitoring is done on quarterly basis. Results on 15 % O2 Correction when Oxygen is greater than 15 %

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7

Dr. ArunBajpai
Lab Manager (Q)

30/01/2021							
SR. NO.	TEST PARAMETERS	Unit	CT-4			GPCB Limit	Test Method
			D.G. Set-1 (1500 KVA)	D.G. Set-2 (1500 KVA)	D.G. Set-3 (1500 KVA)		
1	Particulate Matter	mg/Nm^3	21.25	25.65	23.85	150	IS:11255 (Part-I):1985
2	Sulphur Dioxide	ppm	4.20	7.32	5.65	100	IS:11255 (Part-II):1985
3	Oxide of Nitrogen	ppm	29.58	36.35	34.26	50	IS:11255 (Part-VII):2005

*DG sets are used as standby, so stack monitoring is done on quarterly basis. Results on 15 % O2 Correction when Oxygen is greater than 15 %

12/02/2021							
SR. NO.	TEST PARAMETERS	Unit	CT-3 (South Basin)			GPCB Limit	Test Method
			D.G. Set-1 (1500 KVA)	D.G. Set-2 (1500 KVA)	D.G. Set-3 (1500 KVA)		
1	Particulate Matter	mg/Nm^3	30.86	24.55	22.40	150	IS:11255 (Part-I):1985
2	Sulphur Dioxide	ppm	6.28	5.58	3.59	100	IS:11255 (Part-II):1985
3	Oxide of Nitrogen	ppm	35.71	32.41	30.86	50	IS:11255 (Part-VII):2005

*DG sets are used as standby, so stack monitoring is done on quarterly basis. Results on 15 % O2 Correction when Oxygen is greater than 15 %

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

Minimum Detection Limit [MDL]

Ambient Air Parameters		
Sr. No.	**Test Parameter**	**MDL**
1	Particulate Matter (PM10) (µg/m^3)	10
2	Particulate Matter (PM 2.5) (µg/m^3)	10
3	Sulphur Dioxide (SO_2) (µg/m^3)	5
4	Oxides of Nitrogen (µg/m^3)	5
5	Hydrogen Sulphide as H_2S (µg/m^3)	6

Stack Parameters		
Sr.No.	**Test Parameter**	**MDL**
1	Particulate Matter (mg/Nm^3)	10
2	Sulphur Dioxide (ppm)	1.52
3	Oxides of Nitrogen (ppm)	2.65
4	Carbon Monoxide (mg/Nm^3)	0.1
5	Haydro Carbon NMHC (ppm)	1.0

Sea Water Parameters			
SR. NO.	**TEST PARAMETERS**	**UNIT**	**MDL**
1	pH	--	2
2	Temperature	°C	2
3	Total Suspended Solids	mg/L	2
4	BOD (3 Days @ 27 °C)	mg/L	1
5	Dissolved Oxygen	mg/L	0.1
6	Salinity	ppt	1
7	Oil & Grease	mg/L	2
8	Nitrate as NO_3	µmol/L	0.5
9	Nitrite as NO_2	µmol/L	0.01
10	Ammonical Nitrogen as NH_3	µmol/L	0.2
11	Phosphates as PO_4	µmol/L	0.5
12	Petroleum Hydrocarbon	µg/L	1
13	Total Dissolved Solids	mg/L	10
14	COD	mg/L	3
15	Primary productivity	mgC/L/day	0.1
16	Chlorophyll	mg/m^3	0.1
17	Phaeophytin	mg/m^3	0.1
18	Cell Count	No. x 10^3/L	1

Sea Sediment Parameters			
SR. NO.	**TEST PARAMETERS**	**UNIT**	**MDL**
1	Organic Matter	%	0.1
2	Phosphorus as P	µg/g	1
3	Petroleum Hydrocarbon	µg/g	1
4	Aluminum as Al	%	0.1
5	Manganese as Mn	µg/g	1
6	Mercury as Hg	µg/g	0.1

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

STP Water parameter(mg/L)		
Sr. No.	**Test parameter**	**MDL**
1	pH	2
2	Total Suspended Solids (mg/L)	2
3	BOD (3 days @ 270 C) (mg/L)	1
4	Residual Chlorine (mg/L)	0.2
5	Fecal Coliform (MPN INDEX/100 mL)	1.8

ETP Water Parameters			
SR. NO.	**TEST PARAMETERS**	**UNIT**	**MDL**
1	Colour	Co-pt	2
2	pH	--	2
3	Temperature	^{o}C	2
4	Total Suspended Solids	mg/L	2
5	Total Dissolved Solids	mg/L	10
6	COD	mg/L	3
7	BOD (3 Days @ 27 ^{o}C)	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 as NH_3	mg/L	0.2
12	Phenolic Compound	mg/L	0.005
13	Copper as Cu	mg/L	0.01
14	Lead as Pb	mg/L	0.01
15	Sulphide as S	mg/L	0.1
16	Cadmium as Cd	mg/L	0.002
17	Fluoride as F	mg/L	0.05

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. ArunBajpai
Lab Manager (Q)

"HALF YEARLY ENVIRONMENTAL MONITORING REPORT"

FOR

adani™

BORE HOLE WATER
ADANI PORTS AND SPECIAL ECONOMIC ZONE LIMITED
TAL: MUNDRA, KUTCH, MUNDRA – 370 421

MONITORING PERIOD:
OCTOBER 2020 TO MARCH 2021

PREPARED BY:

Pollucon

POLLUCON LABORATORIES PVT.LTD.

**PLOT NO.5/6 "POLLUCON HOUSE", OPP. BALAJI INDUSTRIAL SOCIETY,
OLD SHANTINATH SILK MILL LANE, NEAR GAYTRI FARSAN MART,
NAVJIVAN CIRCLE, UDHANA MAGDALLA ROAD, SURAT-395007.
PHONE/FAX – (+91 261) 2455 751, 2601 106, 2601 224.
E-mail: pollucon@gmail.com Web: www.polluconlab.com**

TC - 5945 ISO 9001:2015 ISO 14001:2015 ISO 45001:2018

POLLUCON LABORATORIES PVT. LTD.
Environmental Auditors, Consultants & Analysts.
Cleaner Production / Waste Minimization Facilitator
Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

RESULTS OF BORE HOLE WATER

SR. NO	TEST PARAMETERS	UNIT	RESULTS			TEST METHOD
			PUMP HOUSE-1	PUMP HOUSE-2	PUMP HOUSE-3	
	Sampling Date		17/12/2020	17/12/2020	17/12/2020	
1	pH	--	8.32	8.07	8.13	IS3025(P11)83Re.02
2	Salinity	ppt	4.78	1.44	1.76	APHA 2520B
3	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	APHA(22ndEdi)5520D
4	Hydrocarbon	mg/L	Not Detected	Not Detected	Not Detected	GC/GC-MS
5	Lead as Pb	mg/L	0.043	0.037	0.048	AAS APHA(22ndEdi)3111 B
6	Arsenic as As	mg/L	Not Detected	Not Detected	Not Detected	AAS APHA 3114 B
7	Nickel as Ni	mg/L	Not Detected	Not Detected	Not Detected	AAS APHA(22ndEdi)3111 B
8	Total Chromium as Cr	mg/L	Not Detected	0.029	0.033	AAS 3111B
9	Cadmium as Cd	mg/L	Not Detected	Not Detected	Not Detected	AAS APHA(22ndEdi)3111 B
10	Mercury as Hg	mg/L	Not Detected	Not Detected	Not Detected	AAS APHA- 3112 B
11	Zinc as Zn	mg/L	Not Detected	0.42	0.27	AAS APHA(22ndEdi)3111 B
12	Copper as Cu	mg/L	Not Detected	Not Detected	Not Detected	AAS APHA(22ndEdi)3111 B
13	Iron as Fe	mg/L	0.39	2.84	2.68	AAS APHA(22ndEdi)3111 B
14	Insecticides/Pesticides	mg/L	Absent	Absent	Absent	GC/GC-MS
15	Depth of Water Level from Ground Level	meter	1.82	2.0	1.65	--

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. Arun Bajpai
Lab Manager (Q)

POLLUCON LABORATORIES PVT. LTD.
Environmental Auditors, Consultants & Analysts.
Cleaner Production / Waste Minimization Facilitator
Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

SR. NO	TEST PARAMETERS	UNIT	RESULTS		TEST METHOD
			NEAR ETP OFFICE	NEAR ETP PLANT	
	Sampling Date		17/12/2020	17/12/2020	
1	pH	--	8.03	7.84	IS3025(P11)83Re.02
2	Salinity	ppt	7.4	11.6	APHA 2520B
3	Oil & Grease	mg/L	2.6	Not Detected	APHA(22ndEdi)5520D
4	Hydrocarbon	mg/L	Not Detected	Not Detected	GC/GC-MS
5	Lead as Pb	mg/L	0.058	0.28	AAS APHA(22ndEdi)3111 B
6	Arsenic as As	mg/L	Not Detected	Not Detected	AAS APHA 3114 B
7	Nickel as Ni	mg/L	Not Detected	Not Detected	AAS APHA(22ndEdi)3111 B
8	Total Chromium as Cr	mg/L	Not Detected	Not Detected	AAS 3111B
9	Cadmium as Cd	mg/L	Not Detected	Not Detected	AAS APHA(22ndEdi)3111 B
10	Mercury as Hg	mg/L	Not Detected	Not Detected	AAS APHA- 3112 B
11	Zinc as Zn	mg/L	0.15	0.71	AAS APHA(22ndEdi)3111 B
12	Copper as Cu	mg/L	Not Detected	Not Detected	AAS APHA(22ndEdi)3111 B
13	Iron as Fe	mg/L	0.28	4.2	AAS APHA(22ndEdi)3111 B
14	Insecticides/Pesticides	mg/L	Absent	Absent	GC/GC-MS
15	Depth of Water Level from Ground Level	meter	2.1	2.1	--

H. T. Shah
Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. Arun Bajpai
Lab Manager (Q)

Borehole Water Parameters			
SR. NO.	**TEST PARAMETERS**	**UNIT**	**MDL**
1	pH	--	2
2	Salinity	mg/L	0.5
3	Oil & Grease	mg/L	2
4	Hydrocarbon	mg/L	0.01
5	Lead as Pb	mg/L	0.01
6	Arsenic as As	mg/L	0.001
7	Nickel as Ni	mg/L	0.02
8	Total Chromium as Cr	mg/L	0.025
9	Cadmium as Cd	mg/L	0.002
10	Mercury as Hg	mg/L	0.005
11	Zinc as Zn	mg/L	0.06
12	Copper as Cu	mg/L	0.01
13	Iron as Fe	mg/L	0.1
14	Insecticides/Pesticides	mg/L	0.1

H. T. Shah

Lab Manager

POLLUCON LABORATORIES PVT. LTD. SURAT-7.

Dr. Arun Bajpai

Lab Manager (Q)

Annexure – 3

BMW AUTHORIZATION FORM-III(Rule 10)

Distromed Kutchh Services Pvt. Ltd. (373266)

Gujarat Pollution Control Board
Paryavaran Bhavan, Sector-10/A,
Gandhinagar - 382010
Tele :23222756

Under the Rule-10 of the Biomedical waste (Management and Handling) Rules, 2016 framed under the EPACT'86

Authorization for operating a facility for **Generation,Segregation,Storage** of biomedical wastes.

BMW AUTH NO :BMW-333816, VALID UPTO : 01/06/2022

PCB Id : 21749
BMW Id : 373266

Application Inward No : 35914 , Date: 05/06/2017

CCA No: BAWH-87262 (01/06/2022)

File No : KUTCHH-INV-CF-361,

No of Beds : 4,442, **Investment(in lakh) : 70.00,** **Act : B,A,W,H**
No of H.W : 3, **Water Consumption(klpd) : 6.00,** **Scale : S**

In exercise of power conferred by this Board and after scrutiny of above referred application, Superintendent / Incharge **of Distromed Kutchh Services Pvt. Ltd. at Survey No- 42/1/1,Kodki road, Ratia. , Ratia Tal : Bhuj Dist : Kutch West** is here by granted an Authorisation to operate Health Care facility for **Generation,Segregation,Storage** of biomedical wastes on the premises of
M/S. Self is a CBWTF Operator * * * * * * situated at
-,- Dist : - Under
CBWTF Reg. No : NA, Valid Upto :

M/S. Self is a CBWTF Operator * * * * * *, -, -, Dist: - is hereby authorized for handling biomedical waste as per the capacity given below:

(i) Number of beds of HCF : **4,442**
(ii) Number of healthcare facilities covered by CBWTF : **308**
(iii) Installed Treatment and Disposal capacity : **3,000.00 KG/DAY**
(iv) Area or Distance Covered by CBWTF : **150.00**
(v) Qty of Biomedical waste handled, treated or disposed : **550.00**

1.The Authorisation is granted for **4,442** nos. of beds with generation of

Type of Waste Category (Kgs/Month)	YELLOW	WHITE (Translucent)	RED	BLUE
Qty permitted for Handling	18,000.00	1,500.00	3,500.00	6,000.00

category of biomedical wastes. **(Unit - Kgs/Month)**

2.This BMW Authorisation shall be in force **for a period of (5 year, Valid Upto 01/06/2022)**
This CCA Authorisation shall be in force **for a period of 5 year[up to 01/06/2022]**

3.This Authorisation is subject to the conditions stated in the Annexure-I attached here with and to such other conditions as may be specified in the Rules for the time being in force under the Environment (Protection) Act 1986.

4. The authorization shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.

5. The authorization or its renewal shall be produced for inspection at the request of an officer authorised by the prescribed authority.

6. The person authorised shall not rent, lend, sell, transfer or otherwise transport the biomedical waste without obtainig prior permission of the prescribed authority.

7. Any unauthorised changes in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

8. It is the duty of the authorised person to take prior permission of the prescribed authority to close down the fecility and such other terms and conditions may be stipulated by the prescribed authority.

eSign Seeding from UIDAI server Digitally Sign with Aadhaar

For & On behalf of
Gujarat Pollution Control Board

e-Signed On 20/07/2017 15:52:09
(Organic Authentication on AADHAR from UIDAI Server)
TPAV # CVUG6MJS3X

K.C.Mistry, Unit Head

Remark:
Specific Condition :

Encl.: Annexure-I
Issued to , Mrs. Vinod L. kachhadia, Distromed Kutchh Services Pvt. Ltd., Survey No- 42/1/1, Kodki road, Ratia. , Ratia Tal :Bhuj Dist :Kutch West (BMW Id: 373266)

Copy to Regional Office - Kutch West/ H.O
With a request to carry out periodically monitoring of above said hospital/clinic and submit the visit report to this Office.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

NO: GPCB/ ID-17221/CCA/JNG- 24(19)/ RPAD

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous and other Wastes (Management and Trans boundary movement) Rules, 2016 framed under the Environmental (Protection) Act-1986.

And whereas Board has received consolidated consent application No.139359 dated: 02/07/2018 for the Consolidated Consent and Authorization (CC & A) of this Board under the provisions/rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To,
M/S.AMBUJA CEMENTS LTD,
SURVEY NO: 315 to 320, 351 to 352, 395 to 410,
P.O: AMBUJANAGAR -362715,
TAL: KODINAR,
DIST: GIR SOMNATH.

1. **Consent Order No. : AWH- 97567 date of Issue: 05/12/2018**

1.1 The consents shall be valid up to 18/09/2023 for use of outlet for the discharge of trade effluent & emission due to operation of industrial plant for manufacture of the following items/products:

Sr.No	Product	Capacity
1	Cement	1.5 Million TPA
2	Receiving, Common Storage, Handling & Pre-processing facility for co-processing of Hazardous & Non-Hazardous Waste to be used at: 1.Ambuja Cement Unit(ID 17221) and 2.Gajambuja Unit (ID 17221)	1,50,000 TPA

2. **CONDITIONS UNDER THE WATER ACT:**

2.1 The water consumption and waste water generation shall be as under.

	Water Consumption	Waste water generation
Industrial	250 Kl /Day	Nil
Domestic	1550 Kl /Day	1400 KL/Day

2.2 The quantity of sewage from the factory and from township shall not exceed 1400 KL/day.

2.3 Sewage shall be treated at Sewage Treatment Plant to confirm to the following standards.

SR No	Parameters	Permissible Limit
1	pH	6.5-9.0
2	BOD (mg/l)	30
3	Total Suspended Solids (mg/l)	Less than 100
4	Fecal Coliform(FC) (MPN/100 ml)	Less than 1000

2.4 Treated water from Sewage Treatment Plant shall be utilized for following purpose.

- Plant cooling for Ambuja & Gajambuja plant
- Dust suppression on haul roads
- Horticulture and green belt development
- On land for irrigation
- Fire fighting purpose

3. **CONDITIONS UNDER THE AIR ACT:**

3.1 The following shall be used as fuel.

Sr No.	Fuel	Quantity
1	Coal/lignite/Pet coke or in combination with Alternate fuel (Non hazardous waste i.e. bio fuel/biomass/agro waste/RDF & SCF from MSW/plastic waste/tyre chips etc	55 Ton/hr (Inclusive of Maximum 10 Ton/hr alternate fuel)

3.2 In any case, quantity of fuel shall not exceed 55 tons/Hr.

3.3 The quantity of imported pet coke shall as follows.

Source of petcoke	Quantity
Imported Petcoke (However, the overall Consumption of Coal/ Petcoke i.e. imported Petcoke including indigenous Petcoke/ Indigenous Coal/ Imported Coal will not exceed 15500 MT/Month (185000 MT/Annum)	15500 MT/Month (186000 MT/Annum)

3.4 You shall have to comply all the conditions of Office Memorandum for Guidelines for Regulation and Monitoring of Imported Petcoke in India issued vide Letter dated 10th Sept 2018 by MoEFCC.

3.5 **Imported Petcoke shall be used as feedstock and in any petcoke used by unit the sulphur content shall not be more than 7% in Petcoke.**

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

3.6 HSD shall be used as a secondary fuel start up of kiln.

3.7 Any other non hazardous & high calorific value material shall be used as alternative fuel of co-processing in cement kiln.

3.8 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below

3.9 The flue gas emission through stack shall conform to the following standards:

Stack No.	Stack attached to	Stack height In Meter	Air Pollution Control system	Parameter	Permissible Limit
1	Raw Mill Kiln Exit	95	Glass Bag House & Selective Non – Catalytic Reduction (SNCR) System For NOx Reduction	Particulate Matter	30 mg/NM^3
				SO2	100 mg/NM^3
				NOx	800 mg/NM^3
				HCL	10 mg/NM^3
				HF	1 mg/NM^3
				TOC	10 mg/NM^3
				Hg and its compounds	0.05 mg/NM^3
				Cd+Tl and Their compounds	0.05 mg/NM^3
				Sb+As+Pb+Co+Cr+V+Cu+ Mn+Ni+V And their compounds	0.5 mg/NM^3
				Dioxins and Furans	0.1 ng TEC/NM^3
2	Clinker Cooler	35	ESP	Particulate Matter	30 mg/NM^3
3	Coal Mill	53	Bag Filter		
4	Cement Mill-I	34	Bag Filter		
5	Cement Mill-II	34	Bag Filter		

6	Packing Plant–I	30	Bag Filter
7	Packing Plant–II	30	Bag Filter
8	Crusher	20	Bag Filter

Note:

A) The monitored values of SO2,NOx,HCl ,HF,TOC, Metals and Dioxins and Furans at main kiln stack shall be corrected to 10% Oxygen, on dry basis and the Norms for SO2,NOxHCL,HF,TOC, Metals and Dioxins and Furans shall be applicable to main kiln stack and the norms for Particulate Matter (PM) shall be applicable to all the stacks in the plant.

B) PM, SO2, NO_x shall be monitored continuously. HCL, HF, TC, Metals and Dioxins and Furans shall be monitored once in a year.

C) Scrubber meant for scrubbing emission shall not be used as quencher and plants having separate stack for gaseous emission for the scrubbing unit, the height of this stack shall be at least equal to the main stack.

3.10 There shall be no process gas emission

3.11 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

PARAMETERS	PERMISSIBLE LIMIT	
	Annual	24 Hrs Average
Particulate Matter-10 (PM_{10})	60 Microgram/M^3	100 Microgram/M^3
Particulate Matter-2.5 ($PM_{2.5}$)	40 Microgram/M^3	60 Microgram/M^3
SO_2	50 Microgram/M^3	80 Microgram/M^3
NO_x	40Microgram/M^3	80 Microgram/M^3

3.12 The applicant shall install & operate air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in Condition no:3.3 & 3.5 above.

3.13 The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the condition no:3.3 & 3.5 above.

3.14 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.

3.15 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and70 Db (A)during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

4. **GENERAL CONDITIONS: -**

4.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

4.2 Applicant shall also comply with the general conditions given in annexure-I

4.3 Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, Concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipments, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.

4.4 In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no 2.3 of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.

4.5 The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues, These cells/units also coordinate the exercise of

4.6 The applicant shall also comply with the General Conditions as per Annexure - I enclosed.

4.7 The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems fit in accordance with Section 27 of the Act.

4.8 In case of change of ownership/management the name and address of the new owners/partners/Directors/proprietor should immediately be intimated to the Board.

5. **HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANSBOUNDARY MOVEMENT) RULES, 2016 Form -2(See Rule 6(2))**

5.1 Form for grant of authorization for occupier or operator handling hazardous waste.

5.2 **M/s AMBUJA CEMENTS LTD** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at **SURVEY NO: 315 to 320, 351 to 352, 396 to 410,P.O: AMBUJANAGAR - 362715,TAL: KODINAR,DIST: GIR SOMNATH.**

Sr. No	Type of waste	Quantity In MT/Annum	Schedules	Facility
1.	Tarry residue and still bottoms from distillation	150000	1.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
2.	Oil sludge and Emulsion	150000	4.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
3	Spent catalyst	150000	4.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
4	Organic residue from process	150000	4.4	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
5	Spent clay containing oil	150000	4.5	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
6	Used/Spent oil	93.50	5.1	Collection, Storage, Transportation, Disposal By Sale To Registered Recycler
7	Waste or residue containing oil	150000	5.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
9	Cathode residue including pot lining waste	150000	11.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
9	Phosphate sludge	150000	12.5	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
10	Plating metal sludge	150000	12.8	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
11	Sludge from acid recovery unit	150000	13.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

12	Distillation residue generating from production and /or Industrial use of solvents	150000	20.3	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
13	Process waste, residue and sludge	150000	21.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
14	Process residues	150000	22.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
15	Waste or residues (not made with vegetable or animal materials)	150000	23.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
16	Process waste sludge /residue containing acid, toxic metal, organic compounds (i.e. Chemical gypsum)	237250	26.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
17	Dust from air filtration system	150000	26.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
18	Spent solvent	150000	26.4	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
19	Spent catalyst	150000	26.5	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln

20	Process residue and wastes	150000	28.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
21	Spent catalyst	150000	28.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln (As per List attached in Annexure 1)
22	Spent carbon	150000	28.3	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln (As per List attached in Annexure 2)
23	Off specification products	150000	28.4	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
24	Date expired products	150000	28.5	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
25	Spent solvent	150000	28.6	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
26	Process waste or residues	150000	29.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
27	Sludge containing residual pesticides	150000	29.2	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
28	Empty barrels/containers/ liners contaminated with hazardous chemicals/wastes (Only From Paint Industries Sector)	150000	33.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
29	Chemicals containing residues arising from decontamination	150000	34.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln
30	Exhaust air or gas cleaning residue	150000	35.1	Collections, Reception, Recovery, Storage, Transportation By Co-Processing In Cement Kiln

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

5.7 The industry should take necessary steps for prevention of any spillages / Leaching etc. in respect of Hazardous waste from the premises.

5.8 Cement plant shall have to explore the possibilities for transportation of Hazardous waste for the co-processing purpose through dedicated tankers with GPS enabled system in line with Hazardous Waste Rules -2016

5.9 The industry shall use Hazardous Waste tracking (HWT) system of XGN for online real time data for preparing online manifest system for regular updating for retrieval and maintain record thereof and to furnish details to the concerned GPCB, Regional Office & Head Office., Gandhinagar at regular interval.

5.10 The industry should maintain good housekeeping & maintain proper records of Hazardous Waste mentioned in Authorization.

5.11 The industry should submit the point wise compliance report on half yearly basis and monthly report in prescribed format annexed here with as (Annexure-A) to the Hazardous Waste Cell at Head Office Gandhinagar.

5.12 The industry should obtain prior regular permission of CPCB for co-processing of Hazardous wastes in cement kiln.(if applicable) .

5.13 The industry should take all precautionary measure to prevent odour, nuisance and spillage during the storage and handling of Hazardous Waste.

5.14 The industry should obtain prior permission of trial run for co-processing of wastes for which regular permission is not issued to any cement plant.

5.15 The industry should follow the guideline of CPCB for labeling transportation, storage and disposal of hazardous wastes in a environmental sound manner.

5.16 The authorization is granted to operate a facility for collection, storage, transportation and ultimate disposal of Hazardous wastes as above.

5.17 The authorization shall be in force for a period up to 18/09/2023.

5.18 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

5.19 It shall be the responsibility / duty of the applicant to take adequate steps while handling hazardous wastes to contain contaminants and prevent accident and their consequences on human and environment and prevent person working on the site with information, training and equipment and necessary to ensure their safety.

5.20 The applicant shall be liable for all damage caused to the environment or their party due to improper handling of Hazardous Wastes or Disposal of hazardous wastes.

5.21 The applicant shall be liable to pay financial penalties as levied for any violation of the provisions under Hazardous and other wastes (management and transboundary movement) rules, 2016 by the State Pollution Control Board with the prior approval of the Central Pollution Control Board.

5.22 The applicant shall ensure that the Hazardous wastes are packaged and labeled, based on the composition in a manner suitable for safe handling, storage and transport. The labeling and packaging shall be easily visible and to be able to with and stand physical conditions and climatic factors as per guidelines issued by the Central Pollution Control Board from time to time. The transport of hazardous wastes shall be in accordance with the provisions of the rules made by Central Government under the Motor Vehicles Act, 1988 & other guidelines issued from time to time and the transporter shall comply with the provisions of Hazardous and other wastes (management and transboundary movement) rules, 2016.

5.23 In case of transportation of Hazardous Wastes through a state other than the state of origin or destination the occupier shall intimate the concerned State Pollution Control board before, he hands over the Hazardous Waste to the transporter (if applicable).

6. **TERMS AND CONDITIONS OF AUTHORISATION**

a) The applicant shall comply with the provisions of the Environment (Protection) Act - 1986 and the rules made there under.

b) The authorization shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board. The persons authorized shall not rent, lend, sell, and transfer of otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.

c) Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a breach of this authorization.

d) It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.

e) An application for the renewal of an authorization shall be made as laid down in rule 5 (6) (ii).

f) Industry shall have to manage waste oil, discarded containers etc as per Amended Rules-2003 and shall apply Authorization/submit details for all applicable waste as per Amended Rules-2003 with 15 days.

g) Industry shall submit annual report within 15 days and sub sequinty by 30th June every year.

7. **General Conditions:**

7.1 The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.

7.2 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.

7.3 In case of any accident, details of the same shall be submitted in Form - 5 to Gujarat Pollution Control Board.

7.4 As per "Public Liability Insurance Act - 91 "company shall get insurance Policy, if applicable.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(b) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules'2016 & as amended from time to time framed under the Environment (Protection) Act-1986.

And whereas Board has received consolidated consent application Inward I.D.NO. **144910** dated **05/10/2018** for the amendment in Consolidated Consent and Authorization (CC & A) of this Board and under the provisions/rules of the aforesaid acts. Consents & Authorization are hereby granted as under

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)
To,
M/s Saurashtra Enviro Projects Pvt Ltd,
Plot no/Survey no. 386/1,409/1, 414/1,415 & 417
Vill: Juna Kutariya/Lakudiya,
Tal: Bhachau,
DIST: KUTCH-370 150

1. **Consent Order No: AWH – 97731, Date of Issue 13/12/2018.**
The consents shall be valid up to **05/11/2023** for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for following activities at **Plot no/Survey no. 386/1, 409/1,414/1, 415 &417, Vill: Juna Kutariya/Lakudiya, Tal: Bhachau. Dist: Kutch. East- 370150.**

SR. NO.	PRODUCTS	Capacity	Survey No
1	Secured Landfill Site	**8,45,000 MT** (Cell no.1 - 1,20,000MT, Cell no.2 - 2,75,000 MT, Cell no.3 - 4,50,000 MT) Closed & Capped	386/1, 409/1,414/1, 415 &417 Vill: Juna Kutariya/Lakudiya, Tal- Bhachau, Dist: Kutch, East- 370150.
2.	Incineration Facility	7.50 Million Kcal/Hour	

2. **SPECIFIC CONDITION**
2.1 SEPPL shall send generated leachate to M/s ACPTCL for further treatment; unit shall maintain & submit monthly record.
2.2 SEPPL shall comply the submitted notarized undertaking dated 31/03/2018.
2.3 In case of issue related to groundwater contamination or any other damage to environment in future, there shall be a joint responsibility and liability of both Saurashtra Enviro Projects Pvt. Ltd., and Ankleshwar Cleaner Process Technology Centre Pvt Ltd., for conducting assessment study and remediation as per CPCB guidelines.
2.4 Saurashtra Enviro Projects Pvt. Ltd shall bound to comply all the condition of EC/CTE for the facilities as per business transfer agreement.
2.5 Saurashtra Enviro Projects Pvt. Ltd will maintain their independent Escrow Accounts as per the guidelines.
2.6 The Board shall not take any responsibility for legal/Civil dispute between Saurashtra Enviro Projects Pvt. Ltd and Ankleshwar Cleaner Process Technology Centre Pvt Ltd.
2.7 As Saurashtra Enviro Projects Pvt. Ltd. and Ankleshwar Cleaner Process Technology Centre Pvt Ltd. have continuous premises, they shall provide fencing and demarcation of boundaries and shall have different identity.
2.8 As all cells are closed of Saurashtra Enviro Projects Pvt. Ltd, No new waste shall be collected for TSDF disposal.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

BY RPAD

No: GPCB/HAZ-GEN-680(1)/ID: 65572/ **Date:**

Amendment to Consolidated Consent Order No.**AWH-97750 issued dated 14/12/2018**

To,

M/s. Detox India Private Limited,
(Old Name: M/s. Ankleshwar Cleaner Process Technology Centre Pvt Ltd,)
Plot No: 383, 384, 386 P-2, 401, 409/2, 410, 411,
412/1, 412/2, 414 P-2, 416, 418, 178, 179,
Vill: Juna Katuriya, Lakadiya- 370150,
Tal: Bhachau & Dist: Kutch

SUB: - Consolidated Consent and Authorization (CC&A) under various Environment Acts / Rules.
REF: - (1) CCA Order No. GPCB/HAZ-GEN-680/ID-65572/480066 dated: 28/12/2018.
(2)Your letter dated: 02/01/2019 regarding change of name of the industry.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 6(2) of the Hazardous and other waste (Management and Transboundary Movement) Rules'2016, framed under the EP Act-1986 and without reducing your responsibility under the said acts / Rules in any way; this Board is empowered to amend consent order in connection with above reference the **CCA order No.AWH-97750** issued under the provisions of the various Environment Acts/ Rules, which stands amended as under.

The consents **shall be valid up to dated: 04/10/2023** for operation of common hazardous waste TSDF, Forced Evaporation and pre-processing facility for disposal of hazardous waste received from member units at Plot No: 383, 384, 386 P-2, 401, 409/2, 410, 411, 412/1, 412/2, 414 P-2, 416, 418, 178, 179 of Vill: Juna Katuriya, Lakadiya- 370150,Tal: Bhachau & Dist: Kutch.

