

To

The Inspector General of Forest / Scientist C,
Integrated Regional Office (IRO),

Ministry of Environment, Forest and Climate Change

Aranya Bhawan, A Wing, Room No. 409,

Near CH 3 Circle, Sector - 10A,

Gandhinagar - 382007.

E-mail: eccomplinace-guj@gov.in, rowz.bpl-mef@nic.in

एकीकृत क्षेत्रीय कार्यालय, गाँधीनगर

Integrated Regional Office, Gandhinagar

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, Date: 27.11.2021

Ministry of Environment, Forest & Climate Change

भारत सरकार / Govt. of India

कक्ष क्र. 407 व 409 ए, अरण्या भवन

Room No.407 & 409, A Wing, Aranya Bhawan

गाँधीनगर (गुजरात) / Gandhinagar (Gujarat)

02/12/2021

Sub : Half yearly Compliance report for Environment and CRZ Clearance for the "Multi Product SEZ, Desalination, Sea Water Intake, Outfall Facility and Pipeline at Mundra, Dist. Kachchh, Gujarat of M/s. Adani Ports and SEZ Limited"

Ref :

1. Environment and CRZ clearance granted to M/s Adani Ports and SEZ Limited vide letter dated 15th July, 2014 bearing MoEF letter No. 10-138/2008-IA.III.
2. MoEF&CC's Order dated 18.09.2015

Dear Sir,

Please refer to the above cited reference for the said subject matter. In connection to the same, it is to state that copy of the compliance report for the Environmental and CRZ Clearance for the period of April-2021 to September-2021 is being submitted through soft copy (e-mail communication & CD).

Kindly consider above submission and acknowledge.

Thank you,

Yours Faithfully,

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



Shalin Shah

Head - Environment & Sustainability

Encl: As above

Copy to:

- 1) The Additional Secretary, MoEF&CC, Regional Office (WZ), E-5, Kendriya, Paryavaran Bhawan, Arera Colony, Link Road No. - 3, Bhopal - 462016.
- 2) The Director (IA Division), Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003.
- 3) The Zonal Officer, Regional Office, CPCB - Western Region, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara - 390023.
- 4) The Member Secretary, GPCB - Head Office, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar - 382010.
- 5) The Director, Forests & Environment Department, Block - 14, 8th floor, Sachivalaya, Gandhi Nagar - 382010.
- 6) The Regional Officer, Regional Office GPCB (Kutch-East), Gandhidham - 370201.

Adani Ports and Special Economic Zone Ltd
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Registered Office: Adani Corporate House, Shantigram, Nr. Vaishno Devi Circle, S.G. Highway, Khodiyar, Ahmedabad - 382421, Gujarat, India

Chiragsing Rajput

From: Chiragsing Rajput
Sent: Tuesday, November 30, 2021 7:12 PM
To: 'ecompliance-guj@gov.in'; 'rowz.bpl-mef@nic.in'
Cc: 'ec-rdw.cpcb@gov.in'; 'ro-gpcb-kute@gujarat.gov.in'; 'ms-gpcb@gujarat.gov.in'; 'mefcc.ia3@gmail.com'; 'monitoring-ec@nic.in'; 'direnv@gujarat.gov.in'; Snehal Jariwala
Subject: Half Yearly EC Compliance Report Submission - APSEZ, Mundra - MSEZ 2014 (Apr'21 to Sep'21)
Attachments: 8. EC Compliance Report_MSEZ 2014_Apr'21 to Sep'21.pdf



Ports and
Logistics

APSEZL/EnvCell/2021-22/086

To

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

Shalin Shah

Head – Environment & Sustainability

Encl: As above

Copy to:

- 1) The Additional Secretary, MoEF&CC, Regional Office (WZ), E-5, Kendriya, Paryavaran E

Thanks & Regards,

Chiragsing Rajput

Environment Cell | Adani Ports & Special Economic Zone Ltd.

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Growth
with
Goodness

Our Values: Courage | Trust | Commitment



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Environmental Clearance Compliance Report



Multi Product SEZ,
Mundra, Dist. Kutch, Gujarat

Adani Ports and SEZ Limited

For the period of
April-2021 to September-2021

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Copy of Environmental and CRZ Clearance

F. No. 10-138/2008-IA.III
Government of India
Ministry of Environment & Forests

**Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.**

Dated: July 15, 2014

To
M/s Adani Port and SEZ Ltd
Adani House, Near Mithakhali Six Roads,
Navarangpura, Ahmedabad,
Gujarat- 380 009.

Subject: EC for proposed Multi- Product SEZ and CRZ clearance for Desalination, sea water intake, outfall facility and pipeline, at Mundra by M/s Adani Port and SEZ Ltd. – Reg.

This has reference to letter No. ENV-10-2010-1601-E dated 27.03.2012 of the Director (Environment) & Additional Secretary, Govt. of Gujarat and your subsequent letters dated 10.05.2012, 14.05.2012, 26.05.2012 and 29.04.2013 seeking prior Environmental and CRZ Clearance for the above project under the EIA Notification, 2006 and Coastal Regulation Zone Notification, 2011. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 and the Coastal Regulation Zone Notification, 2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, EIA, EMP, recommendations of the State Coastal Zone Management Authority and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 16th -17th April, 2012, 4th -5th June, 2012 and 9th -10th July, 2012.

2. It is, interalia, noted that the project involves development of multi product SEZ on a plot area of 18,000 ha. of which 6641.2784 ha. is presently notified under Special Economic Zone (SEZ). As per the proponent, the Multi product SEZ at Mundra comprising of various processing zones, non-processing zones, warehousing zones, Road Network (trunk as well as internal), Bridges or culverts over natural drains, Rail Network, IT-Telecommunication network, Electrical Network, Water supply, conservation & drainage Network, Effluent collection network, Desalination Plant with proposed intake & outfall locations, Common Effluent Treatment Plants & Sewage Treatment Plants, Natural Gas line network, Social Infrastructure, Existing Airstrip, Municipal Solid Waste Disposal site, utilities & supporting infrastructure etc. For the first phase of development total water requirement will be 150 MLD. Power requirement will be approx. 360 MW. Desalination plant of 150 MLD output capacity is proposed. 11 MLD water will be sourced through Narmada water pipeline. Two CETP each of capacity 50 MLD and 17 MLD as well as STP of 62 MLD is proposed. This will require 375 MLD of seawater intake and 241 MLD of treated waste water outfall into the sea. For final phase of development total water requirement will be 450 MLD and power requirement will be approx. 1000 MW.



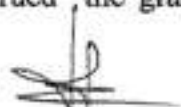
3. A suitable seawater intake point has been identified on the eastern end of the approved East Port Basin at Latitude 22°48'30.76"N; Longitude 69°46'34.06"E where a depth of 6 m below CD would be available after the port development. As per modelling study the combined discharge of 241MLD which includes 16MLD from CETP and 225 MLD from desalination plant as RO reject is expected having 57.57ppt of salinity, 14.41 mg / l of BOD and 94.39 mg/l of COD. After careful consideration of many aspects a suitable outfall location is identified on the west of the Eastern basin at Latitude 22°46'44.04"N; Longitude 69°45'5.51"E taking advantage of the expected 7.5m below CD basin depth. The outfall pipe line length is approximately 5.7 km and diffuser designed to attain a minimum dilution of 40-50 times.

4. The Centre for Earth Science Studies demarcated HTL, LTL and CRZ area. As per the CESS report and GCZMA, out of 6641.2784 ha of SEZ area, 1473.39 ha area falls within CRZ area. No SEZ industrial activity is proposed in the CRZ area. Only the Desalination plant pipeline for intake and outfall is proposed in CRZ areas. The Gujarat SCZMA in their 14th meeting held on 27-02-2012 considered the proposal of intake, outfall facilities, Desalination plant and laying pipeline and recommended the same vide their letter no.ENV-10-2010-1601-E dated 27th March 2012. Gujarat Pollution Control Board has granted Consent to Establishment of Marine outfall (NOC) vide letter dated 10.11.2011. The length of the intake will be approximately 5 Kms. As the sea water intake demand is 15000m³/h, drawal by pipe system is suitable by incorporating a wet well structure at the location. The intake point proposed is within the proposed East Port basin with a depth of 6 m below CD. The projected quantity of water can be transported through a single pipe of 1.3 m dia with a flow velocity of 3 m/ s or with a 1.6 m pipe with flow velocity of 2m/s.

5. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environment and CRZ Clearance for the SEZ in an area of 8481.2784 ha. However, SEZ for 1840 ha has been approved in principle by Ministry of Commerce and Industries.

6. Hon'ble High Court of Gujarat in WP No. 21 of 2013 vide order dated 13.01.2014 has directed that the Ministry to take a decision of its own so far as the issue of grant of environmental clearance is concerned considering the position prevailing as on date and also the aspects which have been highlighted by us in this judgment, within a period of thirty days from the date of this judgment without fail. Further, vide order dated 27.01.2014 Hon'ble Supreme Court in SLP No. 1526 of 2014 which was filed against the Order of High Court by the Respondent-1 has passed order that in case, the MOEF is unable to complete the process within the time stipulated by the High Court, it will be open for them to approach this Court for extension of time. Accordingly, Ministry has filed a petition before the Hon'ble Supreme Court seeking extension of two months time.

7. It is noted from the Judgement dated 13.01.2014 of Hon'ble High Court of Gujarat in PIL 21 of 2013 the Hon'ble Court has construed the grant of lease to units prior to



obtaining EC by M/s APSEZL as violation of EIA, Notification, 2006. Therefore, according to the OM's dated 12.12.2012 and 27.06.2013, PP was addressed for Board Resolution and the State Government was addressed to take credible action against the PP for the violation. Direction under Section 5 of E(P)Act, 1986 was also issued to APSEZ not to take up and allow any further construction activity within SEZ till the grant of clearance.

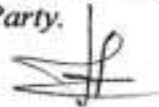
8. Further, Hon'ble Supreme Court video order dated 02.05.2014 in SLP 1526 of 2013 had ordered for stay of Ministry's letter dated 3.04.2014 addressed to Government of Gujarat to initiate legal action for the violation, also directed that the Ministry to complete the process of EC within eight weeks.

9. M/s APSEZ Ltd. has stated that the Board resolved that since the matter is sub-judice before the Hon'ble Supreme Court of India, will fully abide by the outcome of the decision of the Hon'ble Supreme Court.

10. In view of the above and to comply with the orders of Hon'ble Courts, Ministry hereby accords necessary Environment Clearance for proposed Multi- Product SEZ in an area of 6641.2784 ha and CRZ clearance for desalination, seawater intake, outfall facility and pipeline for as per the provisions of Environmental Impact Assessment Notification – 2006 and its subsequent amendments and Coastal Regulation Zone Notification, 2011, subject to strict compliance of the terms and conditions as follows:

11. PART A - SPECIFIC CONDITIONS

- (i) *PP shall abide by the final order/decision of Hon'ble Supreme Court in SLP (Civil) no. 1526/2014 and connected matters.*
- (ii) *Properly conserve the creeks, river and the mangroves area in the area.*
- (iii) *Ensure that mouths of all the creeks are kept open to ensure flushing of the creeks.*
- (iv) *Bring the creeks to the condition as was seen in the satellite map of 2005 which will be a "reference" satellite map and a copy of which shall be sent to you separately.*
- (v) *Submit once in a year latest satellite map which can be compared with the reference satellite map of 2005 to ensure that no modification in the creeks, rivers, mangroves and mouth of creeks have taken place.*
- (vi) *Any direction issued by the MoEF with respect to the report submitted by Ms Sunita Narain Committee shall be complied with by the Proponent as applicable.*
- (vii) *At its cost get Inspection study done once in a year by the organizations like NEERI or any organization approved by this Ministry to - (i) ensure compliance of all the EC conditions (ii) development of SEZ meeting of the environment norms, and (iii) advise any mid-term correction that can be introduced depending on the recommendation of the independent Third Party.*



- (viii) "Consent for Establishment" for the SEZ shall be obtained from Gujarat Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ix) PP shall get detailed bathymetry done for all the creeks and rivers within Port and SEZ areas along with mapping of co-ordinates, running length, HTL, CRZ boundary, mangrove areas including buffer zone through NCSCM / NIOT. PP shall also get prepared a detailed action plan for conservation and protection of creeks/ mangrove area etc through NCSCM / NIOT and submit the same to GCZMA for their examination and recommendation. GCZMA will submit its recommendations to MoEF for approval.
- (x) PP shall demarcate the CRZ area on land with GPS coordinates in consultation with GCZMA/ the agency which has done the HTL/LTL demarcation for the area. There shall be no allotment of plot/s in CRZ area to industries. No industrial activity within CRZ area except the port and harbor & the foreshore facilities shall be allowed as committed
- (xi) Till the approval of action plan for conservation and protection of creeks/ mangrove area, the CRZ area within SEZ shall be demarcated as "No Development Zone". PP shall not allow/ undertake any development in CRZ area of SEZ.
- (xii) The implementation of action plan approved by the MoEF shall be monitored by the NCSCM/ NIOT. Compliance with action plan shall be submitted to GCZMA and to MoEF, RO. at Bhopal along with six monthly monitoring report.
- (xiii) PP shall earmark separate budget for the implementation of the above action plan. The details of the expenditure shall be submitted to GCZMA and to MoEF, RO. at Bhopal along with six monthly monitoring report.
- (xiv) All the industry in SEZ shall be connected through impervious drainage lines to the STP/ CETP for the discharge of their sewage or industrial effluent. There shall not be any discharge to creeks / rivers. PP shall be accountable for implementing this condition and necessary clause shall be incorporated in the MoU while allotting the plot to the individual industries
- (xv) PP shall not carry out any river course modification.
- (xvi) The individual industrial units shall obtain prior EC under EIA Notification, 2006 as applicable.
- (xvii) Proponent shall identify 200 ha of land for mangrove plantation as per the condition laid by SEAC.
- (xviii) 50 meter buffer from the existing mangrove area should be provided for any developmental activity,



- (xix) *Proponent shall develop the green belt with 3 layers of canopy all along the periphery.*
- (xx) *All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.*
- (xxi) *There shall be no disturbance to the sand dunes. The pipelines shall be laid using advanced method viz. Horizontal Directional Drilling (HDD) so as to avoid disturbance to the sand dunes/ creeks/ mangroves.*

PART – B. GENERAL CONDITIONS

Construction Phase.

- (i) *Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.*
- (ii) *A First Aid Room will be provided in the project both during construction and operation of the project.*
- (iii) *All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.*
- (iv) *Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed, taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.*
- (v) *Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.*
- (vi) *Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.*
- (vii) *Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.*
- (viii) *The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.*



- (ix) *The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.*
- (x) *Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.*
- (xi) *Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/GPCB.*
- (xii) *Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within 100 Kms of Thermal Power Stations).*
- (xiii) *Ready mixed concrete must be used in building construction.*
- (xiv) *Storm water control and its re-use should be regulated as per CGWB and BIS standards for various applications.*
- (xv) *Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other referred best practices.*
- (xvi) *Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.*
- (xvii) *Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.*
- (xviii) *Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.*
- (xix) *Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.*
- (xx) *Roof should meet prescriptive requirements as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirements.*
- (xxi) *Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfil these requirement.*



- (xxii) *The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightning etc.*
- (xxiii) *Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.*
- (xxiv) *Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it is found that construction of the project has been started without obtaining environmental clearance.*

Operation Phase

- (i) *The PP while issuing the allotment letter to individual member units shall specifically mention the allowable maximum quantity of water usage and effluent generated by each member unit.*
- (ii) *The PP shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest improvements.*
- (iii) *Treated affluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.*
- (iv) *The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.*
- (v) *Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operational phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Low sulphur diesel should be used. The location of the DG sets may be decided in consultation with the Gujarat Pollution Control Board.*
- (vi) *Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.*
- (vii) *Green belt of adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.*



- (viii) *Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.*
- (ix) *Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented.*
- (x) *The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.*
- (xi) *Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.*
- (xii) *A Report on the energy conservation measures conforming to energy conservation norms finalised by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & D Factors etc and submitted to the Ministry along with six monthly monitoring report.*
- (xiii) *Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be an integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Solar panels may be used to the extent possible.*
- (xiv) *Adequate measures should be taken to prevent odour problems from solid waste processing plant and STP.*
- (xv) *The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.*
- (xvi) *The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.*
- (xvii) *Adequate drinking water facility be provided.*
- (xviii) *Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.*
- (xix) *Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. A hybrid system or fully solar system for portion of the apartments should be provided.*
- (xx) *Ozone depleting substance (Regulation & Control) Rules should be followed while designing the air conditioning system of the project.*

12. Officials from the Regional Office of MOEF, Bhopal who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the

documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bhopal

13. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

14. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

15. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

16. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.

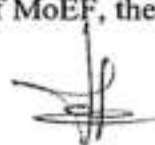
17. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.

18. Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

19. "Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010".

20. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

21. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.




22. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

23. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.


(Lalit Kapur)
Director (IA-III)

Copy to:

1. The Principal Secretary, Forest and Environment Department, Block no. 14/ 8 floor Sachivalaya, Gandhinagar – 382 010 Gujarat.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 110 032.
3. The Member Secretary, Gujarat Coastal Zone Management Authority & Director,(Environment) Forests & Environment Department, Block No. 14, 8th Floor, Sachivalaya, GandhiNagar-382.
4. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bhopal – 462016 (M.P.)
5. The Member Secretary, Gujarat State Pollution Control Board, Paryavaran Bhawan , Sector 10-A, Gandhi Nagar 382043, Gujarat
6. Director (EI), Ministry of Environment and Forests.
7. Guard File.
8. Monitoring File.


(Lalit Kapur)
Director (IA-III)

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Compliance Report of Environmental and CRZ Clearance

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

M/s. APSEZ has been granted Environmental / CRZ clearance vide letter no. 10-138/2008-IA.III, dated 15th July, 2014 for development of “Multi Product SEZ, Desalination, Sea Water Intake, Outfall Facility and Pipeline”.

Activities / Facilities approved are as below:

Facilities / Components Approved	Capacity	Status as on 30.09.2021
Desalination Plant	150 MLD	Construction has not been started.
Sea water Intake & Outfall Facility	375 MLD: Intake 241 MLD: Outfall	Construction has not been started.
Common Effluent Treatment Plant	17 MLD	MPSEZ Utilities Ltd. (MUL) has been granted environmental clearance for CETP having 17.0 MLD capacities. Out of which at present one module of CETP having 2.5 MLD capacities has been constructed and is in operation.
	50 MLD	Construction has not been started.
Social Infrastructure Projects	--	Adani Mundra SEZ Infrastructure Pvt. Ltd. (AMSIPL) has granted environmental clearance for township and area development project in 255 Ha. Out of approved 10,000 no. of residential units, 1368 units are constructed.
Sewage Treatment Plant	62 MLD	APSEZ has installed Sewage Treatment Plant @ 150 KLD Capacities within SEZ for treatment of sewage generated from port user buildings.
Airstrip	--	Airstrip has been developed within SEZ area after obtaining requisite permissions.
Municipal Solid Waste Site	--	Material Recovery site is provided for the management of Municipal Solid Waste.
Free Trade & Ware House Zone (FTWZ)	--	Construction is completed and in operation.

Other utility developments and modification, as a part of SEZ, to facilitate various units coming as a part of SEZ are being done on continuous basis.

Note:

Environmental / CRZ clearance has been granted for additional facilities like Processing Zones, Non-processing Zones, Warehousing Zones, Road Network (Trunk as well as Internal), Bridges or Culverts over natural drain, Rail Network, IT-Telecommunication Network, Electric Network, Water Supply, Conservation & Drainage Network, Effluent Collection Network and Utilities & Supporting Infrastructure within SEZ area.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Boundary wall is constructed along the project periphery. In some of areas level raising and area development of SEZ area, wherever required is also under progress.

APSEZ has been granted Environment and CRZ clearance for 'Expansion of notified Multi-product SEZ by adding 1840 Ha notified SEZ with existing approved area of 6641.2784 ha to make it 8481.2784 ha at Mundra vide letter no. F. No. 10-138/200E-IA.III, dated 12th February, 2020.

*Inline to the APSEZ's request, Ministry of Commerce & Industry (MoCI) vide Gazette order dtd. 4th July 2019 has de-notified 46.6894 from total area of 8481.2784 Ha, thereby making resultant area of notified Multiproduct SEZ as 8434.5890 Ha.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

List of Industrial Units within SEZ area

Sr. No.	Name of Unit	Nature of Business	Status
1.	Skaps Industries India Pvt. Ltd (Unit-I)	Textile	In Operation
2.	Skaps Industries India Pvt. Ltd (Unit-II)		In Operation
3.	Terram Gosynthetics Pvt. Ltd.		In Operation
4.	Ahlstrom Fibre Composite India Pvt. Ltd.		In Operation
5.	Ashapura Garments		Not in Operation
6.	Anjani Udyog Pvt. Ltd.		In Operation
7.	Aanya Composites Private Limited		Under Construction
8.	Bombay Bazar Readymade Garments		In Operation
9.	M.D. Equipments	Engineering	Under Construction
10.	Thermax Ltd.		In Operation
11.	JNK India Pvt Ltd.		Under Construction
12.	Oilfield Warehouse Services Pvt. Ltd.	Warehouse	In Operation
13.	Oilfield Warehouse Services LLP		Under Construction
14.	Rudrax Terminal		In operation
15.	Empezar Logistics		In operation
16.	Steinweige Sharaf		In operation
17.	Kerry Indev Logistic Pvt. Ltd.		In operation
18.	Fast Track CFS		In operation
19.	Adani Warehousing Services Pvt Ltd. Unit I		In operation
20.	Sea Shore Logistics		In operation
21.	Adani Logistics Limited		In operation
22.	Safal Logistics LLP		In operation
23.	Dorf Ketel Specialty Catalyst Pvt. Ltd.	Chemical	In Operation
24.	Oriental Carbon and Chemicals Ltd.		In Operation
25.	Gujarat CREDO Alumina Chemicals Pvt. Ltd.		In Operation
26.	Mundra Oil Pvt. Ltd.		In Operation
27.	Garg Tubes Exports LLP		In Operation
28.	Jasons Industries		In Operation
29.	Seabird Marine Services Pvt. Ltd.	CFS	In Operation
30.	Honeycomb Logistics Pvt. Ltd.		In Operation
31.	All Cargo Global Logistics Ltd.		In Operation
32.	Mundhra CFS		In Operation
33.	Saurashtra Containers Pvt. Ltd.		In Operation
34.	Transworld Terminals Pvt. Ltd.		In Operation
35.	Mundra International Container Terminal (DP World)		In Operation
36.	Central Warehousing Corp. Ltd.		In Operation
37.	Ruby Shipping	Trading Unit	In Operation
38.	Suresh Biz Globe		In Operation
39.	Maruti Suzuki India Limited (PDI Yard)	Pre Delivery Inspection Yard	In Operation
40.	Britannia Industries Limited	Food Products	In Operation
41.	Mundra Solar Photo Voltaic Ltd.	Electronics Manufacturing Cluster	In Operation
42.	Mundra Solar Technopark Pvt. Ltd.		In Operation
43.	Vishakha Renewable Pvt Ltd		In Operation
44.	Vishakha Solar Films Pvt Ltd		In Operation
45.	Vishakha Metals Pvt Ltd		In Operation
46.	Adani Power (Mundra) Limited	Thermal Power Plant	In Operation
47.	Adani Renewable Energy (KA) Ltd.	Wind Energy	In Operation
48.	AMSIPL- Samudra Township (including residential units, STP 2.5 MLD, hospital, commercial complex, school etc.)	Social Infrastructure	In Operation
49.	MPSEZ Utilities Ltd.	Common Effluent Treatment Plant 2.5 MLD	In Operation
50.	Hirise Hospitality Pvt. Ltd.	Beetle smart hotel	In Operation

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Compliance report of Environment Clearance for the project “Multi Product SEZ” and CRZ Clearance for the project “Desalination, Sea Water Intake, Outfall Facility and Pipeline at Mundra, Dist. Kachchh, Gujarat of M/s. Adani Ports and SEZ Limited” vide MoEF letter No. 10-138/2008-IA.III dated 15th July, 2014.

Sr. No.	Conditions	Compliance Status as on 30.09.2021
Part – A: Specific Conditions		
i.	PP shall abide by the final order/decision of Hon'ble Supreme Court in SLP (Civil) no. 1526/2014 and connected matters.	<p>Point noted and will be complied.</p> <p>Vide order dated 14.07.2014, the Hon'ble Supreme Court directed MoEF&CC to complete the process of environmental clearance to the MSEZ project of APSEZ within eight weeks. MoEF&CC issued EC and CRZ clearance to the proposed project vide letter dated 15.07.2014. Hence, the SLP (Civil) no. 1526/2014 is deemed closed. Details of the same were submitted along with EC Compliance report for the period Apr'18 to Sep'18.</p>
ii.	Properly conserve the creeks, river and the mangroves area in the area.	<p>Complied.</p> <p>This reply covers condition no ii, iii, ix, x, xi, xii & xiii.</p> <p><u>Conservation of creeks and rivers:</u></p> <ul style="list-style-type: none"> • The prominent creek system (main creeks and small branches of creeks) in and around APSEZ are: (1) Kotdi (2) Baradimata (3) Navinal (4) Bocha (5) Mundra (Oldest port (Juna Bandar) leading to Bhukhi river). • Rivers passing through the APSEZ area are: (1) Khari (2) Nagmati (3) Phot (4) Bhukhi (5) Dhaneshwari (6) Buchiya (7) Jidal. • All the rivers passing through the SEZ area are dry throughout the year except for monsoon season. • All creeks as well as rivers are in existence allowing free flow of water and there is no filling or reclamation of any creek or river area. APSEZ has so far constructed 19 culverts having total length of approx. 1100 m with total cost of INR 20 Crores. Three RCC Bridges have also been constructed over Kotdi creek with total length of 230 m and cost of INR 10 Crores. Details were submitted along with compliance report submission for the period of Apr'17 to Sep'17. • This aspect is also confirmed from the recent study of NCSCM in 2017-18, which highlights the bathymetry data of

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>the entire coast around APSEZ.</p> <ul style="list-style-type: none"> From the bathymetry data it can be concluded that there are sufficient depths at the creek mouths and all creek mouths are open allowing flushing of water. From the APSEZ operations, there is no discharge of any sewage or effluent to the water streams. <p><u>Conservation of Mangroves:</u></p> <ul style="list-style-type: none"> In and around APSEZ, approx. 1800 ha. mangrove area was identified by NIO in an EIA report prepared the year 1998. Out of this 1800 ha area, 1254 ha area was further demarcated as potential mangrove conservation by NIO in the year 2008 (as part of the EIA report of WFDP). It may be noted that the entire area of 1254 ha is not covered with mangroves. Entire area is being conserved and there is no disturbance to the mangroves in this area. Measures such as restricted entry and regular surveillance have resulted in overall growth of mangroves within this area. As per MoEF&CC directive, APSEZ entrusted NCSCM to demarcate mangroves in and around APSEZ area. As per their study, presently, mangrove cover in and around APSEZ was over 2340 ha. The analysis of the comparison between 2011 and 2016-17 has shown an overall growth of 246 ha. NCSCM final report on comprehensive and integrated plan for preservation and conservation of mangroves and associated creeks in and around was submitted along with half yearly EC Compliance report for the period Apr'19 to Sep'19. The same was further submitted to GCZMA and MoEF&CC for their examination and recommendation vide (with a copy to MoEF&CC vide letter dated 04.06.2018 & reminder letter vide dated 4th Jan, 2019). Presentation on the findings of the report was made to GCZMA committee on 4th October 2019 and the recommendation for the same has been received vide email dtd 22nd Sept, 2020 with conditions, which was submitted as a part last half yearly EC compliance report for the period Oct'20 to Mar'21. <p>As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021		
		Sr. No.	Recommendations	Compliance
		1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none"> APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island. As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.7% This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which also shows that the growth of mangroves in a progressive direction. Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.
		2.	Tidal observation in creeks in and around APSEZ	<ul style="list-style-type: none"> APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal, Bocha and Khari creeks under the guidance of NCSCM. The observed tidal ranges indicate that the creeks experience normal tidal ranges, adequate for the growth of mangroves. The cost of the said activity was INR 1.0 Lacs.
		3.	Removal of Algal and Prosopis growth from mangrove areas	<ul style="list-style-type: none"> Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in some of the mangrove areas, which has been removed manually. The cost of the said activity was INR 1.2 Lacs.
		4.	Awareness of mangroves	<ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done awareness

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021	
		importance surrounding communities in	camps/activities created in the community regarding importance of mangroves. <ul style="list-style-type: none"> Adani Foundation has also provided 8.95 lacs kg Dry Fodder and 24.25 lacs kg Green fodder in 21 villages of Mundra and Anjar Block to support the resource dependent villagers, to avoid their dependency on mangroves. The expenditure for fodder supporting activities was approx. 122.7 Lacs during FY 2021-22 (Till Sep'21). 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 Grassland development in Siracha – 85 Acre & Zarpara – 25 Acre done which resulted in total production of 82 ton. Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no any unauthorized persons allowed within coastal as well as mangrove areas. Refer CSR report attached as Annexure – 1.
		Details of activities done as a part of GCZMA recommendations and NCSCM mangrove conservation action plan were submitted as a part of last half yearly EC compliance report for the period Oct'20 to Mar'21.	
iii.	Ensure that mouths of all the creeks are kept open to ensure flushing of the creeks.	Complied. <ul style="list-style-type: none"> The prominent creek system (main creeks and small branches of creeks) in and around APSEZ are: (1) Kotdi (2) Baradimata (3) Navinal (4) Bocha (5) Mundra (Oldest port (Juna Bandar) leading to Bhukhi river). All above creek mouths are open allowing free flow of water in to the creeks and surrounding areas and there is no filling or reclamation of any creek area. This aspect is also confirmed from the recent study of NCSCM which highlights the bathymetry data of the entire coast around APSEZ. From the bathymetry data it can be concluded that there are sufficient depths at the creek mouths and all creek 	