1. The Board has issued CCA-Fresh **valid up to dated: 04/10/2023** vide letter no GPCB/ HAZ-GEN-680/ID-65572/480066 dated: 28/12/2018. **M/s. Ankleshwar Cleaner Process Technology Centre Pvt Ltd** stands transferred to **M/s. Detox India Private Limited,** with condition that **M/s. Detox India Private Limited,** shall bound to comply with all the conditions subject to which it was granted to this industry originally.
2. The other condition of the CC&A order no: AWH-97750 issued vide letter No: GPCB/ HAZ-GEN-680/ID-65572/480066 dated: 28/12/2018 shall remain unchanged.
3. You are directed to comply with these conditions judiciously.

For and on behalf of GPCB

D-M. Thaker 9/1/19

(D.M. Thaker)
Environmental Engineer
Unit head, Haz Waste Cell

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

GPCB

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(b) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules'2016 & as amended from time to time framed under the Environment (Protection) Act-1986.

And whereas Board has received consolidated consent application Inward **I.D.NO. 144207** dated **05/10/2018** for the amendment in Consolidated Consent and Authorization (CC & A) of this Board and under the provisions/rules of the aforesaid acts.,Consents & Authorization are hereby granted as under

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)
To,
M/s Ankleshwar Cleaner Process Technology Centre Pvt Ltd,
Plot no/Survey no. 383,384,386P2,401,409/2,410,411,412/1,412/2,414 P2,416,418,178 &179
Vill: Juna Katariya/Lakadiya,
Tal: Bhachau,
Dist: Kutch, East-370 150

1. **Consent Order No: AWH – 97750, Date of Issue 14/12/2018.**
The consents shall be valid up to **04/10/2023** for use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for following activities at **Plot no/Survey no. 383,384,386P2,401,409/2,410,411,412/1,412/2,414P2,416,418,178&179, Vill:Juna Katariya/ Lakadiya, Tal: Bhachau, Dist: Kutch,East-370150.**

Sr. No	Facility	Capacity	Survey No.
1.	Secured Landfill Site	Cell No.4: 3,55,000MT(In operation)	Plot no/Survey no. 383,384,386P2,401,409/2,410,411,412/1,412/2,414P2,416,418,178 &179 Vill:Juna Katariya/Lakadiya, Tal: Bhachau, Dist: Kutch,East-370 150
2.	Forced Evaporation System	500KL/Day	
3.	Coal Crusher	10MT	
4.	Pre-Processing facility	120MT/Day	
5.	Ammonical Nitrogen stabilization plant	300KL/Day	
6.	VOC Stripper	150KL/Day	

2. **SPECIFIC CONDITION**
   - **2.1 ACPTCL shall comply the submitted notarized undertaking dated 31/03/2018**
   - **2.2 In case of issue related to groundwater contamination or any other damage to environment in future, there shall be a joint responsibility and liability of both Saurashtra Enviro Projects Pvt. Ltd., and Ankleshwar Cleaner Process Technology Centre Pvt Ltd., for conducting assessment study and remediation as per CPCB guidelines.**
   - **2.3 In no circumstances, VOCs and high ammonical nitrogen containing stream shall be evaporated in spray dried.**
   - **2.4 Unit shall strictly adhere and comply with guidelines issued by the Central Pollution Control Board for Odour control.**

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016, framed under the Environmental (Protection) Act-1986.The board has granted the consent order no. PC/CCA-KUTCH-519/GPCB ID 11946/141682 Date 26/03/2013.

And whereas Board has received application inward No. **130423** dated 06/12/2017 for the **Renewal Consolidated Consent and Authorization** (CC&A) of this Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To,
Sabnam Enterprise,
Plot No. 87,
GIDC Anjar,
Dist : Kutch 370 110

1. **Consent Order No. AWH-91299 Date of Issue: 16/02/2018**
2. The consent shall be valid up to 05/12/2022 for manufacture of the following products:

SR. NO.	PRODUCT	QUANTITY
1.	Lead Ingots from used Lead Acid batteries	75 MT/MONTH

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

2.1 You shall not carry out any activity which may attract the provision of EIA notification-2006.
2.2 You shall submit blood lead reports of workers within one-month time period.
2.3 Ground water shall not be used for any industrial purpose.

3. CONDITIONS UNDER THE WATER ACT 1974:

3.1 The quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall be NIL.
3.2 The quantity of Sewage effluent from the factory shall not exceed 0.250 KL/Day.
3.3 Domestic effluent shall be disposed off through septic tank / soak pit system.
3.4 The quality of industrial waste water shall conform to the following standards:

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C

Colour (Pt. Co. scale units)	100 units
Total suspended Solids	100 mg/L
Oil & Grease	10 mg/L
Ammonical Nitrogen	50 mg/L
BOD (5 Days at 20°C)	30 mg/L
COD	100 mg/L
Chlorides	600 mg/L
Sulphates	1000 mg/L
Total Dissolved Solids	2100 mg/L
Percent Sodium	60 %
Phenolic Compound	01 mg/L
Lead	0.1 mg/L
Copper	02 mg/L
Total Chromium	02 mg/L
Hexavalent Chromium	0.1 mg/L

3.5 The treated effluent confirming to the above standards shall be reused in scrubbing and there shall not be waste water discharge.

3.6 Domestic effluent shall be disposed off through septic tank.

4. CONDITIONS UNDER AIR ACT 1981:

4.1 The following shall be used as fuel in the furnace as following rates

Sr. no.	Name of Fuel	Quantity
1	Charcoal	400 Kg/Day

4.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below.

Sr. no.	Stack attached to	Stack height in Meters	Air Pollution Control System	Parameter	Permissible limit
1	Furnace Numbers - 2	35	Bag Filter and multi cyclone separator followed by water scrubber	PM SO_2 NOx	150 mg/Nm^3 100 ppm 50 ppm

4.3 The shall be no process gas emission from the manufacturing and other ancillary activities.

4.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by Ministry of Environment and Forest dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/M^3
1	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

4.5 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

4.6 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. to 10 P.M. 75 dB (A)
Between 10 P.M. to 6 A.M. 70 dB (A)

5. **Authorization under Hazardous and Other Waste [Management & Transboundary Movement] Rules, 2016 & amended.**

6. **Authorization Number: AWH- 90274 and shall valid up to 26/11/2022.**

6.1 Sabnam Enterprise, is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot No 87, GIDC Anjar, Dist: Kutch 370 110.

Sr. No.	Waste	Quantity per Annum	Category	Facility
1.	Used lead Acid batteries	150 T/ Month	Schedule-IV (No 17)	Reception, Storage, Transportation & Reuse for recovery of Lead Ingots
2.	Lead bearing residue	10 MT	I-9.1	Collection, storage, transportation and disposal at TSDF
3.	Discarded drums/ liners contaminated with hazardous chemicals waste and container	10 MT	I-33.3	Collection, Storage, decontamination, transportation and Disposal **OR** Collection, Storage, Transportation and selling to authorized decontamination facility

6.2 The authorization is granted to operate a facility for reception, collection, storage and transportation and ultimate disposal of Hazardous wastes by selling out to authorized decontamination facility, TSDF.

6.3 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6.4 **GENERAL CONDITIONS OF AUTHORIZATION:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.

6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"

7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.

8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.

11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

12. An application for the renewal of an authorization shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

7. GENERAL CONDITION:

7.1 Unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within premises, the unit shall tie up with local agencies like gram panchayat, school, social forestry office etc. for the plantation at suitable open land in nearby locality and submit an action plan of plantation for next three years to GPCB.

7.2 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of **10** meters width is developed.

7.3 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.

7.4 The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986.

7.5 The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act, 1986 & Rules.

7.6 Applicant is required to comply with the manufacturing, Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986.

7.7 If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property in that case they are obliged to pay the compensation as determined by the competent authority.

7.8 Applicant shall have to comply with all the guidelines / Directive issued / being issued by MoEF&CC / CPCB / DoEF from time to time.

7.9 Applicant shall not use/withdraw ground water either during construction and /or operation phase.

7.10 Environmental cell shall be setup and shall be responsible for the total Environmental management.

7.11 Monitoring in respect to Air, Water, Noise level shall be carried out and results shall be submitted to GPCB on quarterly basis.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(P. J. Vachhani)
Senior Environment Engineer

NO: PC/ CCA- KUTCH- 513 /GPCB ID – 11946/447285 Date: 12/3/18

ISSUED TO:
Sabnam Enterprise,
Plot No. 87,
GIDC Anjar,
Dist : Kutch 370 110

Regional Office – Kutch (East)
Gujarat Pollution Control Board
Room No. 215-216-217, 2nd Floor,
Kandla Port Trust Administrative Building,
Gandhidham – 370201, Kutch.
Email:- ro-gpcb-kute@gujarat.gov.in

In exercise of the power conferred under section-25 of the Waster (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 6(2) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 framed under the E (P) Act-1986.

And whereas Board has received consolidated application no: 176383, dated 28/06/2020 for the fresh consolidated consent and authorization (CC & A) of this Board under the provision / rules of the aforesaid acts-rules. Consent & Authorization is hereby granted as under.

CONSOLIDATED CONSENT AND AUTHORISATION:
(Under the provision / rules of the aforesaid environmental acts)

To,
Aviation Corporation (PCB ID –63724),
PLOT NO: S. No. 67/2/P1,
Shikarpur- 370150
TAL: Bhachau, DIST: Kutch.

1. Consent Order No: AWH -43501; Date of Issue: 21/10/2020.

2. The consent shall be valid up to 27/06/2025 for the use of outlet for the discharge of trade effluent and emission due to operation of industrial plant for manufacture of following items/products at an above-mentioned address.

Sr No	Product	Quantity
1	Used Oil/ Waste Oil Reprocessing	300 MT/Month (Used Oil- 150 MT/Month & Waste Oil- 150 MT/Month)
2	Sodium Silicate	1500 MT/Month

Specific Condition
1. No ground water shall be withdrawn without prior approval from competent authority. 2. You shall not carry out any activity which may attract the applicability of EIA notification-2006 and its amendments. 3. Management of Solid Waste generated from industrial activities shall be as per Solid Waste Management Rules-2016 (solid waste as defined in Rule-3(46). 4. As per provision of Rule-18 of Solid Waste Management Rules-2016 all industrial units using fuel and located within 100 km from the refused derived fuel (ROF) plant shall made an arrangement to replace at least five percent of their fuel requirement by refused derived fuel so produced. 5. Industry shall manage Solid Waste generated from industrial activities as per Solid Waste Management Rules- 2016 (Solid Waste as defined in Rule- 3(46)). 6. Industry shall comply with Plastic Waste Management Rules- 2018 & amended therefore. (if applicable) 7. You shall have to comply with Coal Handling guideline.

Regional Office – Kutch (East)
Gujarat Pollution Control Board
Room No. 215-216-217, 2nd Floor,
Kandla Port Trust Administrative Building,
Gandhidham – 370201, Kutch.
Email:- ro-gpcb-kute@gujarat.gov.in

8. You shall have to comply with Fly Ash Notification- 1999 and its amendments.

3	**Condition under the Water Act**
3.1	Source of Water: Tankers
3.2	The quantity of industrial water consumption shall not exceed 07 KL/Day.
3.3	The quantity of Domestic water consumption shall not exceed 02 KL/Day.
3.4	The quantity of industrial waste water generated from manufacturing process & other ancillary operation shall not exceed 2.2 KL/Day.
3.5	The quantity the Domestic waste water (sewage) shall not exceed 1.2 KL/Day.
3.6	Industrial effluent from process plant, washing etc. shall be collected separately & treated into ETP adequately so that treated industrial effluent shall comply with following norms:

PARAMETER	PERMISSIBLE LIMIT
pH	6.5 to 8.5
Temperature	40°C
Color	100 Units
Suspended Solids	100 mg/l
Oil & Grease	10 mg/l
Phenolic Compound	01 mg/l
Amonical Nitrogen	50 mg/l
BOD (03 days At 27° C)	30 mg/l
COD	100 mg/l
Chloride	600 mg/l
Sulphates	1000 mg/l
Total Dissolved Solids	2100 mg/l
Sulphides	02 mg/l
Percent Sodium	60%
Sodium Adsorption Ratio	26

Treated effluent confirming to the above standards shall be reuse in within plant only.

3.7	Industry shall provide fixed pipeline with flow meter for reuse of treated effluent to achieve Zero Liquid Discharge.
3.5	Sewage shall be disposed of through septic tank / soak pit system.
4	**Conditions under the Air Act**
4.1	The following shall be used as fuel.

Sr No	Fuel	Quantity
1	HSD	20 Lit/Hr.
2	LDO	290 Lit/Day
3	Fire Wood	08 MT/Day
4	Coal	05 MT/Day

4.2 The flue gas emission through stack shall confirm to the following standards.

Stack No	Stack attached to	Stack height in meter	APCM	Parameter	Permissible Limit
1	Boiler (01 TPD)	12	Water Scrubber	PM	150 mg/Nm3

	2	Vessel (12 TPD)	11	with Cyclone Separator	SO2 NOx	100 PPM 50 PPM
	3	Furnace	30	Alkali Scrubber		
	4	DG Set (80 kVA) Stand by	11	--		

4.3 There shall be no process gas emission from manufacturing activities and other ancillary operations.

4.4 The concentration of the following 11parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by MoEF & CC dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in microgram/cum
1	Sulphur Dioxide (SO,)	Annual 24 Hours	50 80
2	Nitrogen Dioxide (N02)	Annual 24 Hours	40 80
3	Particulate Matter (PM10)	Annual 24 Hours	60 100
4	Particulate Matter (PM2.5)	Annual 24 Hours	40 60

4.5 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and tor use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.

4.6 The industry shall make adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and70 dB(A)during night time. Daytime is reckoned in between 6 AM to 10 PM and nighttime is reckoned between 10 PM to 6 AM.

4.7 **DG Sets Conditions:**

The D.G. Set shall have acoustic enclosure and shall comply with the standards specified at Sr. no. 95 of Schedule-l of the rule-3 of E.P. Rules -1986 and Noise pollution level.as per the Air Act-1981.

D.G. Sets standards:

The flue gas emission through stack attached to D.G. Sets shall conform to the following standards.

a) The minimum height of stack to be provided with each of the generator set shall be H=h +0.2(KVA) 112, where H=Total stack height in meter, h=height of the building in meters where or by the side of which the generator set is installed.
b) Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the user's end
c) The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/ acoustic treatment. Such circumstances the performance may be checked for noise reduction up to actual ambient noise level,

preferably, in the night time). The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and the averaged.

d) The D.G. Set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A).

e) All efforts shall be made to bring down the noise level due to the D.G. Set, outside the premises, within the ambient noise requirements by proper siting and control measures.

f) Installation of a D.G. Sets must be strictly in compliance with the recommendations of the D.G. Set manufacturer.

g) A proper routine and preventive maintenance procedure for the D G. Set should be set and followed in consultation with the DG Set manufacture which would help prevent noise levels of the DG Set from deteriorating with use.

5	**Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 & amended.**
5.1	**Authorization Number: AWH -43501 Date of Issue: 21/10/2020 and shall valid up to 27/06/2025.**
5.2	**M/s. Aviation Corporation (PCB ID –63724),** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated PLOT NO: S. No. 67/2/P1, Shikarpur– 370150, TAL: Bhachau, DIST: Kutch.

Sr. No	Waste	Quantity	Schedule-I	Facility
1	Used or spent Oil	1800 MT/yr.	5.1	Receipt, Collection, Storage, Transportation & reused in process.
2	Oily waste	1800 MT/yr.	5.2	Receipt, Collection, Storage, Transportation & reused in process.
2	Sludge from Wet Scrubber	05.0 MT/yr.	37.1	Collection, Storage, Transportation & Disposed to TSDF site.
3	Sludge and filter contaminated with Oil	20.0 MT/yr.	3.3	Collection, Storage, Transportation & Disposed to TSDF site.
4	Empty barrels/ containers/ liners contaminated with hazardous chemicals / wastes	04.00 M/yr.	33.1	Collection, Storage, Transportation & disposed by selling it to registered recycler.

5.3	The authorization is granted to operate a facility for collection, storage within factory premises, transportation and ultimate disposal of Hazardous waste by selling it to registered recyclers.
5.4	Unit shall apply for authorization for other types of hazardous waste referring to the amended Rules.
5.5	The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.
5.6	**Terms and conditions of authorization:-**
1.	The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

2.	The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3.	The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4.	Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5.	The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6.	The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7.	It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8.	The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9.	The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10.	The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11.	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12.	An application for the renewal of an authorization shall be made as laid down under these Rules.
13.	Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14.	Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
5.7	**General Conditions**
1	Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.
2	Applicant shall also comply with the general conditions given in annexure I.
3	The waste generator shall be totally responsible for (I.E. Collection, storage, transportation and ultimate disposal) of the wastes generated.
4	Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form - 4 by 31s1 January of every year.
5	In case of any accident, details of the same shall be submitted in Form - 5 to Gujarat Pollution Control Board.
6	As per "Public liability Insurance Act - 91" company shall get Insurance policy, if applicable.
7	Empty drums and containers of toxic and hazards material shall be treated as per guideline published for management & handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.
8	In no case any kind of hazardous waste shall be imported without prior approval of appropriate authority.
9	In case of transport of hazardous waste to a facility for (I.E. Treatment, Storage and disposal) existing in a state other than the state where hazardous waste are generated, the occupier shall obtain "No Objection certificate" from the state pollution Control Board, the Committee of the

	concerned state or Union territory Administration where the facility exists.
10	Unit shall take a)) concrete measures to show tangible results in waste generation reduction, voidance, reuse and recycle. Action taken in this regards shall be submitted within 03 months and also along with Form 4.
11	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Hon Supreme Court's order in W.P. NO.65 of 1995 dated 14th October 2003.
12	Industry shall have to display online data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

For and behalf of
Gujarat Pollution Control Board

Regional Officer, Kutch(East)

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By-R.P.A.O.

In exercise of the powers conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974 under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 5(2) of the Hazardous & other Waste (Management and Transboundary Movement) Rules 2016 framed under the Environmental (Protection) Act-1986.

And whereas board has received consolidated consent application letter No 120321 dated 17/04/2017 for the **Consolidated Consent and Authorization** (CC & A) of the Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENT
(Under the provisions/rules of the aforesaid environmental acts)
To,
M/S. AROMA PETROCHEM (ID-13828),
PLOT NO. 53,
GIDC, VARTEJ,
VARTEJ -364001,
TAL-DIST-BHAVNAGAR.

1. Consent Order No. AWH-87122 date of Issue. 13/07/2017.
2. The consents shall be valid up to 31/03/2022 for use of outlet for the discharge of trade effluent & emission due to operation of industrial plant for manufacture of the following items/products:

Sr. No.	Product	Capacity
1	Re- Refined used oil	125KL/Month

3. **CONDITIONS UNDER WATER ACT 1974:-**
   3.1 The quantity of the industrial discharge shall not exceed 1.5 KL/day. Generated waste water will be evaporated in evaporation tank after primary treatment hence there shall be 'Zero Discharge' from the industry. The records regarding the generation of trade effluent, evaporation data etc shall be maintained in the form of a log-book & made available to the monitoring staff.
   3.2 The quantity of the domestic waste water (sewage) shall not exceed 0.8 KL/day.
   3.3 Sewage shall be disposed of through Septic tank/soak pit system.
4. **CONDITIONS UNDER AIR ACT 1981:-**
   4.1 The following shall be used as fuel in the Furnaces respectively.

Sr. No.	Fuel	Quantity
1	Wood	3.0 Kg./Hrs

   4.2. The applicant shall install & operate air pollution control system in order to achieve norms prescribed below.
   4.3. The flue gas emission through stack shall conform to the following standards:

Sr.No.	Common Stack attached to	Stack height in Meter	Air Pollution Control System	Parameter	Permissible Limit
1	Furnace(3Nos)	33	Cyclone separator	Particulate Matter SO2 NOx	150 mg/ NM³ 100 ppm 50 ppm

   4.4. There shall be no process emission from the manufacturing process as well as other ancillary process.
   4.5. Stack monitoring facilities like port hole, platform/ladder etc., shall be provided with stack/vents chimney in order to facilitate sampling of gases being emitted in to the atmosphere.
   4.6 The concentration of the following substances in the ambient air within the premises of this industry and at a distance of 10 meters from the source (other than the stack/vent with height of more than 9 meter from the ground level) shall not exceed the following levels:

4.7 Ambient air quality within the premises of the industry shall conform to the following standards :-

PARAMETER	PERMISSIBLE LIMIT Annual	PERMISSIBLE LIMIT 24 hrs. Average
Particulate matter-10 (PM10)	60 Microgram /NM³	100 Microgram /NM³
Particulate matter-2.5 (PM2.5)	40 Microgram /NM³	60 Microgram /NM³
SO_2	50 Microgram /NM³	80 Microgram /NM³
NO_x	40 Microgram /NM³	80 Microgram /NM³

4.8 All measures for the control of environmental pollution shall be provided before commencing production.

5 GENERAL CONDITIONS :-

5.1 Any change in personnel, equipment or working conditions as mentioned in the Consents form/order should immediately be intimated to this Board.

5.2 Applicant shall also comply with the general conditions given in annexure I.

5.3 Industry shall have to display on-line data outside the main factory gate with Regard to quantity and nature of hazardous chemicals being handled in the Plant, including wastewater and air emissions and solid hazardous waste generated within the factory premises.

5.4 Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Hon. Supreme order in w.p. no. 657 of 1995 dated 14 th October 2003.

6. **Authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules-2016 FORM 2**

[See rule 6(2)]

FORM FOR GRANT OR RENEWAL OF AUTHORISATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

6.1 Number of authorization: **AWH-87122**. Date of issue **13/07/2017**

M/s. AROMA PETROCHEM) (ID-13688), is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at **PLOT NO. 60, GIDC, VARTEJ,VARTEJ -364001,Tal-Dist-Bhavnagar.**

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilization or co-processing, etc.	Quantity (Ton/Annum)
1.	1/4.4	Collection, storage, transportation, disposal at TSDF site.	300 MT/Yr
2.	I/35.3	Collection, storage, transportation, disposal at TSDF site.	0.3 MT/Yr
3.	Sch-IV	Reception, Collection, storage, transportation, & Re refining	1500 MT/Yr
4.	[illegible]	Collection, storage, transportation, disposal at TSDF site	95 MT/Yr
5.	I/33.1	Collection, storage, transportation, decontamination	4.8 MT/Yr
6.	I/36.2	Collection, storage, disposal at incinerator	0.2 MT/Yr

6.2 The authorization is granted to operate a facility for collection, storage within factory premises, transportation and Recycle

6.3 The authorization shall be valid up to 31/03/2022.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

6.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act 1986.

7. TERMS AND CONDITIONS OF AUTHORISATION:

a) The applicant shall comply with the provisions of the Environment (Protection) Act – 1986 and the rules made there under.

b) The authorization shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.

B. General Conditions:

A. Conditions under Hazardous and other Wastes (M&TM) Rules-2016

a. The Authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

b. The Authorization or its renewal shall be produced for inspection at the request of an officer Authorised by the State Pollution Control Board.

c. The person Authorised shall not sell, lease, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.

d. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of the authorisation.

e. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;

f. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"

g. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility

h. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

i. The record of consumption and sale of the imported hazardous and other wastes shall be maintained.

j. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.

k. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

l. An application for the renewal of an authorisation shall be made as laid down under these Rules.

m. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

n. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. Specific Conditions

1. The authorised actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorisation.

2. Handing over of the hazardous and other wastes to the authorised actual user shall be only after making the entry into the passbook of the actual user.

3. In case of renewal of authorisation, a self-certified compliance report in respect of effluent / emission standards and the conditions specified in the authorization for hazardous and other wastes shall be submitted to SPCB.

4 The occupier of the facility shall comply Standard operating procedural guidelines published by MoEF&CC or CPCB or GPCB from time to time.

5 ... environmentally protective measures as per the Waste Management Rules-2016.

6 The disposal of Hazardous waste shall be carried out as per the waste Management hierarchy.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Chirag Bhimani)
Unit head

No. PCB/CCA-BHV-41803-13686 Date.

Issued to:
M/S. AROMA PETROCHEM) (ID-13686).
PLOT NO. 60,
GIDC, VARTEJ,
VARTEJ -364001,
TAL-DIST-BHAVNAGAR.

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorisation under Hazardous Waste (Management and Transboundary Movement) Rules'2016 framed under the Environmental (Protection) Act-1986.

And whereas Board has received consolidated consent application letter dated **02/11/2017** for the **Consolidated Consent and Authorization** (CC & A) of this Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(under the provisions /rules of the aforesaid environmental acts)
To;
JAWRAWALA PETROLEUM
PLOT NO. 200/33,
B/H KASHIRAM TEXTILE, NAROL,
AHMEDABAD-382405

1. **Consent Order No.: AWH-90572 Date of Issue: 20/01/2018**
2. The consents shall be valid up to **12/02/2024** for use of outlet for the discharge of trade effluent & emission due to operation of industrial plant for manufacture of the following items/products:

Sr. No	Name (Qty:MT/Month)	Existing Quantity	Proposed Quantity	Total Quantity
1	Re-Cycled Waste Oil	600KL/Month	-	600 KL/Month
2.	Re- refined used oil	400KL/Month	-	400KL/Month
3.	De Contamination,De toxification and Recycle/Reconditioning of Empty barrels (MS & Plastics)	20,000 No/Month	180,000 No/Month	2,00,000 No/Month
4.	Plastic Scrap Granules	100 MT/Month	1900 MT/Month	2000MT/Month
5.	MS Cut Barrles &Sheets	-	3,000 MT/Month	3,000MT/Month

Specific Condition

1) CCA Order no: AWH-61464 dated: 01/04/2014 shall considered as cancelled.
2) Unit shall comply with CPCB guideline for Environment Sound Technology for waste oil/used oil Recycling and also SOP for decontamination of discarded containers/Barrels/drums.
3) Unit shall explore the possibility of co-processing for incinerable Haz. Waste in cement industry & shall Submit the progress report for the same.
4) Unit shall obtain necessary permission under the Plastic Waste Management Rules-2016.

3. **CONDITIONS UNDER THE WATER ACT:**

3.1 The quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall not exceed **29,600 lits/day**. Out of which **2000 lit/day** treated effluent (Condensate) shall be reuse and **18,000 lit/day** treated effluent shall be evaporated in electricity operated evaporator & **11,600 Lit/day** treated effluent shall be incinerated .Thus there shall he No discharge of any industrial effluent within or outside unit.

3.2 The quantity of Sewage effluent from the industry shall not exceed **2000 Lit/day**.

3.3 Domestic effluent shall be discharged off through septic tank/soak pit system.

3.4 The directives issued by the Board from time in view of direction issued by the Honorable High Court Of Gujarat in the matter of S.C.A. 770/95 and any other shall have to be complies with.

4. **CONDITIONS UNDER THE AIR ACT:**

4.1 Following shall be used as fuel in Wood & LDO.

Sr.No.	Fuel	Existing Quantity	Proposed Quantity	Total Quantity
1	Wood (04 No) (Furnace)	400 Kg/day	-	400 Kg/day
2	LDO	35L/hour	20L/hr	55 L/hour

4.2 The applicant shall install & operate air pollution control system in order to achieve norms prescribed below

4.2.1 The flue gas emission through stack attached to boiler/furnace/heater shall conform to the following standards:

Stack No.	Stack attached to	Stack height in meter	Air Pollution Control System	Parameter	Permissible Limit
1.	Furnace(Existing)-3No	30 (Common Stack)	Scrubber & quencher	Particulate Matter SO_2 NO_x	150 mg/Nm^3 100 ppm 50 ppm
2.	Heating furnace (Proposed new)-1No Attached to single effect evaporator				
3.	Thermic fluid Heater	11			
4.	DG set (125 KVA)	9			

4.2.2 The Process gas emission through stack attached to boiler/furnace/heater shall conform to the following standards:

Stack No.	Stack attached to	Stack height in meter	Air Pollution Control System	Parameter	Permissible Limit
1.	Cative incinerator for hazardous waste (cap-500 kg/hr)	11	Alkali scrubber	Particulate Matter SO_2 NO_x HCL cl_2 HF CO TOC	150 mg/Nm^3 100 ppm 50 ppm 50 mg/Nm^3 09 mg/Nm^3 04 mg/Nm^3 100 mg/Nm^3 20 mg/Nm^3

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

4.2.3 Ambient air quality within and outside the premises of the unit shall conform National Ambient Air Quality standards notified by MOEF vide notification dated 16/11/2009 and mainly to the following standards:-

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10} $\mu g/m^3$	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$ $\mu g/m^3$	Annual 24 Hours	40 60

4.3 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.

4.4 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

4.5 The applicant shall provide proper ventilation and exhaust facilities so as to maintain healthy working atmosphere within the factory premises.

5. **GENERAL CONDITIONS: -**

5.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

Form for grant of authorisation for occupier or operator handling hazardous waste

6. **AUTHORISATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTES**
Form-2 (See rule 6 (2))

6.1 **Number of authorisation: AWH-90572 Date of Issue: 20/01/2018**

6.1.1 **Jawrawala Petroleum,** is hereby granted an authorisation to operate facility forfollowing hazardous wastes on the premises situated at **PLOT NO.200/33-, B/H KASHIRAM TEXTILE, NAROL,AHMEDABAD-382405**

Sr. No.	Waste	Quantity	Process Category	Facility and Final Disposal
1	ETP Waste	1.8 MT/y	35.3	Collection, Storage, Transportation, Disposal at TSDF-NECL Vadodara
2	Discarded Containers	2,00,000 nos./Month	33.1	Reception, Storage, Decontamination & Transportation

3	Used Oil	400KL/Month (4800 KLA)	5.1	Reception, Storage, reprocessing in your unit.
4	Spent Clay	120 MT/yr	4.5	Disposal by Captive incinerator/send to cement ind for co-processing
5	Filer& Filtered Material	0.84MT/yr	36.1	Disposal by Captive incinerator/send to cement ind for co-processing
6	Incineration ash	150 MT/yr	37.2	Collection, Storage, Transportation, Disposal at TSDF -NECL Vadodara
7	Oily Sludge	768 KL/yr	4.1	Disposal by Captive incinerator/send to cement ind for co-processing
8	Waste oil	600KL/Month (7200 KLA)	5.2	Reception, Storage, reprocessing in your unit.

6.1.2 The authorisation is granted to operate a facility for collection, storage, within the factory premises and as per 6.1.1

6.1.3 The authorisation shall be valid up to 12/02/2024.

6.1.4 The authorisation is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

6.1.5 **TERMS AND CONDITIONS OF AUTHORISATION**

a) The applicant shall comply with the provisions of the Environment (Protection) Act - 1986 and the rules made there under.

b) The authorisation shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.

c) The persons authorized shall not rent, lend, sell, transfer of otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.

d) Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorisation order by the persons authorized shall constitute a breach of this authorisation.

e) It is the duty of the authorised person to take prior permission of the Gujarat Pollution Control Board to close down the facility.

f) An application for the renewal of an authorisation shall be made as laid down in rule (6) (ii).

g) Industry shall have to manage waste oil, discarded containers etc as per Hazardous and Other Wastes (Management & T.M.) Rule-2016.

h) Industry shall submit annual report by 30th June every year.

For and on behalf of
Gujarat Pollution Control Board

(Y.A.Tai)
Sr. Environmental Engineer

NO: GPCB/ABD/NL/CCA-98 A (3)/ID-11849/ 450634 09/04/2018

JAWRAWALA PETROLEUM
PLOT NO. 200/33-,
B/H KASHIRAM TEXTILE, NAROL,
AHMEDABAD-382405.

Certificate

Certificate No : 1200000023

To Whomsoever it may concern

This is to certify that

ADANI PORTS & SPECIAL ECONOMIC ZONE LTD.

PLOT NO.169/P,
AT: NAVINLAL ISLAND,
TAL:MUNDRA,

KUTCH

is a valid member of

SAURASHTRA ENVIRO PROJECTS PVT. LTD.

for Integrated Common Hazardous Waste Management Facility.

This membership is valid for a period of

5 Years

Date of issue : *06.02.2019*

Date of expiration : *05.02.2024*

Place of issue : *Surat*

For, Saurashtra Enviro Projects Pvt. Ltd.

Director

SUBJECT TO SURAT JURISDICTION

Purchaser's Name ACC, Mundra
Address Mundra
Value Rs 300
In Wi[illegible] ACC, Mundra
License No GujSos/Auth/Avi/01/2006/8211

AXIS BANK LTD.
ADANI PORT,MUNDRA-370421.
GUJSOS/AUTH/AVI/01/2006

भारत 94657 152965 SPECIAL RESERVE MAY 30 2020 13:32
R.0000300/- PB5257
INDIA STAMP DUTY GUJARAT

Service Agreement

This Service Agreement (hereinafter referred to as the "**Agreement**"), is made and entered into at Ahmedabad on this **20th** May, 2020

By and between

Adani Ports And Special Economic Zone Limited, a Company incorporated under the Companies Act,1956having(CIN No.L63090GJ1998PLC034182 and its Registered Office at: Adani House, Mithakhali Six Roads, Navrangpura, Ahmedabad and Corporate office at: Adani Corporate **House** Shantigram S G **Highway P.O. Ahmedabad-382421,** and its port office situated at Adani Port, **Navinal Island Mundra -370421 District Kutch, Gujarat** (Hereinafter referred to as the "**APSEZL or the First Party**" or "**the Generator**", which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors in business and assigns) represented herein by its duly constituted attorney **Mr. Avinash Rai (CEO- APSEZ Mundra & Tuna Ports)** who is authorized to do so by position he holds at/of the First Part.

And

Ambuja Cements Limited, a Company incorporated under the Indian Companies Act, 1956, having CIN No. L26942GJ1981PLC004717 and its Registered Office at **P.O. Ambuja Nagar, Taluka - Kodinar, Amreli, District – Gir Somnath, Gujarat – 362715** having its division/ unit/ section as "Geocycle" that provides specialized services for thermal destruction or recovery of hazardous/ non Hazardous waste material in cement kilns (hereinafter referred to as the "**Second Party/ACL**," which expression shall, unless repugnant to the context, mean and include its successors and assigns) represented herein by its duly constituted attorney **Mr. S Ramarao (MCH- West & South)** who is authorized to do so by position he holds at/of the Other Part.

APSEZL and **ACL** shall be collectively addressed / referred to as "**the Parties**" and individually as "**Party**" herein after in this Agreement.

WHEREAS, First Party, is in the business of Port and SEZ Operations and its Plants are situated at Mundra, Kutch, Gujarat (hereinafter referred to as the First Party's "Manufacturing Units") and is in search of disposal of (i) Contaminated Cotton waste (Cat. 33.2), (ii) Pig Waste (Cat. 3.1) and (iii) ETP Sludge (Cat. 35.3) and (iv) Sorted MSW- Non Hazardous (which are generated at First Party's Manufacturing Units during its production process (hereinafter referred to as the "**Waste Material**"), which is categorized as **Hazardous Waste** as per **Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.**

Adani Ports and Special Economic Zone Limited MUNDRA

First party also generates non-recyclable sorted municipal solid waste i.e. dry plastic waste (hereinafter referred to as the "**Waste Material**"), which is categorized as **Non-Hazardous Waste**.

AND WHEREAS, Second Party is in the business of manufacture and sale of different types and grades of cement and has the capability to dispose the waste materials in an environment friendly manner in the cement kiln process having high temperature and long residence time (hereinafter referred to as "**Co-Processing**") while simultaneously producing cement of desired quality.

AND WHEREAS, Geocycle is a business unit of ACC that provides specialized services for thermal destruction or recovery of hazardous/non hazardous waste material in cement kilns.
AND WHEREAS First Party has approached Second Party for evaluating the feasibility of safe disposal of the Waste Material which is generated at its Segregation Plant, in an environment-friendly manner and based on the evaluation report, the Second Party has offered to Co-Process the Waste Material generated by First Party's Segregation Plant in the Cement Kiln at its **Ambuja Cements Limited**, at **P.O. Ambuja Nagar, Taluka - Kodinar, Amreli, District – Gir Somnath, Gujarat – 362715** (hereinafter referred to as the "**Cement Plant**").

AND WHEREAS, First Party and Second Party have agreed that Second Party shall provide the services of Co- Processing the Waste Material in the Cement Kiln at its Ambuja Cement Plant (hereinafter referred to as the "**Services**"), subject to First Party and Second Party obtaining all statutory clearances, consents, no objection certificate, writings and confirmations as may be applicable from various authorities and Government Agencies for the said purpose.

NOW, THEREFORE, for and in consideration of the forgoing premises and of the mutual covenant herein after stipulated, the Parties hereto, one with the other, do hereby agrees as follows:

1.0 Execution of Services

1.1 Scope

The Second Party shall during the Term of the Agreement (as set out in Clause 7 herein below), provide the Services i.e. Co-Processing of all the consignments of Waste Material of the First Party, delivered to the Cement Plant of the Second Party, which conform to the specification set out in Annexure A attached to the Agreement and which does not contain any of the item listed in the banned item list as set out in Annexure B attached to the Agreement.

1.2 Packaging and Labeling

Prior to shipment of any consignment of Waste Material to Second Party's Plant for the provision of the Services, the First Party shall comply with the following conditions:

1.2.1 Arrange to pack the Waste Material in Double layered/High Density Poly Ethylene (HDPE) bags locked properly with plastic locks/properly sealed packed cartons/Bulk/Loose/Bailed form (Bailing should not be done through metallic wires) - (Change as per requirement) to avoid any leakages, overall weight of the packing should not be more than 300 X 300 X 300 MM.

1.2.2 Label every authorized vehicle (closed container type for transporting Haz Waste) loaded with Waste Material in the format set out in Annexure C attached to the Agreement specifying name of waste, quantity of waste, particle size of waste, size of packaging, Type of waste ("**Hazardous/Other Waste**") in bold letters both in English and Local Language and with other relevant identification as stipulated under applicable laws.

1.2.3 Provide the copies of Health & Safety Data Sheet (in the format as set out in Annexure G) with each consignment of Waste Material.

1.3 Quantity and Schedule of Delivery

1.3.1 First Party shall supply the agreed quantities of Waste Material as set out in Annexure D, generated at its plant, free of all costs and with zero invoice value, to the Second Party's Cement Plant.

1.3.2 First Party shall deliver all the consignment of Waste Material from its plant to the Second Party's Cement Plant by road transportation at its own cost and risk as per the delivery schedule set out in Annexure D attached to the Agreement. Either Party may after mutual agreement with other Party, revise the delivery schedule anytime during the term of the Agreement after giving seven (7) days advance intimation in writing to the other Party, prior to dispatch of any fresh consignment of Waste Material as per the delivery schedule as set out in Annexure D attached to the Agreement. All consignment of Waste Material shall be delivered to the storage area(s) at the Second Party's Cement Plant.

1.3.3 First Party shall guide the transporter on the measures to be taken in case of emergency during transportation and ensure the compliance of **'Guidelines on Transportation'** as set out in Annexure E attached to the agreement during Transportation of Waste Material from First Party's Manufacturing facility to Second Party's Cement Plant.

1.3.4 Both the Parties declare and confirm that they shall comply with relevant portion of the Protocols for Receipt of Waste Material as set out in Annexure F attached to the Agreement.

1.3.5 The risks and liability associated with the Waste Material shall lie with the First Party till the Waste Material provided by the First Party is accepted by the Second Party at its Cement Plant, as per clause 1.3.8 & 1.3.9 hereof.

1.3.6 Second Party shall provide an orientation to the designated transporters, employees, agents and the representatives of the First Party on the applicable statutory provisions and regulations as also Security, Health and Safety Rules including the Health and Safety Policy (set out in Annexure K), as applicable at the Second Party's Cement Plant, prior to commencement of dispatch of any consignment of Waste Material by First Party to the Cement Plant. Provided the First Party shall be responsible for ensuring compliance of all applicable statutory provisions and regulations as also Security, Health and Safety Rules including the Health and Safety Policy (set out in Annexure K), as applicable at the Second Party's Cement Plant, by such transporters, their employees and agents and the representatives of the First Party involved in the unloading, transportation and handling of the Waste Material.

1.3.7 First Party shall, at its own cost, arrange to get every consignment of Waste Material weighed at an authorized weighbridge and issue the weighbridge challan to the approved transporter while dispatching the consignment of Waste Material to the Cement Plant of the Second Party. The quantity of Waste Material in any consignment delivered by the First Party to the Second Party's Cement Plant shall be determined by the electronic weighbridge installed at the Cement Plant. All Waste Material related reports including inventory list shall be prepared as per the Second Party's electronic weighbridge records maintained at the Cement Plant, which shall be the conclusive documentary proof evidencing the actual quantity of Waste Material received by the Second Party in any consignment dispatched from the First Party's Depot. In the event of any dispute relating to the actual quantities of Waste Material dispatched by the First Party and received by the Second Party, the Parties hereto shall resolve the same in good faith through discussion on the appropriate actions required to be taken for verification and correction of any discrepancy.

1.3.8 Second Party shall arrange for unloading, storage and handling of the Waste Material delivered by First Party to the storage area(s) at its Cement Plant in accordance with the Risk Assessment and Crisis Management Plan to be prepared before the delivery of the Waste Material to the storage area (s) of Cement Plant by the Second Party in consultation with the

3

First Party on the basis of Health & Safety Data Sheet, provided by First Party as set out in Annexure G attached to the Agreement. The costs, risks, liability related to unloading, handling and storage of Waste Material in the Cement Plant during the acceptance process shall be with the First Party. However the cost of unloading, handling and storage during acceptance process has been built into the Service Charges and the First Party need not pay the same separately.

1.3.9 The stores department of the Second Party shall issue acceptance receipt to the First Party within eight (8) days from the date of delivery of Waste Material consignments by the First Party at the Cement Plant of Second Party. If the Second Party delays issuance of such acceptance receipt beyond eight (8) days from the date of delivery of consignments of Waste Material by the First Party, it shall be deemed that Second Party has accepted the consignment of Waste Material along with its risk and liability on and from the end of the eighth (8) day. The Waste Material acceptance receipt issued by stores in charge at the Second Party's Cement Plant shall be the conclusive documentary proof evidencing the acceptance of any consignment of Waste Material by the Second Party for the provision of the Services.

1.4 Non- Conforming Waste Material

1.4.1 First Party declares and confirms that all the consignment of the Waste Material delivered at the storage area(s) of the Cement Plant of the Second Party pursuant to the Agreement shall:

1.4.1.1 Confirm to the specifications as set out in Annexure A attached to the Agreement;

1.4.1.2 Be packed and labeled as per the clause 1.2 hereof

1.4.1.3 Not contain any of the items listed in the banned item list as set out in Annexure B attached to the Agreement.

1.4.2 In case, Second Party is in receipt of any consignment that contains banned items or materials other than agreed between the parties as mentioned in Annexure A and/or the requirement under clause 1.2.2 (Packaging & labeling), then Second Party shall be entitled to refuse the acceptance of such consignment and shall intimate the same to First Party with in 24 hrs of the receipt of consignment at Second Party's Plant and First Party shall arrange to transport that consignment at its own cost, expense and risk within 48 hrs from the time of intimation from Second Party on the refusal of acceptance of such consignment. If First Party fails to evacuate such rejected consignment of non-conforming Waste Material as stated above within 1 week, it shall be liable and pay to Second Party **liquidated damages at the rate of Rs. 500/- per ton for each day** of delay (take approval for removal from RSH for 1 plant/NSH for Pan India) in its evacuation from Second Party's Plant. On delay in evacuation of more than 10 days, without prejudice to its rights under Law Second Party shall have the right to further to terminate this Agreement.

1.4.3 In case if the Waste Material is not conforming to the specifications, as mentioned in Annexure A and/or the requirement under clause 1.2.2 (Packaging & labeling) , both the parties shall discuss in order to arrive at a solution with respect to Co-processing that consignment, provided the additional costs towards the same shall be borne by First Party.

1.5 General Responsibilities

1.5.1 First Party shall provide all relevant information relating to safe handling and storage practices of the Waste Material, provide reasonable assistance such as supervision required for safe handling and storage of the Waste Material and the inspection and confirmation of the suitability of the storage arrangement made by Second Party to store the Waste Material.

1.5.2 First Party shall be solely responsible for ensuring that all precautionary measures are complied with, to avoid any fire, explosion or accident during the loading, transportation and

delivery of the Waste Material from the First Party's distribution centre to the storage area(s) of Cement Plant of Second Party for the provision of the Services.

1.5.3 First Party shall be responsible for the compliance of all statutory regulations and guidelines as applicable to its employees, agents or representatives engaged in loading, storage and handling of Waste Material at the First Party's plant and for onward dispatch to the Cement Plant of the Second Party.

1.5.4 Second Party shall be responsible for the compliance of all statutory regulations and guidelines as applicable to its employees, agents or representatives engaged in unloading, storage, handling and Co-processing of Waste Material at its Cement Plant.

1.5.5 Second Party shall be responsible to arrange for all tool's, tackles, equipment and laboratory facilities necessary to provide the Services.

1.5.6 First Party shall be responsible to depute its representatives and senior executives to attend the meetings and answer any queries raised by Second Party relating to the Waste Material.

1.5.7 Second Party shall permit the First Party's designated persons to inspect the Co-Processing of the Waste Material at the Cement Plant, provided that First Party shall give a prior intimation in writing of such inspection to the Second Party.

1.5.8 First Party shall have in force and effect and shall maintain at its own cost such policy & policies of insurance as applicable, with a reputable authorized insurer which gives First Party adequate insurance cover in respect of any liability that may arise/ damage that may be caused to person/ property of First Party, Second Party & its contractors and any Third Party.

1.5.9 Second Party shall have in force and effect and shall maintain at its own cost such policy or policies of insurance as applicable, with a reputable authorized insurer which gives Second Party adequate insurance cover in respect of any liability that may arise or damage that may be caused to person or property of Second Party, First Party and third party

1.5.10 In the event the Second Party is required to comply with statutory regulations and guidelines framed by the concerned authorities or Government Agency relating to emission monitoring for demonstrating the performance of Co-processing of the Waste Material pursuant to the Agreement, the same shall be complied with by the Second Party in consultation with the First Party. Provided, the reasonable costs for the same shall be borne by the First Party.

2.0 CERTIFICATE OF CO - PROCESSING

Second Party shall at the beginning of each month during the term of this agreement, issue to First Party Certificate of Co-Processing for the Waste Material received for Co-Processing during previous month in the format set out in Annexure I attached to the Agreement.

3.0 SERVICE CHARGES AND PAYMENT TERMS

In consideration of the Second Party providing the Services, the First Party shall pay to the Second Party co processing charges in the following manner:

3.1 First Party shall pay to Second Party, Service Charges towards Co-processing at **Rs. 5000/- (Rs Five Thousand Only/-) per Ton of Cotton Waste & Rs. 5000/- (Rs Five Thousand Only/-) per Ton of Pig Waste Rs. 5000/- (Rs Five Thousand Only/-) per Ton of ETP Sludge and Rs 10/MT for Sorted MSW- Non-hazardous** all are exclusive of any transportation cost.

3.2 Second Party shall issue an invoice on monthly basis with relevant supporting documents on First Party against Co-Processing services rendered to First Party on the basis of quantity received during previous month.

3.3 The charges stated in clause 3.1 above shall be exclusive of all applicable taxes and duties. **Applicable tax at the rate of 18 %** (OR as per the latest Govt. norms) of the total service charge will be charged.

3.4 First Party shall make advance payment towards the proforma invoice as against dispatch planning. The Second Party will issue actual invoice on monthly basis based on material received in a particular month. In case of delay in any differential outstanding payments (with reference to advance payment made) beyond 10 days an **interest at the rate of 18 % per annum** shall be chargeable on the delayed payment.

3.5 If there is any dispute about any invoice amount, First Party shall be entitled to dispute the invoice amount within 5 days after receipt of invoice. If First Party does not raise any dispute, it is presumed that the same is acceptable and First Party shall be liable to make any differential payment (with respect to advance payment made) in respect of same within a period of 10 days from date of issue of invoice by Second Party.

3.6 All payment for co-processing charges, additional service charges, transportation charges, if any, and interest on overdue payments shall be made either by electronic fund transfer or by Crossed Cheque drawn in favor of "**Ambuja Cements Limited**" payable at Mumbai.

4. TAXES AND DUTIES

The Parties agree that all taxes, levies, imposts, deductions, charges, duties or withholdings which are assessed, levied, imposed or collected by any Government Central or State or authority and any taxes or levies arising in connection with the Agreement (other than income tax payable by Second Party) shall be included in the debit note issued by Second Party for co-processing charges and other charges, if any and shall be payable by First Party in addition to the co-processing charges and other charges, if any. The First Party agrees to provide the relevant certificate in respect of the income tax deduction at source on the amounts to be paid towards co-processing charges to the Second Party.

Without prejudice to generality of foregoing, First Party shall be responsible for the payment of the stamp duty applicable to the Agreement. Notwithstanding the foregoing, the Parties agree that they shall use their best efforts to obtain exemptions from the payment of any taxes from the concerned Government agency or authority as may be available under applicable laws.

5. STATUTORY COMPLIANCE

5.1 First Party shall be responsible for the following regulatory compliances under applicable laws:

(a) obtain statutory registrations, clearances, license no objection certificate, writings and confirmations from the concerned authorities and Government agencies, file returns, if required, relating to the loading, transportation and delivery of the Waste Material to the Cement Plant of the Second Party.

(b) Pay all applicable taxes, cesses, duties or other levies on (i) the supply of Waste Material to Second Party and (ii) transportation of Waste Material from First Party's Manufacturing Plant to the Second Party's Cement Plant.

5.2 Second Party shall be responsible for the following regulatory compliances under applicable laws:

(a) obtain statutory registrations, clearances, license, no objection certificate, writings and confirmations, if required, from concerned authorities and Government Agencies for the provision of the Services to the First Party. File returns with the concerned authorities or Government agencies, if required, relating to the provision of the Services.

(b) Pay all applicable taxes, cesses, duties or other levies on the Services.

Representations and Warranties of APSEZL.

APSEZL covenants, represents and warrants to ACL that:

I. it is in good standing and that it has full authority and all rights necessary to enter into this Agreement and to perform its obligations hereunder according to the terms thereof;

II. this Agreement is a legal, valid, binding and enforceable in accordance with the terms hereof;

III. by entering into this Agreement, it is not in breach or future shall not be in breach of any contractual obligation against any third party;

IV. the person signing this Agreement, on its behalf, has been duly authorized by the APSEZL to execute this Agreement;

V. it represents that it shall not dispatch any item listed in 'banned item list' as set out in Annexure B to this Agreement.

6. CONFIDENTIALITY OF INFORMATION

6.1 All information given by one Party to the other, pursuant to this Agreement in tangible form, which is specifically marked as confidential as well as all intangible information which is specifically conveyed as confidential in writing within 7 days of disclosure of such information, shall be deemed to be "Confidential Information" for the purpose of this Agreement.

6.2 The Parties agree that the Confidential Information which has been or will be disclosed by or on behalf of the other Party will be received by the recipient Party in confidence and will be used only for performance under and in accordance with this Agreement.

6.3 Each Party acknowledges and agrees that all Confidential Information constitutes valuable, special and unique assets of the business of disclosing Party. Accordingly, the Parties agree that, in the event of any breach of this clause, in addition to any other remedies at law or in equity, the Parties shall be entitled to equitable relief, including injunctive relief and specific performance.

6.4 The confidentiality obligations of the Parties shall not apply to the following exceptions:

(a) any information which, either Party can demonstrate to the reasonable satisfaction of the disclosing Party, as already available in the public domain;

(b) any information which, either Party can demonstrate to the reasonable satisfaction of the disclosing Party, that such information is already available with them from a third party without any corresponding confidentiality obligations;

(c) any information which, either Party can demonstrate to the reasonable satisfaction of the disclosing Party, that such information has been originally developed by them without using the Confidential Information ;

(d) any disclosure which may reasonably be required for the compliance of statutory obligations or for the purposes of legal proceedings.

6.5 Any publicity in connection with the Agreement by either Party shall be subject to the prior consent of the other Party.

6.6 Upon termination of this Agreement, each Party shall return to the other Party all confidential information (without retaining copies thereof) provided for the purposes of this Agreement.

7. TERM

7.1 That this Agreement shall be effective from its Effective Date i.e. date of signing and shall remain valid and binding on the Parties up to 31.12.22 inclusive of the both dates unless earlier terminated pursuant to terms herein below.

7.2 Thereafter, both the parties, at its option, may extend the validity of the contract for a further period of months/year on same term and conditions or on the term and conditions as may be mutually agreed between the Parties.

8. TERMINATION OF AGREEMENT

8.1 Each Party may terminate this Agreement in the following events:-

a) In case of breach of the terms and conditions of the Agreement by either of the Parties, the other Party may give a written notice of Thirty (30) days to such defaulting Party, demanding it to remedy such breach. If the defaulting Party fails to remedy the breach within the notice period then the other Party shall have the right to terminate this Agreement with immediate effect.

b) If either Party goes into liquidation or is ordered to be wound up by any court of law, the other Party shall have the right to terminate this agreement with immediate effect.

c) Any Party herein may terminate this Agreement in case of Business exigencies, which shall be confirmed in a written document, executed by parties.

Upon termination of the Agreement, each Party shall endeavor to deliver to the other Party all documents and materials belonging to the other Party that may be in each Party's possession or under each Party's control. Provided the Second Party shall have the right to withhold all documents and materials belonging to First Party in the custody of Second Party, until such time all of Second Party's dues and/or invoices towards the co-processing charges, additional services charges, transportation charges, costs, if any, and interest on overdue payment incurred up to the date of termination have been settled by the First Party against the production of such invoices evidencing proof for such dues by Second Party.

8.2 Even otherwise either Party shall be entitled to terminate this Agreement by giving 60 days prior written notice to the other party without specifying any reasons for the same.

9. EFFECT OF TERMINATION

9.1 The rights, duties and responsibilities of each Party shall continue to be in full force and effect during the period of notice till the date of termination including the obligation of Second Party to complete the unfinished portion of the Services and the obligation of First Party to settle/pay all dues and/or invoices for the Services completed by the Second Party till the date of termination and/or expenses incurred till the date of termination by the Second Party;

9.2 Neither Party shall be liable to the other pursuant to such termination for compensation, reimbursement or damages on account of the loss of prospective business or profits or on account of expenditures, investments, lease or commitments or for any reason whatsoever arising out of such termination as set forth in clause 8 above, which is consequential in nature.

10. DISPUTE RESOLUTION:

10.1 Parties shall first use their best efforts to settle amicably any dispute arising out of or in connection with this Agreement. Party raising the dispute shall address to the other Party a notice requesting a negotiation of the dispute within ten (10) days of notification. The dispute shall then be referred for resolution between authorized representatives of Parties to be nominated by them who shall attempt to resolve such dispute by negotiation, and document any settlement that may be agreed, within a further period of thirty (30) days.

10.2 If authorised representative are unable to resolve the dispute within thirty (30) days through negotiation, all disputes, controversies and conflicts ("Disputes") arising out of this Agreement or in connection with this Agreement shall be referred for arbitration in terms of the Arbitration and Conciliation Act, 1996 ("Act") or any amendments thereof.

10.3 The place of arbitration shall be at Ahmedabad and the language used in the arbitral proceedings shall be English. Arbitration shall be conducted by a mutually agreed and appointed sole arbitrator. The arbitral award shall be in writing and subject to the provisions of the Act, shall be final and binding on each Party and shall be enforceable in any court of competent jurisdiction.

10.4 Pending the submission to arbitration and thereafter, till the Arbitrator or the Arbitral Tribunal renders the award or decision, the Parties shall, except in the event of termination of this Agreement or in the event of any interim order/award is granted under the afore-stated Act, continue to perform their obligations under this Agreement.

11. GOVERNING LAW AND JURISDICTION

This Agreement shall be governed exclusively by the laws of India. Court of Ahmedabad shall have exclusive jurisdiction to the extent permitted under the applicable provision of law.

12. AMENDMENT

Any amendment and / or variation to the Agreement shall be mutually agreed by the Parties in writing and executed by or on behalf of each of the Parties hereto.

13. SEVERABILITY

If at any time during the term of the Agreement, all or any of the clauses of the Agreement is or becomes illegal, invalid or unenforceable in any respect or declared null and void or illegal under the applicable laws, the same shall not affect or impair the legality, validity or enforceability of any other provisions of the Agreement.

14. FORCE MAJEURE:

Force Majeure means any unforeseen event or circumstance that is beyond the reasonable control of either Party, which event cannot by exercise of reasonable diligence be prevented or caused to be prevented, and which adversely affects such Party's performance of its duties and obligations or enjoyment of its rights under this Agreement. Neither Party shall be considered in default in the performance of its obligation under the Agreement, if such performance is prevented or delayed on account of war, civil commotion, strike, epidemics, pandemics accidents, fires, unprecedented floods, earth quake or because of promulgation of any law or regulations by the Government, unforeseen breakdowns, operational and maintenance stoppages at the First Party Manufacturing Plant or the Second Party's Cement Plant or on account of any other Acts of God. At the time of occurrence of a force majeure condition, the affected Party shall give a notice in writing with documentary proof within Fifteen (15) days from the date of occurrence of the force majeure condition indicating the cause of force majeure condition and the period for which the force majeure condition was likely to subsist. The Parties shall resume to the performance of their respective obligations after the force Majeure condition comes to an end and this agreement shall suitably be extended proportionate to the period of such Force Majeure condition. In the event the affected Party is prevented from fulfilling its obligation under the Agreement owing to the force majeure condition continuing for more than Thirty (30) days, both Parties shall consult each other regarding the continuation of the Agreement including early termination as set forth in clause 8 above. Parties shall not be entitled to any kind of damages in case of termination due to such Force Majeure situation.

13. **SUSPENSION**

Second Party may suspend Services upon prior written notice to First Party, if First Party fails to:

(a) make timely payment against invoices raised for co-processing charges beyond Sixty (60) days from the normal date of invoice,

(b) evacuate the rejected consignment of non conforming Waste Material from the Second Party's Cement Plant within the Ten (10) days period as stated in clause 1.4 above or

(c) deliver Waste Material as per the Delivery schedule set out in Annexure D.

Notwithstanding whatever is contained herein, in case if Parties could not resolve the issue regarding to non evacuation (as afore mentioned in Clause 13), by mutual consultation within 2 days then, Second party shall have option to terminate this agreement forthwith, Such termination shall be without prejudice to any other rights under Law, available to Second Party.

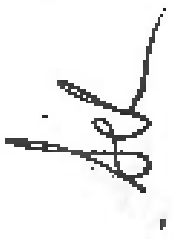
14. **INDEMNITY**

First Party shall indemnify, defend and hold harmless Second Party and its directors, employees and agents from and against any and all claims, demands, fines, losses, damages, costs, penalties, expenses, actions, suits or proceedings, injuries, monetary liability on account of injury to/ death of any person, costs of response to any governmental inquiry, liability for loss of or damage to property or for loss or damage arising from attachments, liens or claims of materials, men or laborers, and cost of response to Governmental enquiries, reasonable attorney and consulting fees and costs relating to any of the foregoing ("Claims"), arising from First Party's performance of the Agreement or resulting from First Party's acts or omissions or from First Party's tender of Waste Material or from First Party 's breach of the Agreement. The foregoing indemnification shall not apply to the extent such Claims are the result of Second Party's gross negligence, willful default, acts or omissions or statutory non compliance or from Second Party's breach of the Agreement.

Second Party shall indemnify, defend and hold harmless First Party and its directors, employees and agents from and against any and all claims, demands, fines, losses, damages, costs, penalties, expenses, actions, suits or proceedings, injuries, monetary liability on account of injury to/ death of any person, costs of response to any governmental inquiry, liability for loss of or damage to property or for loss or damage arising from attachments, liens or claims of materials, men or laborers, and cost of response to Governmental enquiries, reasonable attorney and consulting fees and costs relating to any of the foregoing ("Claims"), arising from Second Party's performance of the Agreement or resulting from Second Party's acts or omissions or from Second Party's breach of the Agreement. The foregoing indemnification shall not apply to the extent such Claims are the result of First Party's gross negligence, willful default, acts or omissions or statutory non compliance or from First Party's breach of the Agreement.

15. **NON WAIVER**

Any delay or omission on the part of each Party in exercising any rights provided under applicable laws or under the Agreement shall not impair such rights or operate as a waiver thereof. The partial exercise of any right provided under applicable laws or under the Agreement, shall not preclude any other or further exercise thereof or the exercise of any other rights under the Agreement.



16. **VALIDITY**

If at any time during the term of the Agreement, all or any of clause(s) of the Agreement is or becomes illegal, invalid or unenforceable in any respect under the applicable laws, the same shall not affect or impair the legality, validity or enforceability of any other provisions of the Agreement.

17. **ASSIGNMENT**

Neither Party shall have the right to assign or transfer its rights and obligations under the Agreement to any third party or person without the prior written consent of the other Party

18. **SURVIVAL**

Upon termination or expiry of the Agreement Clauses 3 (Service Charges and Payment Terms), Clauses 4 (Taxes and Duties), Clauses 5 (Statutory Compliances), 6 (Confidentiality of Information), 9 (Effects of Termination), 14 (Indemnity) and 20 (Jurisdiction) will survive such termination or expiry and continue to bind the Parties.

19. **NOTICE**

Unless otherwise provided in the Agreement, any notice, report or other communications given or made under or in connection with the matters contemplated by or arising from the Agreement, shall be deemed to have been duly given or made if sent by personal delivery or registered post or speed post or by facsimile transmission or upon receipted delivery at the address of the relevant Party at the addresses mentioned above.

20. **ANTI BRIBERY & CORRUPTION DIRECTIVES (ABCD)**

APSEZL is aware that ACL has instituted a whistleblower policy to promote the highest standards of professionalism, honesty, integrity and ethical behavior within the organization. APSEZL declares that it has not paid or agreed to pay any favor either in cash or kind to any of the officials of ACL, either directly or indirectly to secure this Agreement and further undertakes to promptly inform ACL if any such demand is made in future by any officials either directly or indirectly. APSEZL is also aware that if it is found indulged in any of fraudulent, unfair or unethical practices, APSEZL shall be liable for such action as per the prevailing law including termination of this Agreement by concurrent notice. Please see Annexure – I in this regard.

21. **RELATIONSHIP OF PARTIES**

Nothing contained in the Agreement shall be construed as the engagement of Second Party as an agent or partner of First Party. The relationship between the Parties shall be principal to principal, it being clearly understood that it is a "contract for services" and not a "contract of services" and does not create and shall not be deemed to create any partnership, joint venture or a principal agent relationship between the Second Party and First Party. Further First Party shall not be entitled to by act, word, deed or otherwise make any statement on behalf of Second Party or in any manner bind Second Party or hold out or represent that Second Party is representing or acting as agent or partner of the First Party.