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>mouths are open allowing flushing of water.</p> <ul style="list-style-type: none"> • Please refer Specific Condition no. ii for further details.
iv.	Bring the creeks to the condition as was seen in the satellite map of 2005 which will be a "reference" satellite map and a copy of which shall be sent to you separately.	<p>Not applicable</p> <p>This reply covers condition no iv, v, vi.</p> <p>The stated conditions were stipulated in the EC and CRZ clearance with respect to the pending SCNs and based on Ms. Sunita Narain committee report. In continuation to the SCNs and subsequent submissions by APSEZ, MoEF&CC issued a final order vide letter dated 18.09.2015 (which disposed the pending Show Cause Notices). Full compliance of the directions issued vide the said order is provided as Annexure – B.</p>
v.	Submit once in a year latest satellite map which can be compared with the reference satellite map of 2005 to ensure that no modifications in the creeks, rivers, mangroves and mouth of creeks have taken place.	<p>It may be noted that the stated conditions related to the satellite image of 2005 are not imposed to APSEZ as part of the said order. Hence, APSEZ has made submission to MoEF&CC vide letters dated 23.05.2016 and 07.11.2016. Copies of the said letters were submitted along with compliance report submission for the period from Oct'16 to Mar'17. Further there are no directions from MoEF&CC.</p>
vi.	Any direction issued by the MoEF with respect to the report submitted by Ms Sunita Narain Committee shall be complied with by the Proponent as applicable.	
vii.	At its cost get Inspection study done once in a year by the organizations like NEERI or any organization approved by this Ministry to - (i) ensure compliance of all the EC conditions (ii) development of SEZ meeting of the environment norms, and (iii) advise any mid-term correction that can be introduced depending on the recommendation of the independent Third Party.	<p>Complied.</p> <p>NEERI, Nagpur has been appointed to carry out the inspection study for the year 2021-22 at a cost of INR 5 Lacs.</p> <p>Site visit was conducted on 6th & 7th October, 2021 and compliance report of the period from Oct'20 to Mar'21 was reviewed by NEERI. It has been concluded all the conditions stipulated in EC are being complied and there is no violation of any condition. Copy of the certificate is annexed as Annexure – 2.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021												
viii.	"Consent for Establishment" for the SEZ shall be obtained from Gujarat Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.	<p>Complied.</p> <p>Consent to Establish (CtE) is obtained for the project from Gujarat Pollution Control Board vide their letter no. GPCB/CCA-KUTCH-1044/ GPCB ID 31463/ 109800, dated 16.04.2012. Copy of the same was submitted to MoEF&CC, Regional Office, Bhopal vide our letter dated 5th Aug, 2014. The CtE was also submitted with compliance report submission for the period Oct'15 to Mar'16.</p> <p>The project has been developed as per Consent to Establish (CtE) and Consent to Operate (CtO) granted by SPCB. The present in-force CtO are mentioned below.</p> <table><tr><th>Permission</th><th>Project</th><th>Ref. No. / Order No.</th><th>Valid till</th></tr><tr><td>CtO – Fresh</td><td>Multi-Product SEZ</td><td>AWH – 88998</td><td>21.08.2022</td></tr><tr><td>CtO – Amendment</td><td>Multi-Product SEZ</td><td>AWH – 97361</td><td>21.08.2022</td></tr></table> <p>Copy of CtOs were submitted along with half yearly EC Compliance report for the Oct'18 to Mar'19 and there is no further change.</p>	Permission	Project	Ref. No. / Order No.	Valid till	CtO – Fresh	Multi-Product SEZ	AWH – 88998	21.08.2022	CtO – Amendment	Multi-Product SEZ	AWH – 97361	21.08.2022
Permission	Project	Ref. No. / Order No.	Valid till											
CtO – Fresh	Multi-Product SEZ	AWH – 88998	21.08.2022											
CtO – Amendment	Multi-Product SEZ	AWH – 97361	21.08.2022											
ix.	PP shall get detailed bathymetry done for all the creeks and rivers within Port and SEZ areas along with mapping of co-ordinates, running length, HTL, CRZ boundary, mangrove area including buffer zone through NCSCM /NIOT. PP shall also get prepared a detailed action plan for conservation and protection of creeks /mangrove area etc through NCSCM/NIOT and submit the same to GCZMA for their examination and recommendation. GCZMA	<p>Complied</p> <p>Based on the MoEF&CC directions, APSEZ has entrusted NCSCM to carry out the detailed study. Scope of the study include the following:</p> <ul style="list-style-type: none">• Detail bathymetry and topography survey of creeks• Demarcation of mangrove areas and buffer zone• Demarcation of HTL and CRZ areas with co-ordinates• Preparation of a comprehensive and integrated conservation plan for protection of creeks and mangroves <p>In order to complete the study, NCSCM has carried out number of site surveys which are mentioned below:</p> <ul style="list-style-type: none">• Bathymetry survey of creeks• Topography survey of intertidal areas• Mangrove survey (health and area demarcation)• Sampling of soil and water for analysis of physico-chemical and biological parameters												

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	<p>will submit its recommendations to MoEF for approval.</p>	<ul style="list-style-type: none"> • Tide and currents data collection (including residence time of tidal water) study <p>Based on the study, the following points can be summarized:</p> <ul style="list-style-type: none"> • There is no obstruction to any water stream (creeks / branches of creeks / rivers) • Presently, mangrove cover in and around APSEZ is over 2340 ha. There was substantial growth in mangrove cover to the tune of 246 ha (comparison between 2011 and 2016-17) • Majority of the development at Mundra has happened between this tenure. Hence it can be interpreted that the infrastructure development has not left any adverse impacts on ecology. <p>Please refer specific condition no. ii above for further details.</p>
x.	<p>PP shall demarcate the CRZ area on land with GPS coordinates in consultation with GCZMA/ the agency which has done the HTL /LTL demarcation for the area. There shall be no allotment of plot/s in CRZ area to industries. No industrial activity within CRZ area except the port and harbor & the foreshore facilities shall be allowed as committed.</p>	<p>Being complied</p> <p>For demarcation of HTL and CRZ areas, NCZMA has approved the CZMP of Kutch region vide 39th NCZMA meeting, held on 13.01.2020. However the map are yet to be published, Once the maps are published, NCSCM will issue the final maps for the project area of APSEZ. The said maps will then be submitted to GCZMA and MoEF&CC by APSEZ.</p> <p>In addition to that please note that</p> <ul style="list-style-type: none"> • There is no allotment of plot(s) in CRZ area to any industry. • Only those activities which are allowed within CRZ area are being carried out (with due approvals from concerned authorities) • No industrial activity within CRZ area except the port and harbor & the foreshore facilities are carried out.
xi.	<p>Till the approval of action plan for conservation and protection of creeks /mangrove area, the CRZ area within SEZ shall be demarcated as "No Development Zone". PP shall not allow / undertake any</p>	<p>Complied</p> <p>The action plan for conservation of creeks and mangrove areas is prepared by NCSCM and the same is submitted to GCZMA and MoEF&CC for their examination and recommendation. The main action plan as per the study are mentioned summarized below:</p> <ul style="list-style-type: none"> • Monitoring of mangrove cover in Jan/Mar, 2020 using latest

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	development in CRZ area of SEZ.	<p>satellite images and validation with field observations</p> <ul style="list-style-type: none"> Monitoring of tidal range in the mangrove areas and comparison with the data collected during 2017. Removal of silt / sand spits from the central part of navinal creek Dredging of shallow area off Bocha Island to reduce current velocity. <p>Please refer specific condition no. ii for further details w.r.t. Mangrove Conservation Action Plan.</p> <p>No development is carried out in the 'No Development Zone' (i.e. CRZ area of SEZ).</p>
xii.	The implementation of action plan approved by the MoEF shall be monitored by the NCSCM/NIOT. Compliance with action plan shall be submitted to GCZMA and to MoEF, RO at Bhopal along with six monthly monitoring report.	<p>Point noted and will be complied</p> <p>The action plan for conservation of creeks and mangrove areas is prepared by NCSCM and the same was submitted to GCZMA and MoEF&CC for their examination and recommendation.</p> <p>Please refer specific condition no. ii for further details w.r.t. Mangrove Conservation Action Plan.</p>
xiii.	PP shall earmark separate budget for the implementation of the above action plan. The details of the expenditure shall be submitted to GCZMA and to MoEF, RO at Bhopal along with six monthly monitoring report.	<p>Point noted and will be complied</p> <p>A separate budget has been allocated and incurred by APSEZ for implementation of mangrove conservation action plan.</p> <ul style="list-style-type: none"> Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island – 23.56 Lacs Algal & Prosopis Removal Work from mangrove area – 1.2 Lacs Tide Level Monitoring within creeks around APSEZ – 1.0 Lac Fodder supply to the villagers (Apr'21 to Sep'21) – 122.7 Lacs <p>Please refer specific condition no. ii above for further details.</p>
xiv.	All the industry in SEZ shall be connected through impervious	<p>Complied.</p> <p>As per the Lease Deed agreement, existing industries are well</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	<p>drainage lines to the STP/CETP for the discharge of their sewage or industrial effluent. There shall not be any discharge to creeks / rivers. PP shall be accountable for implementing this condition and necessary clause shall be incorporated in the MoU while allotting the plot to the individual industries.</p>	<p>connected with impervious pipeline to discharge their effluent / sewage after confirming to the inlet norms of CETP. Typical copy of the Lease Deed (Agreement) was submitted along with compliance report submission for the duration of Oct'16 to Mar'17.</p> <p>Entire quantity of treated wastewater from CETP is being utilized for horticulture purpose within SEZ area. No discharge is allowed in to creeks / rivers. Same practice will be continued in future as well and capacity enhancement of CETP will be carried out based on requirement.</p> <p>List of CETP member units were submitted along with half yearly EC compliance report for the period Oct'19 to Mar'20. And there is no further change.</p> <p>The industries which treat the sewage / effluent within their premises comply the stipulated norms of discharge given by GPCB. Through regular monitoring it is ensured by APSEZ that the treated water is used for gardening within the respective industries and there is no discharge to any water body including rivers or creeks.</p>
xv.	PP shall not carry out any river course modification.	<p>Complied</p> <p>The project was conceptualized in such a way that no river course modification is required to be carried out. All the rivers passing through SEZ are maintained through proper path for area drainage.</p>
xvi.	The individual industrial units shall obtain prior EC under EIA Notification, 2006 as applicable.	<p>Complied.</p> <p>All industrial units coming up in within the SEZ are informed and aware about the said requirement. Out of total units established within SEZ, only Adani Power Limited, Dorf Ketel and Jeson Industries falls under purview of EIA Notification 2006 and they have obtained their specific EC as applicable. The condition is being followed on case-to-case basis as applicable.</p>
xvii.	Proponent shall identify 200 ha of land for mangrove plantation as per the condition laid by SEAC.	<p>Complied.</p> <p>100 Ha. Mangrove plantation is carried out by SAVE at Tala Tadav village of Khambhat Taluka of Anand district. A final report of SAVE was submitted along with half yearly compliance report for the period Apr'17 to Sep'17.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>100 Ha. Mangrove plantation is carried out by GEC. From which 38 ha. plantation is completed at Tala Tadav village of Khambhat Taluka of Anand district during 2017-18 and remaining 62 ha. Plantation is completed at Aliya Bet of Bharuch district during 2018-19. A final report of GEC was submitted along with half yearly compliance report for the period Oct'18 to Mar'19.</p>
xviii.	<p>50 meter buffer from the existing mangrove area should be provided for any developmental activity.</p>	<p>Complied.</p> <p>50-meter buffer from the existing mangrove area as per the CRZ notification is being maintained and all developmental activities are being carried out as per the approval only.</p>
xix.	<p>Proponent shall develop the green belt with 3 layers of canopy all along the periphery.</p>	<p>Being complied.</p> <p>APSEZ has developed "Dept. of Horticulture" which is taking measures/ steps for terrestrial greening as well as mangrove plantation. Development of greenbelt at various locations within the SEZ is an ongoing activity. Green belt of 3 layer canopy will be developed as part of the development of SEZ.</p> <p>The species such as Ficus Infectoria, Ficus religiosa, Terminalia arjuna, Cocos nucifera, Washingtonia fillifera, Casurina spp., Azadirachta Indica, Eucalyptus spp., Jatropha curacus, Ficus bengalensis, Subabool spp., Casia fistula, Date Palm and Delonix regia were grown in SEZ area.</p> <p>Width of the green belt varies from 2 m to 8 m and density varies from 1500 to 2000 trees per hectare at various locations. Total 146.83 hectares of land with approx. 2.55 Lacs trees is developed within SEZ area till date. So, far APSEZ has developed 486.19 Ha area as greenbelt with plantation 9.4 Lacs trees within the entire APSEZ area.</p> <p>Please refer Annexure – 3 for further details regarding greenbelt development and mangrove afforestation. An updated green belt development plan is also attached as part of the said annexure. Total expenditures of the horticulture dept. for the financial year of 2021-22 (Till Sep'21) have been INR 605 lakh.</p> <p>It may be noted that individual industrial units have developed the greenbelt within their premises based on their planning & approvals and new industries coming up any will also comply</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021																					
		<p>as per their approvals. The same is being ensured by the environment monitoring committee of APSEZ.</p> <p>For the area where further development is yet to be carried out, APSEZ will ensure that greenbelt with 3-layer canopy is developed by either APSEZ or the industrial unit to whom the land is allotted. Photographs showing the 3-layer canopy greenbelt developed within APSEZ were along with half yearly compliance report for the period Oct'18 to Mar'19.</p>																					
xx.	All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF along with half yearly compliance report to MoEF-RO.	<p>Complied.</p> <p>Compliance report of environmental management plan and mitigation measures proposed as part of the EIA report is summarized below. The same is submitted to the concerned authorities including MoEF&CC, RO, Bhopal as part of the six monthly compliance reports. Details of the past six compliance reports are mentioned below.</p> <table border="1"> <thead> <tr> <th>Sr. No.</th><th>Compliance period</th><th>Date of submission</th></tr> </thead> <tbody> <tr> <td>1</td><td>Apr'18 to Sep'18</td><td>30.11.2018</td></tr> <tr> <td>2</td><td>Oct'18 to Mar'19</td><td>31.05.2019</td></tr> <tr> <td>3</td><td>Apr'19 to Sep'19</td><td>28.11.2019</td></tr> <tr> <td>4</td><td>Oct'19 to Mar'20</td><td>20.05.2020</td></tr> <tr> <td>5</td><td>Apr'20 to Sep'20</td><td>26.11.2020</td></tr> <tr> <td>6</td><td>Oct'20 to Mar'21</td><td>25.05.2021</td></tr> </tbody> </table> <p>Summary of the compliance to the measures suggested in EMP are given in Annexure – 4.</p>	Sr. No.	Compliance period	Date of submission	1	Apr'18 to Sep'18	30.11.2018	2	Oct'18 to Mar'19	31.05.2019	3	Apr'19 to Sep'19	28.11.2019	4	Oct'19 to Mar'20	20.05.2020	5	Apr'20 to Sep'20	26.11.2020	6	Oct'20 to Mar'21	25.05.2021
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xxi.	There shall be no disturbance to the sand dunes. The pipelines shall be laid using advanced method viz. Horizontal Directional Drilling (HDD) so as to avoid disturbance to the sand dunes/creeks/mangroves.	<p>Complied.</p> <p>There is no sand dune in the SEZ area.</p> <p>Point noted.</p> <p>No pipelines for intake and outfall of sea water are laid till now and same will be studied as and when required. HDD method will be explored for creek crossing for other pipelines.</p>																					
Part – B: General Conditions																							
	Construction Phase																						
i	Provision shall be made for the housing of	Not applicable at present.																					

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
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Sr. No.	Conditions	Compliance Status as on 30.09.2021
	construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Most of the construction labours reside in the nearby villages where all basic facilities are easily available. There are no housing requirements for labours inside the project area.
ii	A first aid room will be provided in the project both during construction and operation of the project.	Complied. APSEZ has established Occupational Health Center & First Aid facility at different locations within SEZ, which will be utilized during entire construction as well as operation phase of SEZ project. In case of emergency situation requiring higher level of treatment, the facilities at Adani hospital (Multi-Specialty) having 110 bedded facilities located with SEZ area can be utilized.
iii	All the topsoil excavated during construction phase should be stored for use in horticulture/landscape development within the project site.	Complied. Excavated topsoil, if any, will be used for the horticulture /landscape development within the project site.
iv	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed, taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Complied. No excavated muck has been generated and disposed-off. Construction waste, if any, is utilized for area development within the project site.
v	Soil and ground water samples will be tested to ascertain that there is no	Complied. Environment Monitoring is being carried out on regular basis in Port & SEZ areas through NABL accredited and MoEF&CC

Status of the conditions stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30.09.2021																																																																																																																																																																																				
	threat to ground water quality by leaching of heavy metals and other toxic contaminants.	<p>approved agency namely M/s. Pollucon Laboratories Pvt. Ltd. Summary of the ground water as well as soil assessment for duration from Apr'21 to Sep'21 is mentioned below.</p> <p><u>Bore Hole Water Sampling:</u></p> <p>Sampling locations & frequency: 2 nos. (Half Yearly)</p> <table><tr><th>Sr. No.</th><th>Parameter</th><th>Unit</th><th>Max. Value</th><th>Min. Value</th></tr><tr><td>1</td><td>pH</td><td>--</td><td>7.76</td><td>7.73</td></tr><tr><td>2</td><td>Salinity</td><td>ppt</td><td>5.83</td><td>2.97</td></tr><tr><td>3</td><td>Oil & Grease</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>4</td><td>Hydrocarbon</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>5</td><td>Lead as Pb</td><td>mg/L</td><td>0.058</td><td>ND*</td></tr><tr><td>6</td><td>Arsenic as As</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>7</td><td>Nickel as Ni</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>8</td><td>Total Chromium as Cr</td><td>mg/L</td><td>0.039</td><td>0.037</td></tr><tr><td>9</td><td>Cadmium as Cd</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>10</td><td>Mercury as Hg</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>11</td><td>Zinc as Zn</td><td>mg/L</td><td>0.63</td><td>0.42</td></tr><tr><td>12</td><td>Copper as Cu</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>13</td><td>Iron as Fe</td><td>mg/L</td><td>0.41</td><td>0.27</td></tr><tr><td>14</td><td>Insecticides/Pesticides</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>15</td><td>Depth of Water Level from Ground Level</td><td>meter</td><td>2.18</td><td>2.10</td></tr></table> <p style="text-align: right;">*ND = Not Detected</p> <p>Comparison of the present data with baseline data for the nearest locations for Soil.</p> <table><tr><th>Sr. No.</th><th>Parameter</th><th>Unit</th><th>Dhrub station</th><th>Zarpara village</th></tr><tr><td>1</td><td>pH</td><td>--</td><td>7.73</td><td>8.1</td></tr><tr><td>2</td><td>Lead as Pb</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>3</td><td>Nickel as Ni</td><td>mg/L</td><td>ND*</td><td>0.146</td></tr><tr><td>4</td><td>Total Chromium as Cr</td><td>mg/L</td><td>0.039</td><td>0.039</td></tr><tr><td>5</td><td>Iron as Fe</td><td>mg/L</td><td>0.41</td><td>0.258</td></tr><tr><td>6</td><td>Insecticides/Pesticides</td><td>mg/L</td><td>Absent</td><td>ND*</td></tr><tr><td>7</td><td>Depth of Water Level from GL</td><td>meter</td><td>2.1</td><td>1.7</td></tr></table> <p style="text-align: right;">*ND = Not Detected</p> <p><u>Soil Sampling:</u></p> <p>Sampling locations & frequency: 4 nos. (Half Yearly)</p> <table><tr><th>Sr. No.</th><th>Parameter</th><th>Unit</th><th>Max. Value</th><th>Min. Value</th></tr><tr><td>1</td><td>pH</td><td>--</td><td>9.18</td><td>8.32</td></tr><tr><td>2</td><td>Nitrogen as N</td><td>%</td><td>0.34</td><td>0.04</td></tr><tr><td>3</td><td>Phosphorus as P</td><td>mg/kg</td><td>379</td><td>158</td></tr><tr><td>4</td><td>Potassium as K</td><td>mg/kg</td><td>204</td><td>102</td></tr><tr><td>5</td><td>Baron as B</td><td>mg/kg</td><td>3.53</td><td>1.75</td></tr><tr><td>6</td><td>Calcium as Ca</td><td>mg/kg</td><td>479</td><td>318</td></tr><tr><td>7</td><td>Magnesium as Mg</td><td>mg/kg</td><td>742</td><td>352</td></tr><tr><td>8</td><td>Iron as Fe</td><td>%</td><td>0.73</td><td>0.49</td></tr><tr><td>9</td><td>Moisture</td><td>%</td><td>8.40</td><td>6.84</td></tr><tr><td>10</td><td>Organic Matter</td><td>%</td><td>0.73</td><td>0.21</td></tr><tr><td>11</td><td>CEC</td><td>meq/100 am</td><td>10.38</td><td>9.92</td></tr></table>	Sr. No.	Parameter	Unit	Max. Value	Min. Value	1	pH	--	7.76	7.73	2	Salinity	ppt	5.83	2.97	3	Oil & Grease	mg/L	ND*	ND*	4	Hydrocarbon	mg/L	ND*	ND*	5	Lead as Pb	mg/L	0.058	ND*	6	Arsenic as As	mg/L	ND*	ND*	7	Nickel as Ni	mg/L	ND*	ND*	8	Total Chromium as Cr	mg/L	0.039	0.037	9	Cadmium as Cd	mg/L	ND*	ND*	10	Mercury as Hg	mg/L	ND*	ND*	11	Zinc as Zn	mg/L	0.63	0.42	12	Copper as Cu	mg/L	ND*	ND*	13	Iron as Fe	mg/L	0.41	0.27	14	Insecticides/Pesticides	mg/L	ND*	ND*	15	Depth of Water Level from Ground Level	meter	2.18	2.10	Sr. No.	Parameter	Unit	Dhrub station	Zarpara village	1	pH	--	7.73	8.1	2	Lead as Pb	mg/L	ND*	ND*	3	Nickel as Ni	mg/L	ND*	0.146	4	Total Chromium as Cr	mg/L	0.039	0.039	5	Iron as Fe	mg/L	0.41	0.258	6	Insecticides/Pesticides	mg/L	Absent	ND*	7	Depth of Water Level from GL	meter	2.1	1.7	Sr. No.	Parameter	Unit	Max. Value	Min. Value	1	pH	--	9.18	8.32	2	Nitrogen as N	%	0.34	0.04	3	Phosphorus as P	mg/kg	379	158	4	Potassium as K	mg/kg	204	102	5	Baron as B	mg/kg	3.53	1.75	6	Calcium as Ca	mg/kg	479	318	7	Magnesium as Mg	mg/kg	742	352	8	Iron as Fe	%	0.73	0.49	9	Moisture	%	8.40	6.84	10	Organic Matter	%	0.73	0.21	11	CEC	meq/100 am	10.38	9.92
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Sr. No.	Conditions	Compliance Status as on 30.09.2021				
		12	TVC	CFU/gm	3.1*10 ⁶	2.1*10 ⁵
		Heavy Metal				
		13	Cadmium as Cd	mg/kg	ND*	ND*
		14	Antimony as Sb	mg/kg	ND*	ND*
		15	Arsenic as As	mg/kg	ND*	ND*
		16	Thorium as Th	mg/kg	ND*	ND*
		17	Lead as Pb	mg/kg	ND*	ND*
		18	Chromium (VI) as Cr	mg/kg	ND*	ND*
		19	Cobalt as Co	mg/kg	25.8	12.4
		20	Copper as Cu	mg/kg	42.9	15.4
		21	Nickel as Ni	mg/kg	19.8	8.32
		22	Manganese as Mn	mg/kg	356	258
		23	Vanadium as V	mg/kg	9.30	8.13
		*ND = Not Detected				
		Comparison of the present data with baseline data for the nearest locations for Soil.				
		Sr. No.	Parameter	Unit	Dhrub station	Zarpara village
		1	pH	--	8.92	6.45
		2	Nitrogen as N	%	0.21	1.38 gm/kg
		3	Phosphorus as P	mg/kg	268	1230
		4	Potassium as K	mg/kg	149	62120
		5	Calcium as Ca	mg/kg	374	1500
		6	Magnesium as Mg	mg/kg	382	1580
		7	Iron as Fe	%	0.61	1.34
		8	Organic Matter	%	0.73	0.98
		9	CEC	meq/100 gm	9.92	7.4
vi	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the	From the above results it can be inferred that				
		<ul style="list-style-type: none"> The ground level in this area is saline in nature due to close proximity to the coast. There is no threat to ground water quality by leaching of heavy metals and other toxic contaminants. There is no leaching of heavy metals and other toxic contaminants through soil. <p>Please refer Annexure – 5 for detailed analysis reports. Approx. INR 9.56 Lakh is spent for all environmental monitoring activities during the compliance period i.e. Apr'21 to Sep'21 for overall APSEZ, Mundra.</p>				
vi	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the	Complied.				
		Construction spoils including bituminous material is being kept at identified temporary storage area outside CRZ and is being utilized for area development purpose as and when required.				

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Sr. No.	Conditions	Compliance Status as on 30.09.2021
	dump sites for such material must be secured so that they should not leach into the ground water.	<p>Hazardous materials such as diesel, lube oil etc. are handled with utmost care and all applicable rules are followed. Storage area is provided with paving and spill kit to ensure there is no contamination to soil or ground water.</p> <p>Used oil is sold to GPCB approved recycler namely M/s. Aroma Petrochem, Bhavnagar and Aviation Corporations, Bhachau. Oily rags are being disposed through co-processing at cement industries namely M/s. Ambuja Cement Ltd., Kodinar. Dates of validity of all the vendors and details of the same were submitted along with last half yearly EC compliance report for the period Apr'18 to Sep'18. Necessary approvals from GPCB for disposal of hazardous wastes are obtained. Authorization copy was submitted with compliance report submission for the period Apr'17 to Sep'17.</p> <p>Individual units within SEZ are handling their hazardous wastes as per Hazardous waste rules – 2016 after obtaining necessary permissions from GPCB.</p>
vii	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	<p>Complied.</p> <p>All the hazardous wastes are being handled as per Hazardous Waste Rules – 2016.</p> <p>Please refer Point No. vi (General Condition: Construction Phase) for further details.</p>
viii	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	<p>Complied.</p> <p>DG sets are being used only as power back up source in case of power failure. Presently, cumulative capacity of all DG sets installed at APSEZ within SEZ area is 3410 KVA. During the compliance period of Apr'21 to Sep'21, there was no instance of power failure hence it was not required to operate the DG sets.</p> <p>All the DG sets are of low sulphur diesel type. Details of the same were submitted along with half yearly compliance report for the period Apr'20 to Sep'20. DG sets are being used in conformance to the EPA norms and proof for the same was submitted along with compliance period i.e. Apr'17 to Sep'17.</p>
ix	The diesel required for	Complied.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021																																													
	operating DG sets shall be stored in underground tanks if required; clearance from Chief Controller of Explosives shall be taken.	Diesel is stored in the underground tank located in existing port area and approval of the same from Chief Controller of Explosives is obtained from PESO with License no. P/HQ/GJ/15/5188 (P283539) dated 23.01.2020 and is valid till 31.12.2022. Details of the same were submitted along with half yearly EC Compliance report for the period Oct'19 to Mar'20.																																													
x	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should operate only during non-peak hours.	<p>Complied.</p> <p>The vehicles of on-going construction work enter inside the premises only after passing through the fitness check at vehicle health-check centre established by APSEZ. At the vehicle health check-up centre, parking light, reverse light, Horne, wheel, breaks, mirror, etc. are checked before allowing the vehicle to enter the site.</p> <p>Valid PUC Certification is also being checked for all the vehicles while entering in to APSEZ premises.</p> <p>Majority of the vehicles bringing construction materials are operated during non-peak hours.</p>																																													
xi	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/GPCB.	<p>Complied.</p> <p>Ambient Air Quality and Noise monitoring are being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Pollucon Laboratories Pvt. Ltd. Summary of the same for duration from Apr'21 to Sep'21 is mentioned below.</p> <p>Air sampling locations & frequency: 8 nos. (twice a week) & Noise sampling locations & frequency: 5 nos. (once in a month)</p> <table><tr><th>Parameter</th><th>Unit</th><th>Max</th><th>Min</th><th>Perm. Limit^{\$}</th></tr><tr><td colspan="5">AAQM</td></tr><tr><td>PM₁₀</td><td>µg/m³</td><td>98.82</td><td>36.42</td><td>100</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>57.32</td><td>15.58</td><td>60</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>25.50</td><td>6.22</td><td>80</td></tr><tr><td>NO₂</td><td>µg/m³</td><td>42.44</td><td>13.50</td><td>80</td></tr><tr><td>Noise</td><td>Unit</td><td>Leq Max</td><td>Leq Min</td><td>Leq Perm. Limit*</td></tr><tr><td>Day Time</td><td>dB(A)</td><td>72.4</td><td>48.4</td><td>75</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>69.5</td><td>43.5</td><td>70</td></tr></table>	Parameter	Unit	Max	Min	Perm. Limit ^{\$}	AAQM					PM ₁₀	µg/m ³	98.82	36.42	100	PM _{2.5}	µg/m ³	57.32	15.58	60	SO ₂	µg/m ³	25.50	6.22	80	NO ₂	µg/m ³	42.44	13.50	80	Noise	Unit	Leq Max	Leq Min	Leq Perm. Limit*	Day Time	dB(A)	72.4	48.4	75	Night Time	dB(A)	69.5	43.5	70
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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>§ as per NAAQ standards, 2009 * as per CC&A granted by GPCB Values recorded confirms to the stipulated standards.</p> <p>Such environmental monitoring is being carried out on continuous basis at stipulated frequencies. The analysis results are being closely observed for incremental pollution load. From the above results and past data, it can be inferred that the emission levels are well within the prescribed standards. All the analysis data collected are submitted to the concerned authorities as part of the six-monthly compliance reports. The data is also submitted to GPCB on monthly basis as part of the online submission – Monthly Patrak.</p> <p>Please refer Annexure – 5 for detailed analysis reports. Approx. INR 9.56 Lakh is spent for all environmental monitoring activities during the compliance period i.e. Apr'21 to Sep'21 for overall APSEZ, Mundra.</p> <p>Following safeguard measures are taken for abatement of dust and noise emissions.</p> <ul style="list-style-type: none"> • Regular sprinkling on road and other open area • Regular cleaning of roads through mechanized equipments • Development of greenbelt along the periphery of the storage yards/back up area • D.G. Sets having Acoustic enclosures • Transportation of loose dry cargo through covered vehicles / wagons / conveyer system • Regular maintenance of plant machineries and equipments <p>Individual member units are also carrying out environmental monitoring in line with their permissions and the same is also being ensured during industry site visit. Analysis reports of member units are also attached as Annexure – 5.</p>
xii	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27 th August, 2003. (The above condition is applicable	<p>Complied.</p> <p>Fly ash generated from Adani Power Limited, Mundra is being disposed by selling to Cement and Brick Manufacturing units. During compliance period i.e. Apr'21 to Sep'21 approx. 0.2 MMT of fly ash has been disposed by selling to cement and brick manufacturing units. Fly ash mixed paver blocks are being used for development of back up area, footpath, colonies area, parking area, approach road etc. as and when require.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	only if the project site is located within 100 Kms of Thermal Power Stations).	Fly ash based PPC cement is used for construction activity.
xiii	Ready mixed concrete must be used in building construction.	Complied. Only RMC is used for construction activity.
xiv	Storm water control and its re-use should be regulated as per CGWB and BIS standards for various applications.	Complied. Storm water drainage systems are provided. There are no perennial rivers and the possibility of storm water run-off is only during monsoon season. The area is receiving scanty rainfall and there is no continuous flow of water during monsoon. Therefore presently, the storm water drainage is designed to facilitate the area drainage meeting with the downstream part of water area.
xv	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other referred best practices.	Complied. Only RMC is used for construction activity.
xvi	Permission to draw ground water shall be obtained from the competent Authority prior to construction /operation of the project.	Complied. No ground water is used during construction & operation stage of the project. Current sources of water are water through GWIL and desalination plant of APSEZ Average, water consumption for entire APSEZ area is 3.93 MLD during the compliance period Apr'21 to Sep'21.
xvii	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Not applicable As per the master planning all types of wastewater generated are transferred through common conveying system for providing desired treatment at CETP. Treated wastewater is utilized for gardening purpose within the premises of APSEZ / individual industries. It may be noted that condition number xvi to xxi are imposed on all member industries coming up within the SEZ areas (as part of the Lease Deed agreement). The same practice will be continued in future also. As suggested by RO, Bhopal during the site visit, an environment monitoring committee is formed which are ensuring strict compliance of the stipulated conditions by individual industries.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
xviii	Fixtures for shower, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.	<p>Complied.</p> <p>Water flow reducers are installed at various locations within APSEZ. The water flow reducers consume approx. 66% less water compared to the normal tap. Water free urinals are also installed at Port User Buildings for water conservation. In phase wise manner, all the fixtures will be replaced with such water efficient devices.</p> <ul style="list-style-type: none"> • Water flow reducers (total 8740 nos.) are provided in taps of various operation and administrative buildings to reduce the water consumption and are in use. • Total 128 Water-free urinals are installed and in operation within APSEZ.
xix	Use of glass may be reduced by up to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.	<p>Complied</p> <p>Majority of the building envelopes are constructed with energy efficient building materials. While using glass, wherever required, it is ensured that only high-quality glass with reflective coating is used.</p>
xx	Roof should meet prescriptive requirements as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirements.	<p>Complied</p> <p>Majority of the building envelopes (including roofs) are constructed with ECBC compliant building materials having appropriate thermal insulation.</p>
xxi	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air-conditioned spaces by use of appropriate thermal	<p>Complied</p> <p>Majority of the building envelopes (including walls) are constructed with ECBC compliant building materials having appropriate thermal insulation.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	insulation material to fulfil these requirement.	
xxii	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of firefighting equipments, etc. as per National Building Code including protection measures from lightning etc.	<p>Complied</p> <p>Mundra falls in seismic zone V. All the building structures constructed, if any, will meet the requirements of the applicable guidelines for safety. The same practice will continue in future also. However, being a developer, no buildings are constructed by APSEZ.</p>
xxiii	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	<p>Complied.</p> <p>SEZ industries were visited to check measures taken for Energy Conservation, Water Conservation, Waste and Hazardous waste management and phase out plan of Ozone depleting substance during the compliance period. Various industries shared the data in line with above reference. Details of the same were submitted along with EC compliance report for the period Apr'18 to Sep'18.</p> <p>It may be noted that condition number xvi to xxi are imposed on all member industries coming up within the SEZ areas (as part of the Lease Deed agreement). The same practice will continue in future also. As suggested by RO, Bhopal during the site visit, an environment monitoring committee is formed and ensures strict compliance of the stipulated conditions by individual industries.</p> <p>EMS and Compliance verification of individual SEZ units carried out during the compliance period w.r.t. Water & Wastewater Management, Air Management, Hazardous & Non-Hazardous Waste Management, Greenbelt, etc. in line with their statutory permissions and there was no any major non-compliance observed.</p>
xxiv	Under the provisions of Environment (Protection) Act 1986, legal action shall be initiated against the project proponent if it is found that construction	<p>Point noted.</p> <p>Wherever applicable, construction activities have started only after obtaining environmental clearance.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	of the project has been started without obtaining environmental clearance.	
	Operation Phase	
i.	The PP while issuing the allotment letter to individual member units shall specifically mention the allowable maximum quantity of water usage and effluent generated by each member unit.	<p>Complied.</p> <p>Provisions are made while issuing the allotment letter to individual member units for specifically mentioning the allowable maximum quantity of water usage and effluent generated by each member unit. Sample copy of one of such letter was submitted along with compliance report submission for the period Oct'16 to Mar'17.</p>
ii.	The PP shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest improvements.	<p>Complied.</p> <p>APSEZL has a well-structured Environment Management Cell, staffed with qualified manpower for implementation of the Environment Management Plan at site. Site team report to Sr. Manager (Environment) at Corporate, who heads the Environment Management Cell who directly reports to the top management. Environment Management Cell Organogram is attached as Annexure – 6.</p> <p>Separate budget for the Environment protection measures is earmarked every year. All environment and horticulture activities are considered at corporate level and budget allocation is done accordingly. No separate bank account is maintained for the same however, all the expenses are recorded in advanced accounting system of the organization.</p> <p>Budget for environmental management measures (including horticulture) for the FY 2021-22 is to the tune of INR 1332 lakh. Out of which, Approx. INR 876 lakh are spent during the year 2021-22 (till Sep'21). Detailed breakup of the expenditures for the past 3 years is attached as Annexure – 7.</p> <p>Please refer Point No. xxiii (General Condition: Construction Phase) for further details.</p>
iii.	Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. Treatment of 100% grey water by	<p>Complied.</p> <p>APSEZ has total installed capacity of 6.07 MLD for treatment of effluent / sewage generated at various locations. Details regarding the same are mentioned below. The treated sewage from these decentralized units meets the norms stipulated by</p>

Status of the conditions stipulated in Environment and CRZ Clearance

Sr. No.	Conditions	Compliance Status as on 30.09.2021																																																						
	decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	<p>GPCB and it is used for gardening purpose.</p> <table><tr><th>Location</th><th>Capacity</th><th>Technology</th></tr><tr><td>CETP</td><td>2.5 MLD</td><td>Aerobic Digestion</td></tr><tr><td>Shantivan Colony STP</td><td>350 KLD</td><td>Aerobic Digestion</td></tr><tr><td>Shantivan Colony STP</td><td>250 KLD</td><td>Aerobic Digestion</td></tr><tr><td>Adani House STP</td><td>150 KLD</td><td>PVA Gel Technology</td></tr><tr><td>Samudra Township STP</td><td>2.5 MLD</td><td>MBR</td></tr><tr><td>Liquid Terminal ETP</td><td>265 KLD</td><td>Aerobic Digestion</td></tr><tr><td>West Port STP</td><td>55 KLD</td><td>FAB</td></tr></table> <p>CETP of 2.5 MLD capacity is also constructed in SEZ area (having a separate independent environmental clearance). Sewage generated from individual industry is treated by individual industry itself. However, some of the industries are giving their sewage to the CETP for treatment and final disposal. List of CETP member units were submitted along with half yearly EC compliance report for the period Oct'19 to Mar'20. And there is no further change.</p> <p>The treated effluent from CETP confirms to the GPCB norms. Treated water is used for gardening / horticulture purpose within CETP premises and SEZ areas. Online monitoring system at the discharge point is provided to get the system alert in case of any deviation from discharge norms.</p> <p>STP of 2.5 MLD capacity is also constructed in SEZ area as part of social infrastructure project (having a separate independent environmental clearance).</p> <p>Assessment of treated sewage is being carried out by NABL accredited and MoEF&CC approved agency namely M/s. Pollucon Laboratories Pvt. Ltd. The summary of analysis results is mentioned below.</p> <p>Treated Water Analysis (Frequency Twice in a Month – 2 STPs)</p> <table><tr><th>Parameter</th><th>Unit</th><th>Max</th><th>Min</th><th>Perm. Limit^{\$}</th></tr><tr><td>pH</td><td>--</td><td>8.37</td><td>6.73</td><td>6.5 to 9.0</td></tr><tr><td>TSS</td><td>mg/L</td><td>24</td><td>10</td><td>100</td></tr><tr><td>BOD (3 Days @ 27 °C)</td><td>mg/L</td><td>25</td><td>10</td><td>30</td></tr><tr><td>Residual Chlorine</td><td>ppm</td><td>0.8</td><td>0.6</td><td>--</td></tr><tr><td>Fecal Coliform</td><td>MPN/100 ml</td><td>920</td><td>110</td><td>< 1000</td></tr></table> <p>^{\$} as per CC&A granted by GPCB</p>	Location	Capacity	Technology	CETP	2.5 MLD	Aerobic Digestion	Shantivan Colony STP	350 KLD	Aerobic Digestion	Shantivan Colony STP	250 KLD	Aerobic Digestion	Adani House STP	150 KLD	PVA Gel Technology	Samudra Township STP	2.5 MLD	MBR	Liquid Terminal ETP	265 KLD	Aerobic Digestion	West Port STP	55 KLD	FAB	Parameter	Unit	Max	Min	Perm. Limit ^{\$}	pH	--	8.37	6.73	6.5 to 9.0	TSS	mg/L	24	10	100	BOD (3 Days @ 27 °C)	mg/L	25	10	30	Residual Chlorine	ppm	0.8	0.6	--	Fecal Coliform	MPN/100 ml	920	110	< 1000
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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>Please refer Annexure – 5 for detailed analysis reports. Approx. INR 9.56 Lakh is spent for all environmental monitoring activities during the FY 2021-22 (Till Sep'21) for overall APSEZ, Mundra.</p> <p>Greenbelt area developed around the treatment plants act as barrier for odour. In addition to this, regular supervision is done to ensure there is no odour problem from any of the treatment plants.</p>
iv.	<p>The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.</p>	<p>Complied.</p> <p>Waste Management – APSEZ has adopted 5R concept for environmentally sound management of different types of solid & liquid wastes. Please refer below details about management of each type of waste.</p> <p>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 / mechanical sorting is being done for sorting of different types of solid waste. Segregated recyclable materials such as Paper, Plastic, Cardboard, PET Bottles, and Glasses, etc. are then sent to respective recycling units, whereas remaining non-recyclable waste is bailed and sent to cement plant (M/s. Ambuja Cement Ltd., Kodinar) for Co-processing as RDF (Refused Derived Fuel).</p> <p>APSEZ, Mundra is certified for Zero Waste to Landfill management system (ZWTL MS 2020) by TUV Rheinland India Pvt. Ltd. (valid up to 31.05.2024). APSEZ, Mundra has also been certified as Single Use Plastic (SUP) Free Port by Confederation of Indian Industry (CII) (valid up to 25.05.2022). Details of the same are attached as Annexure – 8.</p> <p>Hazardous & Other Waste:</p> <ul style="list-style-type: none"> Bio medical waste generated from OHCs and Adani Hospital is being disposed at Common Bio Medical Waste Treatment Facility namely M/s. Distromed Kutch Services Pvt. Ltd., Bhuj.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021			
		<ul style="list-style-type: none">E – Waste & Used Batteries are being sold to GPCB registered recyclers namely M/s. Galaxy Recycling, Rajkot and Sabnam Enterprise, Kutch respectively.Solid Hazardous Waste is being disposed through co-processing / incineration through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau and/or cement industries of Ambuja Cement Ltd., Kodinar. Used/Waste Oil is being sold to GPCB authorized recyclers / re-processors namely M/s. 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. Jawrawala Petroleum, Ahmedabad. It is also being reused within organization for filling hazardous waste.Solid hazardous waste i.e. Tank bottom sludge is being sold to authorized recycler namely M/s. Mundra Oil Pvt. Ltd., Mundra for recycling.Expired paint materials is being disposed by incineration through common facility i.e. M/s. Saurashtra Enviro Projects Pvt. Ltd., Bhachau.Downgrade chemicals generated from cleaning of storage tanks / pipelines are being sold to authorized solvent recovery facilities namely M/s. Acquire Chemicals, Ankleshwar however during the compliance period, there was no disposal of downgrade chemicals.Slop Oil received from vessels is treated to separate water and oil particles in Oil Water Separator system. Separated oil from the same is being sold to authorized recycler / reprocessor namely M/s. 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. <p>Details of permissions / agreements of hazardous waste authorized vendors were submitted along with pervious half yearly EC Compliance Reports. And there is no further change.</p> <p>The following table summarizes the waste management practice (from Apr'21 to Sep'21) for different types of wastes at APSEZ:</p> <table><tr><th>Type of Waste</th><th>Quantity in MT</th><th>Disposal method</th></tr></table>	Type of Waste	Quantity in MT	Disposal method
Type of Waste	Quantity in MT	Disposal method			

Status of the conditions stipulated in Environment and CRZ Clearance

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Battery Waste	30.0	Sell to registered recycler																																															
E-Waste	35.79	Sell to registered recycler																																															
Bio Medical Waste	3.0	To approved CBWTF Site																																															
Non-Hazardous Waste																																																	
Recyclables Dry Waste / Scrap	755.97	After recovery sent for recycling / Reuse within premises																																															
Non-Recyclable Dry Waste (RDF)	217.86	Co-processing at Cement Industries																																															
Wet Waste (Food waste + Organic waste)	438.55	Converted to Manure for Horticulture use / Biogas for cooking purpose																																															
STP Sludge	17	Used as a Manure for horticulture purpose																																															
		Please refer Point No. xxiii (General Condition: Construction Phase) for further details.																																															
v.	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operational phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Low sulphur diesel should be used. The location of the DG sets may be decided in consultation with the Gujarat Pollution Control Board.	<p>Complied.</p> <p>DG sets are being used only as power back up source in case of power failure.</p> <p>Please refer Point No. viii & ix (General Condition: Construction Phase) for further details.</p> <p>Heights of stacks are maintained as needed for the combined capacity of all attached DG Sets. Locations of the DG sets are checked by GPCB officials during the site visits. Details of all DG set stack heights are mentioned below.</p> <table><tr><th>Sr. No.</th><th>DG Location</th><th>Capacity/KVA</th></tr><tr><td>1</td><td>Adani House</td><td>750</td></tr><tr><td>2</td><td>PUB</td><td>500</td></tr><tr><td>3</td><td>PMC Store</td><td>82.5</td></tr><tr><td>4</td><td>R&D Yard</td><td>50</td></tr><tr><td>5</td><td>North Gate</td><td>320</td></tr><tr><td>6</td><td>CRC North Gate</td><td>5</td></tr><tr><td>7</td><td>North in Gate</td><td>5</td></tr><tr><td>8</td><td>North Outgate</td><td>5</td></tr><tr><td>9</td><td>WTP</td><td>380</td></tr></table>			Sr. No.	DG Location	Capacity/KVA	1	Adani House	750	2	PUB	500	3	PMC Store	82.5	4	R&D Yard	50	5	North Gate	320	6	CRC North Gate	5	7	North in Gate	5	8	North Outgate	5	9	WTP	380															
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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021			
		10	East Gate	30	
		11	Airport	140	
		12	Airport	125	
		13	Gohersama Gate	5	
		14	Airport crossing Gate	5	
		15	Kharimithi Road Gate	5	
		16	Adani Hospital	500	
		17	Old port Gate	5	
		18	West Gate	30	
		19	MRSS	250	
		20	MITAP Substation	62.5	
		21	Zarpara Gate	5	
		22	Navinal Gate	5	
		23	Culvert NO 109	5	
		24	Culvert NO 109	15	
		25	Agri Park	125	
vi.	Noise should be controlled to ensure that it does not exceed the prescribed standards, During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	<p>Complied.</p> <p>Noise monitoring is being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Pollucon Laboratories Pvt. Ltd.</p> <p>Please refer Point No. xi (General Condition: Construction Phase) for further details.</p>			
vii.	Green belt of adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	<p>Being complied.</p> <p>APSEZ has developed "Dept. of Horticulture" which is taking measures/ steps for terrestrial greening as well as mangrove plantation. Development of greenbelt at various locations within the SEZ is an ongoing activity.</p> <p>Please refer condition no. xix (Specific Condition) for further details.</p>			
viii.	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon	<p>Complied.</p> <p>Boundary walls are constructed in such a way by keeping weep holes for defined river path to facilitate free flow of water and it is ensured that water is not stagnant at any given point during rainy season.</p>			

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	period.	
ix.	Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented.	<p>Complied.</p> <p>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.</p> <p>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 compliance period Approx. 6.5 ML of rain water has been recharged to increase the ground water table.</p> <p>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.</p> <p>However, Adani Foundation – CSR arm of Adani Group has carried out rainwater harvesting activities in the nearby villages for benefit of the locals.</p> <p>Water conservation Projects i.e. Roof Top Rain Water Harvesting, Desilting of Check dams, Bore Well Recharge and Pond deepening were taken up in past years, review and monitoring of all water harvesting structures had been taken up. Including this a big recharge operation by bunding was taken up for Zarpara village as rainfall was very good during FY 2020-21.</p> <p>To make connections between human actions and the level of biological diversity found within a habitat and/or ecosystem, this year Adani Foundation launch project “Sanrakshan” in coordination with GUIDE and Sahjeevan.</p> <p>Since 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain in current year 1.11 mtr ground water table increased as per increased in coastal belt of Mundra as per Government Figures.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>Our water conservation work is as below.</p> <ul style="list-style-type: none"> • A large number of water harvesting structure (18 Nos. of check dams incoordination with salinity department) and Augmentation of 2check dams (1 Check dam current year). • 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 90 Nos. (35 Nos current year) which is having 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family. • Recharge Borewell 125 Nos (50 Nos current year) which is best ever option to. • Drip Irrigation 980 Farmers (56 Application current year) 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. • Luni Pond Bund Repairing Work is completed. <p>With the objective of to preserve the rainwater to reduce the impact of salinity and recharge the ground water (the main source of water) to facilitate the Agricultural activities as well as for drinking water.</p> <p>Please refer Annexure – 1 for full details of CSR activities carried out by Adani Foundation in the Mundra region.</p> <p>It may be noted that the individual industrial units will also be encouraged for taking various initiatives for rainwater harvesting within their premises / in the villages around the SEZ area.</p>
x.	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	<p>Complied.</p> <p>Ground Water Monitoring is being carried out on regular basis in SEZ areas through NABL accredited and MoEF&CC approved agency namely M/s. Pollucon Laboratories Pvt. Ltd.</p> <p>Please refer Point No. v (General Condition: Construction Phase) for further details.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		It may be noted that the analysis results of ground water quality are submitted to CGWB, West Central region, Ahmedabad vide our e-mail dated 16.11.2021. Details of the same are attached as Annexure – 9 .
xi.	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	<p>Complied.</p> <p>The entry and exit gates of SEZ and port are provided with ample parking area (210838 m²) near the gate. The entry / exit complex is fully equipped with traffic control equipments and round the clock security is provided for seamless support. No public space is utilized for parking of the vehicle. Details of the same were submitted along with half yearly EC Compliance Report for the period Apr'18 to Sep'18.</p>
xii.	A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & D Factors etc. and submitted to the Ministry along with six monthly monitoring report.	<p>Complied</p> <p>Energy audit of port user buildings (including the details about building materials and technology etc.) is being carried out on regular basis. Last energy audit was done during Oct-2016. Report of the same is submitted to Chief Electrical officer, Gandhinagar. The said report was submitted to MoEF&CC, RO, Bhopal as part of the compliance report for the period Apr – Sep, 2017.</p> <p>Some of the recommendations of these reports have already been implemented as follows.</p> <ul style="list-style-type: none"> • Saving in PAC by overhauling with repairing damage fall ceiling and window curtain • Saving with Improving Power Factor • APFC Panel has already been installed and average PF maintained during last 2 months comes to 0.987 • The system voltage at load end is being maintained 230V and therefore there is no need to install AVC
xiii.	Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be an integral part of the project design and should be in place before project commissioning. Used	<p>Complied</p> <p>Energy Conservation through Installation of Motion Sensor (Occu switch) & AC Temp. controls in few of the buildings are provided.</p> <p>Measures for energy conservation are incorporated at design stage. Few of the buildings in MSTPL are designed as green building. Some features of the same are as below.</p> <ul style="list-style-type: none"> • Used fly ash based cement and bricks

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	<p>CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination. Solar panels may be used to the extent possible.</p>	<ul style="list-style-type: none"> • Special types of glasses were used which gives maximum sunlight and less heat • VOC free paint used certified by CII (Certificate of Indian Industries) • Water flow reducer installed in the entire building <p>CFL / LED lighting are being used at various common areas of SEZ as well buildings and townships. Used CFL are collected and sent for recycling through authorized e-waste collection agency.</p> <p>APSEZ has installed & commissioned 8.8 MW roof top solar plants within APSEZ and Township premises. APSEZ has also installed and commissioned 12 MW windmill and whatever electricity generated is being supplied to grid. Details of the same were submitted along with half yearly compliance report for the period Oct'18 to Mar'19.</p> <p>It may be noted that the individual industrial units will also be encouraged for taking various initiatives with respect to energy conservation (such as energy audit, installation of renewable energy sources, utilization of energy efficient fixtures etc.).</p>
xiv.	<p>Adequate measures should be taken to prevent odour problems from solid waste processing plant and STP.</p>	<p>Complied</p> <p>5R principals are adopted for sustainable waste management at APSEZ. Utmost care is being taken during the waste management and sewage /effluent treatment to ensure that there is no odour generation. Proper secondary treatment and disinfection is provided to the domestic sewage and treated sewage and then it is utilized for horticulture purpose. These measures ensure that odor problem is not created in the surrounding area. Furthermore, greenbelt on the periphery of the treatment plant as well as waste management sites help to prevent odour problems.</p>
xv.	<p>The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.</p>	<p>Complied.</p> <p>Presently, all the buildings have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation. The same practice will be continued in future also.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		It may be noted that the individual industrial units will also be encouraged for consideration of these design parameters.
xvi.	The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.	<p>Complied.</p> <p>Compliance report of all the environmental safeguards contained in the EIA report is attached as Annexure – 4.</p>
xvii.	Adequate drinking water facility be provided.	<p>Complied.</p> <p>Drinking water facility at approx. 200 locations within APSEZ area is provided.</p>
xviii.	Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.	<p>Complied.</p> <p>Environment Monitoring (air, noise, water, soil) is being carried out on regular basis in Port & SEZ areas through NABL accredited and MoEF&CC approved agency namely M/s. Pollucon Laboratories Pvt. Ltd.</p> <p>Please refer following condition nos. for further details.</p> <ul style="list-style-type: none"> v, viii & xi of General Conditions – Construction Phase iii of General Conditions – Operation Phase
xix.	Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. A hybrid system or fully solar system for portion of the apartments should be provided.	<p>Complied.</p> <p>APSEZ has installed & commissioned 8.8 MW roof top solar plants within APSEZ and Township premises. APSEZ has also installed and commissioned 12 MW windmill and electricity generated from it is being supplied to grid.</p> <p>Please refer condition no. xiii of the General Conditions – Operation Phase for further details.</p>
xx.	Ozone depleting substance (Regulation & Control) Rules should be followed while designing the air conditioning system of the project.	<p>Complied.</p> <p>APSEZ is not procuring air conditioning systems which use ozone depleting gases. All the HVAC systems are with Ozone friendly gases within APSEZ. All new air conditioning systems installed, if any, will be designed in line with Ozone depleting substance (Regulation & Control) Rules.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>It may be noted that the individual industrial units will also be encouraged to follow Ozone depleting substance (Regulation & Control) Rules while designing the air conditioning system of the project. The same will be implemented by individual unit as per project suitability.</p>
12	<p>Officials from the Regional Office of MOEF, Bhopal who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional Office of MOEF, Bhopal.</p>	<p>Complied.</p> <p>Full support is always extended to officers of regulatory authorities (including MoEF&CC and GPCB) visiting the project site. The documents as per their requirements are provided to them.</p> <p>The communication documents like application Form – 1, ToR received from MoEF&CC, Final EIA report, Public Hearing proceedings and recommendations of GCZMA are submitted to MoEF&CC, RO, Bhopal for necessary records.</p> <p>APSEZ was visited by RO, MoEF&CC Bhopal on 3rd May, 2018 for compliance verification. APSEZ provided all requisite information and documents required by the Regional Officer. During the said compliance verification visit, and as per the compliance certificate by Ro-MOEF&CC vide dated, 7th June 2018, there was no major non-compliance observed.</p> <p>Inline to the compliance certification process of Environment Clearance condition of Waterfront Development Plan, RO, MoEF&CC Bhopal had visited the site on 27th & 28th January, 2020 for compliance verification. APSEZ provided all requisite information and documents required by the Regional Officer MoEF&CC). During the said compliance verification visit and as per the compliance certification received, there was no non-compliance observed.</p> <p>Inline to the compliance certification process of Consent to Operates of existing facilities developed under Waterfront Development Plan, RO, GPCB, Gandhidham had visited the site on 17th March, 2021 for compliance verification. APSEZ provided all requisite information and documents required by the Regional Officer GPCB). During the said compliance verification visit and as per the compliance certification received, there was no non-compliance observed.</p> <p>Inline to the compliance of MoEF&CC Order dated 18th</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
		<p>September, 2015, Joint Review Committee (JRC) comprising officials from various competent authorities visited the APSEZ, Mundra from 1st to 3rd September, 2021 to monitor the progress of implementation of the conditions stipulated in the order. APSEZ provided all requisite information and documents required by the JRC.</p> <p>It also be noted that officials from GPCB Regional office is also doing regular site visit. Last visit of Regional Office, GPCB was done on 07.05.2021. APSEZL has submitted the reply to the site visit report vide letter dated 14.05.2021 incorporating details of action taken in respect of the observations of the GPCB representative. Details of the same are attached as Annexure – 10.</p>
13	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Point noted and agreed.
14	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provision of the Environmental (Protection) Act, 1986, to ensure effective implementation of the safeguard measures in a time bound and satisfactory manner.	Point noted and agreed.
15	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department Civil Aviation Department, Forest Conservation Act,	<p>Not Applicable at present.</p> <p>The mentioned approvals are not applicable to APSEZ since we are the infrastructure support provider. However, the applicable approvals will be availed by the individual member industries prior to construction of work. The environment management committee will ensure strict adherence to the condition by the individual industries.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective competent authorities.	
16	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	Point noted and agreed.
17	The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Clearance and copies of clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in . The advertisement should be made within 10 days from the date of receipt of the Clearance letter	<p>Complied</p> <p>APSEZ has advertised Environmental and CRZ Clearance in two local newspapers "The Indian Express" (in English language) and "Kutch Mitra" (in vernacular language) on 24.07.14 (within 10 days from the date of receipt of the clearance letter) and copy of the same was submitted vide letter dated 05.08.2014 to Ministry of Environment, Forests & Climate Change, Bhopal.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021
	and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.	
18	Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	Point noted and agreed.
19	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Point noted and agreed.
20	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	<p>Complied</p> <p>Copy of clearance letter was sent to concerned Panchayats, Zilla Parishad, Urban Local Body, Local NGOs and from whom suggestion/representation received. Details regarding the same were submitted to the MoEF & CC along with half yearly compliance report for the period from Apr – 2014 to Sep – 2014.</p> <p>Clearance letter is also put up on the website of the Adani ports https://www.adaniports.com/ports-downloads</p>
21	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update	<p>Complied.</p> <p>Compliance report of EC conditions is uploaded regularly. Last compliance report including results of monitoring data for the period of Oct'20 to Mar'21 was submitted to Regional Office of MoEF&CC @ Bhopal, Zonal Office of CPCB @ Baroda, GPCB @ Gandhinagar & Gandhidham and Dept. of Forests & Env.,</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 30.09.2021																					
	the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Gandhinagar vide our letter dated 18.05.2021. 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 20.05.2021 to all the concern authorities. Please refer below for the details regarding past six compliance submissions.																					
22	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	<table border="1"> <thead> <tr> <th>Sr. No.</th><th>Compliance period</th><th>Date of submission</th></tr> </thead> <tbody> <tr> <td>1</td><td>Apr'18 to Sep'18</td><td>30.11.2018</td></tr> <tr> <td>2</td><td>Oct'18 to Mar'19</td><td>31.05.2019</td></tr> <tr> <td>3</td><td>Apr'19 to Sep'19</td><td>28.11.2019</td></tr> <tr> <td>4</td><td>Oct'19 to Mar'20</td><td>20.05.2020</td></tr> <tr> <td>5</td><td>Apr'20 to Sep'20</td><td>26.11.2020</td></tr> <tr> <td>6</td><td>Oct'20 to Mar'21</td><td>25.05.2021</td></tr> </tbody> </table>	Sr. No.	Compliance period	Date of submission	1	Apr'18 to Sep'18	30.11.2018	2	Oct'18 to Mar'19	31.05.2019	3	Apr'19 to Sep'19	28.11.2019	4	Oct'19 to Mar'20	20.05.2020	5	Apr'20 to Sep'20	26.11.2020	6	Oct'20 to Mar'21	25.05.2021
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2	Oct'18 to Mar'19	31.05.2019																					
3	Apr'19 to Sep'19	28.11.2019																					
4	Oct'19 to Mar'20	20.05.2020																					
5	Apr'20 to Sep'20	26.11.2020																					
6	Oct'20 to Mar'21	25.05.2021																					
23	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	<p>Complied.</p> <p>Environmental statement for each financial year is submitted to GPCB. The same for the FY ending 31.03.2021 in Form-V is submitted to GPCB vide our letter dated 9th June, 2021. Acknowledge copy of the same is attached as Annexure – 11. Copy of the same is also available on our web site https://www.adaniports.com/ports-downloads.</p>																					

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

ANNEXURE A

Compliance Report of CRZ Recommendation

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Note:

With respect to the project components attracting CRZ recommendation from GCZMA, following points shall be noted:

- GCZMA has recommended the CRZ proposal for Sea Water Intake, Outfall system and Pipeline.
- Construction with respect to Desalination Plant, sea water intake and outfall system has not been started yet.
- Existing units are having requisite environmental permissions (from state or central body, as the case may be) for discharging their wastewater, if any, to the Common Effluent Treatment Plant of MPSEZ Utilities Pvt. Ltd. having 2.5 MLD capacity (having a separate individual environmental clearance).
- Treated wastewater is being utilized within the premises of CETP and / or SEZ for the gardening / horticulture activities.
- As soon as the need for discharging the effluent / reject from the desalination plant into sea will arise, construction work for the intake and outfall will be started.