22. **NON EXCLUSIVE ENGAGEMENT**

First Party hereby grants to Second Party a non-exclusive right, on the terms and conditions contained herein, to provide the Services. Nothing herein contained shall prevent or prohibit First Party from engaging other Parties for the provision of the Services. It is clearly understood between the Parties hereto that Second Party shall also on their part be at liberty to

be engaged by other manufacturers who generate waste material in the process of manufacturing finished products for the provision of the Services.

23. **HEADINGS**
The paragraph headings contained in the Agreement are for the convenience of the Parties and shall not affect the meaning and interpretation of the Agreement.

24. **ENTIRE AGREEMENT**
This Agreement along with its annexure embodies the entire understanding between the Parties hereto and supersedes all previous correspondence, agreements and understanding, if any. This agreement shall be executed simultaneously in Two (2) counterpart originals, but shall, nevertheless together constitute one and the same instrument.

IN WITNESS WHEREOF this Agreement is executed in two counterparts on the day and year first above written. Each Party hereto shall preserve one counterpart of the Agreement.

SIGNED AND DELIVERED for and on behalf of

Adani Ports And Special Economic Zone Limited, by the hand of its authorized signatory.

_____ Sh. Avinash Rai (CEO)

in the presence of:

1. _____ Chiranjeevi Rajput
Signature of Witness 1, (Name of Witness 1)

2. _____ Dhanesh Tank
Signature of Witness 2, (Name of Witness 2)

SIGNED AND DELIVERED for and on behalf of

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

_____ S. RAMARAO

in the presence of:

1. _____ _____
Signature of Witness 1. (Name of Witness 1)

2 _____ _____
Signature of Witness 2, (Name of Witness 2)

12

ANNEXURE A
Results of analysis of samples sent by First Party to R&D of Second Party

1. Waste Material Specifications: Waste Materials (as received)

Components	Contaminated Cotton Waste	Pig Waste	ETP Sludge	Sorted MSW
% Moisture	6.4	15.86	6.65	7.22
NCV (Kcal/Kg) (OHB)	4810	5522	2568	4133
% S	0.68	0.25	2.79	0.012
% Cl	0.87	0.21	0.39	0.65

Note:

- Waste should be properly sealed and packed in bags as mentioned under Clause 1.2 (Packaging and labeling hereof).
- Waste should be consistent in terms of quality and similar to the samples send for testing to our lab.
- The above specified values other than moisture content can vary with in the +/- 10 % range.

ANNEXURE B
List of Banned Items

Waste Material dispatched by First Party's Manufacturing Plant to the Second Party's Cement Plant shall not contain following Items that are in the banned item list of Second Party for Co-processing.

- Radioactive waste
- Asbestos-containing waste
- Explosives and ammunition / weapons
- Anatomical medical waste
- Electronic fraction of electrical and electronic waste (e-waste)
- Whole batteries as a targeted material stream
- Waste of unknown or unpredictable composition, including unsorted municipal waste

ANNEXURE C

Format for labeling of the Hazardous and other Waste bags/individual containers

FORM 8

[See rules 17 (1) and 18 (2)]

LABELLING OF CONTAINERS OF HAZARDOUS AND OTHER WASTE

Handle with care

Waste category and characteristics as per Part C of Schedules II and III of these rules	Incompatible wastes and substances .....
Total quantity	Date of storage
Physical State of the waste (Solid/Semi-solid/liquid).	

Sender's name and address	Receiver's name and address
Phone	Phone.....
E-mail.....	E-mail.....
Tel. and Fax No.....	Tel. and Fax No.....
Contact person.....	Contact person.....
In case of emergency please Contact	

Note:

1. *Background colour of label - fluorescent yellow.*
2. *The word, 'HAZARDOUS WASTES' and 'HANDLE WITH CARE' to be prominent and written in red, in Hindi, English and in vernacular language*
3. *The word 'OTHER WASTES' to be written prominently in orange, in Hindi, English and in vernacular language.*
4. *Label should be of non-washable material and weather proof.*

ANNEXURE D

Quantity & Delivery Schedule

First Party, during the term of the agreement, shall deliver the following quantities of Waste Material to ACL's Cement Plant on yearly basis.

Contaminated Cotton Waste : 150 MTPA
Pig Waste : 15 MTPA
ETP Sludge : 10 MTPA
Sorted MSW: 450 MTPA

First Party, during the term of the agreement, shall deliver the Waste Material to the Second Party's Cement Plant on monthly basis as per the mutually agreed delivery schedule. The delivery schedule of the month will be prepared by the party's through mutual consent and will be finalized before 20th of the earlier month.

In case of any change or modification required in the agreed monthly delivery schedule of a particular month by either party, the same shall be brought to the notice of other party at least seven days in advance or as mutually agreed.

ANNEXURE E

Guidelines for Transportation of Hazardous Waste**

First Party shall ensure the following during Transportation of the Waste material:

1. Transport Vehicle used for transporting the Waste Material should have valid authorization for transportation.
2. Transporter /driver shall be licensed for collection and transportation of the Waste Material
3. Properly sealed and labeled containers/bags of the Waste Material should only be loaded into the Transport vehicle and there should not be any indications of potential hazards (e.g elevated temperature, barrel expansion, smoke, spillage, leaks);
4. Transport vehicle should be clean, fit for use and all safety equipment should be operational and easily accessible.
5. Transport vehicle used for transportation of waste material shall be marked with an emergency information panel and should be easily identifiable (number plate)
6. Only the compatible waste materials should be transported together
7. Transporter / driver shall carry 4/5 (Four/Five as the case may be) copies of manifest and shall be guided on the proper movement of the manifest documents.
8. Transporter/driver should be provided with relevant information in Form 11 (Transport Emergency (TREM) Card) of Hazardous and other Wastes (Handling and Transboundary Movement) Rules 2016, regarding the Hazardous nature of the waste and measures to be taken in case of any emergency
9. Logistics should be clearly defined for minimizing OH & safety risks
10. All relevant legal requirements for transportation should be fulfilled
11. Suitable specific emergency response procedures / crisis management plan and equipment should be in place and driver and cleaner should be trained accordingly.

*** Please note that the above mentioned Guidelines for Transportation of Waste Material does not relieve First Party from the applicable statutory provisions and regulations relating to Transportation of Hazardous Waste such as Motor Vehicles Rules, 1989 and CPCB guidelines for Transportation of hazardous waste.*

ANNEXURE F

Protocols for Receipt of Waste Material (Hazardous waste)

The following procedures shall be followed when receiving Waste Material at the Cement Plant of Second Party:

- Transporter will report to the Second Party's security gate for delivery of the Waste Material at storage area(s) of Second Party's designated Cement Plants.
- Second Party's security officer shall inform the concerned officer of the designated Cement Plant.
- Second Party's Cement Plant officer will undertake following activities:-

(a) Receive all relevant documents from the First Party's Transporter including:

(i) Delivery document
(ii) Certificate from the First Party specifying conformance to the waste specifications.
(iii) Invoice indicating zero payment by second party
(iv) Health & Safety Data Sheet of each of the material
(v) Manifest Form (7-copies as the case may be) and other necessary documents as per the statutory requirements.
(vi) Any other document mutually agreed between the parties.

(b) Second Party shall arrange and record the weight of the Transport vehicle on the weigh bridge installed at the plant before and after unloading of the Waste Material at the designated storage area.

(c) Second Party shall make necessary arrangements for unloading of the Waste Material at the designated storage area(s) and shall arrange to store the consignment of Waste Material the designated storage area, as per the date on which the consignment is delivered to the cement plant and shall also record the no. of bags, date of delivery, consignment no., truck no. etc. in the inventory sheet as set out in Annexure H attached to the Agreement.

(d) Second Party shall arrange to conduct inspection and sampling of the Waste Material as required and report to the First Party whether the Waste Material is conforming to specifications list in Annexure A and Annexure B with in eight (8) days of receipt of Waste Material.

(e) Incase Waste Material is not properly sealed/ packed as set out in clause 1.2 (Packaging/Labeling), Second Party shall inform the same to First Party and both the parties shall discuss and arrive at solution for safe handling and disposal of waste material.

(f) Second Party shal keep the storage area locked with appropriate surveil ance by the security.

(g) To attend any emergency situation, the Second Party shall maintain a copy of the risk assessment and crisis management plan with its security officer and also with its concerned officer.

(h) Second Party shall ensure the proper movement of the manifest form at each stage as set out in Hazardous and Other Wastes (Management & Transboundary Movement) Rules 2016.

(i) Second Party shall submit returns to the Authorities in the Form 4 as set out in Hazardous and Other Wastes (Management & Transboundary Movement) Rules 2016 and the format for the same is attached with this Agreement as Annexure J.

AMBUJA CEMENTS LIMITED

Adani Ports and Special Economic Zone Limited MUNDRA

ANNEXURE G
(Health & Safety Data Sheet)
Contaminated Cotton Waste

Customer / Waste Qualification Form

HEALTH & SAFETY

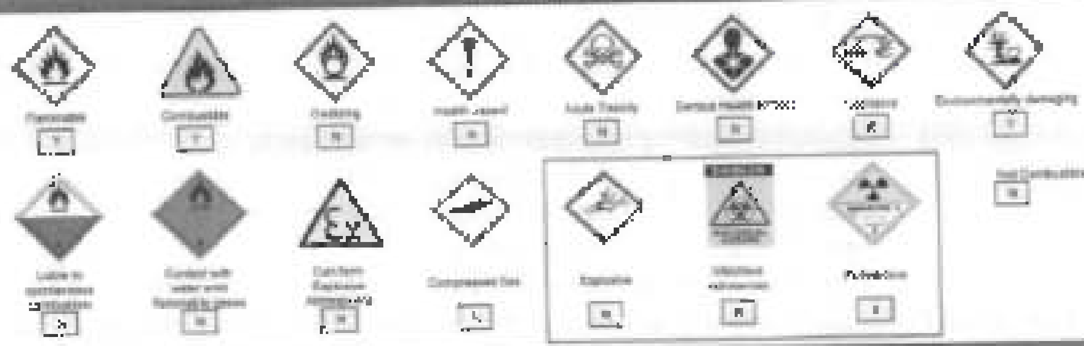
NOTE: It is important to fill all sections of this document. Some points may be not relevant or not needed for a given AFR. Indicate this accordingly.

Designation	Contaminated Cotton & Rags	Industry of origin	SEZ & Ports (Terminal)

Safety data sheet

Available		Not available	

Hazard Identification



Probability of being a Health Hazard (exceeding the Occupational Exposure Limits) via a specific Route of Entry

Probability of exceeding OEL	High	Medium	Low
	Continuously / intermittently exceeding	Unusual, but possible	Conceivable, but very unlikely

	Health hazard	Acute Toxicity	Serious Health hazard	Corrosive
By eye contact	Low	Not Applicable	Not Applicable	Not Applicable
By skin contact	Low	Not Applicable	Not Applicable	Not Applicable
By inhalation	Low	Not Applicable	Not Applicable	Not Applicable
By ingestion	Low	Not Applicable	Not Applicable	Not Applicable

Probability of hazardous reactions

[illegible]	Formation of Toxic vapor	Ignition could occur	Explosion could occur	Polymerization occur
At high temperature	Low	Low	Low	Not Applicable
Under high pressure	Low	Low	Low	Not Applicable
When exposed to Water	Low	Low	Low	Not Applicable
When exposed to air	Low	Low	Low	Not Applicable
When exposed to Acid/Base	Low	Low	Low	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Comments	The material is cotton clothes contaminated with oil. It is general [illegible] and harmful to eyes, skin and if inhaled. The material is mild alkaline in nature			

Fire instruction

Appropriate measures	[illegible] extinguisher/foam type
Inappropriate measures	Not any
Suitable media	Use extinguishing media such as CO2, Foam or DCP type fire extinguisher
Specific risks / instructions	Not any

Spill instructions

Clean-up procedures	Clean the area with hard broom
Recovery procedures	Collect the material in bags with shovel
Disposal procedures	[illegible]
Contact in urgent cases	Mr. Kalpesh Kotharr [illegible], Mr. F.F. Maurya [illegible]

Special Personal protection (additional to standard site PPE)

Clothing	Y	Boiler suits	Eye Protection	Y	Safety goggles	Respiratory	Y	[illegible] mask
Foot Protection	Y	Safety shoes	Hand	Y	Nitril gloves	Other		

First aid

Appropriate measures	Wash with plenty of water for 15 minutes, if irritation persist consult physician immediately. Remove contaminated clothing, wash the area with mild soap and running water if itching persist consult the physician immediately. Shift the person to a fresh [illegible], if respiratory discomfort persist consult the physician immediately. If ingested consult the physician immediately
Inappropriate measures	Not any

Affidavit (to be completed by waste generator)

To the best of my knowledge, I certify that the waste / AFR delivered to LafargeHolcim / Geocycle conforms to the above description, and that all information represented by herewith in this profile is accurate and complete.

Date (dd/mm/yyyy)

Name :	Position	Signature :

18

Pig Waste

geocycle	WASTE PROFILE	HEALTH & SAFETY
Waste Name	Pig Waste	Industry of origin Ports & SEZ

Material safety data sheet			
Available	☐	Not available	☐

Hazard Identification					
Flammable	☐	Irritant	☐	By eye contact	☐
Corrosive	☐	Harmful	☐	By skin contact	☐
Reactive	☐	Toxic	☐	By inhalation	☐
Respirable	☐	Carcinogen	☐	By ingestion	☐
Comments:					

Personal protection					
Acid resistant clothes	☐	Safety gloves	☐	Safety helmet	☐
Full protection mask	☐	Respirator	☐	Safety Goggles	☐
Comments	Use all mandatory PPE's				

First aid	
In case of eye contact	wash the eyes with water for 15 minutes, and if irritation persist consult the doctor
In case of skin contact	remove contaminated clothing and wash the area with mild soap and water, if itching/irritation persist consult the doctor
In case of Inhalation	transfer the person to fresh air, and if respiratory discomfort persist consult the doctor immediately
In case of Ingestion	consult the doctor
Any specific Antidote	not any

Fire instruction	
Extinguisher Type	water/DCP type extinguisher
Inappropriate measures	not any
Specific risks / instructions	not any

Spill instructions	
EMERGENCY NUMBER	Mr. Kalpesh Kothari : 9980015348 :: Mr. H P Maurya 9962073344
Clean-up procedures	collect the material with soft broom in bags
Recovery procedures	collect the material in bags
Disposal procedures	co processing in cement kiln
Contact in urgent cases	as mentioned above

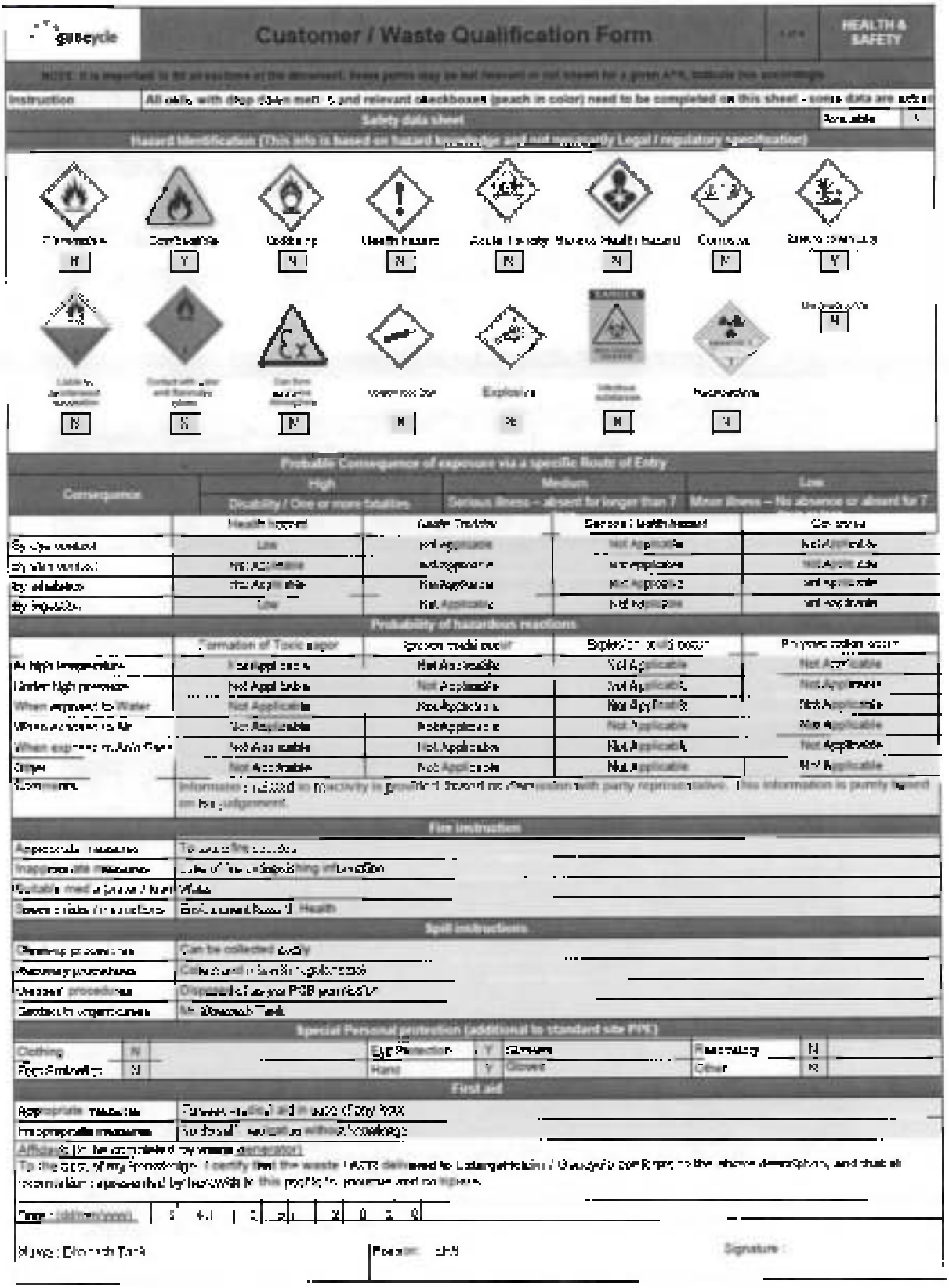
Transport		
Hazard code	Transport code	Waste code 3.1

Comments : This material have good heat value and having more then 100 flash point

AMBUJA CEMENTS LIMITED Unit AMBUJA NAGAR 382 715

Adani Ports and Special Economic Zone Limited MUNDRA

19



Customer / Waste Qualification Form

HEALTH & SAFETY

Instruction

Safety data sheet

Hazard Identification (This info is based on hazard knowledge and not necessarily Legal / regulatory specification)

Probable Consequence of exposure via a specific Route of Entry

Consequence	High	Medium	Low
	Disability / One or more fatalities	Serious illness – absent for longer than 7	Minor illness – No absence or absent for 7

Probability of hazardous reactions

Fire instruction

Spill instructions

Special Personal protection (additional to standard site PPE)

First aid

Sorted MSW

geocycle	WASTE PROFILE	HEALTH & SAFETY

Waste Name	Mixed Solid	Industry of origin	Paris

Material safety data sheet			
Available	☑	Not available	☐

Hazard Identification					
Flammable	☐	Irritant	☑	By eye contact	☑
Corrosive	☐	Harmful	☐	By skin contact	☑
Reactive	☐	Toxic	☐	By inhalation	☑
Respirable	☐	Carcinogen	☐	By ingestion	☑
Comments:	The material is sorted paper and plastic waste from ppc with no odour. It is general irritant and harmful to eyes, skin and if inhaled.				

Personal protection					
Acid resistant clothes	☐	Safety gloves	☑	Safety helmet	☑
Full protection mask	☐	Respirator	☑	Safety Goggles	☑
Comments	Wear PPE like safety gloves, respirator, helmet and safety goggles along with other mandatory PPE as it has moderate odour.				

First aid	
In case of eye contact	wash with plenty of water for 15 minutes, if irritation persist consult physician immediately
In case of skin contact	remove contaminated clothing, wash the area with mild soap and running water if itching persist consult the physician immediately
In case of Inhalation	shift the person to a fresh area, if respiratory discomfort persist consult the physician immediately
In case of Ingestion	If ingested consult the physician immediately
Any specific Antidote	not any

Fire instruction	
Extinguisher Type	DCP type extinguisher/water type
Inappropriate measures	not any
Specific risks / instructions	not any

Spill instructions	
EMERGENCY NUMBER	Mr. Shailesh Parmar - 9099002003, Mr. Prashant Saxena - 9898506088
Clean-up procedures	clean the area with hard broom
Recovery procedures	collect the material in bags with shovel
Disposal procedures	co processing in cement kiln
Contact in urgent cases	as mentioned above

Transport		
Hazard code	Transport code	Waste code

Comments: The material is slight acidic in nature having no odour. While Handling wear safety goggles, respirator, safety shoes and helmet.

Adani Ports and Special Economic Zone Limited MUNDRA

21

ANNEXURE H

Inventory List – Format for maintaining records of Waste Material

FORM 3

[See rules 6(5), 13(7), 14(6), 15(5) and 20 (1)]

FORMAT FOR MAINTAINING RECORDS OF HAZARDOUS AND OTHER WASTES

1. Name and address of the facility :
2. Date of issuance of authorisation and its reference number :
3. Description of hazardous and other wastes handled (Generated or Received)

Date	Type of waste with category as per Schedules I, II and III of these rules	Total quantity (Metric Tonnes)	Method of Storage	Destined to or received from

* *Fill up above table separately for indigenous and imported waste.*

4. Date wise description of management of hazardous and other wastes including products sent and to whom in case of recyclers or pre-processor or utiliser:
5. Date of environmental monitoring (as per authorisation or guidelines of Central Pollution Control Board):

Signature of occupier

Date .....

Place.....

AMBUJA CEMENTS LTD. ... NAKA ... 370 ...

Adani Ports and Special Economic Zone Limited MUNDRA

ANNEXURE 1

CERTIFICATE OF CO-PROCESSING

geocycle

for a zero-waste future

Certificate of Co-Processing

Issued To: Adani Ports And Special Economic Zone Limited
Invoice No:.....
Date: 31/05/2020

This is to certify that we have taken receipt of the following quantities of **Contaminated Cotton Waste, Pig Waste & ETP Sludge, Sorted MSW** sent by **Adani Ports And Special Economic Zone Limited** for Pre and / Or Co-processing in our Cement Kiln during the period 01/05/2020 to 31/05/2020. The same would be safely and completely disposed off within 90 days of receipt and thereafter will not exist.

Waste Name: Contaminated Cotton Waste
Quantity (Tons): .....

Waste Name: Pig Waste
Quantity (Tons): .....

Waste Name: ETP Sludge
Quantity (Tons): .....

Waste Name: Sorted MSW
Quantity (Tons): .....

Authorized Signatory

Ambuja Nagar Cement works

Adani Ports and Special Economic Zone Limited MUNDRA

23

ANNEXURE J- Format of Form 4

FORM 4

[See rules 6(3), 12(8), 16(6) and 20 (2)]

FORM FOR FILING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period April to March]

1. Name and address of facility:

2. Authorisation No. and Date of issue:

3. Name of the authorised person and full address with telephone, fax number and e-mail:

4. Production during the year (product wise), wherever applicable

Part A. To be filled by hazardous waste generators

1. Total quantity of waste generated category wise

2. Quantity dispatched
   (i) to disposal facility
   (ii) to recycler or co-processors or pre-processor
   (iii) others

3. Quantity utilised in-house, if any -

4. Quantity in storage at the end of the year —

Part B. To be filled by Treatment, storage and disposal facility operators

1. Total quantity received -

2. Quantity in stock at the beginning of the year -

3. Quantity treated —

4. Quantity disposed in landfills as such and after treatment —

5. Quantity incinerated (if applicable) -

6. Quantity processed other than specified above -

7. Quantity in storage at the end of the year

Part C. To be filled by recyclers or co-processors or other users

1. Quantity of waste received during the year —
   (i) domestic sources
   (ii) imported (if applicable)

2. Quantity in stock at the beginning of the year -

3. Quantity recycled or co-processed or used —

4. Quantity of products dispatched (wherever applicable) —

5. Quantity of waste generated

6. Quantity of waste disposed

7. Quantity re-exported (wherever applicable)

8. Quantity in storage at the end of the year –

Signature of the Occupier or Operator of the disposal facility

Date.....

Place.....

ANNEXURE - K
Health and Safety Policy of ACL

Ambuja Cement

we care

HEALTH & SAFETY POLICY

Ambuja Cements Limited is an industry leader in the building materials industry.

We conduct our business in a manner that creates a healthy and safe environment for all stakeholders - our employees, contractors, communities and customers - built on a sound health and safety culture.

Health and Safety is our core value. We believe in visible leadership and personal accountability for Health and Safety at all levels and throughout our organization.

Nothing we do is worth getting hurt for.

Our Commitment
We will:

- Conduct our business with a goal of zero harm.
- Provide safe, healthy and secure work conditions for employees and contractors.
- Maintain a global Health and Safety Management System designed to continuously improve our performance and actively minimize risk in our business.
- Comply with applicable legal, regulatory, industry and corporate requirements.
- Communicate openly with all stakeholders on relevant health and safety issues.
- Empower all employees and contractors to stop any unsafe work.

Date of Issue: 21st February 2020

Neeraj Akhoury
Managing Director & CEO

AMBUJA CEMENTS LIMITED

Adani Ports and Special Economic Zone Limited
MUNDRA

Ambuja Cement

Health & Safety Rules

Rule 1

I assess and control risks before starting any task.

Rule 2

I only perform activities for which I am authorized.

Rule 3

I never override or misuse health and safety devices, and I always use the required PPE.

Rule 4

I do not work under the influence of alcohol or drugs.

Rule 5

I report all incidents.

Living by these rules is a condition of employment.

Ambuja Cement

स्वास्थ्य और सुरक्षा नियम

नियम 1

कोई भी कार्य शुरू करने से पहले मैं जोखिमों का आकलन और नियंत्रण करता/करती हूं।

नियम 2

मैं केवल इन गतिविधियों को करता/करती हूं जिनके लिए मैं अधिकृत हूं।

नियम 3

मैं कभी भी स्वास्थ्य और सुरक्षा संबंधी उपकरणों का उल्लंघन या दुरुपयोग नहीं करता/करती हूं तथा सदैव आवश्यक PPE किसी भी समय संबंधी उपकरणों का इस्तेमाल करता/करती हूं।

नियम 4

मैं नशे या मादक पदार्थों के असर में कार्य नहीं करता/करती हूं।

नियम 5

मैं सभी हादसों की रिपोर्ट करता/करती हूं।

इन नियमों का सक्रिय रूप से पालन करना रोजगार की एक शर्त है।

Ambuja Cement

AMBUJA CEMENTS LIMITED THE AMBUJA NAGAR 362 715

Adani Gujarat Special Economic Zone Limited MUNDRA

ANNEXURE – I.

Anti Bribery & Corruption Directives (ABCD) of Ambuja Cements Limited

1. **Prohibition of Corrupt Payments**

First Party affirms that it has not and agrees that it will not (in connection with Services under this Contract or in connection with any other business involving Second Party) make, offer, promise, agree to make or authorize any payment or transfer of anything of value, directly or indirectly to:

(i) any Government Official (defined hereunder);

(ii) any political party, party official or candidate;

(iii) any person while knowing or having reason to know that all or a portion of the value will be offered, given or promised, directly or indirectly, to anyone described in items (i) or (ii) above;

(iv) any owner, director, employee, representative/agent of any actual/potential customer of Second Party;

(v) any director, employee, representative or agent of Company or any of its affiliates; or

(vi) any other person or entity if such payment or transfer would violate the laws of the country in which it is made or the FCPA or the laws of any other relevant jurisdiction as applicable.

It is the intent of the parties that no payments or transfers of value shall be made which have the purpose or effect of public or commercial bribery, acceptance of or acquiescence in extortion, kickbacks or other unlawful or improper means of obtaining business or any improper advantage.

2. **Anti-Corruption Policy**

First Party acknowledges that it has been provided with a copy of Second Party's Anti-Bribery and Corruption Directive, confirms its understanding of the directives established by that document, and agrees to comply with that policy in connection with its work for Company.

3. **Audit Rights**

Second Party shall be allowed reasonable access to First Party's books, records and other documentation related to this Contract or First Party's transaction with Company and shall have the right to audit First Party on a periodic basis.

4. **Cooperation on Disputes**

First Party shall cooperate with Company in regard to any inquiry, dispute or controversy related to a suspected or alleged violation of the Foreign Corruption Practices Act (FCPA), if applicable, Anti Bribery & Corruption Directive (ABCD) and all the applicable related statutory compliances in which Second Party may become involved and of which First Party may have knowledge. Such cooperation shall include disclosure of relevant documents and financial information, and interviews of First Party's personnel. Such obligation shall continue after the expiration or termination of this Contract.

5. **Use of Third Parties (Sub-Contractor)**

First Party shall not use any other party, individual or entity to provide any part of the Services that the First Party is required to provide under this Contract, without the express prior written approval of Second Party.

First Party hereby affirms that it shall obtain an assurance from each of such Sub Contractors that he/it will comply with all the applicable statutory compliances, FCPA, if applicable, Second Party's Code of Conduct and the ABCD, and will take no action that might cause

27

Second Party to be in violation of such laws and policies. All contracts/agreements between First Party and Third Parties will be subject to review by Second Party. Any subcontracting third party is subject to due diligence under Second Party's due diligence procedures before being approved.

Notwithstanding whatever is contained herein Second Party shall not have privity with such Sub-Contractor(s) and shall not in any way be responsible to such Sub Contractor(s) or their activities.

6. Termination in case of violation

Notwithstanding any other provision of this Contract, this Contract shall terminate immediately and without notice, for cause, and shall become null and void, without effect or further liability or obligation on the part of Second Party, upon the occurrence of any of the following circumstances:

1. Violation of Law: This Contract, the relationship created hereby or the performance of any service by First Party hereunder is determined by Second Party or by a competent authority of the United States or India to be in violation of or contrary to the FCPA, if applicable, or any law, decree, rule, order, regulation or prohibition of India;

2. Corrupt Payments: First Party's representations, warranties, and covenants in connection with the ABCD are inaccurate or misleading, or have been breached, or Second Party learns of circumstances that give it reason to believe that such representations, warranties and covenants are or may be inaccurate, misleading, or breached. In any such case no further amounts shall be due to First Party pursuant to this Contract, First Party shall not be entitled to receive, and hereby waives rights to, any termination payment or compensation of any kind because of termination or nonrenewal of this Contract, and First Party agrees that any enhancements in the value of First Party's goodwill as a result of its relationship with Second Party will inure to the benefit of Second Party.

7. Annual Certification and Agreement to Report Violations

First Party agrees that it will, at the request of Second Party, and at least annually, certify in the below provided format (Format Of Annual Certification As Per The Anti-Bribery And Corruption Directive of Ambuja Cements Limited) a that it has not, and to its knowledge no other person, including but not limited to every owner, director, employee, representative and agent of First Party has made, offered to make, agreed to make, or authorized any payment, loan, donation or gift of money or anything else of value, directly or indirectly, to or for the benefit of any Government Official, political party, party official or candidate, in order to obtain or retain business, or secure any improper advantage. First Party further agrees that, if it should learn of information regarding any such actual or suspected payment or offer in connection with Second Party's business, First Party will immediately contact us at email:-sel@ethicalview.com or toll free helpline 1800 209 1005 or Online: www.integrity.lafargeholcim.comfax - 91 (22) 66459796 or post box no. 25, IIO Pune 411001 of such knowledge or suspicion.