In view of the above-mentioned facts, the compliance to the conditions stipulated in the CRZ recommendation will be submitted to all the competent authorities when the construction and operation activities are initiated for the project components attracting CRZ recommendation.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Annexure – B

Compliance Status of MoEF & CC Order dated 18.09.2015

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

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 30-09-2021
i	The proposal of extension of the validity of environmental clearance granted to the North Port vide letter dated 12.01.2009 will be considered separately at later stage.	<p>Point Noted & Complied</p> <p>After receipt of this order, so far APSEZ has not done any application to MoEF&CC for the proposed North port. The expansion of Waterfront Development plan has been proposed excluding North Port area.</p>
ii	Bocha island, ecologically sensitive geomorphological features and areas in the island and creeks around the island will be declared as conservation zone action plan for its conservation must be prepared. M/s. APSEZ should provide necessary financial assistance for this purpose.	<p>Complied</p> <p>This reply covers condition no ii, iv and v.</p> <p>Based on the MoEF&CC directions,</p> <ol style="list-style-type: none"> 1. APSEZ, vide letter dtd. 19th October 2015 had requested GCZMA, for consideration of project for finalization of ToR for NCSCM. 2. Project was considered on 28th GCZMA meeting, scheduled on 22nd April 2016, where ToR was discussed and agreed, upon. 3. APSEZ, vide its letter dtd. 25th April 2016, submitted the proposal to GCZMA along with Scope of work, as submitted by NCSCM. 4. Service Order was issued to NCSCM vide SO dtd. 29th Aug 2016. Cost of the study as per the NCSCM proposal was 315 Lakh and 100% of payment has already paid to NCSCM. 5. NCSCM has carried out number of site surveys during the period, February 2017 – April 2018 as per the defined scope 6. The study report was submitted to GCZMA (with a copy to MoEF&CC vide letter dated 04.06.2018) for their consideration and recommendation if any. 7. A reminder letter was submitted to GCZMA vide letter dated 4th Jan 2019.
iv	A comprehensive and integrated study and protection of creeks/ mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary, will be put in place. The plan will take note of all the conditions of approvals granted to all the project proponents in this area e.g. the reported case of disappearance of mangroves near navinal creek. The preservation of entire area to maintain the fragile ecological condition will be a part of the plan in relation to the creeks, mangrove conservation and conservation of bocha island up to baradimata and others.	<p>Details of above chronology were submitted along with half yearly compliance report for the period Apr'19 to Sep'19.</p>
v	NCSCM will prepare the plan in consultation with NIOT, PP and GCZMA. In recognition of the fact that the existing legal provisions under the	<p>The site survey carried out by NCSCM includes:</p> <ol style="list-style-type: none"> 1. Bathymetry survey of creeks 2. Topography survey of intertidal areas 3. Mangrove survey (health and area demarcation) 4. Sampling of soil and water for analysis of physico-

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	<p>E(P) Act 1986 do not provide for any authority to impose ERF by the government, the plan will be financed by the PP. the implementation will be carried out by GCZMA. The monitoring of the implementation will be carried by NCSCM.</p>	<p>chemical and biological parameters</p> <p>5. Tide and currents data collection (including residence time of tidal water)</p> <p>6. Focus Group Discussions with the community in the close vicinity of the project area</p> <p>In addition to the site surveys, NCSCM has procured satellite images for analysis of mangrove cover.</p> <p>The data collected (through site surveys and analysis of satellite maps) was used as input for mathematical modelling. The modelling studies were carried out to understand the impacts of the development activities. Based on the outcome of the modelling studies the necessary conservation plan for protection of creeks and mangrove areas is prepared.</p> <p>Based on the final study report, outcome is summarized in to following points :</p> <ol style="list-style-type: none"> 1. There is no obstruction to any water stream (creeks / branches of creeks / rivers) 2. Presently, mangrove cover in and around APSEZ was over 2340 ha. There was substantial growth in mangrove cover to the tune of 246 ha (comparison between 2011 and 2016-17) 3. Mundra has undergone substantial development during this tenure. Hence it can be interpreted that the infrastructure development has not left any adverse impacts on ecology. <p>NCSCM study same was submitted to the GCZMA on 04.06.2018. Details of the same were submitted along with half yearly EC Compliance report for the period Apr'19 to Sep'19. The same was further submitted to GCZMA and MoEF&CC for their examination and recommendation vide (with a copy to MoEF&CC vide letter dated 04.06.2018 & reminder letter vide dated 4th Jan, 2019). Presentation on the findings of the report was made to GCZMA committee on 4th October 2019 and the recommendation for the same has been received vide email dtd 22nd Sept, 2020 with conditions. Details of the same were submitted as a part of last half yearly EC compliance report for the period Oct'20 to</p>

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		Mar'21.		
		As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.		
		Sr. No.	Recommendations	Compliance
		1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none"> APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island. As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.7%. This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which also shows that the growth of mangroves in a progressive direction. Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.
		2.	Tidal observation in creeks in and around APSEZ	<ul style="list-style-type: none"> APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal, Bocha and Khari creeks under the guidance of NCSCM. The observed tidal ranges indicate that the creeks experience normal tidal ranges,

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				adequate for the growth of mangroves.
				<ul style="list-style-type: none"> The cost of the said activity was INR 1.0 Lacs.
		3.	Removal of Algal and Prosopis growth from mangrove areas	<ul style="list-style-type: none"> Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in some of the mangrove areas, which has been removed manually. The cost of the said activity was INR 1.2 Lacs.
		4.	Awareness of mangroves importance in surrounding communities	<ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done awareness camps/activities created in the community regarding importance of mangroves. Adani Foundation has also provided 8.95 lacs kg Dry Fodder and 24.25 lacs kg Green fodder in 21 villages of Mundra and Anjar Block to support the resource dependent villagers, to avoid their dependency on mangroves. The expenditure for fodder supporting activities was approx. 122.7 Lacs during last FY 2021-22 (Till Sep'21). 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 Grassland development in Siracha – 85 Acre & Zarpara – 25 Acre done which resulted in total production of 82 ton. Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no any unauthorized persons allowed within coastal as well as mangrove areas. Refer CSR report attached as Annexure – 1.
		Details of activities done as a part of GCZMA recommendations and NCSCM mangrove conservation action plan were submitted as a part		

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		<p>of last half yearly EC compliance report for the period Oct'20 to Mar'21.</p> <p>For demarcation of HTL and CRZ areas, NCZMA has approved the CZMP of Kutch region vide 39th NCZMA meeting, held on 13.01.2020. However, the maps are yet to be published, Once the maps are published, NCSCM will issue the final maps for the project area of APSEZ. The said maps will then be submitted to GCZMA and MoEF&CC by APSEZ.</p>																																
iii	The violations of specific condition of all the ECs and CRZ clearances, if any, will be examined and proceeded with the provisions of EP Act, 1986 independently.	<p>Complied</p> <p>During the said site visits from various regulatory authorities and as per the compliance certification received, there was no non-compliance observed.</p> <table><tr><th>Sr. No.</th><th>Authority</th><th>Date of Visit</th><th>Purpose of Visit</th></tr><tr><td>1</td><td>RO, MoEF&CC, Bhopal</td><td>21st – 22nd Dec, 2016</td><td>EC Compliance Certification of WFDP</td></tr><tr><td>2</td><td>RO, MoEF&CC, Bhopal</td><td>3rd May, 2018</td><td>EC Compliance Certification of WFDP & MSEZ</td></tr><tr><td>3</td><td>RO, MoEF&CC, Bhopal</td><td>3rd & 4th Sep, 2019</td><td>Compliance of the order of the Hon'ble HIGH COURT of Gujarat vide letter dated 22nd Aug. 2019 w.r.t. compliance verification of MoEF&CC order dated 18th Sep, 2015.</td></tr><tr><td>4</td><td>RO, MoEF&CC, Bhopal</td><td>27th & 28th Jan, 2020</td><td>EC Compliance Certification of WFDP</td></tr><tr><td>5</td><td>NEERI, Nagpur</td><td>26th Nov, 2020 & 6th / 7th Oct, 2021</td><td>EC Compliance verification of MSEZ</td></tr><tr><td>6</td><td>SPCB, Gandhinagar</td><td>17th March, 2021</td><td>CC&A Compliance Certification of existing facilities developed under WFDP</td></tr><tr><td>7</td><td>Joint Review Committee</td><td>1st to 3rd Sep, 2021</td><td>Compliance of the order of the Hon'ble HIGH COURT of Gujarat vide letter dated 22nd Aug. 2019 w.r.t. compliance verification of MoEF&CC order dated 18th Sep, 2015.</td></tr></table>	Sr. No.	Authority	Date of Visit	Purpose of Visit	1	RO, MoEF&CC, Bhopal	21 st – 22 nd Dec, 2016	EC Compliance Certification of WFDP	2	RO, MoEF&CC, Bhopal	3 rd May, 2018	EC Compliance Certification of WFDP & MSEZ	3	RO, MoEF&CC, Bhopal	3 rd & 4 th Sep, 2019	Compliance of the order of the Hon'ble HIGH COURT of Gujarat vide letter dated 22 nd Aug. 2019 w.r.t. compliance verification of MoEF&CC order dated 18 th Sep, 2015.	4	RO, MoEF&CC, Bhopal	27 th & 28 th Jan, 2020	EC Compliance Certification of WFDP	5	NEERI, Nagpur	26 th Nov, 2020 & 6 th / 7 th Oct, 2021	EC Compliance verification of MSEZ	6	SPCB, Gandhinagar	17 th March, 2021	CC&A Compliance Certification of existing facilities developed under WFDP	7	Joint Review Committee	1 st to 3 rd Sep, 2021	Compliance of the order of the Hon'ble HIGH COURT of Gujarat vide letter dated 22 nd Aug. 2019 w.r.t. compliance verification of MoEF&CC order dated 18 th Sep, 2015.
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		<p>It may also be noted that GPCB, Regional Office does regular site visit of APSEZ area and no non-compliance observed.</p> <p>It also be noted that officials from GPCB Regional office is also doing regular site visit. Last visit of Regional Office, GPCB was done on 07.05.2021. APSEZL has submitted the reply to the site visit report vide letter dated 14.05.2021 incorporating details of action taken in respect of the observations of the GPCB representative. Details of the same are attached as Annexure – 10.</p>
vi	There will be no development in the area restricted by the High court of Gujarat. APSEZ shall abide by the outcome of the PIL 12 of 2011 and other relevant cases.	<p>Complied</p> <p>The order passed by Hon' ble high court in context of PIL 12 of 2011 vide dated 10th Nov 2011. Subject PIL has been disposed off by Hon'ble High Court vide their order dated 17.04.2015 and now there is no restriction on development in the subject area. The order reads as <i>"In view of the aforesaid discussion, we do not find any merit in this writ petition. This writ petition fails and is accordingly dismissed. No order as to cost."</i> Copy of the order was submitted along with half yearly EC Compliance report for the period Apr'18 to Sep'18.</p> <p>Considering the above status and in line to submission of compliance of all the directions under this order, this condition is closed.</p>
vii	APSEZ will submit specific action plan to protect the livelihood of fishermen along with budget.	<p>Complied.</p> <p>Adani Foundation (AF) is the CSR arm of the Adani Group actively working for upliftment of the communities in the surroundings of various project sites of Adani Group. AF has prepared a specific action plan to protect livelihood of fishermen at Mundra.</p> <p>Various initiatives, as stated below are discussed in detail in the report namely "Silent Transformation of Fisher folk at Mundra". Said report also includes the information related to the planned expenses to the tune of approx. 13.5 Cr. INR for various initiatives for the next five years (2016 – 2021) (Budget details provided in Page No. 68 of report). Copy of the same is already</p>

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		<p>submitted to MoEF&CC vide our letter dated 10.09.2016.</p> <p>Till, Sep'21 approx. 9.78 Cr. INR, has already been invested. Further, details regarding the expenditure incurred against the commitment are attached as Annexure – 12. APSEZ couldn't spend expenditure as committed during March'20 to Sep'21 due to Corona pandemic. However, the remaining budget will be spent in upcoming years for committed fisher folk activities.</p> <p>APSEZ is carrying out various initiatives specific to the Fisherfolk community which includes:</p> <ul style="list-style-type: none"> Vidya Deep Yojana Developing school preparedness programme and empowering balwadis at fisherfolk settlement Under this scheme, 4 balwadis at different settlement has been constructed This programme include nutrition food, hygiene, awareness of health, cleanliness, discipline, regularity and development of basic age appropriate conception Vidya Sahay Yojana – Scholarship Support All basic education supportive facilities have been created to promote education in fisher folk community. Adani Vidya Mandir Children of the family with the income of salary less than 1.5 lac/annum are admitted School focusses on nutrition food, uniform and other services to the children for free. Fisherman Approach in SEZ After due consultative process, APSEZ has provided 7 fishermen access roads for to approach to the sea for fishing activity. Machhimar Arogya Yojana The Fisher folk communities are disposed to several water and air abided diseased due to exposure to unhygienic working conditions. Frequently Special Health care Camps are organized at Vasahat. Our Mobile health care unit van regularly visit fisher folk settlements Machhimar Kaushalya Vardhan Yojana Based on need assessment a number of trades were introduced through the Adani Skill Development Centre in Mundra, where in fisher folk youth could join and get a number of technical and non-technical training Machhimar Sadhan Sahay Yojana Fishing material support was provided by AF at Mundra as per the requests of Pagadiya fishermen. According to their needs, fishing nets, ropes, buoys, ice boxes, crates, weighing scales, anchors, solar lights etc., were provided

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		<ul style="list-style-type: none"> • Machhimar Awas Yojana Shelters, equipped with basic facilities of a toilet and pure drinking water have been constructed for living while fishing and to provide a healthy and hygienic residence. • Machhimar Shudhh Jal Yojana This scheme of providing potable water has helped in reducing the drudgery of women and contributed largely towards general wellbeing • Sughad Yojana Toilets for men and women are constructed at all three Vasahats. Infrastructure was accompanied with continuous awareness campaign on hygiene sanitation and use of toilets in particular. • Machhimar Akshay kiran Yojana Solar street lights at each settlement have been installed. For fish landing shed and school extension room have been fitted with solar inverter allowing late evening video shows for awareness and fish sorting work at ease. • Machhimar Suraksha Yojana Distance Alarm Transmission System – DATS' project was introduced in order to promote safety of the fishermen. Forced to be at sea to earn their livelihood puts the lives of many fishermen at risk • Machhimar Ajivika Uparjan Yojana Mangrove plantation in the area as means of alternate income generating activity for the fisher folk community during the non-fishing months. During the non-fishing months, the fishermen under usual circumstances were benefited by other alternate economic activity to sustain them. • Bandar Svachhata Yojana Waste bins have been provided for proper collection and segregation of waste. <p>Further, APSEZ is actively working with local community around the project area and provides required support for their livelihood and other concerns through the CSR arm – Adani Foundation. Adani Foundation is working in main four persuasions as below.</p> <ul style="list-style-type: none"> ✚ Education ✚ Community Health ✚ Rural Infrastructure ✚ Sustainability Livelihood <p>Brief information about activities in the main four persuasions is mentioned below. Other than this, Adani Foundation has also worked for fight against COVID –</p>

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		19 pandemic situations during this compliance period Activities carried out for the same are summarized as below.								
		<table><tr><th>Area</th><th>Activity</th></tr><tr><td>Fight Against COVID-19</td><td><ul style="list-style-type: none">Started Covid care centre service at Samudra town ship to Provide medical services at 24 x7 hrs. Home Visit for Medical Prescription and advise for further treatment & co-ordination.AF team voluntary performed patients care and co-ordination duty at GKGH, Bhuj for 23 days.AHMPL, Mundra was converted into Covid Hospital with 100 bed Facilities with oxygen to extend Covid medical treatment over community. All related coordination done by our team for more than 353 OPD and IPD.Provided Oxygen Concentrator machines for Home isolated patients resulted in goodwill.Provide Dead body van service to shift covid demise patients to Crematorium with all dignity.Precautionary voice message dissemination through Awaj de voice message service Over Community.Started Village Sanitizing activities and Ukalo, Vitamin C tablet distribution</td></tr><tr><td>Community Health</td><td><ul style="list-style-type: none">Mobile Heath Care Units and Rural Clinics9 Rural Clinics06 from Mundra, 02 from Anjar & 01 from Mandvi block treated;3843 patients31 villages covered, with 94 types of general and lifesaving medicines through Mobile healthcare unit3364 patients benefited during six months06 patients are provided Dialysis treatment at 133 times with nominal charges at Adani Hospital.471 –Economically Challenged patients have been supported for operation, OPD, IPD, Medicines and lab-test.For Preventive health care General and multispecialty camps Pediatric camp, General Health camps in 9 villages and Super specialist camp which benefitted more than 1100 patients of Mundra Taluka.16 Senior Citizens have been linked with Government Niradhar pension scheme, 34 senior Citizens linked up with Ayushman Yojana and 67 Senior Citizens were referred to GKGH Bhuj for chronic illness.</td></tr><tr><td>Sustainable Livelihood – Fisher folk, Agriculture & Women</td><td><ul style="list-style-type: none">Average 75 KL of water was supplied to 676 households at 5 fisherman vasahat on a daily basis under Machhimar Shudhh Jal Yojana and other 4 fisherman vasahat has linkaged with water through GWIL and Mundra Gram Panachayat from which 355 households get benefited.11 Fisher Youth were interviewed among that 5 have</td></tr></table>	Area	Activity	Fight Against COVID-19	<ul style="list-style-type: none">Started Covid care centre service at Samudra town ship to Provide medical services at 24 x7 hrs. Home Visit for Medical Prescription and advise for further treatment & co-ordination.AF team voluntary performed patients care and co-ordination duty at GKGH, Bhuj for 23 days.AHMPL, Mundra was converted into Covid Hospital with 100 bed Facilities with oxygen to extend Covid medical treatment over community. All related coordination done by our team for more than 353 OPD and IPD.Provided Oxygen Concentrator machines for Home isolated patients resulted in goodwill.Provide Dead body van service to shift covid demise patients to Crematorium with all dignity.Precautionary voice message dissemination through Awaj de voice message service Over Community.Started Village Sanitizing activities and Ukalo, Vitamin C tablet distribution	Community Health	<ul style="list-style-type: none">Mobile Heath Care Units and Rural Clinics9 Rural Clinics06 from Mundra, 02 from Anjar & 01 from Mandvi block treated;3843 patients31 villages covered, with 94 types of general and lifesaving medicines through Mobile healthcare unit3364 patients benefited during six months06 patients are provided Dialysis treatment at 133 times with nominal charges at Adani Hospital.471 –Economically Challenged patients have been supported for operation, OPD, IPD, Medicines and lab-test.For Preventive health care General and multispecialty camps Pediatric camp, General Health camps in 9 villages and Super specialist camp which benefitted more than 1100 patients of Mundra Taluka.16 Senior Citizens have been linked with Government Niradhar pension scheme, 34 senior Citizens linked up with Ayushman Yojana and 67 Senior Citizens were referred to GKGH Bhuj for chronic illness.	Sustainable Livelihood – Fisher folk, Agriculture & Women	<ul style="list-style-type: none">Average 75 KL of water was supplied to 676 households at 5 fisherman vasahat on a daily basis under Machhimar Shudhh Jal Yojana and other 4 fisherman vasahat has linkaged with water through GWIL and Mundra Gram Panachayat from which 355 households get benefited.11 Fisher Youth were interviewed among that 5 have
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			<p>been selected. Our target is to support 60+ Fisherman in alternative livelihood till March 2022.</p> <ul style="list-style-type: none"> Facilitation of Pagadiya Welfare scheme & boat license sanction letter to 06 Fishermen. Till date 59 Form has been submitted to fisheries department, Bhuj for pagadiya and boat License. During the Taukate cyclone fishermen family had been shifted to safe Places As well as support to disaster management team for advance preparation. To promote Natural farming Adani Foundation has originated cow-based farming initiative with interconnected techniques which can increase farmer yield. 23 wormicompost unit have been set-up. Which is facilitated through Government with farmer Contribution. 50 Farmers have started to preparing Jiva Mrut & Gaukrupa Amrutam Bio-fertilizer and using in agricrop. Series of Training is arranged by ATMA and Adani Foundation. Two Farmers Groups is registered with ATMA–Agricultural technology management Agency—it will leverage Government schemes. Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 14116 Cattels / 3008 farmers and hence enhancing cattle productivity. Dry Fodder 895398 Kg Green – 2425230 Kg. Fodder Cultivation-To made fodder sustain villages - 25 Acre Gauchar land of Siracha village is being cultivated for the same. Current year for the dates Packaging and Marketing, KKPC Started to sell 10 Kg capacity packaging Box at Minimum Profit Margin At Rs.29/Boxes which resulted in turn over of Rs. 24 Lacs with Profit of 1 Lac. This initiative has supported more than 1800 farmers indirectly. Dragon fruit farming is on going by Five farmers each farmer is doing in 2 Acre farm –Total 11000 plants. Skill Development and Income Generation –Adani Foundation is working with 15 Self help group and supporting to develop entrepreneur skills to become self reliant, sourcing more than 350 women to absorb in various job.
		Education	<ul style="list-style-type: none"> The Virtual and Offline classes (Shrisikshan) with parents permission with all precautionary measures as Government Guide Lines. Its very encouraging that inspired by Our Sheri Sikshan Initiative-Gov Teachers also started same approach. Online Outreach – 259 Students Individual Home visit – 415 Students Sheri sikshan and school students - 838 Students Uthhan First phase 17 Schools and 2951 students were part of the program, and second phase 14 Schools and 1952 Students were part of the programme. Total 4903 students are getting

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Sr. No.	Condition	Compliance Status as on 30-09-2021	
			<p>benefit from Utthan.</p> <ul style="list-style-type: none"> • Coaching of 49 students for National Means cum Merit Cum Scholarship Scheme (NMMS). • Coaching of 34 Students for Javahar Navoday Entrance Exam by Utthan Sahayak since last Three Months. • Total 394 webinar and capacity building program were arranged for Utthan Sahayaks and Government Officers. • Arranged Virtual Tour regarding Plastic Waste Management with Municipal Corporation, Surat and aware about waste Collection, Segregation, treatment and Disposal Process. Total 178 Students were participated for the same. • 508 underprivileged students of Fisherman & Maldhari communities from 8 villages taking education at the Adani Vidya Mandir school • Celebration of various days in village school.
		Rural Infrastructure & Environmental Sustainability	<p>Adani foundation designed and build various structure and provide service in the Health, Education, agriculture and sustainable livelihood area.</p> <p><u>WORK COMPLETED</u></p> <ul style="list-style-type: none"> • 31 RRWHS structure have been completed • 45 Bore-well recharging activity is completed. • Development Approach road Prasala vadi vistar Gogan Pachim at Zarpara • Earthen bund Repairing work at Pond, Luni. • Pre-monsoon activity Approach repairing, Village Pond Lake strengthen and river cleaning (babul cutting) work is ongoing in Various Villages • Approach Road repairing at Various Fishermen Vasahat (ARC). <p><u>WORK IN PROGRESS</u></p> <ul style="list-style-type: none"> • Construction of common Gathering Rooms at Wandi village. • Development of Chain Link Fencing at tree forestation at Nana Kapaya. • Construction of community gathering Shed at Mundra -work in final Stage. <p><u>ENVIRONMENT SUSTAINABILITY PROJECTS</u></p> <ul style="list-style-type: none"> • Miyawaki Forest Development, Nana Kapaya - Plantation of 4965 saplings of different 42 species is completed which will result in dense forest within 2 years • Smruti Van – Plantation more than 40,000 sapling with more than 115 species through Miyawaki methodology. • Ecosystem Restoration, Guneri – Grassland ecosystem restoration and mangrove conservation in 40 Ha area over a period of 4 years • Multi-species Mangrove Park - Adani Foundation at Mundra 's initiated multi-species plantation of mangroves in Kutch association with GUIDE. During 2018-2019 (Phase-I) multi-species mangrove