8. Definition - Government Official

"Government Official" means any officer or employee of any government or any department, agency or instrumentality thereof, or of any government-owned or government-controlled corporation or any public international organization, or any person acting in an official capacity for or on behalf of any such government or department, agency, instrumentality, corporation or a public international organization.

AMBUJA CEMENTS LIMITED

Adani Ports and Special Economic Zone Limited MUNDRA

25

FORMAT OF ANNUAL CERTIFICATION AS PER THE ANTI-BRIBERY AND CORRUPTION DIRECTIVE OF AMBUJA CEMENTS LIMITED

The undersigned hereby acknowledges:

- Second Party has established and implemented the Anti-Bribery and Corruption Directive, together with internal controls reasonably designed to achieve compliance with the applicable laws;
- The undersigned has received, read, and understands Second Party's ABC Directive;
- The undersigned agrees, unconditionally, to comply with all the terms and conditions of Second Party's ABC Directive and with the laws and regulations of the country in which the undersigned operates; and
- The undersigned understands that violation of Second Party's ABC Directive may result in termination of the undersigned's business relationship with Second Party and potential criminal prosecution.

_____

Signature

_____

Printed Name

AMBUJA CEMENTS LIMITED ONE AMBUJA NAGAR

Adani Ports and Special Economic Zone Limited MUNDRA

CERTIFICATE OF REGISTRATION

DISTROMED KUTCHH SERVICES PVT. LTD.

Common Bio Medical Waste Treatment Facility

Office : 3-Swaminarayan Vanijya Sankul, Nr. Divya Bhaskar Office, Hospital Road, Bhuj (Kutchh) - 370 001.
Cell : 99251 26126 E-mail : distromedkth14@gmail.com
Facility : Survey No. 42/1/1, Village : Ratiya, Ta. & Dist.: Bhuj (Kutchh).

FACILITY PROVIDER FOR TREATMENT AND DISPOSAL OF BIO MEDICAL WASTE

Authorised by **Gujarat Pollution Control Board**

Is hereby Issued to :

Hosp./Dr. ADANI PORTS AND SPECIAL ECONOMIC ZONE LTD.
MUNDRA DIST : KUTCH

Registration No. : KTH-356

Validity up to : 01/04/2020 TO 31/03/2021

Bio Medical Waste collection, transportation, treatment and disposal as per Notification No. : So-630 Dated : 20/07/1998 by Ministry of Forest & Environment - Govt. of India

For, **DISTROMED KUTCHH SERVICES PVT. LTD.**

This is conditional certificate : On non payment of disposal charge, this certificate will be invalid

CERTIFICATE OF REGISTRATION

DISTROMED KUTCHH SERVICES PVT. LTD.

Common Bio Medical Waste Treatment Facility

Office : 3-Swaminarayan Vanijya Sankul, Nr. Divya Bhaskar Office, Hospital Road, Bhuj (Kutchh) - 370 001.
Cell : 99251 26126 E-mail : distromedkth14@gmail.com
Facility : Survey No. 42/1/1, Village : Ratiya, Ta. & Dist.: Bhuj (Kutchh).

FACILITY PROVIDER FOR TREATMENT AND DISPOSAL OF BIO MEDICAL WASTE

Authorised by **Gujarat Pollution Control Board**

Is hereby Issued to :

Hosp./Dr. ADANI PORTS AND SPECIAL ECONOMIC ZONE LTD. WEST BASIN

MUNDRA DIST : KUTCH

Registration No. : KTH-390

Validity up to : 01/04/2020 TO 31/03/2021

Bio Medical Waste collection, transportation, treatment and disposal as per Notification No. : So-630 Dated : 20/07/1998 by Ministry of Forest & Environment - Govt. of India

For, **DISTROMED KUTCHH SERVICES PVT. LTD.**

This is conditional certificate : On non payment of disposal charge, this certificate will be invalid

Annexure – 4

Annual Report
2020-21

CSR KUTCH

2020-21

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

Our journey

The year 2020-21 has passed off with great experience and new challenges for Adani Foundation due to Covid 19 Pandemic. Adani Foundation team has started working just after one week of lockdown to keep commitment towards the community. As a part of dignity of workforce team has done remarkable work for fresh food and ration kit supply to retain them at workplace with safe and comfortable environment. Regular visit to senior citizen home and running MHCU by medical officers was not less challenging. Our women SHG has prepared more than 1 lac mask for Taluka Health office, Anganwadi Staff, Police Staff, Custom and coastguard and Education staff. Adani Hospital – Non Covid Hospital and GKGH Bhuj Hospital – Covid Care Hospital remained opened 24x7 throughout the year which is matter of great proud.

Current year Sea weed culture and Natural Farming Promotion were the new concepts which will be planned with five years vision. Mangroves costal biodiversity, water harvesting structures and Tissue culture will have sharp turn with proper documentation and demarcation. Adani Vidya Mandir has proven best in education by reaching to unreached through digital technology, happy to see the fisherman students studying sincerely sitting in fisherfolk settlements by operating tablets. New Era touched upon Framers too who are a part of discussion about natural farming on Zoom application. "Vadil Swasthaya Yojna" and "Suposhan" were in last execution year as a Project but both project will be with us by sourcing and moral support by linkages with different Government Scheme.

Happy to share – under guidance of seniors proper frame work was developed for supporting community as a bridge between various Government schemes and needy people by "Community Resource Centre" its true need and real sustainable way. Fisherman and women employment sourcing created very positive impact as a regular source of income for them.

Adani skill Development center entered into MOU with KSKV Kutchh University for various skill development trainings. The ASDC is committed to the cause of the deprived and underprivileged to generate employment through enhancing skills. It has been working relentlessly which resulted in rapport building with District Administration Kachchh also.

Success is due to present of torch barer and mentor in life who is Respected Dr. Priti Adani. If you have mentor like her in life, she can turn a Mess into message. A Test into a Testimony, A Victim into Victory! We heartly thanks our Rakshit bhai, Respected Gadhvi sir and Respected PNR sir for guidance and motivation.

We wish all the very best to whole Adani Foundation Parivar !

INDEX

Education (SDG - 4/4.a)

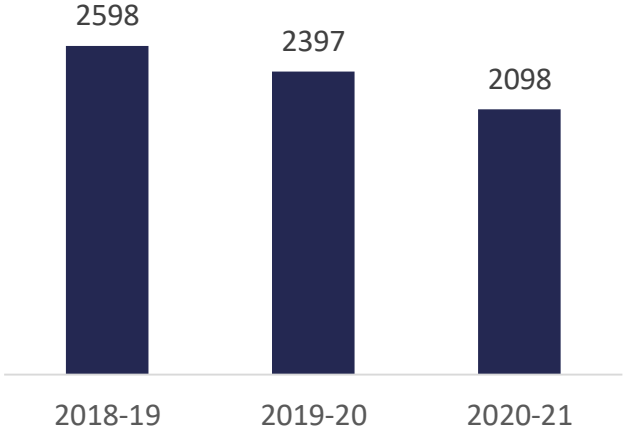
The future of India depends upon the quality of education imparted to our children. We believe that it is the joint responsibility of the Government and citizens to improver school education. With an aim to enhance the quality of primary education in Kutch District, Adani Foundation proposed to adopt 17 government schools located at Mundra Taluka under the project '*Utthan*' as a pilot project. By this intervention, Adani Foundation seeks to facilitate; Focus on 'Priya' students and celebrate their progress, Make learning joyful, provides adequate resources and facilities, strengthen the curricula to provide basic skills, especially in the areas of literacy, numeracy and skills for life and focus on Teachers' capacity building. **(SDG - 4/4.a)**

Utthan

How Utthan Sahayaks overcame/overcoming the Pandemic

In COVID 19 Pandemic, when the schools were completely closed, education went on mobile platform and students are still dependent on mobile internet for their education.

- ✓ During the initial phase of lockdown Utthan Sahayaks reached Priya Vidyarthis through series of curated SMS and WhatsApp messages, they share text/video/audio content focused on hands-on learning activities.
- ✓ Initial approach realized us that we need to find another way to touch our audience Utthan Sahayaks convert this challenge into opportunity. They make themselves tech savvy by learning how to conduct classes on various platform especially on Google classroom.



Our out reach for Utthan project

- ✓ In pandemic times ,Priya Vidyarthis' meet were scheduled on Google meet platform. Primarily Utthan Sahayaks faced the challenges that students are unable to meet them virtually due to the single smart phone availability in the family.
- ✓ Here with us a only solution to make them study available at their door step by following all the guidelines suggested by government to maintain social distances.
- ✓ From October onwards Utthan sahayks approached their students by taking physical classes at their respective residence.

Year	No. of school	No. of village	No. of Girls	No. of Boys	Total
2018-19	17	7	1318	1280	2598
2019-20	17	7	1227	1170	2397
2020-21	17	7	1069	1029	2098

Utthan – during pandemic

Pandemic situation has challenged the functioning of various activities of the project but team Utthan and Adani Foundation adapted to the transitions required to continue with its outreach. With the travel restrictions, team Utthan has adopted all the protocols assigned by the Adani Foundation and the health authorities and has continued both its offline activities while adopting online methods to carryout its activities especially to reach out our students.

Capacity Building Program

- Usage of Google meet and Google classroom
- Art of living
- Individual learning
- Digital Bookmarks
- Vedic maths
- Gandhian Education Philosophy

Competition

- Essay writing
- Ganpati idol making
- Doha recitation
- Garba decoration
- Christmas celebration
- Makarsankranti celebration

Utthan
Additional achievements

Solar panel has been installed in 17 schools of Utthan – so now the schools will be using renewable energy. Support of teachers and Principal during installation was substantial. This is changing and challenging step for Utthan Project to convert whole school running on renewable energy. In coordination with Mundra Solar Panel manufacturing unit – systems installed with inverters.

Utthan is not only deals with Education – but the main strength of the Project is Sahayak. Sahayaks remain in touch with parents and make them understand the value of education. Apart from it, Utthan Sahayaks motivated more than 700 parents of girl students to open "Sukanya Samriddhi Bank Account" for their bright future

Staff Training - Adani Schools

Date: Saturday, February 20, 2021
10:00 hrs to 12:30 hrs
Platform: ZOOM

Topic: **A Blissful Journey: From Entropy to Stillness**

Resource Person: **Mr Saurabh Beniwal**

15+ years of Corporate and Educational Training Experience during association with various organizations like [illegible]. He has been associated with [illegible] as National Head - Teacher Empowerment Initiatives, conducted more than 700 highly energetic Workshops, Seminars and counselling sessions for Teachers, Students, Principals and Parents on various topics listed in profile below. Served more than 1,00,000 teachers, students and Parents across nation.

Timings	Discussion Point	Material/Activity
10:00 to 10:30 hrs	Presence of Mind, Comfort Zone	PPT presentation, Discussion
10:30 to 11 hrs	Types of learners and how to deal with them, 3 C's of Life	PPT, Discussion and Activity
11 to 11:30 hrs	Human Exponential Model, Effective Communication with blocks to listening, Power of positive thinking	PPT, Story, Discussion
11:30 to 12 Noon	Goal Setting for teachers, communication Gap, Outer world Vs Inner World	PPT, Video, Story, Discussion
12:00 Noon to 12:30 hrs	Material Vs Spiritual Knowledge, Meditation	PPT, Guided musical meditation for 15 minutes

Utthan - Impact

IMPACT OF THE PROGRAM

- **Beneficiary of Online classes**
  - 17 Utthan Sahayaks
  - 17 Gov. Primary Schools
  - 2098 total students
- **Weekly Content of IT and Physical Education**
  - 106 Gov. Pri. School
  - 35000+ students
- **Virtual Mothers meet**
  - 500+ Mothers attended meeting on Google meet
- **Capacity Building Program**
  - 70+ Webinar attended by Utthan Sahayak
  - 10 Seminar/ Workshop
- **Competition /Celebration**
  - 248 Students took part virtually

Confessions

'Solar Panel installation in Uthhan Schools is biggest step towards best usage of renewable energy. Now our students can study comfortably during absence of electricity and not only this – student can understand value of solar energy too"

Principal,

Mundra, Kutch, Gujarat

'Utthan Sahayaks with the help of customized curriculum and structured time table meet huge success to achieve the main objective of the program

In corona pandemic Uthhan Sahayak acted as a main force for students to remain active during lockdown through home visits, various competitions and E-events.

In future, Utthan will be sound support system for Government Schools of Mundra

I wish all the best to Team Uthhan

Haresh Patel
Taluka Primary Education Officer
Kachchh- Bhuj

Confessions

'During this pandemic period Utthan Sahayaks are doing very commendable job. We will receive an encouraging feedback from Parents too. Project Utthan has made a positive impact on our students as well as in school too.

Mahendrasingh Solanki
Principal,
Zarpara Shaala no. 3
Mundra, Kutch, Gujarat

'Education is what builds a nation generation after generation and the process begins early on; fist at homes/communities and then in the schools. With an aim to enhance the quality education in government primary school in Kutch district project Utthan launched by Adani Foundation with the close monitoring by GoG as a pilot project with 17 schools at Mundra.

After the completion of 2 years, project marks a very positive impression not only in school but also in community. Utthan Sahayaks played a vital role to transfer Priya *Vidyarthi* into main stream. School culture and environment has become more advanced and techno based with the up skilling of government teachers through various capacity building program. Attendance of schools has increased due to active Mothers meet and SMC meetings.

I am sure in near future with the active involvement of this project performance level of government primary school shall further improve.

My good wishes and support are always with the team!'

Prabhav Joshi (IAS)
District Development Officer
Kachchh- Bhuj

Adani Vidya Mandir, Bhadreshwar (SDG - 4/4.1)

EDUCATION: FREE AND COMPULSORY – WHAT A WAY TO LEARN LOGIC!" The quote mentioned unfolds the distinguished 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.

Adani Vidya Mandir, Bhadreshwar

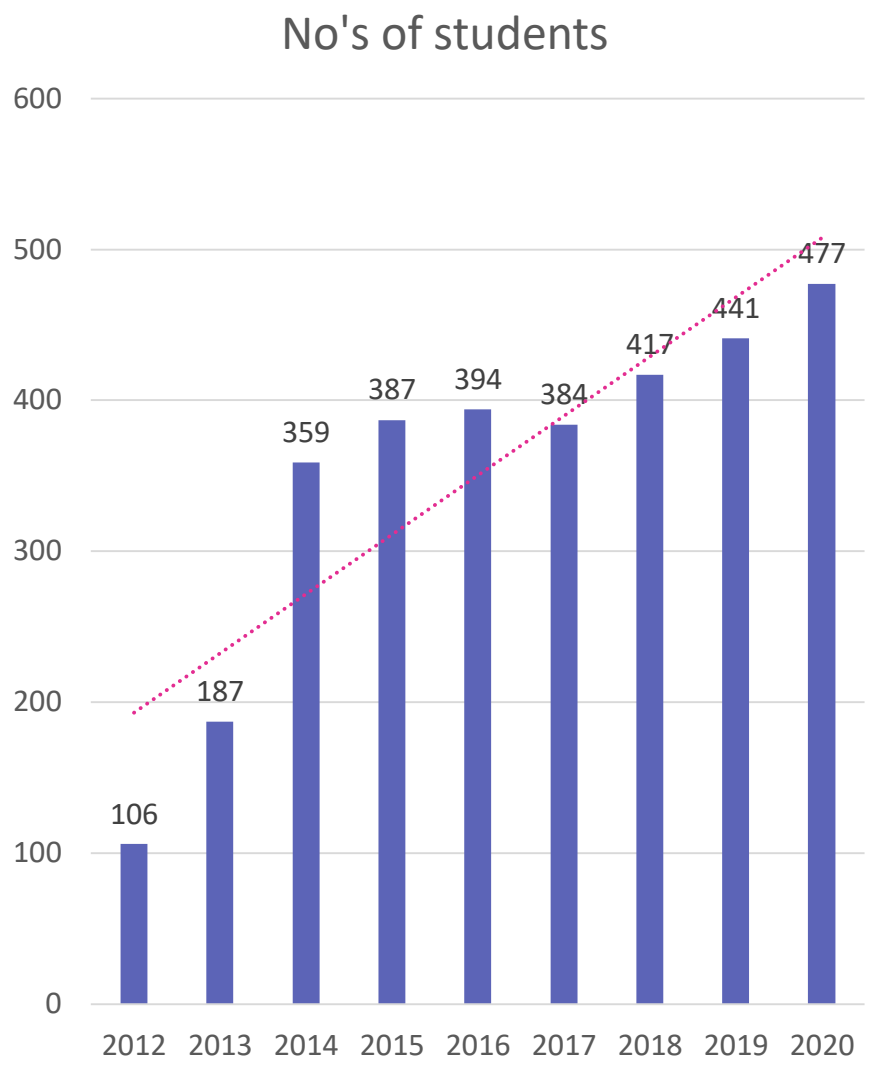
Adani Vidya Mandir Bhadreshwar Gujrat Board Standard 10th Examination Result is 82.60% (19 students have passed the examination out of 23). Adani Foundation will take all responsibility of further study of students with respect to their interest.

The global upsurge of the Covid-19 pandemic and the resultant lockdown has brought all of us to face such unprecedented times and situations. The challenge was rural locality, network unavailability, lack of health awareness, apprehensions for technology and gadgets and financial crunch to spend on mobile / Internet.

But We did not Give-up and reached out to our students to pursuit educational through virtual platform by various initiative.

AVMB STD - 10 SECOND BATCH RESULT
Year 2020-2021

SR NO	GRADE	STUDENTS
1	Above 80 %	00
2	Above 70 %	02
3	Above 60 %	05
4	Above 50 %	07
5	Above 40 %	05
6	Fail	04
	TOTAL	23



Activities Covered

- Admission process of Std 1 students through draw system.
- Online Class through What Sapp and YouTube video
- DD Girnar Timetable intimation and & Follow-Up
- Regular home visit for homework and lessons with PPE's by Teachers
- Textbook support to students of all classes.
- 10th standard students divided into small Group and Mentoring by AVMB Teachers.
- Unit test conducted as per GSEB circular for the students
- Offline Examination for class 3rd to 10th
- G Suite & Diksha Training for Teachers
- Opened G-Mail Account of Each Child
- **Tablet support to 10th class students for Online Classes by Employees Volunteering Programme**
- Self Learning Material Distribution to 1st to 9th standard students who don't have access for online education.
- Parents Meeting : Regular basis
- Start Remedial Classes at 3 villages with Following all Gov Covid Guide
- reopens Schools class 9th to 10th Standard
- Day Celebration (Fit India, Children day and Mathematic day & Republic day) Virtually and Physically to get rid off from the Covid Stigma

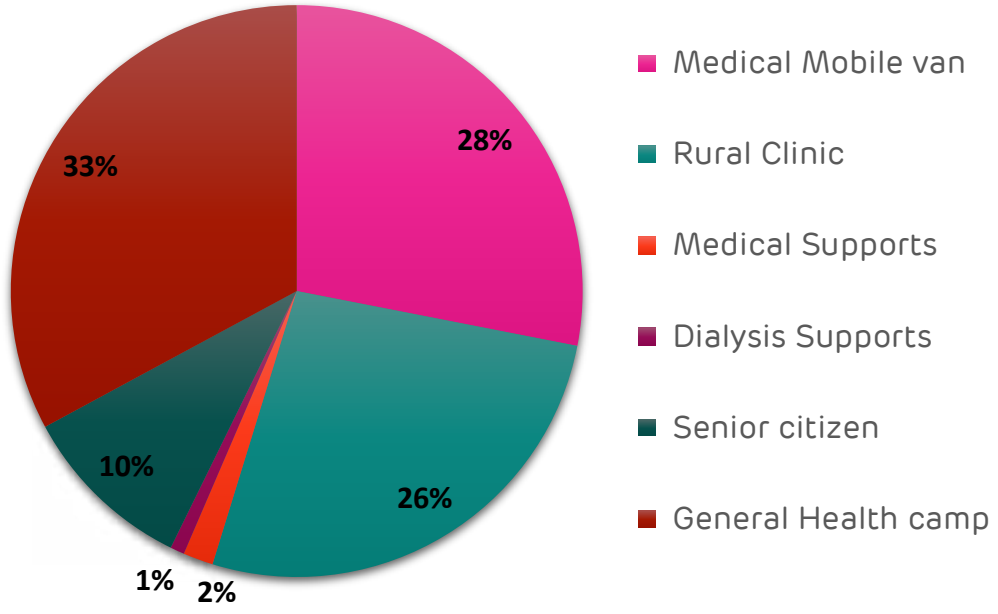
Community Health (SDG - 3/3.8)

Access to quality healthcare is a fundamental right of every individual

Health plays a crucial role in transforming people's lives. Throughout the year, COVID-19 has taught us the lesson about the importance of health. Access to quality health care gives a fair chance to lead healthy, productive lives. Healthy people can utilize opportunities available to them.

Community Health

CH All Project Patient Details			
Project	Direct Beneficiary	In-Direct Beneficiary	Remarks
Medical Mobile van	16611	66476	33 Villages
Rural Clinic	15797	63192	11 Villages
Medical Supports	1008	5040	63 Villages
Dialysis Supports	474	2370	63 Villages
Senior citizen	5836	17508	63 Villages
Health camp	19461	58383	11 Villages
Total	59187	212979	



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

Adani Foundation relentlessly working for same in each health core area through various kind of health activities i.e. Mobile Health Care Unit, Rural Clinics, Special Innovative Projects i.e. Health Card to Senior Citizens, "Project Abhimanyu" and support to dialysis patients projects. Adani Foundation had also organized special medical camps during Corona pandemic

Rural Clinic & Mobile Health Care unit

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

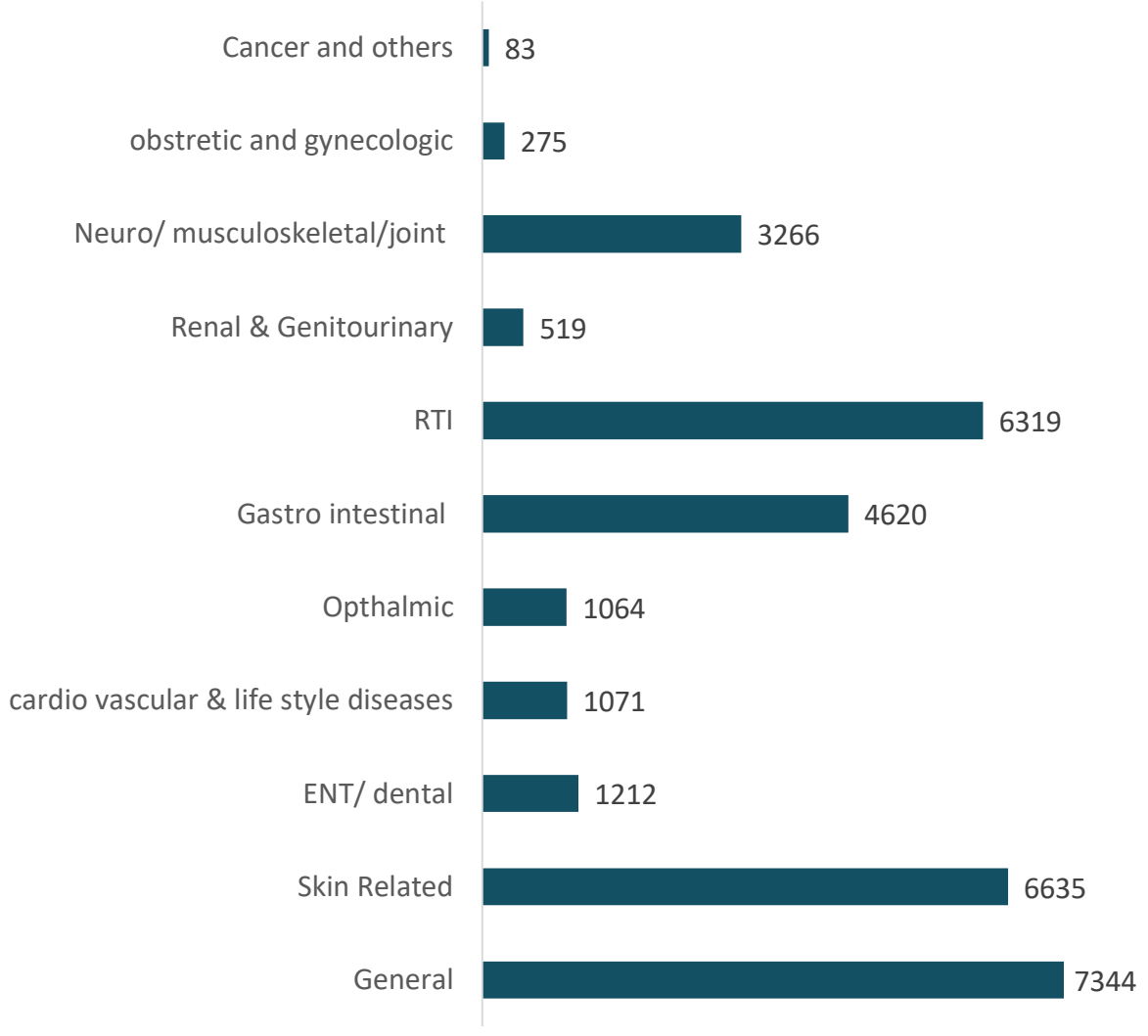
Mobile Health Care Units and Rural Clinic Services are deployed with the objective of providing basic healthcare facilities to remote rural areas as well as poor peoples. The service is being executed by adani foundation is to reduce travel time, hardships and expenses.

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

Rural Dispensaries are established where there is a gap in the healthcare services. The Adani Foundation operates Rural Dispensaries in 7 villages of Mundra block, 03 villages of Anjar block and 1 clinics in Mandvi Block. Mobile dispensary and rural clinics provide health services with token charge of 10/- rupees per patient daily by a doctor and a volunteer.

During this year total 16611 beneficiaries 6141 male and 10470 female were benefitted by Mobile van and total 15797 beneficiaries 7128 male and 8669 female were benefitted benefits by Rural clinics.

Community Health – Disease wise Distribution



Health Cards to Senior Citizens

Senior citizens often face difficulties in getting treatment for want of financial, social and moral support. In this stage of life is there is need special care for health and warmth hence Adani foundation has started senior citizen project in Mundra Block since 10 years. The main objective is to provide specialized, timely and hassle-free healthcare services according to the needs of senior citizens. The initiative also encourages them to pay attention to their health and promotes preventive healthcare.

During the year 2020-21, total 5836 transactions were done by 8711 card holders of 68 villages of Mundra Taluka. They received cash less medical services under this project.
The limit for the beneficiary has been set Rs.8000/- in exit year. the senior citizens get emergency medical care at Adani Hospital, Mundra and refer to GKGH, Hospital ,Bhuj in Emergency.

Specialty Camps

General health camps, Pediatric Camp, breast and cervical cancer screening camp and surgical health camps was organized at frequently to meet the specific requirements of the community and in disease outbreak season with following the guideline of COVID-19.
In the year of 2020 -21 total 97 people had been benefitted by various kind of camp and needy and screened patients are treated in Adani Hospital.

Sr. Citizen status Year-2011 to 2020-21											
Number of Villages	Total Cards	Total Survey	Pending Renew Cards	EXP	Green cards	Blue Cards	BPL Cards	APL Cards	No Ration Cards	RSBY Cards	MA Cards
68	8711	7095	901	715	6328	767	2493	4555	47	77	222

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 1008 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, 6 patients were supported for regular dialysis (twice a week) with partial support.

Ukado & Vitamin-C Tablets Distribution

Covid-19 pandemic is at the peak level And there is no any specific treatment But as preventive measure and immunity booster we had started Ayurveda UKADO distribution at various public spot in Mundra.

The TDO, THO, Flywing foundation, Ayurveda Department had support and coordinate in UKADO and Vitamin-C tablets distribution activities. Total **18240 people had get benefits of UKADO and Vitamin-C tablets.**

Machhimar Shudhh Jal Yojana (SDG 6/6.4)

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 8 years.

Sr.	Vasahat	Family	Requirement Per day	Remarks
1	Luni	116	15000	9 Months
2	Bavdi Bandar	107	15000	9 Months
3	Kutdi Bandar	118	15000	9 Months
4	Randh Bandar	245	25000	9 Months
5	Zarapra Vasahat	90	5000	12 Months
6	Vira bandar	80	--	Linkages with GWIL
7	Juna bandar	160	--	Linkage with Mundra GP
8	Ghavarvaro Banada	60	--	Linkages with GWIL
9	Zarapra chacha	55	--	Linkages with Port GWIL
	TOTAL	1031		

Community Health Bhuj (SDG 3/3.8)

- Adani Foundation Team has initiated coordination with GKGH hospital since 2014 and established a reception area for the smooth patient coordination and preparation for the social networking program.
- GKGH Hospital is Covid Care Hospital since 22nd March 2020. Adani Foundation staff members supported in patient counselling, coordinating and supporting for dead body covid care van.
- Total 3368 Covid patients got treatment from overall Ketch with satisfaction.
- Dead body medical van – Dignity to death is one of the noble initiatives taken up by the Adani Foundation. If any death occurs in GKGH, dead bodies are shifted to the native village of the concerned in the Kutch District free of cost. Total 809 dead bodies privileged till now to different locations in Kutch including Covid Patients.
- Mahiti Setu is linkages between various Government Schemes and beneficiaries. Through Mahiti Setu sourcing of 2378 beneficiaries and linkages with more than 780 cards of MAA Yojna and Ayushman Yojna

Community Health - Impact

IMPACT OF THE PROGRAM

Benefits of MHCU and Rural Clinics
- 44 Villages
- 23000 Population Coverage
- Saving of Rs. 150 per day
- Total Revenue saved – Rs. 44.26 Lacs

Senior Citizen Health Card
- All Senior Citizens of Mundra – 8711 cards
- Unique Project with focus on preventive care
- Revenue generated @ Rs. 63 Lacs

Corona pandemic Times
- More than 12 camps of Ukala Distribution
- Outreach @ 2,50,000 for awareness and immunity boosting methods

Potable Water to Fisehrfolk
- Covering 676 Families with 75000 liters per day water for drinking purpose at Vasahat
- 3 Vasahat became self sustain with coordination of Gram Panchayat

AHMPL
- Total 20959 patients benefited in year 2020-21 from 55 different villages .
- Goodwill created as a only hospital remained 24x7 opened during whole year of pandemic

Environmental Sustainability

Sustainable development has many important facets/components like social, economic, environmental, etc. these components are closely interrelated and mutually re-enforcing. Under Corporate Environmental responsibility 10 km radius villages from SEZ Boundaries.

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. Including this a big recharge operation by bunding was taken up for Zarpara village as rainfall was very good current year

To make connections between human actions and the level of biological diversity found within a habitat and/or ecosystem, this year we launch project “Sanrakshan” in coordination with GUIDE and Sahjeevan.

Water Conservation Projects (SDG 6/6.6)

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 Government Figures. Our water conservation work is as Below.

- A large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department)
- Ground recharge activities (pond deepening work for more than 52 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
- Roof Top Rain Water Harvesting 54 Nos. which is having 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family.
- Recharge Bore well 75 Nos which is best ever option to
- Drip Irrigation 823 Farmers benefitted in coordination with Gujrat Green Revolution Company
- 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.