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 30-09-2021	
			<p>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. Current year 3 hector development is planned to extend multi-species mangrove plantation.</p> <ul style="list-style-type: none"> • Home biogas - 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. • Seaweed Culture - 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. • Water Conservation Projects – <ul style="list-style-type: none"> ✓ A large number of water harvesting structure (18 Nos. of check dams and Augmentation of 2check dams (1 Check dam current year). ✓ Ground recharge activities (pond deepening work for more than 52 ponds) individually and 26 ponds under Sujlam Suflam Jal Abhiyan ✓ Roof Top Rain Water Harvesting 90 Nos. (35 Nos current year) which is having 10,000 litre storage ✓ Recharge Borewell 125 Nos (50 Nos current year) which is best ever option to. ✓ Drip Irrigation 980 Farmers (56 Application current year) ✓ 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. ✓ Luni Pond Bund Repairing Work.
		Skill Development	<p>Over the last few years, Adani Skill Development Center 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.</p> <p><u>ASDC. Mundra</u></p> <ul style="list-style-type: none"> • RPL–Recognition of Prior Learning Training given to Adani Group Contractual Employees–Total 218 Employees have been benefitted • Junior Crane Operator practical training to 36 Candidates for (Group-1, 2 & 3) At MICT Port. • Guest Lecture on Mehendi products, Beauty Therapist & Resin art Total 100 candidate have been benefitted. • Certificate Distributed to Mud work candidates at MICT Colony – 30 women learnt Mud work. • Volunteer Support in GKGH and Adani Hospital during covid pandemic.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 30-09-2021
		<ul style="list-style-type: none"> 21 students were coordinated for interview in seabird CFS of Mundra. <p>ASDC, Bhuj</p> <ul style="list-style-type: none"> Launched New online General Duty Assistant & Beauty Therapist for 63 candidates under (DDU-GKY). Soft Skills Training Certificate distribution to Prisoners of Palara Special Jail. Guest lecture on "Tally: Older vs New" & "Concept of Emerging E-way Bill" <p>Total Beneficiaries:</p> <ul style="list-style-type: none"> Technical Training: 365 Nos. Sof-Skill Training: 52 Nos. <p>Please refer Annexure – 1 for full details of CSR activities carried out by Adani Foundation in the Mundra region. Budget for CSR Activity for the FY 2021-22 is to the tune of INR 1628.45 lakh. Out of which, Approx. INR 423.18 lakh are spent during current compliance period i.e. Apr'21 to Sep'21.</p> <p>Till Sep'21, Adani Foundation has done total expenditure of INR 137 Cr. for CSR activities in Kutch region since its inception.</p>
viii	APSEZ will voluntarily return the grazing land, if any, in their possession.	<p>Point noted.</p> <p>All lands are acquired through proper procedure prescribed by State Government. However, APSEZ has agreed for voluntarily giving land back to Zarpara village for the purpose of Gauchar. Land has been identified in the presence and confirmation of Gram Panchayat. Necessary procedure has been initiated by APSEZ vide its letter dated 09th Aug 2012 with concerned revenue authority with respect to surrender of gauchar land at village Zarpara. Same has been taken up by revenue department for necessary procedure of transfer and is under process. Details of the same were submitted along with half yearly compliance report for the period Apr'19 to Sep'19.</p>
ix	A regional strategic impact assessment report with a special focus on Mundra region will also be prepared. The cost towards these studies will also be borne by	<p>Complied</p> <p>This reply covers direction no ix and x.</p> <p>1. APSEZ vide its letter dtd. 24th Feb 2014 has submitted draft ToR for preparation of CIA report to GCZMA for their approval.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 30-09-2021
x.	<p>PP.</p> <p>In the subject matter of thermal power plant, the proposed regional strategic Impact assessment analysis will take In to account salinity aspect along with Its potential environmental Impact to suggest future corrective actions as well as the guiding tool on extension and addition of the capacities.</p>	<ol style="list-style-type: none"> GCZMA vide its letter dtd. 19th Dec 2014, has approved ToR for CIA. Based on the ToR finalized by GCZMA (as per the instructions of MoEF&CC) for carrying out regional impact assessment study, APSEZ awarded the work to NABET accredited consultant M/s. Cholamandalam MS Risk Services Ltd. to carry out the studies, vide SO dtd 10th Feb 2016 as stated in these directions. Primary baseline environmental monitoring data collection during March – June 2016 and published secondary data on various environmental attributes have been considered for the study. The study has been concluded and the final report was submitted to GCZMA and MoEF&CC for their consideration vide our letter dated 30.04.2018. Reminder letter has been submitted to GCZMA for their comments and consideration vide letter dated 4th Jan 2019. <p>Details of above chronology were submitted along with last half yearly compliance report for the period Apr'19 to Sep'19.</p> <p>Total cost of the study is approx. INR 1.3 cr. which is financed by APSEZ.</p> <p>The stated study was carried out in following 3 phases</p> <ul style="list-style-type: none"> Baseline data collection and review of the past EIA reports and clearances issued to APSEZ. Mathematical modelling and other technical studies for identification of potential impacts (for the year 2030) of the approved and existing project activities. Development of macro level EMP for the phase wise implementation of actionable points. <p>As part of the study, following modelling exercises / technical studies have been carried out to study the impacts on all environmental attributes:</p> <ul style="list-style-type: none"> Ambient air quality Marine (Hydrodynamic, Thermal & Salinity dispersion, Sediment transport)

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Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 30-09-2021
		<ul style="list-style-type: none"> Noise level Traffic assessment Oil spill contingency plan Water resource and salinity ingress Land Use / Land Cover Socioeconomic, Regional infrastructure Waste management Ecology, Bio diversity and Fisheries Shoreline change assessment <p>Preparation of these reports require extensive use of modelling software and study of the available information / research reports to assess the impacts on individual attribute of environment. Based on the modelling outcomes and findings of the technical studies, a macro level environment management plan is prepared.</p> <p>Inline to the present stage of the project, APSEZ is already complying, as per Environment Management Plan and further recommendations, applicable to APSEZ as mentioned in the EMP, wrt Traffic Management Plan, Ground water quality management, Salinity ingress programme, Air and Noise quality Management, Surface and Marine water quality management, Ecology and Biodiversity Management, Solid & Hazardous waste management, Socio-economic Management and Shoreline Management, will be implemented in phase wise manner as per the progress of development within the boundary limits of APSEZ.</p> <p>The final CIA Report was prepared inline to the ToR by Chola MS and the same was submitted to the GCZMA on 30.04.2018. Details of the same were submitted along with half yearly EC Compliance report for the period Apr'18 to Sep'18. Presentation on the findings of the report was made to GCZMA committee on 4th October 2019 and after detailed discussion, authority has decided to constitute committee to discuss the details of the report further.</p> <p>Reminder Letter vide dated 07.09.2020 & 10.03.2021 submitted to the GCZMA, Gandhinagar for further</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Apr'21 To : Sep'21
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status as on 30-09-2021
		<p>directives to present the findings of the CIA report in detail. Details were submitted as a part of last half yearly EC compliance report for the period Oct'20 to Mar'21.</p> <p>However, APSEZ is already complying with the Environment Management Plan (applicable to APSEZ) suggested in Cumulative Impact Assessment report. The detailed compliance, applicable to APSEZ is attached as Annexure – 13.</p>

Annexure – 1



CSR KUTCH

Six Monthly
Report 2021-22

PREFACE

Corporate Social Responsibility in India is going through an interesting phase where the need for community centered impact is increasingly becoming more important than ever before. It is not just about the compliance with the laws and regulations but also about transitioning beyond the mandated CSR. Stakeholder engagement is a critical tool to ensure a comprehensive approach in carrying out responsible business and within that community ownership holds an important place.

In Year 2021-22 Uthhan Project spread the wings from 17 Primary schools to 31 Primary schools with MOU with Education Department. Natural Farming Promotion concept is started as a mission with training to 500+ Farmers and pure chemical free farming with 50+ Farmers. Mangroves coastal biodiversity, water harvesting structures and Tissue is ongoing sustainable Project 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. "

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 started General Duty Assistant Course training under DDUGKY. 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 presence of torch bearer and mentor in life who is Respected Dr. Priti Adani. We heartily thanks our Rakshit bhai, Respected Gadhvi sir and Respected COO sir for guidance and motivation.

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



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

Reducing Carbon footprint

1. Miyawaki – Nana Kapaya

Nana Kapaya village and proposed site for Miyawaki- Dense Plantation is very close to many industries in and around the Mundra landscape. This area is also very close to main roads and coastal creeks. Mainly dense to sparse *Prosopis juliflora*- Ganda Bavar cover is recorded surrounding to project site with very few scattered native trees like- Limda, Deshi Bavar etc. Shrubs species like- Akado and Aavar are also predominant close to site; while, grasses like Chhabar and Dhrab are recorded in proposed plot area.

As shared and discussed by villagers, this proposed plot is also very close to sewage water tank and nallahs; and proposing for watering to our proposed plantation.

As discussed with villagers and Adani Foundation, we proposed the close or dense plantation at site- called 1Miyawaki Types of Plantations with following four major compartments (45X20 meters approx.) and with following strategies:

1. Mixed Plantation dominant Drought Resistant Plants
2. Mixed Plantation dominant by Larger Leaves
3. Mixed Plantation dominant by Saline Resistant Plants
4. Mixed Plantation dominant by Medicinal Values.

Plantation of 4965 saplings of different 42 spices is completed which will result in dense forest within 2 years



Reducing Carbon footprint

Species Name/ Botanical Name	Local Name in Gujarati	Saplings Required	TOTAL ACTUAL	TOTAL ACTUAL	Mixed Plantation dominant Drought Resistant Plants PLOT 1	Mixed Plantation dominant by Larger Leaves PLOT 2	Mixed Plantation dominant by Saline Resistant Plants PLOT 3	Mixed Plantation dominant by Medicinal Values PLOT 4	Mixed Plantation dominant Drought Resistant Plants PLOT 1	Mixed Plantation dominant by Larger Leaves PLOT 2	Mixed Plantation dominant by Saline Resistant Plants PLOT 3	Mixed Plantation dominant by Medicinal Values PLOT 4
Acacia nilotica (L.) Del. subsp. indica (Bth.) Brenan	દેશી બાવળ	300	500	500	200	75	150	75	6	15	9	15
Cordia gharaf (Forsk.) E.&A.	નાના ગુંદા, લિયાર	500	400	400	80	100	140	80	16	11	10	14
Pithecellobium dulce (Roxb.) Bth.	ગોરસ આમલી	400	400	400	80	100	150	70	16	11	9	16
Moringa oleifera Lam.	મીઠો સરગવો	300	300	300	75	75	90	60	17	15	15	19
Salvadora persica L.	ખાળી જાળ- પીલુડી ખાળી	100	250	250	40	60	100	50	32	19	14	23
Derris indica (Lam.) Bennet	કરંજ	200	200	200	25	75	25	75	52	15	55	15
Azadirachta indica A. Juss.	લીમડો	200	200	200	40	40	70	50	32	28	20	23
Moringa concanensis Nimmo	ખારો- જંગલી સરગવો	200	200	200	50	50	60	40	26	23	23	29
Morus alba L.	શેતુર	200	200	200	50	50	50	50	26	23	28	23
Tinospora cordifolia Roxb.	ગળો, ગિલોય	200	200	200	50	50	50	50	26	23	28	23
Tecomella undulata(Sw.) Seem.	રગત રોહિડો	300	200	200	50	60	60	30	26	19	23	38
Commiphora wightii (Arn.) Bhandari	ગુગળ	200	200	200	75	25	25	75	17	46	55	15
Dalbergia sissoo Roxb.	સીસમ	200	200	200	100	25	25	50	13	46	55	23
Zizyphus mauritiana Lam.	બોરડી, મોટા બોર	200	180	180	50	30	70	30	26	38	20	38
Vitex negundo L.	નગોડ	200	150	150	35	55	30	30	37	21	46	38

Reducing Carbon footprint

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Adhatoda zeylanica Medic.	અરડૂસી	100	100	100	15	20	25	40	86	57	55	29
Parkinsonia aculeata	રામ બાવળ	100	100	100	20	10	50	20	65	114	28	58
Albizia lebbeck (L.) Bth.	કાળો શિરીષ	100	100	100	25	20	35	20	52	57	40	58
Terminalia arjuna (Roxb.) W. & A.	અર્જુન સાદડ	100	80	80	20	20	20	20	65	57	69	58
Grewia tiliaefolia Vahl var. tiliaefolia	ફાલસા	100	60	60	15	20	10	15	86	57	139	77
Abrus precatorius L.	ચણોલી	50	50	50	15	10	15	10	86	114	92	115
Aegle marmelos (L.) Corr.	બીલીપત્ર	50	50	50	15	10	10	15	86	114	139	77
Ailanthus excelsa Roxb.	અરડૂસો	50	50	50	15	10	10	15	86	114	139	77
Asparagus racemosus Willd. var. javanicus	શતાવરી	50	50	50	15	10	10	15	86	114	139	77
Cassia fistula L.	ગરમાળો	50	50	50	15	10	10	15	86	114	139	77
Cordia dichotoma Forst.	મોટા ગુંદા	50	50	50	15	10	10	15	86	114	139	77
Holoptelia integrifolia	કણજી	50	50	50	10	15	10	15	129	76	139	77
Murraya koenigii (L.) Spr.	મીઠો લીમડો	50	50	50	10	15	10	15	129	76	139	77
Psidium guajava L.	જામફળ	50	50	50	15	10	10	15	86	114	139	77
Punica granatum L.	દાડમ	50	50	50	15	10	10	15	86	114	139	77
Syzygium cumini	જાંબુ	50	50	50	15	10	10	15	86	114	139	77

Reducing Carbon footprint

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Tamarindus indica L.	આમલી ખાટી	50	50	50	15	10	10	15	3	6	4	Tamarindus indica L.
Butea monosperma (Lam.) Taub.	કેસુડો	30	30	30	5	10	5	10	8	6	7	Butea monosperma (Lam.) Taub.
Manilkara zapota (L.) van Royen	ચિકકુ	30	30	30	5	10	5	10	8	6	7	Manilkara zapota (L.) van Royen
Mimusops elengi L.	બોરસલી	30	30	30	5	10	5	10	8	6	7	Mimusops elengi L.
Plumeria rubra L.	ચંપો સફેદ કે ગુલાબી	30	30	30	5	10	5	10	8	6	7	Plumeria rubra L.
Ficus benghalensis L.	વડ	10	10	10	2	4	2	2	20	15	18	Ficus benghalensis L.
Ficus religiosa L.	પીપળો	10	10	10	2	4	2	2	20	15	18	Ficus religiosa L.
Gmelina arborea L.	શેવળ	30	5	5	1	1	1	2	40	59	35	Gmelina arborea L.
Arygyreia nervosa (Burm.f.) Boj.	સમુદ્ર શોષ	50	0	0	0	0	0	0	0	0	0	Arygyreia nervosa (Burm.f.) Boj.
Bauhinia racemosa Lam.	આસીત્રો	50	0	0	0	0	0	0	0	0	0	Bauhinia racemosa Lam.
Ficus racemosa L.	ઉમરો	10	0	0	0	0	0	0	0	0	0	Ficus racemosa L.
Grewia tenax (Forsk.) Fiori	ગાંગણી	300	0	0	0	0	0	0	0	0	0	Grewia tenax (Forsk.) Fiori
Grewia villosa Willd.	લુસ્કા	200	0	0	0	0	0	0	0	0	0	Grewia villosa Willd.
Prosopis cineraria (L.) Druce	ખીજડો	200	0	0	0	0	0	0	0	0	0	Prosopis cineraria (L.) Druce
Salvadora oleoides Decne.	મીઠી જાળ-પીલુડી મીઠી	100	0	0	0	0	0	0	0	0	0	Salvadora oleoides Decne.

TOTAL SAPLINGS PLANTED 4965

Reducing Carbon footprint

Smritivan Memorial park– Bhuj

Smritivan Memorial park is a unique initiative by Prime Minister in order to commemorate the death of about 13,805 people during this massive earthquake which had its epicenter in Bhuj District.

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

As a part of this Smritivan Memorial Park, it will have a museum, convention Centre, sunset point and **Ecological park** with around varied species of trees to attract different biodiversity.

For the ecological park, approx. **24 acres** of land has been demarcated, wherein it is proposed to plant **~3 lakh local species trees**.



Reducing Carbon footprint

Smritivan Memorial park– Bhuj

Under Phase – 1 project, Govt of Gujarat through GSDMA will be planting across **1 lakh trees, across 8 acres** through “**Miyawaki**” methodology (Japanese technology of tree plantation). They have already enrolled the services of **M/s Forest Creator**, a Mumbai, based agency expertise in carrying out afforestation project, through Miyawaki technology.

Forest Creators have already been involved and completed **58** such kind of project of Terrestrial afforestation, across India and this will be their 59th project. (***Details of project carried out Forest Creator attached***)

Under this project, **~60+ local species of trees** will be planted and further the entire scope of development of Nursery, Soil enrichment, Plantation of saplings, mulching, biomass application, water supply & maintenance for 3 years are considered under their proposal. All Corporate of Kutch has supported fund for the same. APSEZ has done monitory support under CSR and Adani Foundation is coordinating for monitoring



Reducing Carbon footprint

Grassland Ecosystem Restoration project - Guneri

As a part of Biodiversity initiatives, APSEZ has proposed to take the pioneering steps towards building sustainable growth in the Lakhpat region, Kutch by taking the initiation of restoring the natural grassland habitats (Ecological Restoration) along the Guneri village, i.e. ~40 Ha grassland ecosystem in gauchar land, by involving Gujarat Ecology Society (GES) – A Nonprofit Organization, based in Vadodara, Gujarat.

The Restoration & Conservation Plan, will be executed in a phase wise manner over 40Ha of the area, over a period of 4 years

Guneri village is situated north of Lakhpat fort with a population of 967 as per the 2011 census. A Biodiversity Management Committee (BMC) already exists there and hence it becomes easy to undertake grassland restoration with the help of

committee members. The gauchar land available for restoration is around 100 Ha and about 40 Ha of the area can be considered for restoration. The restoration process will be spread over a time period of three years, starting initially with 10 Ha and slowly moving up to 40 Ha by the third year.

The project aims to take the pioneering steps towards building sustainable growth in the Lakhpat region by taking the initiation of restoring the natural habitats along the Guneri village. In the long run, this area can be declared as a Indigenous and Community Conserved Area (ICCA) in lines with a new category of protection status followed by IUCN.

Despite changes in hydrological regimes, there are certain pockets where unique biodiversity endemic to the area has

established itself with relics of past vegetation, the inland mangroves are one such area. Inland mangroves of Guneri village are a living example of the presence of rich estuary in the region sustained by a larger riverine system. The area has been well documented and proposed as Biodiversity Heritage Site. The rare and threatened species present in the area include *Helichrysum cutchicum* (endemic species), *Cistanche tubulosa*, *Campylanthus ramoissimus*, and *Sida tiagii*. Apart from the listed species, Guneri's unique ecosystem sustains good faunal diversity from herpetofauna to birds to mammals.

It is combined efforts of Environment APSEZ and Adani Foundation under consultation of GEC

Reducing Carbon footprint

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The project aims to take the pioneering steps

towards building sustainable growth in the Lakhpat region by taking the initiation of restoring the natural habitats along the Guneri village. In the long run, this area can be declared as a Indigenous and Community Conserved Area (ICCA) in lines with a new category of protection status followed by IUCN.

Despite changes in hydrological regimes, there are certain pockets where unique biodiversity endemic to the area has established itself with relics of past vegetation, the inland mangroves are one such area. Inland mangroves of Guneri village are a living example of the presence of rich estuary in the region sustained by a larger riverine system. The area has been well documented and proposed as Biodiversity Heritage Site. The rare and threatened species present in the area include *Helichrysum cutchicum* (endemic species), *Cistanche tubulosa*, *Campylanthus ramoissimus*, and *Sida tiagii*. Apart from the listed species, Guneri's unique ecosystem sustains good faunal diversity from herpetofauna to birds to mammals.

It is combined efforts of Environment APSEZ and Adani Foundation under consultation of GEC



Reducing Carbon footprint

Coastal Biodiversity

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 km² in 2017 to 1,177 km² now.

A major portion of human population of Gujarat is solely dependent on these coastal ecosystems for their livelihood. Thus, several mangrove restoration programme/ activities are in progress in the state. Mangrove restoration activities in Gujarat are mostly single species stands of *Avicennia marina*. Adani Foundation at Mundra's initiated multi-species plantation of mangroves in Kutch 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 Kutch 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 Kutch, their seeds/ propagates 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 *Aegiceroscorniculatum*.

Current year 3 hector development is planned to extend biodiversity park





Reducing Carbon footprint

Homebiogas -

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

Promotion of Natural Farming–Home biogas

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

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 120 farmers are utilizing it with satisfaction and considerable outcome by saving Average Rs. 23,400 for gas and fertilizer as well - Homebiogas is base of promotion of natural farming.



2,053 TONS OF ANIMAL MANURE TREATED

159,687 HOURS OF CLEAN COOKING;

4.3 TONS OF BIOGAS CREATED

125 TONS OF FIREWOOD REPLACED;

27,375 HOURS SAVED ON REDUCTION OF FIREWOOD
& COLLECTION

625 TONS CO2 EMISSION REDUCTION

Reducing Carbon footprint

See 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.



Water conservation Project

Since 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain in current year 1.11 mtr ground water table increased in coastal belt of Mundra as per Government Figures. Our water conservation work is as Below.

- A large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) and Augmentation of 2 check dams **(1 Check dam current year)**
- 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 90 Nos. **(35 Nos current year)** which is having 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family.
- Recharge Bore well 125 Nos **(50 Nos current year)** which is best ever option to
- Drip Irrigation 980 Farmers **(56 Application current year)** 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 bore well depth decreased by 50-100 Ft in Zarpara, Bhujpur and Navinal Vadi Vistar.
- **Luni Pond Bund Repairing Work is completed**



Water conservation Project

- **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 and process is going on for 56 farmers for year 2021-22.**



Education Projects

Utthan

- The Virtual and Offline classes (Shri sikshan) with parents permission with all precautionary measures as Government Guide Lines. Its very encouraging that inspired by Our Shri Sikshan Initiative - Gov Teachers also started same approach.
 - **Online Outreach-259 Students**
 - **Individual Home visit-415 Students**
 - **Sheri sikshan and school students- 838 Students**
- Coaching of 49 students for National Means cum Merit Cum Scholarship Scheme (NMMS).
- Coaching of 34 Students for Javahar Navoday Entrance Exam by Utthan Sahayak since last Three Months.
- Total 93 Meetings were carried out with parents to create awareness for education progress. Apart from that aware about Precautionary measures and Covid -19 vaccination and Gyan-setu Program Telecast on Girnar Channel regularly approximately 1503 Mothers were engaged through various events and programmes.
- As Schools learning is not possible, our Library books corner Initiate is not in Function. Hence started to issue Library books to Students during Home Visit.
- Total 394 webinar and capacity building program were aranged for Utthan Sahayaks and Government Officers.
- **Uthhan First phase 17 Schools and 2951 students were part of the program, and second phase 14 Schools and 1952 Students were part of the programme. Total 4903 students are getting benefit from Utthan.**
- Second phase inauguration was held in last week of September in which District Primary Education Officer was remained present.



Education Projects

- Tree plantation at Utthan Primary School - Total 1000 saplings have been planted in the schools premises and laid responsibility for nurturing and care.
- Celebrated World Emoji Day. Its an unofficial holiday that is celebrated every year on July 17. Students prepared / draw 157 no of various and gifted to their friends and teachers.
- International Yoga Day celebration on 21st June Through Virtually and Physically. More than 520 Family members were participated
- Utthan Students had participated in **Lets us sing the National Anthem Contents** ,an Initiative of Government to Mark Azadi ka Amrit Mahotsav. Total 389 students and 76 parents have participated.
- Celebrated 75th Independence day with Commemorate 75 untold story , A Freedom Fighters who paid remarkable contribution for Indian Independence.



Activities	Location	
	Mundra	Nakhatrana
Silent reading	367	253
Virtual group reading – Classes: 7 and 8	42	30
Book review – Classes: 5 and 6	38	22
Puppetry show- Classes: 1-4	80	28
Total	527	333

Education Projects

- On the Rakhi festival Students made Eco friendly Rakhi and tied to the **104 Frontline corona warriors** who had paid remarkable service during Pandemic. (Doctor, Police, PHS and health Staff ,Sarpanch as well as Collector, Kutch and DDO ,Kutch).
- Arranged **Virtual Tour** regarding Plastic Waste Management with Municipal Corporation, Surat and aware about waste Collection , Segregation, treatment and Disposal Process. **Total 178 Students were participated for the same.**
- Teacher day celebration by preparing gratitude wall with card at all 17 schools.
- D- Talks are an Initiative of Global Dream, a Disruptive Movement for Universal Foundational Literacy and Numeracy. Mr. Jatin Upadhyay Talk On "Empowering the Marginalized Communities in Gujarat Through rejuvenating Education.
- World Book Day celebration on 23 April with various activities



Education Projects

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. Due to Covid Pandemic this year Class 1st Admission was done -

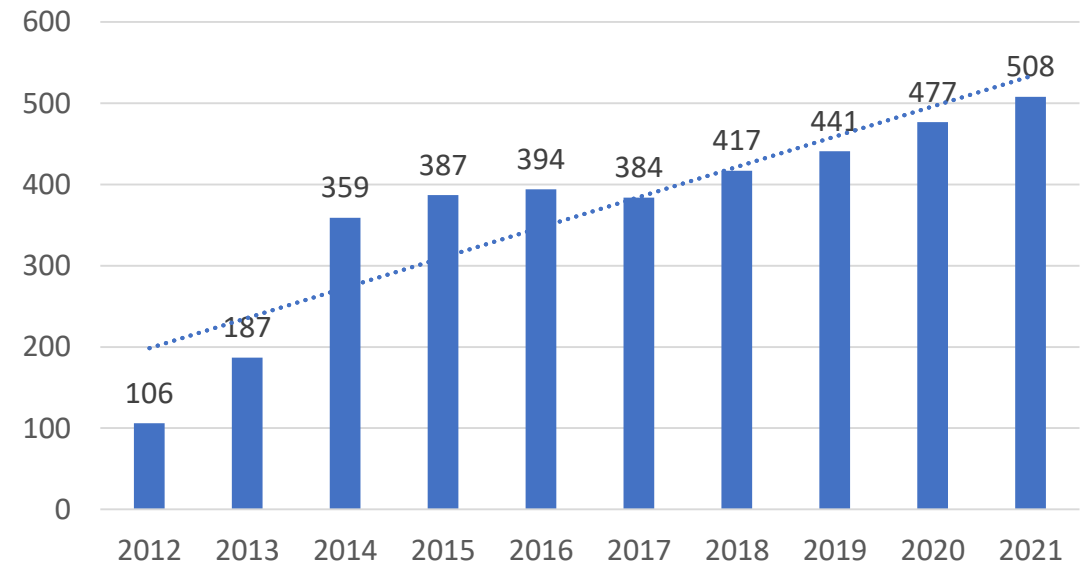
Education Projects



Adani Vidya Mandir Bhadreshwar Gujrat Board Standard 10th Examination Result is 100% as board examination was not held due to Covid. 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.

No's of Students



But We did not Give-up and reached out to our students to pursuit educational through virtual platform by various initiatives. Not only that, our teachers started visiting their home and initiated sheri shikshan concept.

Adani Vidya Mandir, Bhadreshwar

Objective

- Provide free and quality education to economically and socially under-privileged students
- Support to students for academics and co-curricular activities and overall well-being

Project Activity

- Balwadis started in 2010, for students in age group of 2-5 yrs. In 2013, this school was built on a donated land
- Free food, education, uniforms, online tablets
- Classes from Gr-I to Gr-X with 22 qualified teachers and 8 helping staffs
- Monthly stay of Gr-X students at school before exam, along with teachers

Outcome

- **508 underprivileged students** of Fisherman & Maldhari communities from **8 villages** taking education at the school
- Educated children have better opportunities of income beyond fishing
- Quality of life and change of mindset of students & families
- With education, many addictions reduced

Closer to SDG

1. No poverty
2. Zero hunger
3. Good Health & Well-being
4. Quality Education



Farmers Sustainable Livelihood Projects

Promotion of Natural Farming



- To promote Natural farming Adani Foundation has originated cow based farming initiative with interconnected techniques which can increase farmer yield – our main objective is to improve quality of soil.

Implementation

- Survey and identification of farmers to adopt Natural farming –Total 50 Farmers are selected as criteria in first phase of the Project.
- Water & Soil Testing- Most of Farm soil contain low organic carbon.
- Arranged Workshop & Hands on training for them which was conducted by Agri expert ,KVK and Progressive farmers with 500+ farmers
- 23 wormi compost unit have been set-up. Which is facilitated through Government with farmer Contribution.
- 50 Farmers have started to preparing JivaMrut & Gaukrupa Amrutam Bio-fertilizer and using in agri crop. Series of Training is arranged by ATMA and Adani Foundation
- Two Farmers Groups is registered with **ATMA –Agricultural technology management Agency – it will leverage Government schemes**





પ્રાકૃતિક ખેતી

કૃષિ

જીવામૃત : દુનિયાના શ્રેષ્ઠ ખાતર

જીવામૃત બનાવવા માટેની સત્તાવીસ

વસ્તુ	પ્રમાણ	ઉપયોગીતા
માવનું તાજુ ભાજુ	૧૦ કિલો	માઈદોજન, ઘોડાસ, કેરોલિયમ, મેગ્નેશિયમ, નાઇટ્રોજન, પોષક, ઓલિવ, બેન્ડો, જાંબુ, બોલેન, મોલીબ્ડેન
દેલી માવનું બોલુ	૧૦ લીટર	માઈદોજન, વાલર, ડોલર, જાંબુ, એમોનીયમ, સુરી, એલીડ, કોલેટ, લોડીયમ, પોટેશિયમ, મેગ્નેશિયમ, કાર્બન, એલીડ, કેરોલિયમ, નાઇટ્રોજન, કિનસન, પિટામીન, એ, બી, સી, ડી, ટી, ડી, એન્જાઈન, પાલી, સુરી, એલીડ, સાયટોફાસ્ફોરિન, હાઈડ્રોલોફાઈડ
કોલેન કોલ નો કોલ	૧ કિલો	કોલીન અને ફાઈબર
દેલી મોલ	૧ કિલો	સુખેત અને સંતંજ બેક્ટેરીયા
વડની નલે (ભાજાની માટી)	૫૦૦ કીલો	સંતંજ બેક્ટેરીયા

જીવામૃત બનાવવાની રીત	જીવામૃતનો ઉપયોગ
૨૦૦ લીટર પાણીમાં ૫૫૫ ૫ વસ્તુઓ મિલે	જીવા ૫૫૫૫ની માલીને ૧ મી ૩ વાર ૫૦૦૫ સપાવ - બોરીલા તેમજ ડ્રીપમાં ભાપી ૫૫૫
દિવસમાં સવાર-સાંજ બગીચાના કાંડની દિશામાં ૩-૩ મિનિટ ભાજુ	૫૦૦૫ વખતે ૫૫૫માં ૨ લી ૨, ૫ લીટર જીવામૃત ભાજુ
જીવામૃતને ૫૦૦૫માં ભાજુ	જીવામૃત ૫૫ દિવસે ભાજુ - ૫૦૦૫, ૫૫૫, ૫૫૫૫૫૫ ૫૦૦૫, ૫૫૫૫૫૫ ૫૦૦૫ તેમજ કોલેન ૫૫૫માં ભાપી ૫૫૫
૧ - ૧ દિવસમાં જીવામૃત ભાજુ	

જીવામૃત
પ્રાકૃતિક ખેતી

Farmers Sustainable Livelihood Projects

Pashudhan : " Fodder Support Programme, Individual Fodder Cultivation and Preventive Health Care

- Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 14116 Cattles / 3008 farmers and hence enhancing cattle productivity. Dry Fodder 895398 Kg Green – 2425230Kg
- Fodder Cultivation- To made fodder sustain villages - 25 Acre Gauchar land of Siracha village is being cultivated for the same.
- To protect Cattles against Bovine Brucellosis zoonotic disease, Awareness and vaccination program is ongoing with Kutch fodder fruit & Forest development trust (KFFT) in our 11 Villages , **Total 1076 Female calves** below 3 years have been vaccinated in six months.