Jiv Srishti Saurakshan Yojana (SDG 15/15.9)

Bio Diversity Park – Mundra

Ecological greenbelt development plan expects to attracts and provide habitats for many species of major faunal groups such as amphibians, reptiles, birds (terrestrial and aquatic), butterflies and mammals. Further this developed area can act as recreational, educational and interpretation center for the community of the corporate sector to understand and enhance their knowledge base on local environmental and ecological scenario.

Adani Foundation, Mundra-Kutchh proposed a biodiversity park at 5 acres Nandi Sarovar area and approached to Sahjeevan, Bhuj for technical support for same. Sahjeevan team visited this proposed site for development of greenbelt to support biodiversity and enhancement of overall ecological food web existing in and around the landscape in first phase.

In addition, senior team of Adani Foundation and Sahjeevan also discussed in details for this program and suggested to initiate an interpretation center for awareness to various stakeholders on very unique biodiversity of Kutchh region in second phase.

Zone wise different habitats identified by technical team, i.e. Outside Plot Area, Along Waterlogged Area, Climber/Twiner Area, New Plantation Area, Entry Gap Filing Area, Gate Area, and Wetland Area within the proposed project area, technical team will develop a list of species that are representative of mature, undisturbed local forests, grasslands and wetlands. The chosen species will be typical of the species composition of local habitats.

Develop a list of plant species that can be chosen on the basis of aesthetic characteristics, in particular for the beauty/abundance of their flowers, eventually of their fruits/foliage.

Define information on different types activities involved under this ecological greenbelt development project (i.e. butterflies areas, medicinal plants areas, birds areas etc.).

Develop a manual that will give guidelines for habitats based on local practices, for short term and long-term management.

Jiv Srishti Saurakshan Yojana (SDG 15/15.9)

Coastal Bio Diversity Park – Luni

In the coastal environment mangroves and mudflats are dynamic ecosystems that usually support a large population of floral and faunal life forms. Mangrove forests are highly productive ecosystems, which provide numerous goods and services both to the marine environment and people. Mangroves in India are spread over nine maritime states and three Union Territories. Gujarat has the longest (1,650 km) coastline among the maritime states of the country. With the second largest mangrove cover in India after West Bengal, Gujarat's mangrove area has increased from 1,140 km^2 in 2017 to 1,177 km^2 now.

A major portion of human population of Gujarat is solely dependent on these coastal ecosystems for their livelihood. Thus, several mangrove restoration programmes/ activities are in progress in the state. Mangrove restoration activities in Gujarat are mostly single species stands of *Avicennia marina*. Adani Foundation at Mundra-Kachchh has initiated multi-species plantation of mangroves in Kachchh in association with GUIDE. 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. Due to geological set up of Kachchh where fresh water source is atypical, the survival and growth of mangrove plantation remains poor. Thus, a survival rate of 30% is expected for this multi-species plantation. Mangrove biodiversity park of its kind will help in disseminating knowledge on mangrove ecosystem and simultaneously conserving the species.

Since, some of the mangrove species are not readily available in Kachchh, their seeds/ propagules were procured from other districts of Gujarat and other states. The proposed species of mangroves that have the potential for enhancing mangrove biodiversity in and around APSEZL include *Rhizophora mucronata*, *Ceriops tagal, Ceriops decandra, Rhizophora apiculata and Aegiceros corniculatum*.

Vision

Enhance the diversity of mangrove and its associated species in suitable coastal region of Kachchh, which in turn increase 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.

Mission

- Reconnaissance and identification of potential sites for technical suitability for enhancing mangrove biodiversity in Kutchh.
- Examine tidal pattern, availability and duration of fresh water, water regime/inundation, and substratum and water quality, species association at the site (based on secondary literature).
- Development of different plots based on combinations of species and site characteristics.
- Nursery development, transplantation of nursery grown seeds / propagules, monitoring its survival, etc.
- Examine the physico-chemical characteristics of water and sediment in the selected plantation sites.
- To detailed out the diversity, species richness of marine faunal component in the selected plantation sites
- To assess natural (algal encrustation, shift in substrate nature) as well as anthropogenic threats (cattle grazing, lopping) to the plantation site and provide suggestive measures.
- Long term monitoring plan and protection of the developed mangrove patches and coastal biodiversity in the plantation sites.

Sea Weed Culture

Primary Information About Sea Weed

Recently, seaweeds have gained substantial traction globally owing to the appreciation of the benefits that they provide in societal, economic and environmental realms. Ever since the economic and ecological benefits of seaweeds recognised, there has been a constant and sustained global effort to further increase their production and utilisation by following innovative practices along the various value chains. Seaweeds are farmed commercially in several Asian countries where their utilisation for food and phycocolloids (agar, carrageenan and alginate) is intense, and their farming has indeed evolved into a social enterprise particularly in some Asian and tropical countries in the world. Seaweed farming has indeed emerged as an economic growth engine in several developing economies in Asia.

Utilization in India

In India so far, seaweed resources have been utilized exclusively for the production of typical phycocolloids such as agar and alginates by local processing units (about 30 MSMEs) from the wild harvest, particularly from the coast of Tamil Nadu. Despite developing pioneering technologies in both farming and processing for different economically important seaweeds, seaweed cultivation has not gained momentum and widespread in the country as expected but rather continued to confine to limited geographical regions in the state of Tamil Nadu alone. This could be partly due to different inherent challenges associated with open sea cultivation. The seaweed farming in the open sea is interrupted by monsoon and hampers the year-round production efforts and sustainability. With this backdrop, and further to give traction to the seaweed industry in the country, a unique consortium of industry partners have come together on a common platform with a unified interest to build a technologically competitive and viable platform for the production and processing of the seaweed feedstock for harnessing the associated economic and ecological (climate reversal and prevention of coastal water eutrophication) benefits to the fullest extent possible while providing livelihoods to the coastal communities, in the spirit of creating and sustaining “Blue Economy” as also “Inclusive Economy/Circular Economy”

Adani Foundation Kutch

Sea Weed Culture

Vision

The consortium aims to take a holistic view of transforming seaweed resources as natural capital and use open source knowledge to build an innovative technology platform for harnessing the economic potentials along with the associated ecological benefits thereof. Also, foster a cordial relationship with visionary sponsors and collaborators from India and abroad for sustainable production and utilisation of seaweed resources for the production of innovative products while engaging the coastal communities as direct beneficiaries (human capital) of this unique effort.

Collabration

Agrocel, Piddilite, Adani Foundation has jointly initited the Pilot Project with a objective transform sew weed into Natual Capital as well as engaging community as a human capital.

Achievements

A pilot cultivation facility (5 KL tanks in 6 nos) for the farming of different economically important seaweeds in the tanks on the onshore has been established and commenced the cultivation trials with red seaweeds *Kappaphycus alvarezii*, *Gracilaria dura* and green seaweed *Ulva*. The initial trials have given very promising results and harvested 6-7 times the seeded material in a 40-45 days cultivation period.

The successful completion of pilot cultivation trials of Kappaphycus has helped to move forward to set up raceway type tanks of 26 m Length × 6 m Width × 1.1 m Height in 2 nos for large scale cultivation of *Kappaphycus* in Balavadi campus at Juna Bandar, Mundra. The cultivation trials are in progress.

Growth of Kappaphycus in various durations

Sea Weed Culture

Further plan for Adani Foundation Mundra

The initial seaweed cultivation findings have provided enough evidence for upscaling the facility over a one-hectare area in 2021-22 engaging the local fishers who can earn reasonable monthly income by formation of Group of Fisherman.

Fisherman Group is initially consist of 15 members. Adani Foundation will provide off shore and on shore cultivation of sea weed, its further process i.e. cleaning and drying and expolore market opportunities.

In recent times, two outreach programmes were also conducted for fishers living in the Juna Bandar area to ascertain their interest in adopting seaweed cultivation as an alternate profession to fishing which is fastly dwindling. There is a scope for providing an additional income stream through seaweed farming to fishers if we set up model demonstration farms. These farms can be utilised for showcasing the cultivation technology, training purpose and seed supply for those fishers who likely to become seaweed entrepreneurs.

Raceway tank with Kappaphycus seaweed

Drip Irrigation Project (SDG 2/2.4)

- **Basis of Requirements of Drip Irrigation**

The main source of livelihood being agriculture, the cultivators tend to use more and more underground water for irrigation. Underground waters have gone very highly saline. The use of such water for irrigation has made the soil also saline and the crop yields have dwindled.

- **Process of Drip Support**

Farmer have to applied in the prescribed form of Adani foundation with photograph.
Inspection and verification will be by AF representative.
Ration card, work order of G.G.R.C, 7/12 certificate and all bills must be attached.
Farmer will be informed by telephonic to have form query.
Primary information about farmer land will be received by telephone.
Farm visit within 10 days of after received of application and verified the installation of system as per map and material as per bill will be checked and get farmer feed back.
Verification report submitted to account office.
Payment within 20 days if all document is complete through net banking.
Farmer economic study after our support. – Follow up

- **We have covered 295 farmers and 1422 acre drip irrigation area in last two years which is remarkable for water conservation in first phase – in this phase we have covered 66 farmers and 360 Acre land for the same.**
- **Total 968 Farmers and 5626 Acre Drip since 2011-12 to 2020-21.**

Sustainable Livelihood Development

In the villages at Mundra Taluka, several communities are economically side-lined and weaker that depend on a sole income source or are unemployed. Sustainable livelihood projects have been launched to cater financial independence through building local partnerships, providing diverse livelihood avenues, inculcate the attitude to establish savings, equipping to earn and updating local skills by making use of existing resources to encourage self-reliant lifestyles. Participation Is encouraged by launching specific projects for fishermen communities, farmers and cattle owners, youth and women.

Work till date for Fisherman Development

444 Book Support

733 Vehicle transportation from Bandar to AVMB

86 Cycle Support

481 Scholarship Support

28015 Potable water provision

370 Youth Employment

2561 Fishing Net & Equipment Support

195 Linkages with Fisheries Scheme

3504 Ramaotsav Community Engagement

17 Fisherman Sea Weed Culture.

46878 Man days Mangroves Plantation

Fisher Folk Education (SDG 4/4.2)

Fisher folk are having less illiteracy level so they are not motivating their ward education, Children are engaged in fishing practices since child hood ,which pushed them in terribly poor scenario in every aspect of life. Hence Adani foundation have started education program in dynamic manner to cover each segment of life from the Balwadi to Higher education study through various Intervention.

Scholarship Support Scholarship Support is a programme to motivate fishermen students for High school and secondary education . Girl child is supported with 100% scholarship to girls & 80 % support to Male Students.
Total 59 students were facilitated with scholarship current year

Fishermen Balwadi Education system were ceased in the covid-era. But with telephonic talk and home visit were continue since May 2020 with child & parents to keep them update for education, lesion revision and Covid awareness.

Vehicle transportation- Avail easy and safe transportation service for the Fisherfolk child of Various Vasahat to made them Regular and Synchronized with School atmosphere. Total 37 students from 6 to 10 standard are Benefitted.

Fisher Folk Education (SDG 4/4.2)

Book Support-

55 Higher secondary (9 to 12 standards) students were benefited with Books material from Juna Bandar, Zarpara, Luni, Navinal , Bhadreshwar Villages.

Cycle Support

Cycle support to Juna Bandar 9TH standard fisherfolk students to continue their study and Up down who are studying in Mundra Government School . This year 5 students were supported for the same

Ramaotsav

Ramaotsav Program was held at all fishermen vasahat for child motivation and aware parents for their ward education. This year total 442 students(1 to 10th standard) had participated in various outdoor game. Winner were felicitated with prize and others are appreciated with School bags.

Machhimar Ajivika Uparjan Yojana (SDG 14/14.B)

Fishermen are too vulnerable and marginalised community. Moreover due to uncertainty of fish catch and Four month Fishing band season they have to face vicious debt cycle. Adani Foundation with Gujrat Fisheries Board are providing Fishing equipment support as per Government Schemes.
Also AF has started various intervention for their alternate Livelihood and Employment.

Net & Equipment Support

Seven Fishermen are supported for Net and Equipment
10 Fishermen Linkage with Fisheries Department Scheme and Fishermen credit card for bankable loan

Mangrove Plantation

It is a win-win situation which provide 4830 Men days employment over 236 fishermen as well as created Environment sustainability as well.

Soft skilled & Technical training

Survey had been carried out in APSEZ Companies to Know human resource requirement And According that Fisher Youth youth were trained and interviewed for the Placement.
Total 70 Fishermen youth are selected and working in Various company current year.

Natural Farming Promotion

Soil is the key point for successful Agri-farming, it is the Millions of microorganism habitat which keeps an alive media for agricultural purposes, with improving water holding capacity, infiltration rainfall water rate, with improves plants ability to take soil nutrients which reflect on farmers Yield and returns. But the Imprudent & over use of chemical fertilizers & Pesticides deteriorate soil & Plant condition which made the ill effect on consumer health and farmer Livelihood .The permanent and cheapest solution to overcome the dangerous effects of modem agriculture to develop a farming system is to do natural farming which is economically productive and long lasting with various integrated and judicious method and management technique which play important role to maintaining or improving soil , plant health and farmers socio economic status.

Objectives

- Maximize biological activity in soil and minimize soil erosion.
- Enhance the genetic and biological system and its surroundings.
- Provide livestock with optimal living conditioned for wellbeing and better health.
- Promotion of environmentally friendly use of soil, water and air thus minimizing agricultural pollution.
- To improve the physical and biological properties of soils, self-life and flavor of farm Produce
- To reduce the use of inorganic fertilizers and pesticides.
- To convert Farm waste Biomass into renewable energy & rich Fertilizer. To increase export of farm produce

Implementation

A village level capacity building programs are organized for the farmers as awareness campaign and farmers are trained to adopt & implement Model farm initiative into their own farm. This Project will be implemented on cluster approach basis mean each cluster will have five to six model which will be used as demonstration and farmer to farmer training to adopt and replicate in their own farm.




HOMEBIOGAS



દેશી ગાયની ગૌશાળા
બાયોગેસ પ્લાન્ટ
ઔષધિય વનસ્પતિ પંચવટી
ગૌમુત્ર
જીવામૃત
ગૌકૃપા અમૃતમ
વરસાદી પાણી સંગ્રહ નો ટાંકો બંધપાળો, બોરવેલ રિચાર્જ
બાગાયતી ખેતી દાડમ, ખારેક, કેશર આંબા, ડ્રેગનફ્રુટ, દ્રાક્ષ, સરગવો,પાંચ પ્રકારનાં કેળા
કીચન ગાર્ડન
ફાર્મર ટુ ફાર્મર તાલીમ
ટપક સિંચાઈ
મીશ્રપાક ખેતી આંતરપાકો
ઘાસચારા વાવેતર ગીનવો નેપીયર, સુપર નેપીયર, યાફકટર






Model Farming : Parameters

Sr. No	Activity Name	Objective
1	Soil Health Analysis	To Provide require Micro nutrient and improvement of soil quality
2	Cow Urine Collection	To prepare Jeeva Mrut, Gau Krupa Amritam Bacteria and Panchgavya
3	Cow base Farming	To use as liquid fertilizer
4	Home Bio Gas	Source of Renewable from Farm waste
5	RRWHS	To use of natural resource (rain water) to made independent Water sustain family.
6	Kitchen Garden	Ensure inexpensive ,regular and handy supply of fresh and healthy vegetables
7	Herbals crop farming	To avail herbal medicines at Home.
8	NB-21	To create individually fodder sustainability.
9	Farm Banding	To reduce soil erosion and retained moisture in the soil.
10	Bore well & well recharge	Enhance the ground water level.
11	Drip Irrigation	To save ground water & reduce salinity ingress.
12	Fruits Crop farming (seasonal)	To Fetch high yield and returns perennial
13	Compost Fertilizer	To act As conditioning soil with increase the Nutrients and water holding capacity.
14	Wormy Compost	Increase porosity and microbial activity in soil to improve water retention and aeration.
15	Training Otlo (Farmer to Farmer)	To deliver TRAINING IN FORMAL & Informal way.
16	Jiva Mrut	As source of Natural Fertilizer and micro nutrients to healthy crop and yield.
17	Vegetable Fertilizer	To create healthy soil condtion.
18	Mulching	To create microclimate around plants root to create healthy environment for plant growth.
19	Chaft Cutter	To made easy for cattle chewable & digestion.
20	Modern Agri Tools	To have great benefit in production
21	Nursary development	To avail local plants & seed.
22	Intern Crop	To produce greater yield in limited resources.
23	Mix Farming	
24	Government Scheme Linkage	
25	Dates Tissue & Offsuit Plantation	To produce uniform date fruits in the siza shape and taste.
26	linkage with KKPC	To become share holder and peace partners with natural farming promotion

Promotion of Natural Farming –Home biogas

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 to Uthhan Villages phase wise. Current year supported 117 home biogas in Dhrub, Zarpara and Navinal Villages.

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

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.

As a Main Process, Bacteria break down organic waste in a naturally occurring process, and Home Biogas stores and harnesses the energy created so that it can be used for gas.

Earlier we had proceeded for capacity 2 cum but after visit and series of meetings with farmer group – we need to take up plant capacity 6 cum

Till date 117 farmers are utilizing it with satisfaction and considerable outcome by saving Average Rs. 23,400 for gas and fertilizer as well.

Benefits of Home biogas

Plants without bio slurry:

Plants with bio slurry:

Difference between plant growth

Before home biogas

After home biogas

Usages of biogas in villages of Mundra block

Selection of village by some important parameters i.e. Mobile Van data of lungs related issues, Ambient air quality, cattle population, agriculture land availability, willingness for natural farming
Selection of beneficiary base on willingness of Natural Farming and Number of Cattle. In this Project Primary Stakeholders are also partnering project by financial contribution as well.

Biogas – 117 Nos

82	- Zarpara
18	- Dhrub
07	- Siracha
03	- Navinal
07	- Other

Dragon Fruit Farming (SDG 2/2.4)

Dragon fruit is a tropical fruit that has become increasingly popular in recent years. Though people primarily enjoy it for its unique look and taste, evidence suggests it may provide health benefits as well.

Dragon fruit grows on the *Hylocereus* cactus, also known as the Honolulu queen, whose flowers only open at night. The two most common types have bright red skin with green scales that resemble a dragon — hence the name.
The most widely available variety has white pulp with black seeds, though a less common type with red pulp and black seeds exists as well. In Kutchh Red variety is available due to its weather condition and soil type.

Dragon fruit contains small amounts of several nutrients. It's also a decent source of iron, magnesium, and fiber Dragon fruit contains several types of antioxidants These are compounds that protect your cells from unstable molecules called free radicals, which are linked to chronic diseases and aging

Due to all this benefits and suitable weather condition and soil type Adani Foundation has provided technical support and awareness training to start the dragon fruit farming. Five Dragon fruit farm have been developed with pole and Wire fencing support for 2 acre land and 1000 dragon fruit plants each. Adani Foundation had given 40% contribution in this Project. Fruiting will start from June 2021.

Tissue Culture (SDG 2/2.4)

Date palm (Phoenix dactylifera L.) is one of the oldest trees known to mankind. It is popularly referred as "Kalpavriksh of Kutchh" as it is an important fruit tree of arid and semi-arid regions of the State owing to its high tolerance to environmental stresses especially abiotic.

The biggest constraint faced for the improvement of date palm following conventional breeding approaches includes its long generation cycles. Nonconventional approaches like Marker Assisted Selection is not possible as there is no true breeding population and very trace molecular work has been carried out till date.

Due to its cross-pollinated nature, date seeds are highly heterogeneous and heterozygous which give rise to 50% unproductive male trees and 50% female trees with poor or varying productivity in terms of both yield and quality.

Date palm cultivation is the only means of livelihood for majority of farmers belonging to Kutchh region of the state. Looking to aforesaid limitations in applying traditional and non-traditional approaches, mass multiplication (Tissue Culture) of superior quality date palm is the need of time to increase the socio-economic status of the farmers and date growers

Advantage

Tissue culture plants bearing offshoots are true-to-type in nature and hence, in short duration a uniform population could be developed. Availability of planting material of Barahi genotypes round the year.

Selection of offshoots is carried out which are disease free, higher in yield and having good fruiting characteristics, hence export of fresh dates could be carried out by the farmers. Due to Large scale plantation of Barahi trees can be increased.

Dates is the nectar of the kutchh and Our periphery villages are known to produce exportable dates belt as having appropriate weather condition.

To increase the farmer income and over all production individual farmer We have provide "Barahi Varities Tissue plant" which has good strength and productivity.

850 plants have been distributed to 34 farmers. 25 plants / Farmers.

Tissue plant cost is 3000/ per cost with 50% famer Contribution. As per tracking record more than 97% plants are growing very well as per expectation.

Agri mall by Kutchh Kalptaru FPO

Kutchh Kalptaru producer company is a registered FPO by central registration center has Started Agro cum Women empowerment Mall at Shantivan complex Nana-kapaya Mundra with support of AF to provide platform for farmers and SHG women to fetch the right value of their products.

The Grand Inauguration of Agri Mall was done on 26th October in presence of Mr.K.G Chaudhary (Sub District Magistrate Mundra) and Mr. Joshi Director (District Rural Development Authority, Kutchh) and Mr. Rakshit Shah EDM, APSEZ.

Currently more than 170 types of items i.e. Chemical free Grain, pulses, sugar, Jaggery, oil, masala, Vegetables ,dry Snacks made by women group, handicraft items, Mud Utensils, toys, handmade chocolates and many more are placed for sell.

Under the Umbrella of Kutchh Kalptaru farmers producer company more than 200 Farmers and 112 women been engaged. KKPC Agri –cum Women Empowerment mall Approx. Rs.4.07 lacs turn over till end Feb (for 6 months)

GOVERNMENT OF INDIA
MINISTRY OF CORPORATE AFFAIRS

Central Registration Centre

Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014]

I hereby certify that KUTCH KALPATARU PRODUCER COMPANY LIMITED is incorporated on this Sixteenth day of July Two thousand twenty under the Companies Act, 2013 (18 of 2013) and that the company is limited by shares.

The Corporate Identity Number of the company is U01100GJ2020PTC114677.

The Permanent Account Number (PAN) of the company is AAECK1700C

The Tax Deduction and Collection Account Number (TAN) of the company is RKTK05184E

Given under my hand at Maseur this Sixteenth day of July Two thousand twenty .

Digital Signature Certificate
Mr RAJENDER KUMAR
DEPUTY REGISTRAR OF COMPANIES
For and on behalf of the Jurisdictional Registrar of Companies
Registrar of Companies
Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the company on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the company can be verified on www.mca.gov.in

Animal Husbandry-SLD (SDG 2/2.5)

The less rainfall and high saline ground water kept agriculture practices in threaten situation. Adani foundation have started various intervention for the Holistic development of Agriculture and Animal Husbandry

Fodder support

In 20 villages of Mundra and Anjar Block. 6.70 lacs kg Dry Fodder and 11.60 lacs kg Green fodder has been supported.

95 Farmers benefitted with NB -20 Off suite to bring fodder sustainability.

125 farmers are supported with 40KG maize per farmer with Micronutrient for **Individual Fodder Cultivation** during winter Season.

Sr. No	Village Name	No of Farmers	Average Production	Average rate	Average Value
1	Zarpara	64	4562.26	2.5	7,29,961
2	Navinal	23	3973.91	2.5	2,28,499
3	Siracha	35	3910.28	2.5	3,42,149
4	Desalpar	3	3733.33	2.5	27,999

Fodder Cultivation

Village Gauchar land development for the fodder cultivation to made fodder sustain village & Avail green fodder in scarcity phase.

With the support of Gauchar Seva Samiti Grass land development in Siracha-85 Acre & Zarpara -25 Acre done which resulted in total production 82 ton.

Animal Husbandry-SLD (SDG 2/2.5)

Bovine brucellosis

Bovine brucellosis is chronic factious cattle disease that causes abortion, dead & weak birth of calves, and infertility which reduced milk production and ill effect on health as well. Cattle and buffaloes are susceptible and persist for many years. It's a zoonotic disease (that can be transmitted from animals to people)

Brucellosis disease Control and management project has been started in our 11 Villages with (**National Dairy Development Board and KFFFDC(Kutch fodder fruit & forest development trust)** is ongoing with awareness & vaccination to (0 to 3 yrs female cattle).

Total 2132 Cattles have been vaccinated

Under this project following activities were carried out so far,

- Meeting with Gram Panchyat, 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 Leaders and Gram Panchyats
- Primary Survey and Sample Collections i.e. Milk Ring Test, Blood Collection and testing
- Brucella Vaccination and Ear Tagging etc.
- Expense per Animal = Rs. 177 / Cattle – including awareness and vaccination

Women Empowerment (SDG 5/5.4)

Today entire world is nothing against the corona pandemic ...not only India but all the nations world wide are striving hard to fight against this and come out of it at earliest . The situation lies in invisibility and severity of the causative agent . It is generally observed that the newly discover diseases are such which could be avoided by being more cautions.

Adani foundation works hard for upliftment of women, it has noteworthy history of completing and executing projects addressing issues like educations, health and empowerment from grass root level in Kutch district many project are done for females by various organizations but there are certain issue specially pertaining to women 's health which are still remaining unaddressed due to the social stigma and hesitations issues' like usage and importance of sanitary pad during menstrual cycle to protect oneself from fatal disease . This simple precautions can also help a female to fight against cervical cancers like disease as well. Keeping this thought in 8th March 2020 Adani foundation held a seminar on awareness during menstrual cycle -Myth and facts . The seminar witnessed 300-400 Participants including women college going girl ,homemakers etc.. This initiatives helped the females to voice out their quarries and problems and to get a solutions for the unusual problems. District Development officer was the part of the seminar.

District development officre of kutch shri Prabhav Joshi was highly impressed with the task been undertaken for women empowerment and the motivated for production of sanitary pads to the women of adani foundation . This task was vey planned and executed by the enthusiastic women group – it was a great journey towards success"

Initially the works seemed toughed as the outcome /day was 150-200 pads with minimum profits . Bit real salute this women that they did nit lose hope and tirelessly kept working for this mission . It is rightly said "practice make a men perfect and the graph of producing the pads per day rose from 300 to 350 and further elevated to 400 to 500 by proper distribution of work with strict target . Simultaneously the order started pouring in from District were satisfactorily completed . Today each woman is earning average 2900 Rupees /Month ,expansion of thus task is being planned by Marketing it to every small and making it a sustainable model which may be a benchmark in itself.

The spirit hard work and motivations of these women have given a way to increase in demand from district development office ,PHC,CHC office Aganvadi and even out of state orders will be very soon catered to.

This is an example showcasing how women empowering can bring about development of as small scale task to a full- fledged Endeavour.

Women Empowerment (SDG 5/5.4)

Empowered women and girls contribute to the health and productivity of their families, communities, and countries, creating a ripple effect that benefits everyone.
An initiative under the Sustainable Livelihoods Development Program to encourage women, sense of self-worth, decision-making power, access to opportunities and resources, power and control over her own life ability to be effect change.

11 SGH Group have been engaged with 127 Women

Saheli Swa Sahay Juth are trained for Sanitary pad preparation anmd and supported with semi Automatic sanitary pad making unit. In the year of 20-21 total turn over was Rs.3.12 Lacs

Self Help Groups

Adhar Saheli Swa Sahay Juth is engaged making dry nasta preparation got Fssai Certificate in current March which will help to market the products

Sonal Saheli Swa Sahay Juth is engaged in Phynale & Washing powder making its Current year turn over was Rs.4.50 Lacs

Tejasvi Saheli Swa Sahay Juth- is expert in Stitching practices & made approx. Ninty thousand Three layer mask which had generate Rs.9.45 lacs revenue over 10 Women.

Sr. No.	Name of Group	Village	Skilled	Member	Total saving (In Rs)
1	Sonal Saheli Swa Sahay Juth	Shekhadiya	Phynale & Washing Powder	11	1,32,500
2	Jay Adhar Saheli Swa Sahay Juth	Baroi	Dry Snake	10	84,000
3	Tejasvi Saheli Swa Sahay Juth	Mundra	Stiching,Uniform,Bag	14	84,000
4	Umang Saheli Swa Sahay Juth	Mundra	Soft toyes, Jula,	11	84,000
5	Vishvas Saheli Swa Sahay Juth	Navinal	Tie & Die, Stiching	11	84,000
6	Jay Momay Saheli Swa Sahay Juth	Kandagara	Tie & Die, Stiching	10	84,000
7	Meghadhanush Saheli Swa Sahay Juth	Mudara	Mud Works,	10	84,000
8	Saheli Swa Sahay Juth	Mundara	Sanitary Ped	11	84,000
9	Radhe Saheli Swa Sahay Juth	Zarapara	Dhadaki, Small Godadi	14	84,000
10	Shrddha Saheli Swa Sahay Juth	Mota Kapaya	Snacks,Thepala,Vada Pav	15	84,000
11	Mogal Saheli Swa Sahay Juth	Shekhadiya	Roti,Ladu (Churama)	10	84,000
Total				127	9,72,500

Community Infrastructure Development (SDG 9,6)

Community infrastructure development includes both public and privately provided facilities and services required to accommodate and support community services, programs, activities, which is significant to improve their quality of life & Productivity. Adani foundation designed and build various structure and provide service in the Health ,Education, agriculture and sustainable livelihood area.

Community Infrastructure Development (SDG 9,6)

To store rainfall water and increse water level, Pond Bund strengthening work had been carried out at Zarpara Village
apart from this various activity like approach Road Restoration at All Fisherfolk Vasahat, Bus Stand with wall Construction, Open Shed Sukhpurvah Mundra, Shelter at Randh Bandar , Garden Development Primary School Rampar village has been done in this year.

Bund strengthening work at Zarpara

Approach Road Restoration at All Fisher folk Vasahat

Garden Development Primary School Rampar village

Open Shed Sukhpurvah Mundra

SuPoshan (SDG 3/3.8)

The objective of the Project is to reduce occurrence of malnutrition and anemia. create awareness about malnutrition and anemia and related factors amongst all stakeholders and role they may play in curbing the issue.

To successful implementation of the project, “Sangini – Village Health Volunteer” plays major role in the Project. The purpose of the Project is to reduce occurrence of malnutrition and anemia. create awareness about malnutrition and anemia and related factors amongst all stakeholders and role they may play in curbing the issue.

To successful implementation of the project, “Sangini – Village Health Volunteer” plays major role in the Project.

As per Global Nutrition Report, Children below five years- 23 % Stunted and 8 % are wasted. 69.5 % children 6-59 months old, 55.8% adolescent girls aged 15-18 years, 55.3% women aged 15-49 years have Anaemia. Moreover anaemia prevalence in pregnant women is as high as 58.7 %) Curbing Malnutrition was part of Millennium Development Goals and again focussed through second and third Sustainable Development Goals on Zero hunger and Good Health & Wellbeing respectively.

During the year various activity like, Covid-19 awareness in village & Slum Area, Menstrual Hygiene Day, Breastfeeding Week, National Deworming Day, National Nutrition Month had been celebrated.

With slogan of "RED-ACHHA HAI" - 100 beneficiaries in Menstrual Hygiene Day, 204 beneficiaries in Breastfeeding Week, 320 beneficiaries in National Deworming Day, 20 villages covered in celebration of NATIONAL NUTRITION MONTH and 42 Family counselling had been done.