બ્રુસેલોસિસ કંટ્રોલ પ્રોગ્રામ
Brucellosis Control Program

શું તમારા પશુમાં બ્રુસેલોસિસ રોગનાં લક્ષણો તો નથી ને ? જો હોય, તો સાવધાન...!!!

બ્રુસેલોસિસ રોગના લક્ષણો...

- માદા પશુએ ૫ મહિના પછી ગર્ભવત્ત થાય
- જડ / મેદી ના પડવો
- પામના સાંધાઓમાં કોષ્ટકો આવવો

આ ભયંકર ચોપી ગર્ભપાત રોગ મનુષ્યમાં પણ ફેલાઈ શકે છે.

જડ / મેદી તથા ચોપી રક્તપાના સંપર્કમાં આવવાથી

મનુષ્યમાં ઘઠ-ઉતરતો તાવ આવવો, સાંધા જકઠાઈ જવા અને યુવકમાં કોષ્ટકો આવવો વગેરે લક્ષણો જોવા મળે છે.

મનુષ્ય જાડિયાં આ રોગનું મિટાન કરવું અને તેની સારવાર કરવી ઘણી અપડી તેમજ અર્થાત્ત એ અને આ રોગને અટકાવવા કોઈ રસી પણ નથી.

પુખ્ત વયના પશુઓમાં આ રોગ ભેગવાર ફેલાઈ જવા પછી તેની સારવાર શક્ય નથી પણ તેવી પશુઓથી અન્ય પશુઓમાં આ રોગ ફેલાતો અટકાવવો એમણ છે.

એક માત્ર ઉપાય : રસીકરણ

પશુને અપાવવા માટે એક જ ઉપાય છે :
જ મહિના થી મોટી વાસણીઓ અને પાડીઓને રસીકરણ કરાવવો.
રસી મુકેલા અપાવણીઓ અને પાડીઓથી અન્ય રાત્રનાં કિતાબ છે.
તેની જોતજ માટે કાનમાં રેગ / કટી લગાવવી પુરુષ જરૂરી છે.

શું તમે તમારી જ મહિના થી મોટી વાસણીઓ અને પાડીઓને રસીકરણ કરાવવું હો? અન્ય રોગથી સંભાવના પશુઓનું મિટાન કરાવવું હો? જો આ કાર્યનું કોમ તો : તમારા ગામના "પશુપાલક મિત્ર" નો સંપર્ક કરો...

સંપર્ક

adani Foundation

સહાયતા : M. 99011 67140
જયદીપસા : M. 99080 99740

સંકીર્ણ : M. 97279 93362
રાજુભાઈ : M. 97277 60919

સામગ્રી

સહાયતા : M. 99011 67140
જયદીપસા : M. 99080 99740

સંકીર્ણ : M. 97279 93362
રાજુભાઈ : M. 97277 60919



Farmers Sustainable Livelihood Projects

Promotion of Horticulture : Date Palm and Dragon fruits

Kutch Kalpaturu Producer Company (KKPC) is established to address the challenges faced by the farmers, particularly to enhanced access for inputs, technology up gradation in Agri practices, output, Sorting, Grading, Value addition & marketing. by the farmers of Mundra Block in the year of 2020. The company is started with 196-shares of 89 Farmers , that is Rs.0.96 lacs Fund in the year of 2020. Right now it is on path of expansion up to 5000 Farmers.

- Current year for the dates Packaging and Marketing, KKPC Started to sell 10 Kg capacity packaging Box at Minimum Profit Margin At Rs.29/Boxes which resulted in turn over of Rs. 24 Lacs with Profit of 1 Lac. This initiative has supported more than 1800 farmers indirectly.
- Regular Director Board Meeting as well as capacity building Training were arranged.

Dragon fruit farming is on going by Five farmers each farmer is doing in 2 Acre farm – Total 11000 plants. Pleasure to share that Auspicious presence of Respected Douglas Smith sir, our CEO ,APSEZ the First batch of fruit was harvested.





Fisher folk Sustainable Livelihood Projects

- Get the technical and Non-technical Man-power Requirement details from CFS and APSEZ, Mundra And inform to fishermen Youth and Leader. Later Eligible fisher Youth had trained for interview facing and soft skilled practices and interviewed in respective Company. 11 Fisher Youth were interviewed among that 5 have been selected. Our target is to support 60+ Fisherman in alternative livelihood till March 2022.
- Fishermen Government Scheme awareness Program was Arranged at Adani Guest House Mundra on 11th Augusts. The schematic details was Felicitated by Fisheries Department Staff. As well as Facilitation of Pagadiya Welfare scheme & boat license sanction letter to 06 Fishermen. Till date 59 Form has been submitted to fisheries department ,Bhuj for pagadiya and boat License.
- ASDC Courses Induction Meeting with Fishermen Youth at Navinal and as well as listed out their name to start computer & Spoken English classes through Adani Skill Development Center, Mundra.
- During the **Taukate cyclone** fishermen family had been shifted to safe Places As well as support to disaster management team for advance preparation.
- Fishermen's boat get across the vessel approach often while fishing Often , which create issue due to miscommunication Between Fishermen and Vessel crew members to clear vessel approach. its delay vessel berthing



Women Empowerment Projects

"You can tell the condition of a nation by looking at the status of its women" – Women are central to the entire development process, be it in an individual family, village, state and to the whole nation.

The below mentioned figure shows determinants associated with the empowerment of women and these are the challenges for us as a CSR to work upon.

Adani Foundation is considering all parameters as a part of Empowerment.

- Education – Uthhan Project promotes girl child education, Creating awareness through various Govt schemes i.e. Vahali Dikri Yojana, Sukanya Samridhhi Yojana etc. till date covered more than 1200 girl child to get benefit out of it.
- Health and Nutrition – Suposhan Project focus on adolescent and Reproductive age women nutrition part. Till date covered more than 12500 women and 8700 adolescent under this Project and brought them to considerable status.
- Skill Development and Income Generation – Adani Foundation is working with 15 Self help group and supporting to develop entrepreneur skills to become self reliant, sourcing more than 350 women to absorb in various job – this will give them identity, confidence and right to speak in any decision for home, village and working area.
- Drinking Water and Sanitation – Total 89 Roof Top Rain Water Harvesting is supported for reducing hassle of the women to fetch the water as well as making clean water available.



Women Sustainable Livelihood Projects

- Total 15 Active SHG Group are engage as Mentioned Income generation activity. We facilitate them capacity building training for quality ,Marketing Finance and team work to made them self sustain.
- Saheli Swa Sahay Juth have completed order of 1500 Sanitary pad from District Health Department.
- "Shradhha Saheli Sva sahay Juth" is won the tender to provide Catering service in Block level Government
- Tejasvini SHG has received order of three layer mask preparation worth Rupees Nine Lacks
- Sonal Saheli Women SHG had supplied 500 KG washing powder to Adani port & Will mar.
- Shradha Saheli & Jay Adhar Saheli have been registered in FSSAI (Food safety and standards Authority of India.

Sr.No	Name of IG activity	Activity	Nos
1	Sonal Saheli Swa Sahay Juth	Phynale & Washing Powder	11
2	Jay Adhar Saheli Swa Sahay Juth	Dry Nasta	12
3	Tejasvi Saheli Swa Sahay Juth	Stiching,Uniform,Bag	12
4	Umang Saheli Swa Sahay Juth	Soft toys, Jula,	13
5	Vishvas Saheli Swa Sahay Juth	Tie & Die, Stitching	13
6	Jay Momay Saheli Swa Sahay Juth	Tie & Die, Stitching	12
7	Meghadhanush Saheli Swa Sahay Juth	Mud Works,	10
8	Saheli Swa Sahay Juth	Sanitary Pad	10
9	Radhe Saheli Swa Sahay Juth	Dhadaki, Small Godadi	14
10	Shraddha Saheli Swa Sahay Juth	Fresh Food	10
11	Chamunda Saheli Swa Sahay Juth	Tie & Die	10
12	Jay shakti Saheli Swa Sahay Juth	Stitching	10
13	Navdurga Saheli Swa Sahay Juth	Sanitary Pad Sale	10
14	Sakhi Saheli Swa Sahay Juth	Sanitary Pad Sale	10
15	Sonal Krupa Saheli Swa Sahay Juth	Stitching	10
168 Members in Group			

Women Sustainable Livelihood Projects



Economic Empowerment of women means "Enhancing the role of women as drivers of poverty reduction, promoting female investors and entrepreneurs as per SDG 5" in this half year all 15 women groups did turn over of Rs. 11.5 Lacs. 43 women got job in various SEZ industries by AF intervention and 11 women got absorbed as Gram Rakshak Dal, Bank Sakhi and Bima Sakhi.

Registration Certificate
Government of Gujarat
Food And Drugs Control Administration
Food Safety and Standards Authority of India
Registration Certificate under FSS Act, 2006

Registration Number: 2071983060348

1. Name and permanent address of Food Business Operator (FBO): JAT AJODHAR SAHNI/ TIVA SAHNI/ 20TH BRIDGE, Barai, Mundra, BHUSKUTCHAK, Gujarat-370421

2. Address of location where food business is to be conducted / premises: BAROL Barai, Mundra, BHUSKUTCHAK, Gujarat - 370421

3. Kind of Business: General Manufacturing

4. Photo Identity Card: N/A

Place / BHUSKUTCHAK
 Issued On / 12-08-2021 (New Registration)
 Valid Upto / 11-08-2022 (For details, refer Annexure)

Registering Authority

Annexures:
 1. Product Abstract
 2. Layout Diagram
 3. Registration ID Card

Note:
 1. Application for renewal of Registration Certificate can be filed as early as 180 days prior to expiry date of Registration Certificate. You can file application for renewal or modification of Registration Certificate by login into FSSAI's Food Safety Compliance System (<https://www.foodsafegov.in>) with your user id and password or call us at 18001121100 for any clarification.
 2. This Registration Certificate is only to commence or carry on food businesses and not for any other purpose.
 3. This is computer generated Registration Certificate and doesn't require any signature or stamp by authority.
 4. This Registration Certificate is allowed to conduct food businesses activities having annual turnover upto Rs. 12 Lacs only.

Community Health Projects

Mobile Health Care Units
and Rural Clinics



9 Rural Clinics

06 from Mundra 02 from Anjar & 01 from Mandvi block treated ;

3843 patients.

31 villages covered, with 94 types of general and life saving medicines through Mobile healthcare unit

3364 patients benefited during six months

Community Health Projects

Swasthaya Seva to needy Patients

06 patients are provided Dialysis treatment at 133 times with nominal charges at Adani Hospital

471 – Economically Challenged patients have been supported for operation ,OPD ,IPD ,Medicines and lab-test.

Promoting preventive health care

Initiated identifying patients of NCD-Non communicable disease by survey which will help to diagnosed chronic disease at early stage and treated as well. From 960 patients - **80 Patients are find symptomatic to Hype, tension, Diabetic.**

As a part of emergency situation - Rural clinic and Mobile van are equipped with Portable ECG machine & Life saving medicines to treat cardiac patients For Preventive health care General and multispecialty camps Pediatric camp, General Health camps in nine villages and Super specialist camp which benefitted more than 1100 patients of Mundra Taluka.

16 Senior Citizen have been linked with Government Niradhar pension scheme, 34 senior citizen linked up with Ayushman Yojana and 67 Senior Citizens were referred to GKGH Bhuj for chronic illness.



Community Health Projects

Corona Related Work at GKGH and AHMPL

- Started Covid care centre service at **Samudra town ship** to Provide medical services at 24 x7 hrs. Home Visit for Medical Prescription and advise for further treatment & co-ordination.
- AF team voluntary performed patients care and co-coordination duty at GKGH ,Bhuj for 23 days.
- AHMPL,Mundra was converted into Covid Hospital with 100 bed Facilities with oxygen to extend Covid medical treatment over community. All related coordination done by our team for more than 353 OPD and IPD.
- Provided Oxygen Concentrator machines for Home isolated patients resulted in goodwill.
- Provide Dead body van service to shift covid demise patients to Crematorium with all dignity.
- Precautionary voice message dissemination through Awaj de voice message service Over Community.
- Started Village Sanitizing activities and Ukalo, Vitamin C tablet distribution



Community Resource Center

Scheme	Detail	Total
Widow	Widow pension	78
Fishermen	Pagadiya License & Boat License	59
Kitchen Garden Kit	Kitchen Garden kit	20
Mukhya Mantri Yojna	Orphan Covid Child	14
Su-kanya Yojna	Fix deposit	11
Manav Garima	Tools & Kit support	1
Agriculture	Barrel & Chaff Cutter	12
Bal Ayog Yojna	health	19
Senior Citizen	Pension Yojna	06
Vahali Dikri Yojna	Fix deposit	2
Total		222



Though there are huge number of Government welfare scheme but people could not get it s benefit because of awareness and access facilities.

We have started community resource center at Field office Mundra to facilitated Government scheme as below

Till the date more than 2100 beneficiaries and during past six months 222 application have been submitted to Government Department i.e. widow pension scheme, Senior Citizen pension scheme, agriculture and fisherfolk related scheme, child support scheme after pandemic, vahali dikri Yojana etc.

Community Infrastructure

Work Completed

- 31 RRWHS structure have been completed
- 45 Bore-well recharging activity is completed .
- Development Approach road Prasala vadi vistar Gogan Pachim at Zarpara
- Earthen bund Repairing work at Pond, Luni.
- Pre-moon soon activity Approach repairing, Village Pond lake strengthen and river cleaning (babul cutting) work is ongoing in Various Villages
- Approach Road repairing at Various Fishermen Vasahat(ARC).

Work in progress

1. Construction of common Gathering Rooms at Wandi village.
2. Development of Chain Link Fencing at tree forestation at Nana Kapaya.
3. Construction of community gathering Shed at Mundra- work in final Stage.



Adani Skill Development Centre

ASDC, Mundra

Courses	Female	Male	Total
Digital Literacy	10	20	30
Tally with GST	02	03	05
General Duty Assistant	04	01	05
Dori work	21	00	21
Mudwork	18	00	18
Basic Functional English	09	12	21
Beauty Therapist	01	00	01
Manicure and pedicure	20	0	20
Data entry operator	02	0	2
Junior crane operator	00	48	48
Total	87	84	171

RPL – Recognition of Prior Learning Training given to Adani Group Contractual Employees –Total 218 Employees have been benefitted Junior Crane Operator practical training to 36 Candidates for (Group-1,2 & 3) At MICT Port

Guest Lecture On Mehendi products , Beauty Therapist & Resin art Total 100 candidate have been benefitted.

Certificate Distributed to Mud work candidates at MICT Colony-30 women learnt Mud work.

Volunteer Support in GKGH and Adani Hospital during covid pandemic

21 students were coordinated for interview in sea bird CFS of Mundra.

Centre Inspection by Mr. Krunal (GSDM) At Solar Mundra Under Sankalp project

We Received 4 Star rating from the Department.



Adani Skill Development Centre

ASDC,Bhuj

Courses	Female	Male	Total
General Duty Assistant	47	16	63
Diet & Nutrition (Chanakya College)	36	5	41
Digital Literacy (Chanakya College: 30 + Online: 5 + University: 3)	26	12	38
GST with Tally (Online: 1 + University: 22)	20	3	23
First Aid (Chanakya College)	35	6	41
Basic Functional English	3	1	4
Beauty Therapist	3	0	3
Financial Literacy (Chanakya College: 18+ University: 3)	20	1	21
Junior Crane Operator	0	3	3
Welding Technician	0	1	1
Logistics & Supply Chain Management	0	1	1
Frontline Health Worker	5	0	5
Occupational Safety and Health Administration	1	0	1
Domestic Data Entry Operator	0	1	1
Total	196	50	246



Other Activities:

Launched New online General Duty Assistant & Beauty Therapist for 63 candidates under (DDU-GKY).

Certificate Distribution program to Old GDA batch (DDU-GKY).

Soft Skills Training Certificate distribution to Prisoners of Palara Special Jail.

Guest lecture on " **Tally: Older vs New**" & " **Concept of Emerging E-way Bill**"

total 100 Candidate had attend Guest Lecture.

Nakhatrana CSR

CSR activities being executed for the holistic development of eight most effected villages. in four core area Education, health, SLD and CID

- Carried out Survey of Widow women for Gov Pension scheme. There are Total 246 widow women among them 121 have been facilitated with Widow pension scheme@ Rs.1250/Month i.e. Rs.121250 /Month.
- To increase the ground water table we have started Ground water Recharging activity.Total 22 Bore well have been recharged at Ugedi and Deshalpar Villages.
- Repairing of Four Old check dam ,two pond have been deepen in Ugedi Village.
- World Environment day celebration on 5th June by tree Plantation at Jinjay & Ugedi Villages.
- Tree Plantation at Ugedi primary School with nurturing responsibility over Students **one Tree one Child.**
- Respected Gautam sir Birthday celebration with Tree Plantation at Ugedi schools.
- Adani Foundation day celebration at Deshpar –Gantuli Wiodw pension Government scheme form filling and brief about adani foundation activities.
- Mangoes sapling have been Given to Farmers and aware and awake about the important of Horticulture Cropping to doubling the farmer Income. 1000 Mangoes Sapling had been Distributed to Ugedi and Deshalpar Villages Farmers Accordingly.



Sr. No	Village Name	Total Widow woman	Eligible for Pension scheme	Total remaining	Facilitated Through AF
1	Ratdiya	45	27	18	26
2	Ugedi	42	36	6	19
3	Amara	43	17	26	17
4	Deshalpar (G)	69	44	25	39
5	Jinjay	25	18	7	12
6	Dhamay Navi	13	5	8	5
7	Dhamay Juni	9	3	6	3
Total		246	150	96	121

Nakhatrana CSR



- Under Utthan project total 8 schools and 1165 students are getting benefit since two years
- Even though the covid pandemic Utthan education is ongoing with innovative teaching method.
 - **Online Outreach- Students-375**
 - **Individual Home visit-138**
 - **Sheri sikshan and school students- 313**
- Apart from regular classes Utthan Sahayks conducted online Covid awareness session. In which 100+ students and 80+ mothers took participate
- Utthan Sahayks approached Virtual classes for progressive learner before 9:00 am and after 8:30 pm.
- 21 students have been coached guided for National Means cum Merit Cum Scholarship Scheme (NMMS).
- Mothers Day Celebration and sensitized about how they are key point for their family growth. Total 350 mothers were participated
- International Yoga Day celebration on 21st June Through Virtually and Physically. More than 100 Family had participated
- More than 504 Mother were informed and awaked durinh mother meeting in Utthan Villages and aware about their wards education progress Health ,Hygine.
- Capacity building program for Utthan Sahayaks and Government Officers.
- Celebrated 75th Independence day with Commemorate 75 untold story , A Freedom Fighters who paid remarkable contribution for Indian Independence. And 139 Utthan school students and 53 parents had participated in Rashtragaan ,an initiative by the Ministry of Culture to Mark Azadi ka Amrit Mahotsav.
- Rakhi festival Students made Eco friendly Rakhi and tied to the 108 Frontline corona warriors.
- Arranged Virtual Tour on Plastic Waste Management with Municipal Corporation, Surat 73 Students were participated for the same.
- Teacher day celebration by preparing gratitude wall with card at 08 Utthan schools.
- D- Talks are an Initiative of Global Dream, a Disruptive Movement for Universal Foundational Literacy and Numera. Mr. Jatin Upadhayay Talk On "Empowering the Marginalized Communities in Gujarat Through rejuvenating Education.
- World Bool day celebration and started issue our library corner Books ,297 Books were issued by 6 to 9 standard students through our Library corner initiative which prompted them for reading nd created curiosity to know more.
- Teacher day celebration by preparing gratitude wall with card at all 08 schools.
- 25 Students are being taught for Javahar Navoday Entrance Exam by Utthan Sahayak since last Three Month.

Tuna CSR



CSR activities being executed for the holistic development of three most effected villages and two fisherfolk settlement AKBTPL, Tuna.

We are Providing sage and clean potable water to Vira and Ghavarvado Fishermen vasahat and Vandi Village.
Total 11310 KL water was supplied by coordination with GWIL.

Two Pond Deepening at at Rampar Village and Community training center construction at Vandi Village.

Tree Plantation at Rampar primary School with **one Tree one Child concept to Nurturing Environment. 500+ trees planted**

Fodder distribution to Rampar and Tuna Villages.
Green Fodder -720310Kg
Dry Fodder -26680Kg Green.

Bitta CSR

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 awareness for water conservation was provided to 50+ farmers of 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.

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



Dignity of Work Force Programme - EVP

Presently in Mundra Population of migrated labour community is increasing. Some of them are living in pathetic condition due to lack of awareness and education. It is true that we cannot achieve our goal of development until we support to up bring lives of this community. Basic needs of this labour force needs to be address. In labour Vasahats they are not getting facility of health facilities, proper living condition, sanitation or proper living atmosphere. This leads to addiction and various diseases.

Under Employee Volunteering Programme, Adani Foundation employees are supporting to more than 800 students of Hindi Medium from workforce background.

Adani Foundation Medical officers are providing their services at Labour clinic at Every Saturday Sunday and covering more than 150 patients in a week.

Joy of giving week celebration is scheduled twice in a year. In June 2021, more than 7500+ cloth distribution to workforce families by Employees of Adani Group under EVP.

DE addiction Awareness Campaign is going on with "Prajapita Brahmakumaris" at Labour Vasahat Areas. This campaign has changed life of many labours. Cleanliness Drive is organized in May and August with Adani Willmar Limited at vasahat areas.

Rakshabandhan and Ashadhi bij celebration by Mundra Solar

Dignity of workforce programme is arranged by joining collaboration with Adani Wilmar Limited, APSEZ, labour contractor and leaders of union. adan



Dignity of Work Force Programme - EVP



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

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

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

Early diagnostics and treatment initiation are key to saving lives and minimizing disease transmission. In 2019, India reached a milestone of 24 lakh notified cases in India, an increase of 12% compared with 2018. Even then, an estimated 5.4 lakh were 'missing' across India, a serious drawback to our TB

elimination efforts as what is not measured is unlikely to be improved. Diagnostic delays are also prevalent in India, with studies indicating that these can be attributed to patients as well as health systems.

Adani foundation with APSEZ, APML, AWL and MSPVL HR department in coordination of FOKIA has launched cluster based screening program to eliminate TB in labours under Dignity of workforce program. Adani Ports and SEZ Limited has initiated screening with 2300 work force in first phase with target of screening more than 10,000 workforce of all group businesses and SEZ Industries.

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

Success Stories : Stories of 9 Empowered Women of Mundra



Educating and investing in women and girls has a multiplier effect on productivity, efficiency and economic growth but economically strengthening women is not only a means by which to spur and sustain inclusive industrial development, it is also a matter of advancing women's human rights.

Success Stories



"Biogas asanje kutum jo hakdo sabhy j aay"
(Homebiogas is our family member now)
words by Gita Bharu sheda residing in
Zarpara village. We get bio slurry which is
golden material for growth and I am so happy
to cook on gas flame !! Earlier we have to
collect wood and 5 hours per day breathing
carbon during cooking period..
We will create awareness of the same to
other farmers also.



Jetbai Gadhvi residing in Bhorara, she is
saying " Now rural women can enjoy a smoke
free life and almost entirely freedom from
firewood collection and management. We
feel safer, healthier and less worried - now
we have time for other activities.

Success Stories



Valbai Sheda is residing at Zarpara village Prasla Vadi Vistar. She is Arts graduate and very much interested in developing various types of fodder. Having 5 cows and 2 buffalos, use of biogas since 4 years soil become fertile. She is developing Super Napier Bajra - NB21 and using chaff cutter for cutting it. She always use to make silage and cattle food with high protein. With all experiments milk quality and also quantity increased by half ltr to one ltr per day per cow



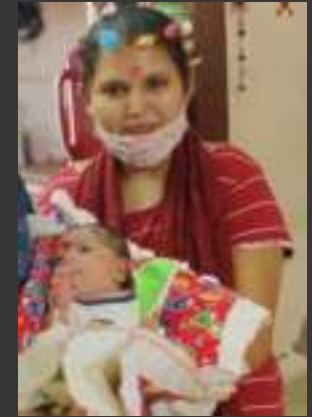
Heerbai sodham residing at Nana kapaya who is progressive lady farmer. She lost her husband in 2015 in road accident. Responsibility of 4 children made her determined to earn for family. Her mother in law encouraged her for continue agriculture work. Her daughter is studying BSc nursing at Ahmedabad. Since 3 years she is doing cow based natural farming. After knowing about homebiogas she approached Adani foundation and today on world environment day with her contribution installation carried out at her farm. We salute her strong approach for natural farming and courage to take care of whole family with confidence

Success Stories



Gitaben is lady farmer doing natural farming at Bhorara Village. She is taking care of her dragon fruit farm having more than 3000 plants with zero chemicals. She is widow and having 3 children . Her daughter is civil engineer and helping her in cultivation. When we meet her in month of March and offered our support – she told she just required guidance for jeevamrut and Gau Krupa Amrutam. She took part in "Kamlam" Exhibition at Ahmedabad. Adani Foundation salutes her confidence and self respect.

When a sweet little angel came into this world she was not at all aware about condition of her parents !!
Divyanen soni residing at Gandhidham was nine month pregnant, delivery date was having only 7 days time period.
In this happiness time - suddenly symptoms of corona appeared and corona test came out positive.
Her husband Nikunj soni inquired to many private hospital but nobody was ready to take responsibility of delivery of corona patient.
Finally the couple came to Adani GKGH hospital. Including corona treatment safe Delivery happened of patient - saved two lives !!
When divya ben left for home with a cute baby girl she said " Thanks word is very small for this nobel help - I got great gift of the God "



Success Stories



Ranjana ba is 28 years old lady lives in bhorara. She has 4 children. Her husband Raghuvirsinh lost his life before 3 months due to corona.

For Ranjan ba it was a very crucial time - socially and financially..

Jagrutiben meet her n fill forms of bal sanrakshan for 4 children. She will start getting 2000 per child - Rs 8000 per month from GOG. This support will be blessings for her.



Diwali Ben Parmar age 62 Years living at Mundra. Her name is totally opposite to her personality - she is 100 percent blind. With help of karsanbhai she started getting Niradhar vridhd pension Rs 750 per month as well as she received bus pass today. We can see her blessings by her innocent smile..

Success Stories

"if you are planning for one year grow crops, if you are planning for 10 years grow the fruit saplings, but if your planning is for 100 years grow education" – this is a well-known proverb. It is not that person does not know about education but when a person has to make choice of education v/s hunger the later one wins the battle. Dearth for education burns to extinguish fire of hunger.

The war of Education v/s hunger was the same in the house of Haribhai Khetshi Sheda a resident of Zarpara Village of Mundra. The couple Haribhai Sheda has 7 daughters and 5 sons was earning livelihood through grazing animals, working in others farm, and trying to grow something in his own farm with great difficulty. In the grave financial conditions there was no scope that children could be educated as all were occupied as child labourers and all gave priority to work as compared to education. But, story was

different with the fourth child Nagajan Sheda. For him detection of polio followed by permanent defect in leg due to doctors fault turned as a blessing in disguise as he completed education till class 9 and dropped out after failing in class 10.

In 1991, when Adani Company started Mr Nagajan got labour work from a contractor. His first marriage had failed but was comfortable with the second wife. His first daughter from first marriage was Jyoti. He tried to give her best of childhood. He took an oath to educate the daughter by any means and make her doctor. It was his burning desire to see the upcoming generation of Charan samaj educated. He determined to do anything to have the tag of Dr. for his daughter.

Mr Nagajan started a tea stall for the people coming to work at Adani Port. But too bad of

his fate nobody turned up for 08 days as he was using cow and buffalos milk and not of the packet. He didn't have enough fund to invest for the same. Meanwhile one contractor came with 50 labourers to do some civil work and they all started coming to his tea stall. Gradually, he borrowed 5000 rupees to bring things for the shop and also took the franchisee for Amul. He admitted Jyoti in the govt school of Dhrub. The family of Nagajanbhai also got two more sons and a daughter.

In order to fulfill his desire Nagajanbhai started searching for a good school in nearby area and narrowed down to Adani Public School, CBSE school. The family members opposed for the same as it would increase the expense for all. He was firm and said " I will eat chapatti and salt but will educate my daughter".

Success Stories



Jyoti was admitted in the school in Jr.Kg. The teachers of the school could understand the passion of the parent and her journey in APS started which was followed by her 03 siblings joining her in the same school.

Inspite of distance, different timings of all

the section Mr Nagajan use to meticulously do pickup and drop for all the children. His wife supported him by doing all the household chores on her own, managing livestock and farm to earn some amount.