Community Engagement and other Activities		
Sr.No	Activity	Total
1	No of Sangini	24
2	Total Village Cover	41
3	Total Anganwadi Cover	70
4	SAM to MAM Monitoring Progress	03
5	MAM to Normal Monitoring Progress	15
6	Focus Group Discussion	85
7	Family Based Counselling	42
8	Village level Events	05
9	No of SAM children referred to CMTC	06
10	Total Anthropometric screening	140
11	Total Family Cover through video & Audio Calling	20
12	Total House Hold Family Visit	130
13	No. of Severe Acute Malnourished children (SAM) Telephonic Counselling	08
14	No. of Severe Underweight children (SUW) Telephonic Counselling	03
15	No. of adolescent girls-Telephonic Counselling	190
16	No. of pregnant women-Telephonic Counselling	100
17	No. of lactating mothers-Telephonic Counselling	230
18	No IFA Tablet Distribution to adolescent girls	200
19	Total Family Cover	9178
20	No of Sangini completed online POSHAN Abhiyan E- Learning module	15

THANKS GIVING PROGRAMME" MUNDRA & BITTA Site

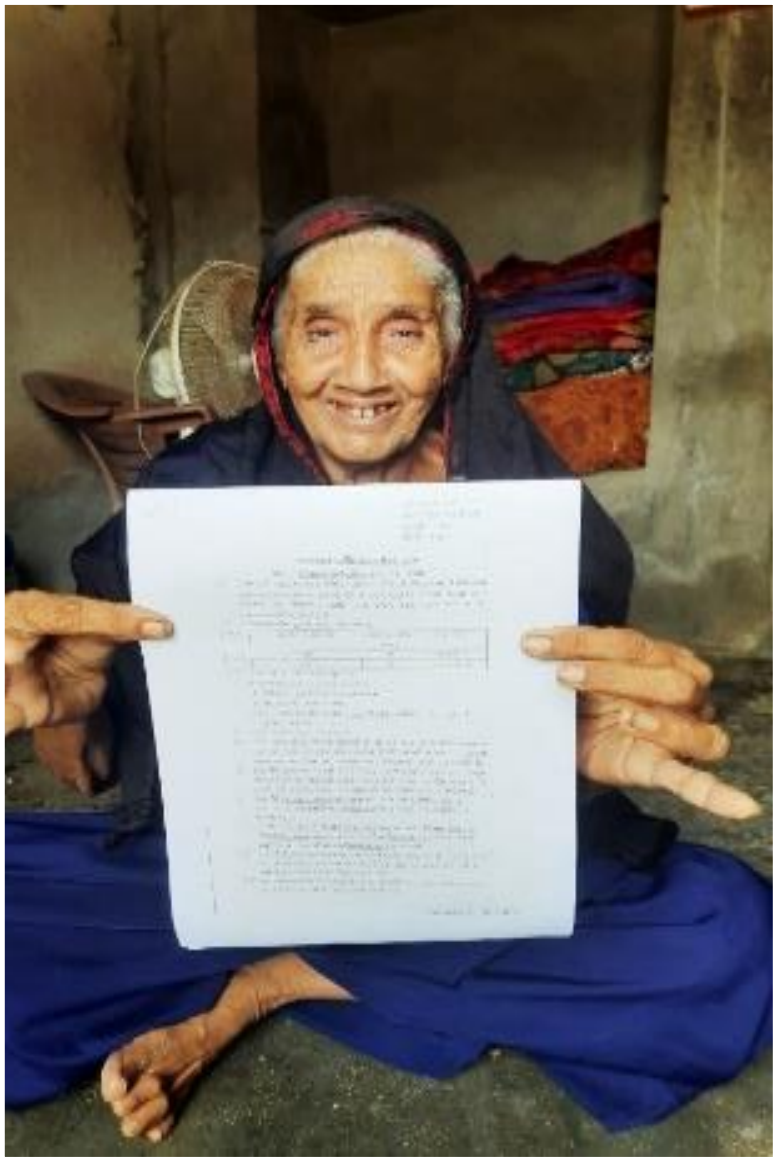
SuPoshan Thanksgiving program was organized. In this webinar DDO, CDPO Mundra and other dignitiaries remained present and appreciated the efforts to overcome malnourishment in Mundra and Bitta.

Community Resource Center (SDG 3)

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.

- ✓ Listed out the Widow ,Senior Citizens ,Handicapped & Orphan Child from seven Utthan villages and linkages accordingly with the Social Defense Department Scheme,. 276 people are Facilitated in coordination with Bhuj Samaj Suraksha Khata.
- ✓ With a slogan "Beti Bachavo – Beti Padhavo" to ensure better future for Girl child education by Linking 1001 Girl child with Government "Sukanya Samrudhhi Yojna" & Vahali Dikri Yojna.
- ✓ 48 SC Farmers were Linked Kitchen Garden Scheme.
- ✓ To avail Fishermen Government scheme (Fishermen Credit card) one day program was arranged with social distancing and all precaution.
- ✓ 30 KCC form fill-up at Navinal. Created awareness with Telephonic about same

Project Swavlamban



Project Swavlamban Launched for linkages of differently abled people of Kutchh District to Social Welfare Department. Foundation is playing supporting role to increase awareness and tie up with Government schemes for Divyang people, widows and senior citizens and coordinate them with Social Welfare Department.

The identity cards - UDID are issued for the handicapped in coordination with Bhuj Samaj Suraksha Khata which is beneficial for them to get specific kit for their disability type.

After getting income generation equipment support - Proper training provision is given to make them self-reliant in true sense!!

Till date Total 1057 beneficiaries have been linked up with various government schemes and 519 beneficiaries have been supported through various schemes of income generation.

Project Swavlamban

Total 1576 beneficiaries have been benefited and get support of Rs.24,12,550/- through Government and Adani Foundation.

No	Government Schemes	Beneficiaries	Per / Month	Total Amount
1	Widow women	237	1250	296250
2	Senior citizen	94	750	70500
3	Sankat Mochan (One Time)	2	40000	40000
4	Widows Ration card Renewal	13	0	0
5	Diviyang Pension Scheme	5	1000	5000
7	Palak Mata Pita Pension	9	3000	27000
	Total	360	-	438750

Government Scheme	Beneficiaries	Amount	Total Amount
Artificially foots	14	15000	210000
Artificially Hand	1	5000	5000
Blind satick	7	200	1400
Bycycle	9	4500	40500
Crutches	4	200	800
Hand cart	4	5000	20000
Hearing Aid	13	3000	39000
M.R kit	20	500	10000
music	1	500	500
RTE Admission	1		0
Sewing Machine	30	5000	150000
Tricycle	43	6500	279500
Walker	3	1000	3000
walking satick	12	200	2400
Wheelchair	33	4000	132000
Bus pass	427		0
Rasion card renew	13		0
Medical certi	422		0
Total	1057		894100

Divyang AF Support			
Details	Beneficiaries	Amount	Total Amount
Cabin	6	15000	90000
Fridge	1	18000	18000
Fruit Shop	2	8000	16000
Grocery Shop Item	5	5000	25000
Hand Cart	3	9000	27000
Harmonium	1	10000	10000
Rikshaw	1	80000	80000
Sewing Machine	27	5500	148500
Tricycle	44	6800	299200
Wheelchair	60	4000	240000
Lims	9	14000	126000
Total	159		1079700

Adani Skill Development Centre

India has highest population of the youth yet there has always been a major issue of increasing unemployment on one side and non-availability of skilled professionals for industries.

Adani Group has initiated Adani Skill Development Center model with broad and long term vision to enhance employability of youth and getting right people at the right place of skilled requirement.

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.

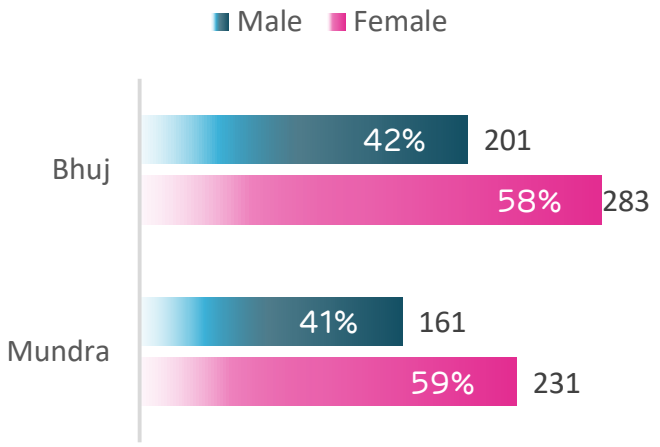
Over the last few years, ASDC has assessed various aspects of the technical, leadership. and soft skills gaps that organizations, in general, face and accordingly. focuses on imparting required training in those areas in partnership with various colleges and institutes.

Several miscellaneous industries exist in Kutch district. Adani Skill Development Centre has started a center in Mundra and Bhuj block so that the needs of these industries are fulfilled.

Admission for the F.Y. of 2020-21

Bhuj

	General Duty Assistant	Basic Functional English	Digital Literacy	Entrepreneurship Skills	Financial Literacy	Mud Work	GST with Tally
Free Training Model	0	185	25	0	0	0	40
Paid Training Model	140	3	47	1	2	4	18
Kachchh University	0	0	2	0	5	0	12



Mundra

	Basic Functional English	Basic Home Health Care	Beauty Therapist	Business Training (MS-Office)	Digital Literacy	Financial Literacy	General Duty Assistant	Marketing Skill	Mud Work	Non Domain Skills	GST with Tally	Training Skill
Free Training Model	43	12	00	66	57	07	04	11	00	03	00	15
Paid Training Model	07	00	56	00	20	00	13	00	73	00	05	00

Placement Details

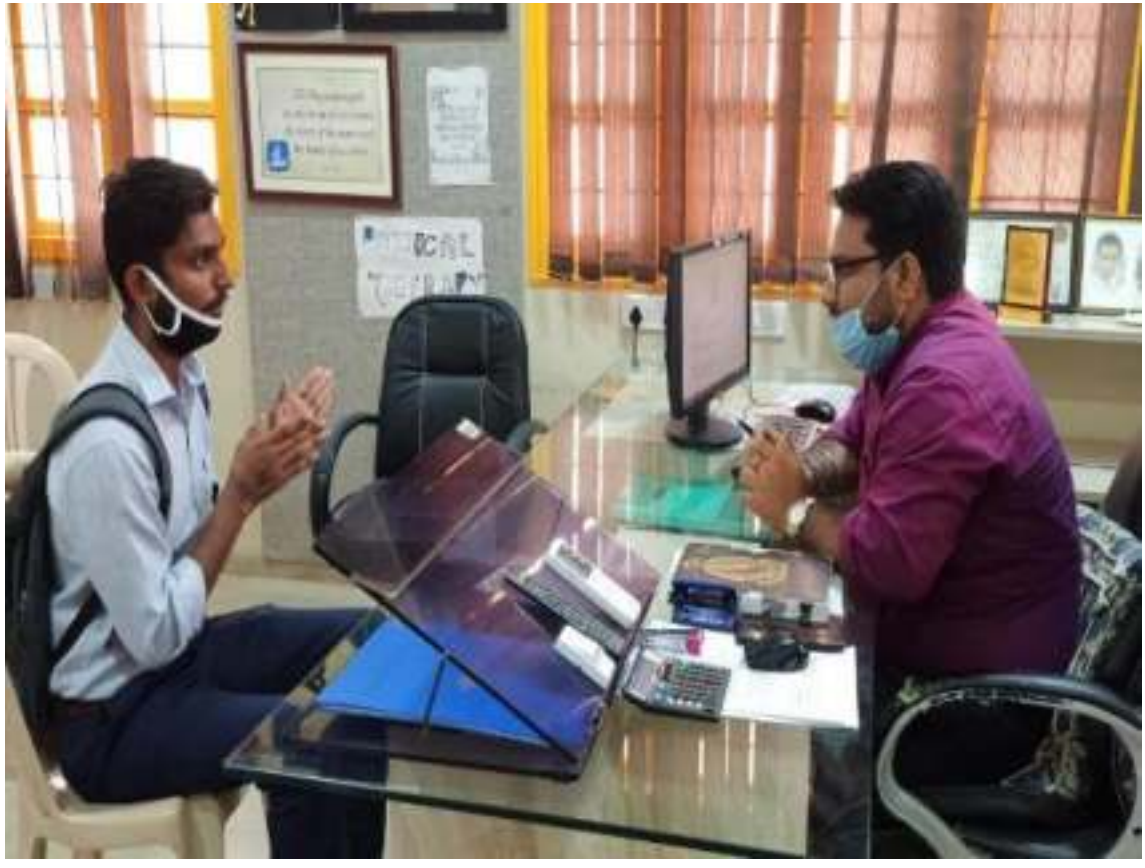
ASDC imparted various soft skilled and technical training to made Atma Nirbhar India.
Total 47 youth have been placed in various company and 37 youth are been self employed.

Bhuj

Trade	Total Trained
General Duty Assistant	51
Basic Functional English	79
Digital Literacy	61
Entrepreneurship Skills	1
Financial Literacy	2
Mud Work	4
GST with Tally	16
Total	**214**

Mundra

Trade	Total Trained
Basic Functional English	50
Basic Home Health Care	12
Beauty Therapist	52
Business Training (MS-Office)	66
Digital Literacy	77
Financial Literacy	7
General Duty Assistant	13
GST with TALLY	9
Marketing Skill	11
Mud Work	73
Non Domain Skills	3
Pedicurist and Manicurist	4
Training Skill	15
TOTAl	**392**



E-Learning Training at Bhuj

In this type of pandemic we have started virtually training on various trades like General Duty Assistant, Digital Literacy, GST with Tally, Basic Functional English etc. On Saksham Day we started E-learning training of Digital Literacy & Basic Functional English on free bases.
Till date we admitted 221 candidates in domain courses and 263 candidates in non-domain courses.
Now we started offline training with following all Covid-19 related guidelines.

The students of DDU-GKY (GDA) creating awareness regarding Covid-19 in their own village through various activity

Meeting at Palara Jail and after that meeting we did skill survey of around 150 prisoners.

MoU signing ceremony was arranged by **Krantiguru Shyamji Krishna Verma Kachchh University** on 11th January, 2021. In this project we will provide training in 4 courses (General Duty Assistant, Digital Literacy, GST with Tally & Financial Literacy).

MoU signing ceremony was arranged by **The Takshshila Educational & Charitable Trust - Bhuj** on 06th March, 2021. In this project we will provide training in 7 courses (Entrepreneurship skills, Non Domain employability skills, Diet & Nutrition, First aid, Digital Literacy, GST with Tally & Financial Literacy).

Arranged interview of DDU-GKY GDA students at Sterling Hospital – Gandhidham, GAIMS (Sodexo), Chanakya College, Accord Hospital, Fire Academy.
39 students get placement in GAIMS (sodexo), Alilance Hospital, Shreeji Hospital, Bhuj Fire Academy, Divine Hospital etc.
3 students are working in COVID-19 Hospital

online beauty therapist course has been conducted by ASDC Mundra

Online mudwork training has been organized by ASDC Mundra, after training 28 students became self employed.

Soft skill training for Fishermen youth & Industrial Employer meet

Organized industrial employer meet at Adani House with support by Adani foundation team. And conformed Vacancy details in respective Company. After that ASDC mundra team and Adani foundation jointly given 3 days soft skill training for Fisherman youth. The main objective of this training are to provide alternate livelihood to Fisherman community group specially those youth who are 10th -12th, ITI, diploma and graduates.

CSR Nakhatrana

Adani Green Energy(MP) (AGEMPL) set –up approx. 1250 windmill from Dayapar to Nakhtrana in Kutch (Gujarat). And as the part of our corporate social responsibility adani foundation have started various intervention for the holistic development of community since 2019 in the Ratalita , Amara, Deshalpar ,Jinjay, Dhamay & Ugedi Villages with Community Involvement by means Participatory Rural appraisal (PRA), and VDC (Unnati manch) formation to identified real need and extended our arm to render Education , Health , Livelihood and community infrastructure facilities.

Water through construction with 10 KL capacity in the barred land to avail drinking water for domestic catlle and wild animal at Ugedi & Deshkapar Villages.

Urinary Block Construction in the Ugedi village to keep Swachh Villages swachh and to provide privacy for women

Swachh Village Cleanliness is the beauty of village and to inculcate the habit to keep villages swachh and clean.100 Dustbin were provided to 8 Villages of Nakhtrana which are been kept at Public places and maintain and monitoring by GP

Sitting arrangement with Benches and tree plantation around the cricket ground of Kotda madh villag with tree Guard.

Uakdo distribution it is been said that Prevention is the better than care hence to mitigate the ill effect of covid-19 we organized Ayurvedic Kwadh & Immunity booster medicines distribution camp in the Nakhtrana city. And aware to take precautionary care.

Total 500 peole were benifitted with the same.

Event

- **World Environment Day** Celebration on 5th June **and Van Mahotsav week celebration** in Ugedi village with awareness and tree planation Program.
- **Women day celebration** on 8th march with Collaboration of ICDS Department in the Ugedi Village . On this occasion Elocution competition were held on the topic of women empowerment and women right among primary students and winner were felicitated with memento prize. More than 60 Women were remain present and motivated and Encouraged .
- **Tree Plantation** have been done in the Ratadiya and Deshalpar villages with tree guard with sensitization about the important of trees and responsibility for watering and caring of trees.

Lakhpat : Tree plantation with awareness at Kapurashi & Koriyani village of Lakhpat Taluka. Adani Foundation had also provided 150 cages.

CSR Nakhatrana

Setu

we are acting as the bridge between Beneficiaries and Government to facilitate government welfare scheme. due to this effort 82 widow women are getting widow pension of rs.1250 per month which is worth for them.

Sr. No	Scheme	Beneficiaries
1	Widow Pension	82
2	Bus pass	5
3	Wheel Cahir	2
4	Panchar Kit	1
Total		91

Swavlamban

Adani foundation provide tool & Kits support to Physically disable person the main objective of the program is to made them self sustain and "Atma Nirbhar" We are supporting various Tool & Kits to various Villages

Swavlamban Support To Disable Person								
Sr. No	**Village Name**	**Sewing Machine**	**Cabin Shop**	**Flour Mill**	**Wheel chair**	**Trycycle**	**Hand Cart**	**Total**
1	Dahmay	1						1
2	Aamara	4		1			1	6
3	Jinjay	2		1	1			4
4	Deshalpar	1	1					2
5	Ugedi	1	3		1	1	1	7
6	Ratadiya		3					3
Total		9	7	2	2	1	2	23

CSR Nakhtrana

Semi arid climate with very scanty rain fall does not support extensive and water intensive agriculture in the nakhtrana region .

more ever Farmer are not aware about modern agri technology adani foundation have started some intervention for the integrated agriculture development .

Kitchen Garden Kit

To promote the horticulture farming practices farmers are provided with Kitchen garden kit with twelve type if Vegetables , fertilizers and plastic carret.

Promote for Vegetable farming with structure support i.E Bamboo ,wire and cement Pole support to set up structure for vegetable support and grow.

Sr.	Village Name	Kitchen Garden Farmers	Vela Vala Farming
1	Ugedi	8	3
2	Ratadiya	8	
3	Aamara	7	
4	Deshalpar	10	2
5	Jinjay	7	
Total		**40**	**5**

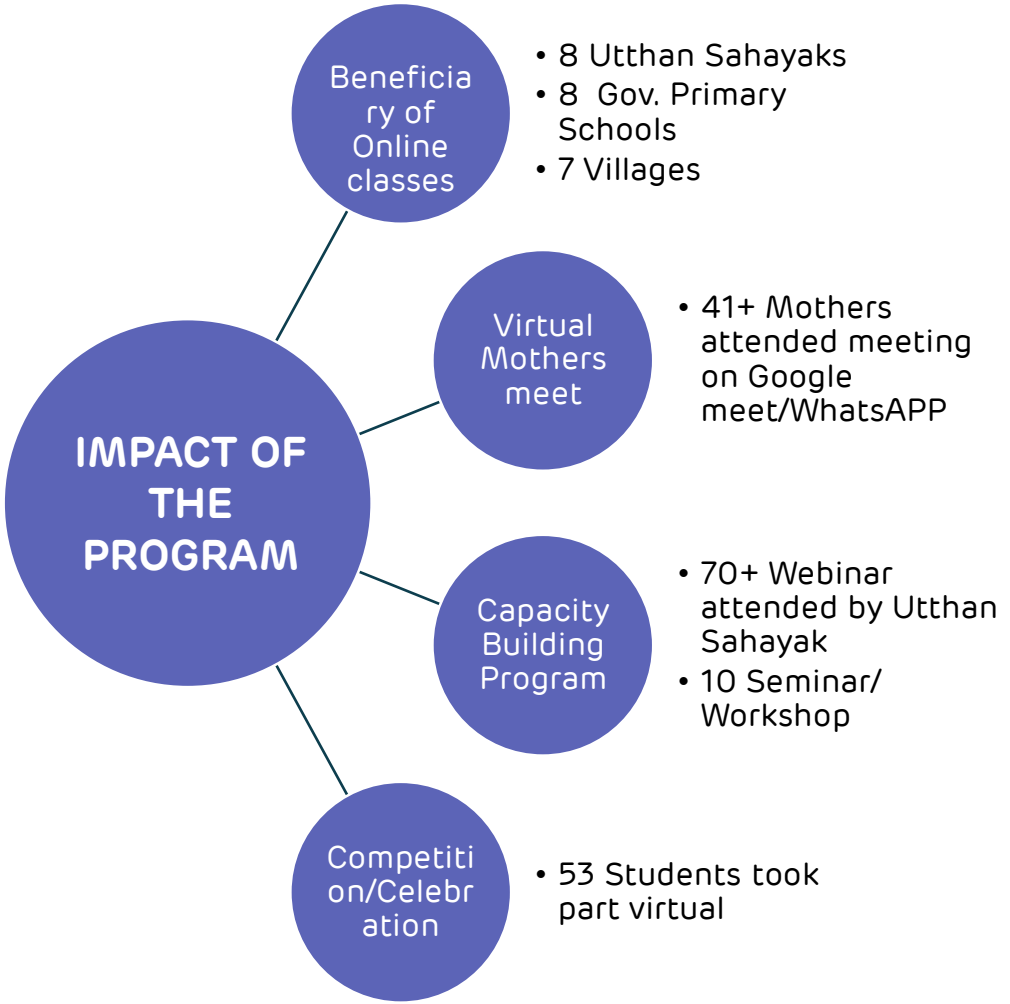
Organic Farming training

To aware about the ill Effect of pesticides and chemical fertilizer in farming and promote toward organic farming training was organized at Deshalpar with hand on training for Jivamrut preparation.Total 38 Farmers were participated

Modified Dev-6 wheat seed Distribution to two farmer of Deshalpar and Ugedi Village as demonstration which resulted that it produce High yield with less irrigation comparatively.

Utthan Nakhtrana

Large-scale efforts have been made by the government and non-government sectors, especially in rural government primary schools, but coverage and quality of education are still not satisfactory.
Adani Foundation leveraging their experience, to intervene in Government Schools. These interventions will aim to enhance the quality of primary education in Government schools.
Under Project UTTHAN 8 primary government schools of Nakhtrana Taluka of Kutch district have been adopted to take up various initiatives aimed to improving quality of education these schools.
Total 234 priya vidyarthis are benefiting from a meaningful education in these schools. .



Year	No's of School	No's of village	No's of Girl	No's of Boys	Total
2019-20	8	7	560	590	1150
2020-21	8	7	593	570	1163

CSR Nakhtrana

Environment and bio diversity conservation is always been the prime responsibility of adani Foundation. with this objective we started such work in Ugedi village near Nakhtrna to develop Ecological green belt to attract major faunal group such as amphibians, reptiles, birds ,butterflies and mammals and restoration of native vegetation to improve overall ecological food web of landscape.

This work has been entrusted to Sahajivan, an expert organization for the protection and conservation of biodiversity as part of which following work have been carried out.

- BMC –Bio diversity conservation committee has been formed in Ugedi Village.
- Habitation Improvement by removed "***PROSOPIS JULIFLORA"- Ganda Bavar*** from 8-10 hectare and native tress seed has been sprinkled As well as in the garden of Ugedi village and in the place of Angalwadi, trees have been planted.Also,in the seam land seam area of Ugedi village, more than 300 native trees have been planted like Desi baval *(Acacia nilotica*), Mithi Jar *(Salvadora oleoides),* Liyar *(Cordia sp.*) and Gugal *(Commiphora wightii)* Pilu, Khejari, have been planted.
- Improvement of Catchment : approx. 750 cubic meter excavation and embankment in sloping ground to increase catchment area of open pond to support existing Vegetation and other Biodiversity
- Three species **1. Bird - Peacock 2. reptile-Spiny tailed lizard 3. mammal-Chinkara** are selected for Conservation
- Started awareness program with pamphlet, Leaflet and IEC Material distribution in the Villages and School to sensitize about their important to maintain ecosystem and Bio diversity.


ગુજરાતી નામ : મોર
Peacock
વૈજ્ઞાનિક નામ
Pavo cristatus
ચાલો મોરને ચાહીએ અને તેને બચાવવામાં મદદરૂપ થઈએ...
તેને શાનો ભય છે?
સંરક્ષણ માટે શું કરી શકાય?
adani


વસવાટ
ભય
સંરક્ષણ માટે આટલું કરીએ
adani


ગુજરાતી નામ : ચિંકારા
Chinkara
વૈજ્ઞાનિક નામ
Gazella bennettii
ચાલો ચિંકારાને ચાહીએ અને તેને બચાવવામાં મદદરૂપ થઈએ...
ભય
સંરક્ષણ માટે આટલું કરીએ
adani

CSR Tuna

Adani Kandla Bulk Terminal Pvt. Ltd. is joint venture of Adani Ports and SEZ Limited as well as Kandla Port. There are three Villages & Two Fishermen Vasahat where Adani Foundation Doing various CSR activities in the Education, Health , SLD and Community Infrastructure area. Adani Foundation are running Rural Clinics in 3 villages on regular basis and supporting the villages in water storage and distribution networks. Current year supported for Drainage network for Tuna and Wandi as per MOU between Pandit Dindayal Trust and Adani Foundation

Drainage work

As per MOU between Dindayal Port Trust and Adani Founation – Contribtuion of Rs. 40 Lacs for Drainage Facility Provision in Tuna and Wandi Village was taken up and work will be completed upto June 2021

Water facility

To reduce water born disease, we are providing portable drinking water facility at Dhavalvaro bandar and Vira bandar.

Ration kit support

During covid -19 pandemic & lock down directly and adversely affect over Poor and vulnerable families whose are sustain daily wages work. We Distributed Ration kit to those people with aware to take precautionary measures as well. Total 1100 Ration Kits were distributed to Tuna Rampar and Vandi Villages

Tree plantation

Tree plantation has been carried out at Tuna, Vandi & Rampar village and Garden development work has been done at Rampar primary school which would create healthy environment and entertainment over students.

Fodder support

in Rampar and Tuna village 47950kg dry fodder and 335730kg fodder has been supported during this year.

Rural Clinics

Rural Clinics 2 hours per day are operated by Adani Foundation to ensure primary health at door step. Total OPD is @ 350 per month.

CSR Bitta

Under Adani Solar Limited – 40 MW Solar Panel Power Unit is Situated at Bitta Village in Abdasa Taluka. We have done various activity under the CSR work.

As Abdasa is water scared region with list amount of rain Fodder support had been provided to 100 ton fodder to Bitta, Dhrufi and Moti Dhrufi villages.

Cleanliness of village Pond inlet in the Bita Village which lead more storage capacity and Village. Pond bunding construction in Dhufi village.

Cricket ground of bitta village has been upgraded and cricket kit provided to youth.

Panchayat Building construction was carried out by Adani Foundation's support and technical guidance.

Drainage line maintenance and Cleanliness is frequently done in Bita which lead Swachh Village

EVP
Employee Volunteering program

Since last few years adani group employees are adopting students of migrant labours. this year also all the 802 students of Vallabh vidhalaya were adopted. All this students are belongs to migrants labour families who are working in various industries in and around of Mundra. The students does not feet any difficulty of language because the vallabh vidhalaya is Hindi medium school.

On 1st may i.e. on the world labour day, all the cheques of rs.16.04 lacs had been handed over to Mr. Dharmendra who is the director of vallabh vidhalaya

Due to COVID-19, the 10th standards students of AVMB felt difficulties in study as they do not have any digital gadget for online learning. Our APSEZ Employee had been voluntary support to provide Lenova tablet to the AVMB Students.

WORK DURING COVID-19

To fight against the COVID19, Adani foundation has stepped up to guard the health and well-being of rural communities, provide relief material to needy.

Chemical sanitization was carried in various villages of Mundra with the coordination of Fire Department APSEZ. With coordination of Port, Wilmar and Foundation free cost food facility (Breakfast, Lunch and Dinner) in port & SEZ premises and AWL area.

24 Sanitization work in villages

1900 Daily Food Facility (Breakfast, Lunch, Diner) for 1900 Labour per day

5500 ration kit support to needy people (Specially Fisherman, daily wedge workers, widows and senior citizen).

105000 Mask prepared by women SHG for Government officers / staff of SDM, ICDS, TDO, Custom, THO, Police Dept. etc.

WORK DURING COVID-19

Providing treatment is prime thing in case if any outbreak but making people aware about safety n self quarantine plus to handle the panic situation. Our mobile health care unit had provided primary treatment to community at door step and also created awareness. In this panic situation Adani Hospital Mundra had continue his IPD and OPD services. SuPoshan Sanginis led awareness drives for conveying correct hand washing techniques, importance of sanitization. They also visited pregnant women and counselling regularly. 'Awaz De' a voice message campaign was started in local kutchi language to make the people aware on COVID-19.

- 158 Taken care of Senior citizens at old age home
- \- Awareness drives by SuPoshan Sanginies
- \- Mobile health care unit provides Primary treatment at doorstap
- 35000 'Awaz De' a voice message campaign in local Kutchi language

Our Change Makers

In critical time of Corona, Medical Officer Dr. Deven Goswami, Dr. Narendra Dodiya and Dr. Mukesh Parmar has performed their duties at GKGH Hospital for 1.5 month period.

My Mother's dream became true

Name: Mura Keshabhai Dhuva

Place: Khavda, Bhuj, Kutch, Gujarat

Employer: Alliance Hospital (Covid 19 hospital), Mundra, Kutch, Gujarat.

Job: Joined as Nursing Assistant.

Salary: Rs. Up to 9000/- per month with lodging and boarding facilities.

Candidate Brief:

He belongs to rural family. Father is Carpenter and mother is Home maker. Parental household's monthly income prior to his placement was Rs.8, 000. His prior educational qualifications is 12th pass.

In his own words:

My mother's dream is that one of the sons should be in medical field. But due to financial constraint, I couldn't study further. I thought I will never be able to fulfill my mother's dream but fortunately, I got opportunity to get trained under GDA course and soon after its completion, I got placement in hospital. I feel proud to serve Covid19 patients and will continue doing fearlessly.

Thanks to Adani Skill Development Centre to give me opportunity to take training under DDU-GKY scheme and make me capable to take care of my family.

It helped me to become good team member and work efficiently

Name: Nipul Punjabhai Sanjot

Place: Bidada-Mandvi, Kutch, Gujarat

Training Trade & PIA: Completed a course in General Duty Assistant from Adani Skill Development Centre, Bhuj under DDU-GKY.

Employer: Alliance Hospital (Covid 19 hospital), Mundra, Kutch, Gujarat.

Job: Joined as Nursing Assistant.

Salary: Rs. Up to 9000/- per month with lodging and boarding facilities.