Time flied and Ms Jyoti secured 92% in Class 12 Science. The first target of Mr Nagajan was achieved. He received great appreciation and could set an example for his community. At present his two sons Rudra and Shivam are in 11th and 7th respectively and daughter Sonal is in class 9. It is not been an easy task to regularly pay fees of 04 kids. Yet he managed to do so. At times he has become fee defaulter which created various issues like result on hold etc. At one point of time he sold his plot and paid fees. His all the four children are good at studies and other co-curricular activities. Jyoti has got first position in district level

throw ball, has got the best school award in swachagraha, gave a speech on kargil day and many others.

Jyoti is firm to fullfil the dream of her parents. She is able to drive vehicles like bolero, bike and grows different plants.

In the community of Nagajan Bhai early marriages are still prevalent. But, he has not done so for any of his kids. Nagajan bhai has proved to be a living example that if one decides he could achieve anything be it education of kids or their bright future.

Our country needs many such Nagajan bhai to have many Jyoti's!!!!

Events



Inauguration of **Community Resource Centre on 3rd April** to bridge the gap between Government and community to facilitate government schemes with Launching of "Super 51" Book Let by auspicious presence of Respected DM kutchh Ms.Pravina D K - IAS, District Development Officer Mr Bhavya Verma - IAS, Director, DRDA Mr Joshi , Director- Social welfare office Mr Arvind Rohadiya, Mr Chaudhary Sub Divisional Magistrate.

All dignitaries has visited Sanitary pad making unit and discussed with Saheli group women regarding orders and capacity. Pravina D K mam meet all women groups and asked NRLM department to prepare empowerment plan for the SHG's.

Events



❖ Super specialist health camps

With Joint Collaboration of Adani Foundation, Adani Hospital Mundra & Sterling Ramakrishna Hospital Gandhidham at Adani Hospital Mundra on 26th August. With availability of **Dr. Ankur Gupta** (Neuro & spine surgeon), **Dr. Tausif Sauravardi** (Pulmonologist), **Dr. Gautam Pipara** (Urologist), **Dr. Kunal Thakkar** (Endocrinologist) from Sterling Ramakrishna Hospital Gandhidham render their services accordingly.

With Joint Collaboration of Adani Foundation, Adani Hospital Mundra & Sterling Ramakrishna Hospital Gandhidham at Rotary hall on 28th September. **Dr. Ankur Gupta** (Neuro & spine surgeon), **Dr. Tausif Sauravardi** (Pulmonologist), **Dr. Gautam Pipara** (Urologist), **Dr. Kunal Thakkar** (Endocrinologist) Dr. Sachin Patel (MD), Dr. Rajesh Shukla (Surgeon) and Dr. Treyank Shukla (Pediatrician) had provided their services

Total 961 **Patients** had benefitted.



Doctor's Day Celebration

Kutch Kalpataru farmer producer organization is working for promoting dates of Kutch. On the occasion of Doctor day on 1st July, KKPC Farmers honored Doctor, Nurses and House keeping staff of GKGH, Bhuj & AHMPUL, Mundra with great respect to paid their sincere contribution during Covid -19 Pandemic.

On this day all Directors of KKPC were remain present and facilitate all medical staff with dates packet. More than 800 Staff members have been facilitated with the same.

This shows great feelings of farmers towards remarkable work of Adani healthcare in pandemic condition at Mundra and Bhuj Hospital.

Events



We celebrated **25th Silver Jubilee of Adani Foundation** at Adani House Mundra. On this Auspicious day We facilitated 11 women of Mundra Villages who have done Remarkable work in their filed in the Presence of EDM Shree Rakshit sir and HOD of APSEZ. acquainted about Adani Foundation Journey.

As well as Appointment letter Felicitated to Mamd Shakil Manjaliya, a First Fisher Youth who have peruse Mechanical Diploma



On the occasion of **Respected Dr. Pritiben Birthday** at 29th August, 21 Ration kit were distributed by APSEZ & AWL Employee To needy widow and senior citizen Women who are alone & passing measurable life

As well as ensure to continue ration kit support for life long to them.

Events



World Environment Day Celebration

Miyawaki forest development inauguration was held in coordination with Gram Panchayat, Forest Department and Mnrega. Additional collector, Sub division Magistrate, Range forest officer, TDO, Head environment, Panchayat members and Talati remained present. Press media was also live in this virtual event. Executive Director Mr. V. S. Gadhvi had given motivational speech on the occasion.

MOU signing ceremony for promotion of Natural farming with KSKV kutchh University. Dr.Jayrajsinh Jadeja vice chancellor and Dr.Mrugesh trivdi HOD of earth and environmental science were present and discussed about the road map for involving more than 2000 farmers for natural farming



International Coastal Clean up Day

Adani foundation MUNDRA has celebrated International Coastal Clean up Day with Coast Guard" with theme swachhagraha.. School students, Coast Guard staff and Adani foundation staff had cleaned Mandvi beach and give a message of swachhagraha.. In this event more than 150 students and 120 staff members of coast guard and Adani Foundation had taken part

Visits



- **ESG team** of Adani Group had visited AF Mundra - sustainable Project & business
- **Adani Foundation COO**, Respected Chandrasekhar Gowda sir-COO Adani Foundation had visit of all AF Project Mundra.
- **Adani Digital Lab & AF Communication Team**, had visit all AF Project Mundra.
- **MOEF team** had visit about APSEZ & AF Sustainability Projects.
- **EDI -Entrepreneurship Development Institute Team** had visit to frame out sustainable SHG development Project
- Gujarat Ecology Commission has visited grassland development project
- **100 VVIP Investor had Visit** APSEZ ,Mundra as well as Briefed about CSR activities and Gifted with NAMDA Frame which is unique combination to Revival of NAMDA craft and Mangrove Bio diversity- Fauna.



Mapping AF Projects with Sustainable Development Goals...

Sr No	UN-Sustainable Development Goals	Illustrative Mapping of Mundra Projects
1	No Poverty	Support to Farmers, Fishermen and Locals, Adani Skill Development Centre (ASDC)
2	Zero Hunger	Natural Farming, Drip Irrigation Project, Dragon Fruit Farming, Date Tissue Culture
3	Good Health & Well-being	Gujarat Adani Institute of Medical Sciences (GAIMS), Health Clinics, Mobile Health Vans
4	Quality Education	Adani Vidya Mandir, GAIMS & ASDC
5	Gender Equality	Co-education in Adani Vidya Mandir & ASDC, Saheli Samitis, Support to Women Farmers
6	Clean Water & Sanitization	Water Conservation Projects, Potable Water to Fishermen
7	Affordable & Clean Energy	Usage of Solar Energy, Promotion of Bio-Gas Plants
8	Decent Work & Economic Growth	ASDC, Self Help Groups (SHG), Local Arts Revival
9	Industry, innovation & infrastructure	Tissue Culture, Seaweed Culture, Local Arts Revival
10	Reduced Inequalities	SHGs, Local CSR Leadership
11	Sustainable Cities & Communities	Community Infrastructure, Smriti Van
12	Responsible Consumption & Production	Usage of Solar Energy, Natural Farming
13	Climate Action	Mangroves Conservation, Biodiversity, Water Conservation, Seaweed Culture
14	Life below Water	Mangroves Conservation, Seaweed Culture
15	Life on Land	Mangroves Conservation, Smriti Van, Animal Husbandry
16	Peace, Justice & Strong Institutions	Local CSR Leadership, Self-sustained Open Structures
17	Partnerships for Goals	Revival of Local Arts, Smriti Van, Project Swavalamban, Seaweed Culture

Stories of change - impact in numbers...



175+

Hectares of Land Luni
Mangroves Biodiversity

5820+

Fisherman person days
employed in Mangroves
Plantation

41000+

Plantations at Smriti Van
of **115 varieties**

950+

Beneficiaries of
multispecialty health camp

500+

Students at Adani Vidya
Mandir

8900+

Beneficiaries of Health
Initiatives

15

SHGs under 'Saheli'
initiative for Women

121

Home Biogas Plants
installed in 5+ villages

8700+

Special health care for Sr
Citizens in **68 Villages**

1632+

Beneficiaries enrolled in
Govt Schemes in FY21

20

Check Dams constructed
and rejuvenated

5000+

Students under Utthan
initiative in **39 Schools**

Summary - Budget Utilization of six month F.Y. 2021-2022

Sr No	Particulars	Approved Budget	Budget Utilization	% of utilization
A.	General Management and Administration	76.12	23.67	31.10%
B.	Education	172.05	18.07	10.50%
B1	Utthan-Education -Mundra & Anjar	149.51	16.91	11.31%
B2	Utthan : Fisherfolk	22.54	1.16	5.14%
C.	Community Health	330.38	107.47	32.53%
D.	Sustainable Livelihood Development	426.28	171.64	40.26%
E.	Community Infrastructure Development	141.35	11.18	7.91%
F.	EDM Recommended Projects	100.00	2.65	2.65%
G.	COVID 19 Support	25.00	12.16	48.63%
	Total AF CSR Budget :	1,271.18	346.84	27.28%
[I]	Adani Vidya Mandir-Bhadreshwar	189.84	40.41	21.28%
[II]	Project Udaan-Mundra	167.42	17.99	10.75%
	GRAND TOTAL Budget F.Y. 2021-22 :	1,628.45	405.24	24.89%

Media coverage

આદાણી ફાઉન્ડેશન દ્વારા લાના કપાયા ખાતે ગાટ જંગલ ઉખું કરાશે

આદાણી ફાઉન્ડેશન દ્વારા લાના કપાયા ખાતે ગાટ જંગલ ઉખું કરાશે. આ કાર્યક્રમમાં આદાણી ફાઉન્ડેશનના સભ્યો અને સ્થાનિક સરકારના અધિકારીઓ હાજર રહેશે. આ કાર્યક્રમનો હેતુ જંગલનું સુરક્ષિત રાખવું અને લાના કપાયાના વૃક્ષોનું સંરક્ષણ કરવું છે.

આદાણી ફાઉન્ડેશન દ્વારા લાના કપાયા ખાતે ગાટ જંગલ ઉખું કરાશે

આદાણી ફાઉન્ડેશન દ્વારા લાના કપાયા ખાતે ગાટ જંગલ ઉખું કરાશે. આ કાર્યક્રમમાં આદાણી ફાઉન્ડેશનના સભ્યો અને સ્થાનિક સરકારના અધિકારીઓ હાજર રહેશે. આ કાર્યક્રમનો હેતુ જંગલનું સુરક્ષિત રાખવું અને લાના કપાયાના વૃક્ષોનું સંરક્ષણ કરવું છે.

કચ્છ પત્રિકા

આદાણી ફાઉન્ડેશન અને તાલુકા હેલ્થ ઓફીસના સંયુક્ત ઉપક્રમે “ટી.બી.હારેગા દેશ જીતેગા” અંતર્ગત કાર્યક્રમ યોજાયો

આદાણી ફાઉન્ડેશન અને તાલુકા હેલ્થ ઓફીસના સંયુક્ત ઉપક્રમે “ટી.બી.હારેગા દેશ જીતેગા” અંતર્ગત કાર્યક્રમ યોજાયો. આ કાર્યક્રમમાં આદાણી ફાઉન્ડેશનના સભ્યો અને તાલુકા હેલ્થ ઓફીસના અધિકારીઓ હાજર રહેશે. આ કાર્યક્રમનો હેતુ ટી.બી. રોગનું સંરક્ષણ કરવું છે.

કચ્છ પત્રિકા

કોરોનાકાળમાં મહિલાઓએ મેળવી રોજગારી

કોરોનાકાળમાં મહિલાઓએ મેળવી રોજગારી. આ કાર્યક્રમમાં મહિલાઓને રોજગારીની તકનીકો શીખાવવામાં આવી છે. આ કાર્યક્રમનો હેતુ મહિલાઓને રોજગારીની તકનીકો શીખાવવાનો છે.

આદાણી ફાઉન્ડેશનના પ્રયાસો દેશ લાંબાવા

માછીમારનો દીકરો મિકેનિકલ એન્જિનીયર બન્યો, માટી કપનીમાં નોકરી પણ મળી

આદાણી ફાઉન્ડેશનના પ્રયાસો દેશ લાંબાવા. આ કાર્યક્રમમાં આદાણી ફાઉન્ડેશનના સભ્યો અને સ્થાનિક સરકારના અધિકારીઓ હાજર રહેશે. આ કાર્યક્રમનો હેતુ દેશ લાંબાવાનો છે.

adani Foundation

આદાણી ફાઉન્ડેશનનો મંત્ર : સેવાનું ઉત્તરદાયિત્વ

આદાણી ફાઉન્ડેશનનો મંત્ર : સેવાનું ઉત્તરદાયિત્વ. આ કાર્યક્રમમાં આદાણી ફાઉન્ડેશનના સભ્યો અને સ્થાનિક સરકારના અધિકારીઓ હાજર રહેશે. આ કાર્યક્રમનો હેતુ સેવાનું ઉત્તરદાયિત્વ કરવું છે.

કચ્છ પત્રિકા

“શાળા બંધ પણ શિક્ષણ નહિ”

આદાણી વિદ્યા મંદિર, ભદેશ્વર દ્વારા અંતરિક્ષણ ગ્રામોમાં શેરી શિક્ષણ શરૂ કરાયું. આ કાર્યક્રમમાં આદાણી વિદ્યા મંદિરના સભ્યો અને ભદેશ્વર દ્વારા અંતરિક્ષણ ગ્રામોમાં શેરી શિક્ષણ શરૂ કરાયું.

કચ્છ પત્રિકા

મુંદરામાં કોમ્યુનિટી રિસોર્સ સેન્ટરનો કરાયેલો પ્રારંભ

મુંદરામાં કોમ્યુનિટી રિસોર્સ સેન્ટરનો કરાયેલો પ્રારંભ. આ કાર્યક્રમમાં આદાણી ફાઉન્ડેશનના સભ્યો અને સ્થાનિક સરકારના અધિકારીઓ હાજર રહેશે. આ કાર્યક્રમનો હેતુ કોમ્યુનિટી રિસોર્સ સેન્ટરનો પ્રારંભ કરવું છે.

મુન્દરાની આદાણી હોસ્પિટલમાં કોરોના પોઝિટીવ દર્દીઓની કરાતી સેવા-ચાકરી

મુન્દરાની આદાણી હોસ્પિટલમાં કોરોના પોઝિટીવ દર્દીઓની કરાતી સેવા-ચાકરી. આ કાર્યક્રમમાં આદાણી હોસ્પિટલના સભ્યો અને સ્થાનિક સરકારના અધિકારીઓ હાજર રહેશે. આ કાર્યક્રમનો હેતુ કોરોના પોઝિટીવ દર્દીઓની સેવા-ચાકરી કરવું છે.

Adani Foundation Kutch

Thank You

Annexure – 2

डॉ. एम. सुरेश कुमार /Dr. M. Suresh Kumar

मुख्य वैज्ञानिक तथा प्रमुख/Chief Scientist & Head

प्रोफेसर एसीएसआईआर/Professor AC-SIR

पर्यावरणीय प्रभाव एवं संपादनीय प्रभाग

Environmental Impact & Sustainability Division

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CSIR-National
Environmental
Engineering
Research
Institute
Nehru Marg
Nagpur 440 020
INDIA

No.ECCA-AP&SEZ/CSIR-NEERI/05

Date: 10/10/2021

To,

Head-Environment,

M/s. Adani Ports and Special Economic Zone Limited,

Adani House, P.O. Box No.1,

Mundra, Kutch - 370421.

Sub: Status of SEZ Environment Clearance Compliances

Ref:

1. SEZ Environment Clearance bearing MoEF letter No. 10-138/2008-I A.III, dated 15th July, 2014 (Specific Condition No. vii)
2. SO No. 4800061050, dated: 22.10.2020
3. Site Visit dated 06.10.2021

With reference to the above stated subject and references, work has been awarded to us for studies through Environment Clearance compliance audit at Multi Product SEZ of M/s. Adani Ports & SEZ Limited, Mundra with reference to EC Specific Condition No. (vii).

Accordingly, the site visit was conducted on 06th October, 2021 and the compliance report (October 2020 - March, 2021) was reviewed by us. It was further assessed from the monitoring reports submitted to us and site visit carried out, as part of the compliance report that all the environmental norms meet the applicable standards.

It has been concluded all the conditions stipulated in Environment Clearances are being complied and there is no violation of any condition. The existing practices shall be continued in future as well to ensure meeting with the applicable norms.

With Regards,

(M. Suresh Kumar)

Annexure – 3

Details of Greenbelt Development at APSEZ, Mundra

Total Green Zone Detail Till Up to Sep – 2021					
LOCATION	Area (In Ha.)	Trees (Nos.)	Palm (Nos.)	Shrubs (SQM)	Lawn (SQM)
SV COLONY	71.66	34920	7962	69696.00	100646.00
PORT & NON SEZ	81.61	149359	19220	75061.78	62966.38
SEZ	116.60	227120	20489	220583.60	28162.03
MITAP	2.52	8168	33	3340.00	4036.00
WEST PORT	109.37	256552	70831	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	57.27	63722	11834	23908.89	47520.07
Productive Farming (Vadala Farm)	23.79	27976	--	--	--
TOTAL (APSEZL)	486.19	8,12,591	1,35,171	426484.27	271633.33
		Total Saplings: 9,47,762 Nos.			

Details of Mangrove Afforestation done by APSEZ

Sl. no.	Location	District	Area (Ha)	Duration	Species	Implementation agency
1	Mundra Port	Kutch	24	-	Avicennia marina	Dr. Maity, Mangrove consultant of India
2	Mundra Port	Kutch	25	-	Avicennia marina	Dr. Maity, Mangrove consultant of India
3	Luni/Hamirmora (Mundra,)	Kutch	160.8	2007 - 2015	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GUIDE, Bhuj
4	Kukadsar (Mundra)	Kutch	66.5	2012 - 2014	Avicennia marina	GUIDE, Bhuj
5	Forest Area (Mundra)	Kutch	298	2011 - 2013	Avicennia marina	Forest Dept, Bhuj
6	Jangi Village (Bhachau)	Kutch	50	2012 - 2014	Avicennia marina	GUIDE, Bhuj
7	Jakhau Village (Abdasa)	Kutch	310.6	2007-08 & 2011-13	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GUIDE, Bhuj
8	Sat Saida Bet	Kutch	255	2014-15 & 2016-17	Avicennia marina & Bio diversity	GUIDE, Bhuj
9	Dandi Village	Navsari	800	2006 - 2011	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GEC, Gandhinagar
10	Talaja Village	Bhavnagar	50	2011-12	Avicennia marina	Forest Dept, Talaja
11	Narmada Village	Bhavnagar	250	2014 - 2015	Avicennia marina	GEC, Gandhinagar
12	Malpur Village	Bharuch	200	2012-14	Avicennia marina	SAVE, Ahmedabad
13	Kantiyajal Village	Bharuch	50	2014-15	Avicennia marina	SAVE, Ahmedabad
14	Devla Village	Bharuch	150	210-16	Avicennia marina	SAVE, Ahmedabad
15	Village Tala Talav (Khambhat)	Anand	100	2015 - 2016	Avicennia marina	SAVE, Ahmedabad
16	Village Tala Talav (Khambhat)	Anand	38	2015 - 2016	Avicennia marina	GEC, Gandhinagar
17	Aliya Bet, Village Katpor (Hansot)	Bharuch	62	2017-18	Avicennia marina & Rhizophora spp.	GEC, Gandhinagar
Total			2889.9			

Annexure – 4

Compliance Report of EMP & Mitigation Measures

Sr. No.	Suggested Measures	Compliance Status
Construction Phase:		
A	Air Environment	
1	Water sprinkling in vulnerable areas	Water sprinkling on road and other construction area as well as on construction materials is being carried out on regular bases.
2	Enforce proper maintenance of vehicles and construction equipment. Allowing only PUC approved vehicles in the site.	Please refer Condition No. ix of Part-B (General Conditions Construction phase) of EC and CRZ Clearance.
3	Enforce usage of covered trucks for transport of construction material.	Covered trucks are being used for handling of construction materials.
B	Noise Environment	
4	Enforce proper maintenance of vehicles and construction equipment. Enforce use of earmuffs / earplugs to workers in high noise level areas.	The vehicles of on-going construction work enter inside the premises after the fitness check. Ear protection device is provided to workers in high noise areas.
C	Water Environment	
5	Provide temporary drinking water supply and proper sanitation facilities within the site	Provision of drinking water and sanitation facility is being provided.
D	Land / Soil Environment	
6	Proper disposal of construction debris at regular intervals	Construction debris is being kept at identified temporary storage area and is being utilized for area development.
E	Thermal Environment	
7	Enforce (i) use of Portland Pozzallano Cement / (ii) use of Portland Slag Cement / (iii) use fly ash as admixture in construction	Fly ash mixed paver blocks are being used are used for development of back up area, footpath, colonies area, parking area, approach road etc. Please refer Condition No. xi of Part-B (General Conditions: Construction phase) of EC and CRZ Clearance.
F	Energy	
8	Wherever possible, piping shall be along the natural topography to permit gravity flow. Else, energy efficient pumps shall be used. Pipe material shall be such as to minimize friction losses.	Energy efficient pumps and HDPE Pipelines are used for supply of utilities. Refer point no. xii of EC & CRZ Clearance in Part – B (Operation Phase) for energy efficient electrical fittings. Few of the buildings in MSTPL are designed as green building.
9	Wherever possible, natural light shall	

Sr. No.	Suggested Measures	Compliance Status
	be used. Energy efficient electrical fittings and fixtures shall be used.	
Operation Phase:		
A	Land / Soil Environment	
1	Good quality non-corrosive type pipeline should be used. Regular checking of the pipelines for early detection of any possible leakage and damage. Regular ground water monitoring should be done within the SEZ.	<p>HDPE pipelines are used for supply of utility. Regular visual surveillance along the utility lines corridor is being done to check leakage or damage.</p> <p>Third party analysis of the ground water is being carried out at every three month by NABL and MoEF&CC accredited agency namely M/s. Pollucon Laboratories Pvt. Ltd.</p> <p>Please refer Condition No. v of Part-B (General Conditions: Construction phase) of EC and CRZ Clearance.</p>
2	The waste should be transported in covered trucks. Vermi-composting is highly recommended for treatment and disposal of biodegradable and kitchen wastes. Other domestic solid waste (garbage) shall be disposed through MSW facility or as per prevailing norms.	Please refer Condition No. iv of Part-B (General Conditions: Construction phase) of EC and CRZ Clearance.
3	The waste should be transported in covered trucks. Transporter should be informed of remedial measures required to be taken in case of spillage of waste	Waste handling vehicles are being handled through covered trucks only. Details were submitted along with compliance report submission i.e. Apr'17 to Sep'17.
B	Socio-Economic Environment	
4	It will encourage development of surrounding areas & further generate employment. People from various cultures shall mingle encouraging a more tolerant society.	Please refer Condition No. vii of Annexure – C (Compliance Status of MoEF & CC Order dated 18.09.2015).

Annexure – 5

**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

"HALF YEARLY ENVIRONMENTAL MONITORING REPORT"

FOR**ADANI PORTS AND SPECIAL ECONOMIC ZONE LIMITED
TAL: MUNDRA, KUTCH, MUNDRA – 370 421****MONITORING PERIOD:
APRIL 2021 TO SEPTEMBER 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,
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E-mail: pollucon@gmail.com Web: www.polluconlab.com****TC - 5945****ISO 9001:2015****ISO 14001:2015****ISO45001:2018**

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Cleaner Production / Waste Minimization Facilitator

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RESULT OF AMBIENT AIR QUALITY MONITORING

WTP- NEAR CETP					
Sr. No.	Date of Sampling	Particulate Matter (PM ₁₀) µg/m ³	Particulate Matter (PM _{2.5}) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
1	03/04/2021	78.65	40.25	15.25	25.66
2	07/04/2021	69.38	34.34	20.65	37.56
3	10/04/2021	79.56	39.54	18.31	40.23
4	14/04/2021	82.51	45.66	16.31	27.55
5	17/04/2021	70.27	42.33	14.20	34.23
6	21/04/2021	83.47	49.49	23.41	41.24
7	22/04/2021	64.25	26.43	19.28	36.24
8	26/04/2021	71.56	38.50	17.28	33.46
9	29/04/2021	84.54	35.59	13.31	30.26
10	03/05/2021	65.33	28.58	13.30	31.54
11	07/05/2021	82.42	42.62	19.55	36.52
12	10/05/2021	75.42	33.51	22.34	39.53
13	13/05/2021	80.36	44.54	17.52	33.65
14	19/05/2021	74.55	40.21	15.32	27.57
15	21/05/2021	66.26	31.68	20.44	35.66
16	24/05/2021	72.63	39.25	14.60	30.21
17	27/05/2021	84.66	48.24	21.53	38.27
18	31/05/2021	90.22	43.29	24.57	34.23
19	03/06/2021	82.62	48.37	24.69	38.43
20	07/06/2021	75.68	36.46	18.65	34.50
21	10/06/2021	69.58	32.68	15.31	28.32
22	14/06/2021	79.62	42.67	19.54	31.57
23	17/06/2021	88.61	34.55	21.57	36.45
24	21/06/2021	72.47	40.21	17.60	32.41
25	28/06/2021	92.36	50.37	20.23	29.51
26	02/07/2021	84.61	43.58	15.30	27.63
27	05/07/2021	71.63	35.63	20.25	37.55
28	08/07/2021	78.37	45.33	18.67	33.56
29	12/07/2021	86.32	48.62	16.27	36.53
30	15/07/2021	63.62	36.59	11.23	29.33

Continue ...

H. T. Shah

Lab Manager



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

WTP- NEAR CETP					
Sr.No.	Date of Sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (SO ₂) $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen (NO ₂) $\mu\text{g}/\text{m}^3$
31	19/07/2021	80.35	44.37	13.47	24.36
32	22/07/2021	74.35	41.54	17.55	31.52
33	26/07/2021	87.62	49.37	19.59	34.56
34	29/07/2021	68.52	32.43	21.65	30.55
35	02/08/2021	77.52	40.25	14.54	36.35
36	05/08/2021	65.35	34.22	17.60	30.23
37	09/08/2021	89.36	48.87	21.36	29.42
38	12/08/2021	71.24	30.80	12.59	33.48
39	16/08/2021	66.84	27.67	16.55	39.55
40	19/08/2021	70.34	43.56	19.35	35.31
41	23/08/2021	61.52	46.35	15.60	28.51
42	26/08/2021	69.36	38.42	20.50	31.25
43	30/08/2021	74.52	42.58	23.41	42.44
44	02/09/2021	75.68	42.67	16.31	34.56
45	06/09/2021	68.66	38.46	14.34	31.24
46	09/09/2021	60.34	25.64	22.36	41.23
47	13/09/2021	82.63	47.58	19.39	37.57
48	16/09/2021	61.21	31.55	15.68	25.61
49	20/09/2021	73.51	39.46	17.57	32.44
50	23/09/2021	85.38	45.37	12.69	29.33
51	27/09/2021	71.58	29.55	21.27	36.52
LIMIT [#]		100	60	80	80
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-NaAsO ₂)

#: 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



Dr. Arun Bajpai

Lab Manager (Q)



POLLUCON LABORATORIES PVT. LTD.

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Cleaner Production / Waste Minimization Facilitator

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RESULT OF AMBIENT AIR QUALITY MONITORING

AIR STRIP								
Sr. No	Date of Sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM 2.5) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (SO2) $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen (NO2) $\mu\text{g}/\text{m}^3$	Carbon Monoxide as CO mg/m^3	Hydrocarbon as CH ₄ mg/m^3	Benzene as C ₆ H ₆ $\mu\text{g}/\text{m}^3$
1	03/04/2021	55.48	25.38	11.26	33.47	0.34	ND*	ND*
2	07/04/2021	62.45	31.52	6.39	22.37	0.39	ND*	ND*
3	10/04/2021	72.42	35.58	8.43	20.61	0.23	ND*	ND*
4	14/04/2021	56.34	18.23	14.51	17.53	0.29	ND*	ND*
5	17/04/2021	60.22	32.44	10.26	28.51	0.16	ND*	ND*
6	21/04/2021	57.56	25.46	13.55	24.31	0.24	ND*	ND*
7	22/04/2021	69.31	37.54	16.60	30.44	0.33	ND*	ND*
8	26/04/2021	54.38	23.41	12.38	23.68	0.14	ND*	ND*
9	29/04/2021	45.47	20.53	9.42	18.25	0.17	ND*	ND*
10	03/05/2021	67.62	34.51	6.58	15.35	0.46	ND*	ND*
11	07/05/2021	54.28	24.54	8.38	18.66	0.23	ND*	ND*
12	10/05/2021	62.44	30.48	12.67	25.63	0.34	ND*	ND*
13	13/05/2021	58.73	26.34	10.46	29.31	0.40	ND*	ND*
14	19/05/2021	65.61	28.60	7.49	16.28	0.48	ND*	ND*
15	21/05/2021	47.53	23.45	15.66	22.68	0.42	ND*	ND*
16	24/05/2021	55.44	32.44	11.24	16.64	0.21	ND*	ND*
17	27/05/2021	60.23	35.62	9.54	19.51	0.37	ND*	ND*
18	31/05/2021	57.64	27.68	13.65	25.45	0.30	ND*	ND*
19	03/06/2021	55.36	30.44	15.69	24.52	0.23	ND*	ND*
20	07/06/2021	49.63	20.61	11.61	14.51	0.32	ND*	ND*
21	10/06/2021	64.61	28.43	13.46	20.32	0.29	ND*	ND*
22	14/06/2021	56.35	25.46	7.59	26.31	0.34	ND*	ND*
23	17/06/2021	51.57	38.51	12.36	18.66	0.24	ND*	ND*
24	21/06/2021	68.61	27.51	9.64	21.54	0.18	ND*	ND*
25	28/06/2021	59.62	34.58	14.33	27.56	0.27	ND*	ND*
26	02/07/2021	59.33	25.42	12.64	19.58	0.46	ND*	ND*
27	05/07/2021	65.36	38.26	14.54	25.37	0.25	ND*	ND*
28	08/07/2021	36.42	20.57	10.68	21.34	0.40	ND*	ND*
29	12/07/2021	42.62	34.33	13.60	17.53	0.24	ND*	ND*
30	15/07/2021	83.52	23.87	15.30	23.65	0.44	ND*	ND*

Continue ...