He can be contacted at: 9726242085

Candidate Brief:

His father and mother works as helping staff (housekeepers) in another hospital. Monthly income of family prior to his placement was 10,000/-. His prior educational qualifications is 12th pass.

In his own words:

I am youngest in Covid19 hospital here but I know this is the time to act wise. When my friends ask me do you fear working as PCA? I simply laugh and say I am trained in GDA course and fully prepared for this work. My duty is to check patient's temperature, blood pressure and oxygen level and maintain record. We get residential facility nearby hospital. To Treat Covid19 patients, needs a courage and team work and I am blessed I got this wonderful chance.

Thanks to Adani Skill Development Centre to give me opportunity to take training under DDU-GKY scheme and make me capable to take care of my family.

Name: Khoja Sahista Hussenali

Place: Kera, Bhuj, Kutch, Gujarat

Training Trade & PIA: Completed a course in General Duty Assistant from Adani Skill Development Centre, Bhuj under DDU-GKY.

Employer: Om Maternity Home, Bhuj, Kutch, Gujarat.

Job: Joined as Nursing Assistant.

Salary: Rs. Up to 7000/- per month with lodging and boarding facilities.

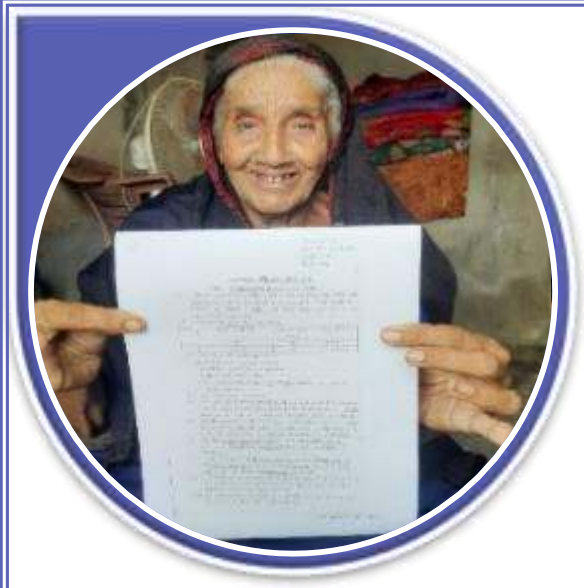
He can be contacted at: 8347304586

Candidate Brief:

She is belong to poor family. Her family's monthly income prior to his placement was Rs. 8,000 and source of income is from grocery store. Her prior educational qualifications is 12th pass.

In her own words:

My name is Sahista khoja i am living in kera village . My father's dream is that my daughter should be in medical field. But due to my mother's health issue i completed my SSC and HSC external And i thought i will never fulfill my father's dream but fortunately i came to know from my friends about GDA course and i got opportunity to trained under that course. And I started my internship at Om maternity home and on last day of internship i got placement their. I want to thank Adani skill development from the bottom of my heart to give me opportunity to take training under DDU - GKY and make me capable to became a second earner for my family.



Stick at old ages

Dhanuba a self-esteem lady from Zarpara VIlage .While I peeped in her life it seems like that her existence is only to bear grief and sadness .Her husband was passed away before 20 Years since that she has been eduring social and economic responsibility of her family by drudgery daily wages. She have two daughter who are married and two sons who are supporting her for daily end meet ,day was passed little more good combatively .....Who knows it was for short times .....

Unfortunately one more shock in her life that her elder son get Heart attack and passed away & younger son got mentally ill again she have to drudgery to get them daily bread and butter... Though her daughters called her to lives with them but she denied strongly believed to don't be burden & belongs to daughter. Now she is 70 years old and physically weak and also get illed often.

One day she came to our Rural clinc for medical check-up and was talking with deep sigh & despair about her problem. Fortunately our Employee Mr. Karsanbhai was present at their and promptly talked with her and comprehend the reality. She could not availed benefit of widow pension scheme because of the certain government limitation even after numbers of time applied and Follow-up for the same. He went along with her and Collected the essential document and submitted to the respective department later within two month she received sanction order for the same and further Rs.1250 /- Widow pension has been started which been the great support for daily meet.

She and her daughters expressed great gratitude and said that Adani Foundation is hope For the Poor and needy persons.

"Vidyadan Mahadan"

Name: Sohil Gafur Manjaliya

Place: Luni ,Mundra

AF intervention:- Education Scholarship Support

Progress & Achievement:- Studied intently and perused Graduation Degree and process for LLB admission

Salary: Working with Lawyer as a practicenor and earn Rs. 8000/Month

Back Ground : He belongs to Poor Fishermen family and sincere to study since child hood. He belongs to Poor Fishermen family and sincere to study since child hood. His father is used to Pagadiya fishing practice to get the daily end meet.

In his own words:

In our community most of the youth left study after 8th standard and engaged in Fishing practice but when I had interacted with AF staff and persuaded for further study and Scholarship support. I realized that the only education can be the game changer to strengthen my Financial condition. Later I focused to study Intentionally and dreamed to be Lawyer.

Now am working with Advocate as Assistance and do Financially support to my family.

Indeed AF sensitized me and act as catalyst to transform my life than others really I am honored by friends and Society

Real Support

Name: Harkhumben hirabhai Rabari

Place: Jinjauu,Nakhtrana

AF intervention:- Sewing Machine Support.

Progress & Achievement:- Started Embroidery and sewing work

Income : Rs.2500 to 3000/Month

Back Ground : She is 40 year old lady and disable by polio in childhood. They are five members three Children and Husband wife. Her husband is driver and the only person to earn hence financial problem is always remain host.

However She is illiterate & handicapped but symbol of etiquette and dedication. She always thought to be financial Supporter to her life partner . As belongs to Rabari community stitching & hand work is imbibed in her and she want to purchase Sewing machine for the same but Financial constrain did not allow them for same.

During community interaction she express her willing sewing machine support. we met her and after verification Support accordingly.

In his own words:

It was difficult to me as house wife to maintain budget but since I have started sewing work which added some extra money which can we expence for our children nurturing and education for their bright future.

Thanks to Adani foundation to be supporter to such disable persons

Sea of Change – I can !!

Manjaliya Jakum Osman is 36 years old Fishermen Youth though he was little dull in study but has insight sense and dedication to work. After completion of primary education he had been engaged in fishing practice with his father. Though he was earning but not enough to sustain his big family with Five Daughters .

He was always thinking to get hike and asking to provide work according to his skill like drivering ,electrician and painting work.

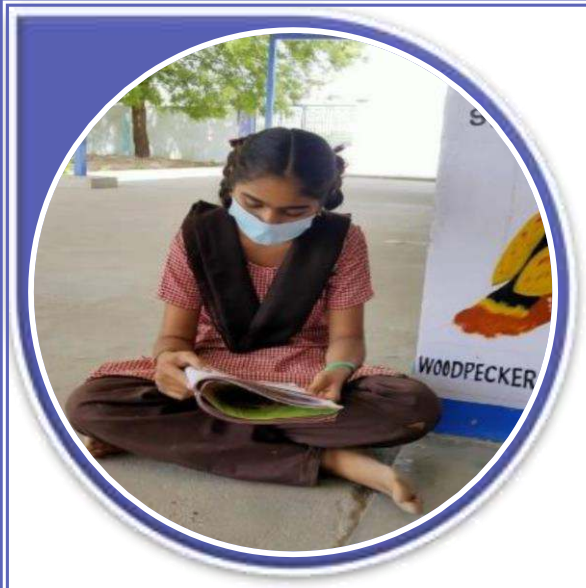
One day we offer him contract work in our dry cargo department for loading Unloading work. He started enthusiastically with 30 Labors teams and paid 100% Efforts to fetch the targets but.....Unfortunately he had to left contract due to some constrain.

Again he engaged in fishing as routine but destiny define another for him. we had called From APSEZ to need Casual labors and referenced for Jakum as having Good feedback for dedication toward work.

he accepted opportunity even did not know the process. Initially We supported for gate pass and other mandatory formalities. Currently 22 Fishermen youth are working under him.

He is saying that I am earning Approx Rs.40000/Month. And massage to Fishermen youth that I am grateful to AF to provide chance to proof my self and sustaining well. now I can Fulfill all basic amenities and invest to my daughter education.

He message to Fishermen Youth that we have great Opportunity as having ADANI port and companies to get employed.



Fostering for Future

Life without parents is like boat in the mid of the ocean without compass , Krishna was cute and beloved girl of her family. Though her parents was labour but had been grew with lots of love & fulfilled all her wishes. But who knows the destiny ,when she was 8th year old she lost her father due to heart attack. yet she get back from the shocked, her mother got remarried which pushed her in the sorrow of ocean.

she is from Siracha village & studying in 5th standard. However her uncle and aunty are looking after her fostering with all possibility, she is but since they are poor, the financial constrain cant allow them to do much more even they wish. One day when our Employee Mr. Karshanbhai Gadhvi knew about its , he met them and get review from the village leader about the reality ,They are really poor and has been taking care of Krishna with soft intend & Love. Later we informed them about the Government scheme and did all the necessary documentation to linked with Government Orphan Yojna.

Now they are being facilitated with Rs.3000 pension /Month which they deposit in Krishna bank Account to invest for their Education and wish to made her Officer now Krishna s future is secured...

Events

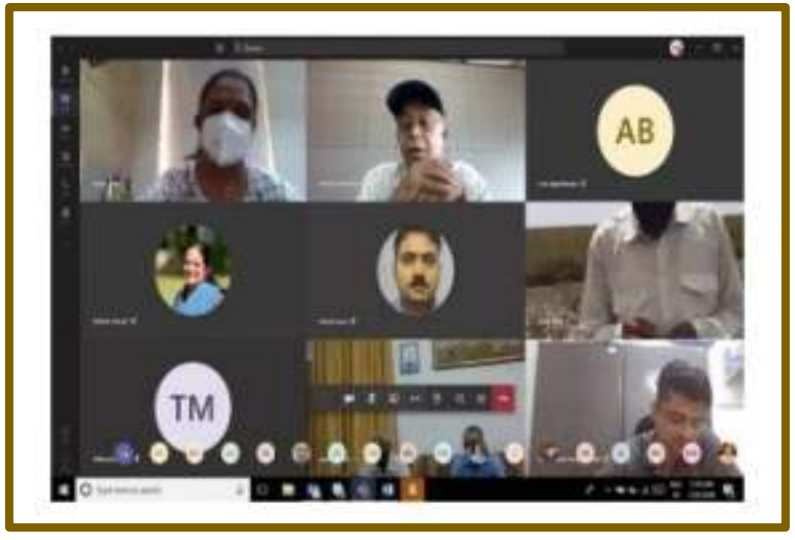
World Environment Day

World Environment Day was celebrated in Four Talukas by different activities related to conservation of Environment. The events were organized with coordination of Sarpanch, village leader and village committee members and difference type of activity had been carried out in this events.

Activity

- Mangrove Plantation at Luni sea coast with fisher folk community
- Tree Plantation at Mundra, Nakhtrana, Lakhpat & Tuna block.
- Inauguration of Gauchar land development work in 22 acres at Siracha village
- Tissue culture plant distribution to farmer
- 1500 herbal plants like meshvak, amla, galo, gugal, ardusi, pilu, etc planted at Nandi Sarovar biodiversity park

World Mangrove day



Web talk show was organized on the occasion of "World Mangrove days On Multi species Mangrove bio diversity with Joint effort of Guide and Adani Foundation, mundra.

Dr.V.Vijayan Kumara (Director of Gujarat institute of Desert ecology) , Mr. C.R.K Reddy (Former chief scientist ,CSIR-CSMCRI CEO) and Respected PNR sir and Gadhvi sir had delivered occasionally speech. As well as Paper presentation by GUIDE and with KSKV Scientist . Total 70 participated had joint this webinar.

Vanmhotsav

Vanmahotsav week had been celebrated by adani foundation. The main objective of the vanmahotsav is to promote forest conservation the tree plantation.

More than 4100 tree plantation activity had been carried out in Tunda, Siracha, navinal , Zarpara, Dharb, baroi, luni, samgoga, Nani bhujapar, moti bhujapar, Mota bhadiya, Gundiyali , Anjar, tuna, rampar and wandi villages of Mundra & Anjar.

World ocean day

8th June is celebrated as world ocean day. adani foundation had celebrated the world ocean day by coastal cleaning activity at Juna Bandar, Luni Bandar and Bavadi Bandar.

More than 105 Fisherman took part in this activities with great enthusiasm and zeal. Adani Foundation has scheduled awareness of coastal biodiversity, No fishing in monsoon period and conserving mangroves by allege removal and sweet water usage in initial period.

National Youth Day

The National youth day was celebrated by motivation the youth who had play significant role during corona period as a warier in various sector and society.
On the occasion Mr.Sharad Sharma –AWL plant head and Mr. Vijay Saxena –HR head MUPL were remain present and delivered speech accordingly.
17 youth (3 utthan sahayak, 4 fishermen youth, 3 corona warriors, 7 women - animal husbandry & gram rakshak dal) were appreciated.

International Women's day

Adani foundation and Britannia had jointly celebrated women's day on 10th March 2021 in which Guest of honour was Pabiben Rabari Entrepreneur Kutchh
283 women are working at Britannia and preparing biscuit n rusk. Adani foundation is supporting for sourcing, n motivation training for them and on job training Plus convincing of families of women for shift duties also.
Pabi ben had given information about her life journey n struggle and congratulated women for their joining the work. Dr Punam has informed about how to stay mentally and physically healthy plus maintain hygiene. Felicitation of 25 women by Medal who become permanent in Britannia company. Five Women shared their journey of life.

The National girl child day

Women are the epitome of strength ,Love ,sacrifice and courage.
and In the fast growing world women role is more important for the Socio , Economical & political development of Family ,Nation and world.
The National girl child day was celebrated with ICDC Department with Vahli Dikri Yojna form filling, paediatric health camp and Baby health kit distribution at Mundra . Mrs. Ashaben - CDPO Mundra was remain present in this event. Total 61 forms has received approval letter from GOG and 15 forms filled up on the same day

Ayurvedik Ukalo Distribution

Covid-19 pandemic is at the peak level and while don't having Specific treatment and vaccine taking precautionary measure and immunity boosting is the only weapon to keep away our self from Covid-19.
We have started Ayurvedic Kwadh Distribution at Various Public spot, Our Port Entry &Exit gate and APL ,AKBTP,T una with spreading awareness to mitigate rapid transition to combat against covid -19. More than 6500 people had benefitted with Ukado and Vitamin –C tablet from Mundra, Baroi Shanti van & Samudr township.

World Water day

Adani Foundation Mundra & Nakhtrana had Jointly celebrated World water Day with WASMO. Mr. R J Sonkesariya - SE irrigation dept., Ms. Dimpleben Shah - District coordinator WASMO were remain present in this event. Innovative farmer Mr.Vadilal Pokar had shared his experiance and value of drip and borewell recharge activity. more then 125 farmers of Mundra and Nakhtrana block took part in this event. To understan the value of water, drawing competition on the theme of valuing water had been organized for utthan school students.

World Disability Day

The people who living with disability, face many barriers to inclusion into key aspects of society, God blessed them with some kind of limitations with other kind of skill.Disability brings different ability.

We had celebrated world disability day on 3rd Dec with the aim to empowerment and help them to create real opportunity to make them self sustain.

In Mundra, Bita, Tuna, Anjar, Nakhtrana, Lakhpat, Bhuj & Khavda blocks of Kutch district, total 40 people were benefitted with various Tool and Machine. The District Social Welfare Officer had issued appreciation letter for our efforts. All Divyang of kutchh, have been assured to support for Government online application to facilitate Aid & Equipment well as divvying certificate and bus pass.

Awards

Adani Port and Special Economic zone ,Mundra has been awarded with 2nd prize for the National water Award from the Government of India Ministry Of Jal Shakti for the best industry for CSR Activity Category. and got cash Prize of Rs.1.5 lacs.

Awards

There was state level QCFI Award competition for (HR and CSR activity) We participated with our Namda work revival project though virtual presentation. we received diamond award.

Beneficiaries data

No	Core Area	Direct Beneficiaries	Indirect Beneficiaries	Remarks
1	Education	2098	9424	Utthan 17 Schools
2	Adani Vidhya Mandir	472	1888	AVMB ,Students
3	Community Health Mundra	19196	212969	MHCU, Rural Clinic, Senior Citizen, Health camp,
4	Community Health, Bhuj	5870	23480	Medical Support , Mahiti setu, Dead Body , Patients Care & Co-ordination
5	AHMPUL	20959	62877	OPD & IPD Patinets
6	SLD Fishermen	8035	2330	Education, Mangrove, Water and Livelihood
7	SLD –Agriculture	21190	2991	Drip, Fodder, Home Bio Gas, Tissue ,
	SLD- Women Empowerment	127	508	SHG Group Income generation & Training
8	CRC	1079	4316	Sukanya Samrudhi Yojna, Agriculture ,Fishermen,
10	Swavlamban	276	1072	(Widow women & Divyang)
11	Community Infra Structure	111855	162488	Fishermen Amenities & Shelter ,Pond Deepening, Approach
12	Nakhtrana	18528	8168	Health ,SLD, Bio Diversity & CID
13	Tuna	6717	20151	Fodder, Health & portable water
14	Lakhpat	2956	1380	Tree Plantation & Tree Guard
15	Suposhan	20565	0	Child ,Adolescent Girl ,RPA Women
16	ASDC Bhu & Mundra	577	1432	soft skill and DL .GDA & Online Training
	Total	240500	515474	

Financial Overview - Adani Foundation -Mundra
Executive Summary-Budget Utilization F.Y. 2020-201

(Rs. In Lacs)

Sr. No.	Budget Line Item	Budget 2020-21	Total LE 2020-21	% of Total Utilization
A.	Admin Expense	61.10	56.96	93.28%
B.	Education	94.56	57.87	61.20%
B1	Utthan-Education -Mundra & Anjar	64.11	52.05	81.19%
B2	Utthan : Fisherfolk	30.45	5.82	19.12%
C.	Community Health	420.70	325.12	77.28%
D.	Sustainable Livelihood Development	365.00	336.62	92.23%
E.	Community Infrastructure Development	58.30	60.13	103.14%
F.	EDM Recommended Projects	60.00	60.00	100.00%
G.	COVID 19 Support	100.00	27.05	27.05%
H *	Budget taken against Saving			
1	Wandi – Tuna Drainage Support		45.40	
2	Support to Dhrub Hospital-Dhrub		22.00	
3	Approach Road Construction at Prasla Vadi, Zarpara		16.00	
4	Participation in Gaushala Construction at Goyersama		10.25	
	Total Budget plan against Saving:		93.65	
Total AF CSR Budget :		1,159.66	1017.41	87.73%
[I]	Adani Vidya Mandir-Bhadreshwar	219.67	104.74	47.68%
[II]	Project Udaan-Mundra	50.00	49.30	98.61%
GRAND TOTAL Budget F.Y. 2021-22 :		1,429.33	1,171.45	81.96%

જીવન સાથે જીવનનિર્વાહની સામર્થવાન કામગીરી કરતું: અદાણી ફાઉન્ડેશન

અદાણી ફાઉન્ડેશન દ્વારા દેશના ૧૮ રાજ્યમાં ૨,૨૫૦ ગામડાઓમાં કરવામાં આવેલ લોક કલ્યાણના વિવિધ કર્યો : મુન્દ્રા તાલુકાના ૨૨ ગામોને સેનીટાઈઝ કરવામાં આવ્ય અસરગ્રસ્ત પરિવારોને ૧૦,૦૦૦ જેટલી રાશન કીટનું વિતરણ

ખારેક, દાડમ અને કેરીના ગ્રેડિંગ, ક્લીનિંગ અને પેકિંગ માટે બાસ વ્યવસ્થા ઉભી કરાશે

મુંદ્રાના ૧૧ ગામોના ખેડૂતોના ઉત્થાન માટે 'કચ્છ કલ્પતરૂ પ્રોડ્યુસર કંપની લિ.' એગ્રોમોલ બનાવશે !

- અદાણી ફાઉન્ડેશનનો સહયોગ અને કા
- ઓક્ટોબરના અંત સુધીમાં ૨૦૦ સભ્યો

દિવ્ય ભાસ્કર કચ્છ ભાસ્કર 30-05-2020

માસિક એ કુદરતી પ્રક્રિયા હોવાથી તેનાથી આભડછેટ ન રાખો

મુન્દ્રા અદાણી ફાઉન્ડેશન દ્વારા ફૂડ પેકેટનું વિતરણ

। મુન્દ્રા ।

મુન્દ્રા તાલુકામાં તાજેતરમાં પડેલા ભારે વરસાદના પગલે

ઉદ્ભવેલી સ્થિતિમાં અદાણી ફાઉન્ડેશન દ્વારા શહેર સમીપના ઝૂપડપટ્ટી વિસ્તારમાં પુરી, શાકના

મુંદરા બારોઇ વિસ્તારમાં વિવિધ સંસ્થાઓના સહયોગથી જન જાગૃતિ આરોગ્ય સપ્તાહની ઉજવણી કરવામાં આવી

જન જાગૃતિ આરોગ્ય સપ્તાહ

અદાણી ફાઉન્ડેશને મુંદરાના વલ્લભ વિદ્યાલયનાં ૮૦૦ બાળકને દત્તક લીધાં

ભુજપુર આસપાસ ૨૩ લાખના ખર્ચે વિવિધ વિકાસકામો સંપન્ન : ખાનગી કંપનીનો સહયોગ

મુન્દ્રા તાલુકાના ૮ ગામોના ૩૪ ખેડૂતોને બારહી ખારેકના ટીસ્યુકલ્ચર રોપાઓનું વિતરણ કરાયું

ખારેક બજાર વ્યવસ્થા માટે કચ્છ-કલ્પ તરુ પ્રોડ્યુસર કંપની બનાવશે : અદાણી ફાઉ. દ્વારા આયોજન

ણીમાં સમુદ્ર સફાઈ અભિયાન હા

કચ્છમાં આંતરરાષ્ટ્રીય દિવ્યાંગ દિવસની ઉજવણી કરાઈ

મુન્દ્રા તા.ના પ્રાગપર ખાતે ૫ એકરના પ્લોટમાં બાયોડાયવર્સીટી પાર્ક બનશે

નંદી સરોવરમાં એન્કરવાયા અહિંસાધામ અને અદાણી ફાઉન્ડેશન દ્વારા આયોજન

મુંદરા તાલુકાના વિવિધ ગામોમાં ૪ હજારથી વધુ વૃક્ષોનું વાવેતર કરાયું

અદાણી ફાઉન્ડેશન દ્વારા ઝરપરાના વીર સહિદની પુણ્યતિથિએ કરાઈ કામગીરી

કચ્છના યુવાનોમાં રહેલા કૌશલ્યનો વિકાસ કરવા સાથે રોજગારી વધારાશે

શ્યામજી કૃષ્ણ વર્માના ૧૬૩મા જન્મદિને કચ્છ યુનિ. અને અદાણી સ્કિલ ડેવ. વચ્ચે કરાર

નખત્રાણા શહેરમાં આયુર્વેદિક ઉકાળાનું વિતરણ કરવામાં આવ્યું

by કચ્છ સમાચાર -

રાજ્ય સરકારના આઈસીડીએસ વિભાગ દ્વારા સંયુક્ત ઝુંબેશ યોજાઈ

મુંદરા તા.માં વહાલી દીકરી યોજના હેઠળ ૧૫૦થી વધુ બાળાને સહાય મળશે

મુંદરામાં અદાણી ફાઉન્ડેશન દ્વારા વિવિધ ક્ષેત્રના તારલાઓનું બહુમાન

માછીમાર સમુદાયના ઉચ્ચ અભ્યાસ કરનારા નવયુવાનોનું સન્માન કરાયું

સ્વમાનભેર રોજગારી મેળવવા યુવાનો પારંગત બને તેવો સંદેશો અપાયો

નર્સિંગ કોર્ષના ૨૦ તાલીમાર્થીઓને પ્રમાણપત્ર પહેલા જ નોકરી મળી

ભુજમાં અદાણી સ્કિલ ડેવલોપમેન દ્વારા અપાઈ હતી તાલીમ

કચ્છમાં જરૂરિયાત મુજબ નિમણુક અપાવવામાં પ્લેસમેન્ટ ઓફિસર નિરવ લેઉવા, કિન્નરી ઉમરાણીયા તથા રોહન સોની મદદરૂપ થયા હતા.

તાલીમ માટે અસ્મિતાબેન જેઠી અને પૂર્વી ગોસ્વામી સહાયરૂપ થયા હતા. હજુ પણ જરૂરિયાત મુજબ પ્રયત્નો કરવામાં આવી રહ્યા છે.

અત્રે ઉલ્લેખનીય છે કે, ગયા ઓક્ટોબર-૧૯માં બેચ શરૂ થઈ હતી. પરંતુ, લોકડાઉન આવી જતા પરીક્ષા લઈ શકાઈ નહોતી છતાં ફળ મળ્યું છે.

Disability brings different ability, it bring hope in different way let us pray the God to give confidence and strength to the person who are having some kind of limitations with other kind of skill

Thank You...

Annexure – 5

Details of Greenbelt Development at APSEZ, Mundra

Total Green Zone Detail Till Up to March – 2021					
LOCATION	**Area (In Ha.)**	**Trees (Nos.)**	**Palm (Nos.)**	**Shrubs (SQM)**	**Lawn (SQM)**
SV COLONY	71.63	34920	7962	69426.00	100646.00
PORT & NON SEZ	81.51	149192	19220	75061.78	62062.38
SEZ	116.60	227120	20489	220583.60	28162.03
MITAP	2.52	8168	33	3340.00	4036.00
WEST PORT	100.25	244112	70331	24612.00	22854.15
AGRI PARK	8.94	17244	1332	5400.00	2121.44
SOUTH PORT	14.45	27530	3470	3882.00	3327.26
Samudra Township	56.89	62522	11834	20908.89	47520.07
Productive Farming (Vadala Farm)	23.79	27976	--	--	--
TOTAL (APSEZ)	**476.56**	**798784**	**134671**	**423214.27**	**270729.33**
		Total Saplings: 933455 Nos.			

Details of Mangrove Afforstation done by APSEZ

Sl. no.	Location	Area (ha)	Duration	Species	Implementation agency
1	Mundra Port	24.0	-	Avicennia marina	Dr. Maity, Mangrove consultant of India
2	Mundra Port	25.0	-	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)	298.0	2011 - 2013	Avicennia marina	-
6	Jangi Village (Bhachau, Kutch)	50.0	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)	255.0	2014-15 & 2016-17	Avicennia marina & Bio diversity	GUIDE, Bhuj
9	Dandi Village (Navsari)	800.0	2006 - 2011	Avicennia marina, Rhizophora mucronata, Ceriops tagal	SAVE, Ahmedabad
10	Talaza Village (Bhavnagar)	50.0	2011-12	Avicennia marina	SAVE, Ahmedabad
11	Narmada Village (Bhavnagar)	250.0	2014 - 2015	Avicennia marina	SAVE, Ahmedabad
12	Malpur Village (Bharuch)	200.0	2012-14	Avicennia marina	SAVE, Ahmedabad
13	Kantiyajal Village (Bharuch)	50.0	2014-15	Avicennia marina	SAVE, Ahmedabad
14	Devla Village (Bharuch)	150.0	210-16	Avicennia marina	SAVE, Ahmedabad
15	Village Tala Talav (Khambhat, Anand)	100.0	2015 - 2016	Avicennia marina	SAVE, Ahmedabad
16	Village Tala Talav (Khambhat, Anand)	38.0	2015 - 2016	Avicennia marina	GEC, Gandhinagar
17	Aliya Bet, Village Katpor (Hansot, Bharuch)	62.0	2017-18	Avicennia marina & Rhizophora spp.	GEC, Gandhinagar
Total Mangrove Plantation:		**2889.90 Ha**			

Annexure – 6

Cost of Environmental Protection Measures

Sr. No.	Activity	Cost incurred (INR in Lacs)			Budgeted Cost (INR in Lacs)
		2018 – 19	2019 – 20	2020 – 21	2020 – 21
1.	Environmental Study / Audit and Consultancy	6.7	0.33	6.2	51.0
2.	Legal & Statutory Expenses	4.42	0.84	10.58	11.0
3.	Environmental Monitoring Services	20.36	21.74	19.17	30.0
4.	Hazardous / Non Hazardous Waste Management & Disposal	95.72	108.43	83.55	119.8
5.	Environment Days Celebration and Advertisement / Business development	0.28	1.5	5.3	10.0
6.	Treatment and Disposal of Bio-Medical Waste	1.21	1.62	2.09	1.68
7.	Mangrove Plantation, Monitoring & Conservation	47.0	Nil	32.59	32.59
8.	Other Horticulture Expenses	579.32	734.18	689	733
9.	O&M of Sewage Treatment Plant and Effluent Treatment Plant (including STP, ETP of Port & SEZ & Common Effluent Treatment Plant)	144.29	110.18	148.49	160.08
10.	Expenditure of Environment Dept. (Apart from above head)	109.28	105.13	89.11	107.44
	Total	**1008.58**	**1083.95**	**1086.08**	**1256.59**

Annexure – 7

091245

Previous ... Previous License No. 4929

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

0102

फॉर्म नं. ४

(नियम ५ के अनुसार)

कारखाना चलाने के लिये नामांकन और लाइसेंस

अधपन्ना 52109 लाइसेंस नं. _____

नामांकन संख्या ~~70707~~

सविनय Malay Mahadevia + 8 १९४८ के कारखाना है अधिनियम
और उसके अंतर्गत बनाये गये नियमों के आधीन निम्न लिखित मकान विस्तारका वर्ष के दौरान किसीभी कार्य दिवसमें 500 से अधिक/~~अधिक~~ नहीं व्यक्तिओं को कार्य पर रखने और 5000 होर्स पावर से अधिक/~~अधिक~~ नहीं विद्यय शक्ति रखनेवाले कारखानो को नियमानुसार लाइसेंस दिया जाता है।

यह लाइसेंस ३१ दिसंबर 2018 तक मान्य रहेगा।

दिया गया भुगतान शुल्क 79200/- 52 2640/-

बाकी भुगतान शुल्क 79200/-

अधिक भुगतान शुल्क 2640/-

ता. 20/4/2017

का. धा. दिनांक : 7/10/98

Deputy Director
Industrial Safety & Health
Adipur (Kutchh)

-Sd-
विकास आयुक्त
मुन्द्रा विशेष आर्थिक क्षेत्र

लाइसेंस दिए गए मकान विस्तार की रुपरेखा

दिनांक 11-1-98 का नकशा नं. 1209/c में दर्शित लाइसेंस दिए गए मकान
Navinal Islands ~~Mandra Kutch~~
जगह पर आया हे और उसमें
Adani Ports And Special Economic Zone Ltd है।

नवी करण

नवी करण 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
26/11/2011	500 से अधिक नहीं	5000 से अधिक नहीं	39600	42240/-	२०१९	
-"-	500 से अधिक नहीं	5000 से अधिक नहीं	39600	2640	२०२०	
11-01-2021	500 से अधिक नहीं	5000 से अधिक नहीं	39600	42240	२०२१	
-"-	500 से अधिक नहीं	5000 से अधिक नहीं	39600	2640/-	२०२२	
	से अधिक नहीं	से अधिक नहीं			२०	
	से अधिक नहीं	से अधिक नहीं			२०	
	से अधिक नहीं	से अधिक नहीं			२०	
	से अधिक नहीं	से अधिक नहीं			२०	
	से अधिक नहीं	से अधिक नहीं			२०	