H. T. Shah

Lab Manager



Dr. Arun Bajpai

Lab Manager (Q)

**POLLUCON****LABORATORIES PVT. LTD.**Environmental Auditors, Consultants & Analysts
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Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

AIR STRIP								
Sr. No	Date of Sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM 2.5) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (SO2) $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen (NO2) $\mu\text{g}/\text{m}^3$	Carbon Monoxide as CO mg/m^3	Hydrocarbon as CH ₄ mg/m^3	Benzene as C ₆ H ₆ $\mu\text{g}/\text{m}^3$
31	19/07/2021	69.36	26.34	6.32	14.31	0.32	ND*	ND*
32	22/07/2021	50.76	21.28	8.83	20.55	0.21	ND*	ND*
33	26/07/2021	73.65	44.36	16.55	29.52	0.48	ND*	ND*
34	29/07/2021	63.42	29.85	9.66	24.65	0.52	ND*	ND*
35	02/08/2021	62.41	28.56	13.51	21.54	0.29	ND*	ND*
36	05/08/2021	59.52	25.63	15.40	24.35	0.53	ND*	ND*
37	09/08/2021	71.94	32.32	12.89	26.55	0.37	ND*	ND*
38	12/08/2021	57.62	38.46	16.67	30.59	0.54	ND*	ND*
39	16/08/2021	67.62	26.41	11.47	25.31	0.30	ND*	ND*
40	19/08/2021	73.86	21.49	17.66	31.51	0.52	ND*	ND*
41	23/08/2021	58.82	27.55	7.68	22.46	0.16	ND*	ND*
42	26/08/2021	60.36	34.53	10.47	18.56	0.24	ND*	ND*
43	02/09/2021	61.31	31.52	8.87	28.34	0.18	ND*	ND*
44	06/09/2021	50.34	20.40	6.47	25.39	0.24	ND*	ND*
45	13/09/2021	64.28	25.34	11.64	23.44	0.39	ND*	ND*
46	16/09/2021	52.62	22.62	13.57	20.60	0.21	ND*	ND*
47	23/09/2021	63.44	32.40	15.27	20.37	0.38	ND*	ND*
48	27/09/2021	54.36	24.58	12.36	24.64	0.30	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-NaAsO ₂)	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



Dr. Arun Bajpai

Lab Manager (Q)

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RESULTS OF AMBIENT AIR QUALITY MONITORING

SAMUDRA TOWNSHIP STP					
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
1	03/04/2021	52.49	23.54	13.55	29.51
2	07/04/2021	92.50	37.89	16.24	34.35
3	10/04/2021	83.67	32.58	10.27	31.22
4	14/04/2021	79.64	38.67	9.58	19.54
5	17/04/2021	68.69	30.47	12.52	24.55
6	21/04/2021	78.62	35.44	17.54	27.82
7	22/04/2021	61.88	24.54	15.76	23.55
8	26/04/2021	69.45	29.43	8.24	30.42
9	29/04/2021	80.40	47.50	11.24	25.44
10	03/05/2021	50.42	26.57	10.59	25.62
11	07/05/2021	73.56	38.43	14.54	29.45
12	10/05/2021	69.24	28.39	18.50	30.44
13	13/05/2021	71.35	39.54	12.44	23.48
14	19/05/2021	80.62	33.45	9.67	21.64
15	21/05/2021	64.86	19.23	16.87	33.23
16	24/05/2021	88.76	46.34	13.47	26.32
17	27/05/2021	79.52	43.52	17.48	22.53
18	31/05/2021	77.52	37.55	15.58	28.58
19	03/06/2021	60.32	38.47	12.64	21.57
20	07/06/2021	66.56	26.53	15.64	30.32
21	10/06/2021	41.24	23.50	9.47	23.69
22	14/06/2021	72.56	32.46	11.50	18.64
23	17/06/2021	90.63	47.54	17.53	32.44
24	21/06/2021	50.65	24.37	13.85	28.61
25	28/06/2021	54.62	22.63	18.48	34.65
26	02/07/2021	68.84	30.63	7.34	14.32
27	05/07/2021	58.34	32.41	18.36	32.34
28	08/07/2021	63.65	37.60	15.84	38.45
29	12/07/2021	47.67	18.61	6.85	28.36
30	15/07/2021	53.38	28.31	8.65	19.38

Continue..**H. T. Shah****Lab Manager****Dr. Arun Bajpai****Lab Manager (Q)**



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SAMUDRA TOWNSHIP STP					
Sr. No.	Date of Sampling	Particulate Matter (PM ₁₀) µg/m ³	Particulate Matter (PM _{2.5}) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
31	19/07/2021	64.26	31.25	11.43	16.56
32	22/07/2021	57.62	25.37	13.59	29.34
33	26/07/2021	62.41	33.45	10.30	23.46
34	29/07/2021	59.31	26.36	16.48	20.64
LIMIT [#]		100	60	80	80
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-NaAsO ₂)

#: 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



Dr. Arun Bajpai

Lab Manager (Q)

**POLLUCON****LABORATORIES PVT. LTD.**Environmental Auditors, Consultants & Analysts
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RESULTS OF AMBIENT AIR QUALITY MONITORING

SAMUDRA TOWNSHIP CUSTOMER CARE					
Sr.No.	Date of Sampling	Particulate Matter (PM ₁₀) µg/m ³	Particulate Matter (PM _{2.5}) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
1	03/04/2021	90.45	29.48	7.65	18.41
2	07/04/2021	84.65	22.41	10.10	25.32
3	10/04/2021	98.82	25.32	13.50	28.43
4	14/04/2021	71.69	37.55	11.58	22.60
5	17/04/2021	65.45	23.54	8.44	21.28
6	21/04/2021	72.89	27.57	19.52	32.53
7	22/04/2021	58.93	18.55	9.36	19.22
8	26/04/2021	44.26	24.28	14.22	26.51
9	29/04/2021	68.55	28.24	6.32	16.22
10	03/05/2021	51.28	20.32	17.51	29.39
11	07/05/2021	60.27	27.53	12.20	23.54
12	10/05/2021	49.28	24.53	16.62	33.41
13	13/05/2021	66.31	33.52	7.66	18.52
14	19/05/2021	54.51	25.24	11.52	24.26
15	21/05/2021	48.64	28.36	13.53	17.53
16	24/05/2021	52.36	19.63	8.59	21.29
17	27/05/2021	68.64	39.25	15.34	15.62
18	31/05/2021	76.25	30.65	10.19	22.35
19	03/06/2021	65.66	33.56	10.54	15.65
20	07/06/2021	44.32	23.54	13.53	25.38
21	10/06/2021	52.34	20.38	7.18	18.32
22	14/06/2021	61.53	35.68	9.32	23.54
23	17/06/2021	55.68	43.62	15.31	27.55
24	21/06/2021	45.37	21.54	11.34	24.33
25	28/06/2021	48.34	38.42	16.46	22.68
26	02/07/2021	78.56	35.68	9.70	23.48
27	05/07/2021	52.41	25.32	16.32	28.48
28	08/07/2021	68.21	32.64	12.36	25.68
29	12/07/2021	76.28	45.33	10.28	22.34
30	15/07/2021	58.33	31.52	6.36	16.31

Continue...

H. T. Shah

Lab Manager



Dr. Arun Bajpai

Lab Manager (Q)

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SAMUDRA TOWNSHIP CUSTOMER CARE					
Sr.No.	Date of Sampling	Particulate Matter (PM ₁₀) µg/m ³	Particulate Matter (PM _{2.5}) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
31	19/07/2021	73.82	36.26	8.62	19.34
32	22/07/2021	69.37	39.34	11.31	24.54
33	26/07/2021	56.22	41.29	7.60	20.34
34	29/07/2021	79.31	38.34	18.55	15.33
LIMIT[#]		100	60	80	80
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)

#: 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****Dr. Arun Bajpai****Lab Manager (Q)**

**POLLUCON****LABORATORIES PVT. LTD.**Environmental Auditors, Consultants & Analysts
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RESULT OF AMBIENT AIR QUALITY MONITORING

ADANI HOUSE								
Sr. No.	Date of Sampling	Particulate Matter (PM ₁₀) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM _{2.5}) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (SO ₂) $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen (NO ₂) $\mu\text{g}/\text{m}^3$	Carbon Monoxide as CO mg/m^3	Hydrocarbon as CH ₄ mg/m^3	Benzene as C ₆ H ₆ $\mu\text{g}/\text{m}^3$
1	02/04/2021	56.28	29.60	11.58	23.63	0.34	ND*	ND*
2	06/04/2021	67.57	26.59	19.30	32.54	0.29	ND*	ND*
3	09/04/2021	62.16	31.52	16.53	29.22	0.32	ND*	ND*
4	13/04/2021	70.27	34.58	9.53	22.66	0.24	ND*	ND*
5	16/04/2021	51.55	16.56	15.32	31.56	0.38	ND*	ND*
6	20/04/2021	60.45	35.58	10.36	26.59	0.41	ND*	ND*
7	22/04/2021	58.66	28.68	14.28	21.27	0.58	ND*	ND*
8	26/04/2021	50.42	22.53	12.42	28.45	0.40	ND*	ND*
9	29/04/2021	63.22	25.38	17.60	30.40	0.48	ND*	ND*
10	03/05/2021	52.52	22.67	15.59	27.62	0.23	ND*	ND*
11	07/05/2021	82.42	33.49	9.55	19.40	0.50	ND*	ND*
12	10/05/2021	72.55	30.52	7.84	16.32	0.79	ND*	ND*
13	13/05/2021	60.24	20.53	10.34	17.53	0.58	ND*	ND*
14	19/05/2021	56.36	23.54	19.54	24.35	0.56	ND*	ND*
15	21/05/2021	65.31	34.62	12.40	28.26	0.55	ND*	ND*
16	24/05/2021	59.64	29.43	8.32	20.21	0.37	ND*	ND*
17	27/05/2021	53.41	21.62	11.32	30.34	0.82	ND*	ND*
18	31/05/2021	61.27	26.26	6.22	15.40	0.68	ND*	ND*
19	03/06/2021	71.23	33.41	11.61	20.34	0.31	ND*	ND*
20	07/06/2021	65.37	23.41	13.42	34.27	0.39	ND*	ND*
21	10/06/2021	58.65	26.59	15.30	31.42	0.32	ND*	ND*
22	14/06/2021	70.26	31.65	6.56	23.41	0.23	ND*	ND*
23	17/06/2021	55.31	28.56	8.33	16.56	0.62	ND*	ND*
24	21/06/2021	64.56	35.37	14.40	32.58	0.33	ND*	ND*
25	24/06/2021	52.47	39.30	10.40	35.35	0.68	ND*	ND*
26	28/06/2021	60.42	27.09	7.60	19.38	0.50	ND*	ND*
27	02/07/2021	94.36	55.35	13.40	27.55	0.48	ND*	ND*
28	05/07/2021	82.62	49.67	7.52	17.53	0.56	ND*	ND*
29	08/07/2021	91.36	56.86	9.64	22.6	0.42	ND*	ND*
30	12/07/2021	88.67	44.57	14.35	28.44	0.16	ND*	ND*

Continue...

H. T. Shah

Lab Manager



Dr. Arun Bajpai

Lab Manager (Q)



POLLUCON LABORATORIES PVT. LTD.

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ADANI HOUSE								
Sr. No.	Date of Sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM 2.5) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (SO2) $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen (NO2) $\mu\text{g}/\text{m}^3$	Carbon Monoxide as CO mg/m^3	Hydrocarbon as CH ₄ mg/m^3	Benzene as C ₆ H ₆ $\mu\text{g}/\text{m}^3$
31	15/07/2021	92.36	53.35	12.35	24.68	0.39	ND*	ND*
32	19/07/2021	87.62	46.53	10.23	18.84	0.57	ND*	ND*
33	22/07/2021	93.62	41.52	8.56	21.32	0.46	ND*	ND*
34	26/07/2021	83.43	48.62	11.38	25.38	0.60	ND*	ND*
35	29/07/2021	71.28	35.66	6.39	31.81	0.55	ND*	ND*
36	02/08/2021	60.44	27.26	12.44	20.35	0.53	ND*	ND*
37	05/08/2021	65.16	24.54	15.68	31.31	0.27	ND*	ND*
38	09/08/2021	77.62	28.56	13.72	24.50	0.18	ND*	ND*
39	12/08/2021	69.54	21.41	17.55	29.35	0.50	ND*	ND*
40	16/08/2021	86.28	47.32	11.43	23.47	0.62	ND*	ND*
41	19/08/2021	70.61	29.48	9.45	21.29	0.25	ND*	ND*
42	23/08/2021	80.35	40.60	21.37	41.25	0.57	ND*	ND*
43	26/08/2021	87.62	57.32	16.48	30.40	0.29	ND*	ND*
44	30/08/2021	78.45	43.44	10.62	25.76	0.19	ND*	ND*
45	02/09/2021	67.52	28.43	6.56	18.85	0.49	ND*	ND*
46	06/09/2021	56.51	33.61	16.39	32.50	0.40	ND*	ND*
47	09/09/2021	76.38	38.46	9.35	25.35	0.26	ND*	ND*
48	13/09/2021	73.46	39.55	7.57	17.53	0.43	ND*	ND*
49	16/09/2021	52.63	21.24	12.42	26.43	0.22	ND*	ND*
50	20/09/2021	66.33	26.47	15.70	20.26	0.32	ND*	ND*
51	23/09/2021	71.66	29.31	14.26	33.66	0.21	ND*	ND*
52	27/09/2021	58.45	23.62	10.24	36.50	0.13	ND*	ND*
53	30/09/2021	65.31	31.57	8.97	15.66	0.53	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

*NotDetected

#: 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



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RESULTS OF NOISE LEVEL MONITORING**Result of Noise level monitoring [Day Time]**

SR. NO.	Name of Location	WTP- NEAR CETP					
		Result [dB(A) Leq]					
	Sampling Date & Time	01/04/2021	05/05/2021	07/06/2021	07/07/2021	02/08/2021	03/09/2021
1	6:00-7:00	60.1	56.2	65.4	66.4	61.3	68.4
2	7:00-8:00	68.5	62.1	69.1	60.1	68.6	65.1
3	8:00-9:00	66.1	65.1	68.4	68.5	67.8	63.7
4	9:00-10:00	70.4	60.5	68.7	70.2	62.2	66.9
5	10:00-11:00	63.7	66.3	64.1	61.6	68.9	62.7
6	11:00-12:00	60.8	63.1	62.8	63.3	66.3	65.3
7	12:00-13:00	60.1	64.5	61.7	67.5	68.7	63.3
8	13:00-14:00	58.1	68.4	60.1	66.7	70.1	61.4
9	14:00-15:00	61.2	61.8	62.7	60.2	69.5	66.6
10	15:00-16:00	63.8	69.4	63.8	63.8	60.4	70.2
11	16:00-17:00	65.1	65.2	65.1	68.6	68.4	63.2
12	17:00-18:00	61.8	67.1	68.4	69.4	71.2	69.5
13	18:00-19:00	62.8	70.6	62.5	70.1	65.5	66.2
14	19:00-20:00	68.4	63.4	63.4	61.5	61.2	67.5
15	20:00-21:00	64.3	68.5	68.4	64.8	64.2	61.2
16	21:00-22:00	69.8	64.5	66.1	65.3	68.5	65.7
Day Time Limit*		75 dB(A) Leq					

Result of Noise level monitoring [Night Time]

	Name of Location	WTP- NEAR CETP					
		Result [dB(A) Leq]					
	Sampling Date & Time	01/04/2021	05/05/2021	07/06/2021	07/07/2021	02/08/2021	03/09/2021
1	22:00-23:00	62.1	63.4	56.2	65.2	65.4	66.5
2	23:00-00:00	63.4	60.1	60.5	60.2	60.3	63.3
3	00:00-01:00	65.1	59.8	65.8	59.6	68.4	64.9
4	01:00-02:00	62.8	62.4	63.1	56.4	62.1	66.1
5	02:00-03:00	60.1	67.4	59.2	60.4	61.5	59.1
6	03:00-04:00	53.4	60.8	56.1	63.6	58.8	62.9
7	04:00-05:00	62.4	63.1	62.4	61.8	62.1	60.2
8	05:00-06:00	64.1	61.5	60.8	68.4	65.5	68.1
Night Time Limit*		70 dB(A) Leq					

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Lab Manager



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RESULTS OF NOISE LEVEL MONITORING**Result of Noise level monitoring [Day Time]**

SR. NO.	Name of Location	AIR STRIP					
		Result [dB(A) Leq]					
		19/04/2021	06/05/2021	25/06/2021	28/07/2021	19/08/2021	06/09/2021
1	6:00-7:00	59.5	52.1	65.1	52.1	66.4	67.4
2	7:00-8:00	63.3	58.2	60.3	56.8	59.6	66.1
3	8:00-9:00	65.1	58.4	67.4	48.4	52.4	64.0
4	9:00-10:00	60.1	61.4	66.1	66.3	58.9	62.4
5	10:00-11:00	56.4	55.5	64.1	60.5	60.1	60.8
6	11:00-12:00	63.2	65.4	62.7	58.4	64.4	60.1
7	12:00-13:00	58.4	68.4	60.8	62.1	59.8	63.1
8	13:00-14:00	54.1	63.4	60.1	60.3	63.5	67.6
9	14:00-15:00	61.7	60.3	63.1	58.5	65.4	61.1
10	15:00-16:00	59.4	56.4	65.7	60.8	69.6	66.5
11	16:00-17:00	63.1	50.4	62.8	60.7	59.4	63.5
12	17:00-18:00	62.1	56.1	60.4	65.1	60.2	69.8
13	18:00-19:00	62.4	59.4	68.7	69.5	64.1	70.5
14	19:00-20:00	61.5	55.8	65.5	62.4	62.3	65.6
15	20:00-21:00	60.8	60.4	68.4	61.8	67.4	69.2
16	21:00-22:00	63.4	53.8	62.3	66.6	62.8	66.4
Day Time Limit*		75 dB(A) Leq					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	AIR STRIP					
		Result [dB(A) Leq]					
		19/04/2021	06/05/2021	25/06/2021	28/07/2021	19/08/2021	06/09/2021
1	22:00-23:00	62.4	59.7	59.4	59.5	56.2	59.2
2	23:00-00:00	59.5	52.1	52.1	52.1	59.8	56.2
3	00:00-01:00	63.1	46.1	50.4	46.5	62.4	58.4
4	01:00-02:00	62.8	49.8	59.8	45.2	63.1	54.8
5	02:00-03:00	59.4	52.4	56.1	54.7	60.8	56.3
6	03:00-04:00	58.4	55.1	62.4	59.3	62.1	60.3
7	04:00-05:00	61.8	60.2	56.8	60.3	60.4	60.7
8	05:00-06:00	58.7	56.4	60.8	55.8	58.4	58.3
Night Time Limit*		70 dB(A) Leq					

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Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	SAMUNDRA TOWNSHIP STP					
		Result [Leq dB(A)]					
		22/04/2021	13/05/2021	15/06/2021	23/07/2021	16/08/2021	14/09/2021
1	6:00-7:00	55.2	63.8	63.2	60.4	70.5	65.9
2	7:00-8:00	63.5	56.4	70.4	65.2	65.2	61.5
3	8:00-9:00	60.1	61.8	65.1	62.3	68.1	63.8
4	9:00-10:00	68.4	69.4	65.5	67.4	63.3	69.4
5	10:00-11:00	65.1	65.0	63.4	72.4	65.3	65.5
6	11:00-12:00	69.5	55.2	68.4	64.1	60.7	68.1
7	12:00-13:00	65.9	62.8	61.2	71.1	61.5	59.7
8	13:00-14:00	60.3	66.1	66.1	59.5	66.5	65.4
9	14:00-15:00	59.4	57.1	62.8	66.2	65.7	68.7
10	15:00-16:00	68.8	60.2	60.4	57.3	63.2	62.3
11	16:00-17:00	66.1	65.8	68.5	64.5	60.8	60.7
12	17:00-18:00	64.2	63.1	65.4	63.5	62.5	63.6
13	18:00-19:00	61.3	60.4	63.8	68.4	68.8	68.6
14	19:00-20:00	62.8	58.4	68.3	62.5	67.1	71.6
15	20:00-21:00	65.5	62.1	62.5	61.4	62.4	65.8
16	21:00-22:00	61.8	57.4	61.5	62.2	63.8	62.5
		75 Leq dB(A)					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	SAMUNDRA TOWNSHIP STP					
		Result [Leq dB(A)]					
		22/04/2021	13/05/2021	15/06/2021	23/07/2021	16/08/2021	14/09/2021
1	22:00-23:00	60.4	65.8	61.4	61.4	60.1	57.3
2	23:00-00:00	62.1	64.1	66.5	58.7	63.1	60.5
3	00:00-01:00	55.1	62.8	58.7	62.1	58.4	59.8
4	01:00-02:00	60.2	55.4	62.4	55.4	55.2	57.4
5	02:00-03:00	59.4	58.7	54.1	53.1	59.4	62.0
6	03:00-04:00	62.4	60.4	62.5	57.5	62.1	65.7
7	04:00-05:00	58.7	61.8	61.2	58.4	63.4	58.9
8	05:00-06:00	59.1	66.8	63.4	64.8	61.5	57.6
Night Time Limit*		70 dB(A) Leq					

H. T. Shah

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Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	SAMUNDRA TOWNSHIP CUSTOMER CARE					
		Result [Leq dB(A)]					
		06/04/2021	20/05/2021	14/06/2021	14/07/2021	09/08/2021	01/09/2021
1	6:00-7:00	56.1	54.1	66.3	55.1	60.6	64.5
2	7:00-8:00	60.4	63.5	68.7	59.3	59.1	60.4
3	8:00-9:00	68.1	57.5	62.7	65.6	67.5	62.8
4	9:00-10:00	62.4	63.4	60.4	56.7	67.6	69.9
5	10:00-11:00	62.9	65.4	65.8	58.2	67.9	67.7
6	11:00-12:00	59.7	62.1	65.2	66.1	62.6	64.8
7	12:00-13:00	66.1	68.4	63.7	59.4	65.6	62.2
8	13:00-14:00	61.4	61.4	64.8	62.8	59.3	71.4
9	14:00-15:00	65.8	55.2	65.6	63.4	62.0	69.6
10	15:00-16:00	55.4	64.5	62.4	70.5	56.8	63.4
11	16:00-17:00	51.2	66.4	62.1	65.4	63.1	66.3
12	17:00-18:00	63.1	65.6	68.5	61.2	58.5	67.1
13	18:00-19:00	66.2	59.4	63.4	65.5	61.4	62.9
14	19:00-20:00	60.1	60.4	69.4	68.7	69.8	68.9
15	20:00-21:00	64.7	58.7	64.2	68.1	62.1	61.3
16	21:00-22:00	62.8	62.4	62.8	64.4	60.5	63.9
Day Time Limit*		75 Leq dB(A)					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	SAMUNDRA TOWNSHIP CUSTOMER CARE					
		Result [Leq dB(A)]					
		06/04/2021	20/05/2021	14/06/2021	14/07/2021	09/08/2021	01/09/2021
1	22:00-23:00	61.4	60.4	60.4	63.3	58.4	61.9
2	23:00-00:00	59.5	64.3	56.4	55.5	59.4	66.7
3	00:00-01:00	60.1	55.1	49.5	48.4	55.1	65.3
4	01:00-02:00	58.4	52.4	52.4	46.1	46.2	62.7
5	02:00-03:00	47.1	49.7	56.8	50.4	52.1	58.1
6	03:00-04:00	50.6	56.2	49.1	59.8	59.6	57.1
7	04:00-05:00	59.1	60.4	43.5	60.5	62.8	59.3
8	05:00-06:00	60.5	62.8	56.4	59.4	60.4	59.9
Night Time Limit*		70 Leq dB(A)					

H. T. Shah

Lab Manager



Dr. ArunBajpai

Lab Manager (Q)

Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	ADANI HOUSE					
		Result [Leq dB(A)]					
		07/04/2021	17/05/2021	01/06/2021	05/07/2021	04/08/2021	23/09/2021
1	6:00-7:00	62.4	58.4	65.2	66.4	67.2	64.7
2	7:00-8:00	69.5	62.1	69.9	60.3	64.3	64.6
3	8:00-9:00	66.1	61.8	68.3	69.6	64.4	63.3
4	9:00-10:00	70.1	68.5	65.1	70.5	62.3	66.4
5	10:00-11:00	68.3	65.3	65.4	65.3	69.6	68.3
6	11:00-12:00	66.2	63.2	68.4	68.8	66.4	69.1
7	12:00-13:00	60.4	62.8	69.5	67.5	61.3	62.4
8	13:00-14:00	58.4	64.1	72.1	72.2	69.7	62.3
9	14:00-15:00	63.4	60.1	62.7	65.2	65.1	61.8
10	15:00-16:00	69.4	65.9	60.4	62.6	69.3	64.2
11	16:00-17:00	70.6	69.5	60.1	66.3	65.8	62.2
12	17:00-18:00	68.4	63.3	66.8	59.2	66.5	61.3
13	18:00-19:00	65.1	65.2	63.4	67.4	68	68.8
14	19:00-20:00	62.5	61.4	68.1	68.1	62.8	64.0
15	20:00-21:00	61.5	66.2	62.4	60.5	61.5	64.1
16	21:00-22:00	63.2	68.7	61.7	62.7	68.5	60.3
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)]					
		07/04/2021	17/05/2021	01/06/2021	05/07/2021	04/08/2021	07/09/2021
1	22:00-23:00	65.4	65.8	65.1	63.6	64.4	62.3
2	23:00-00:00	60.1	60.2	69.5	53.5	65.3	68.5
3	00:00-01:00	58.4	58.8	62.4	60.2	60.9	66.8
4	01:00-02:00	56.1	57.4	64.1	55.4	66.1	60.8
5	02:00-03:00	60.7	62.4	59.3	57.7	59.4	62.4
6	03:00-04:00	63.5	64.1	68.4	61.4	62.4	61.2
7	04:00-05:00	61.2	59.8	64.5	68.4	61.5	65.6
8	05:00-06:00	68.4	60.9	62.8	58.7	63.2	67.4
Night Time Limit*		70Leq dB(A)					

H. T. Shah

Lab Manager



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Lab Manager (Q)



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RESULTS OF STP WATER OUTLET

SR. NO	TEST PARAMETERS	Unit	ADANI HOUSE STP OUTLET							
			APRIL-2021		MAY-2021		JUNE-2021		GPCB Permissible Limit	TEST METHOD
			09/04/2021	21/04/2021	06/05/2021	20/05/2021	05/06/2021	18/06/2021		
1	pH	--	7.63	7.81	7.79	7.93	7.43	7.93	6.5 to 9.0	IS3025(P11)83Re.02
2	Total Suspended Solids	mg/L	14	17	12	16	16	15.0	100	IS3025(P17)84Re.02
3	BOD (3 days @ 270 C)	mg/L	25	13	15	14	15	13	30	IS 3025 (P44)1993Re.03Edition2.1
4	Residual Chlorine	mg/L	0.7	0.6	0.6	0.8	0.8	0.7	--	APHA(22ndEdi)4500 Cl
5	Fecal Coliform	MPN/100 ml	150	120	110	140	170	210	1000	APHA (22ndEdi) 9221 C&E

SR. NO	TEST PARAMETERS	Unit	ADANI HOUSE STP OUTLET							
			JULY-2021		AUGUST-2021		SEPTEMBER-2021		GPCB Permissible Limit	TEST METHOD
			06/07/2021	16/07/2021	06/08/2021	17/08/2021	07/09/2021	24/09/2021		
1	pH	--	6.93	7.18	7.29	8.33	8.03	8.37	6.5 to 9.0	IS3025(P11)83Re.02
2	Total Suspended Solids	mg/L	17	14	16	19	24	13	100	IS3025(P17)84Re.02
3	BOD (3 days @ 27 ⁰ C)	mg/L	13	17	15	12	15	10	30	IS 3025 (P44)1993Re.03Edition2.1
4	Residual Chlorine	mg/L	0.6	0.8	0.8	0.6	0.6	0.8	--	APHA(22ndEdi)4500 Cl
5	Fecal Coliform	MPN/100 ml	150	130	110	140	170	220	1000	APHA (22ndEdi) 9221 C&E



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Lab Manager





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RESULTS OF STP WATER OUTLET

SR. NO	TEST PARAMETERS	Unit	AMSIPL SAMUNDRA TOWNSHIP STP OUTLET							
			APRIL-2021		MAY-2021		JUNE-2021		GPCB Permissible Limit	TEST METHOD
			09/04/2021	21/04/2021	06/05/2021	20/05/2021	05/06/2021	18/06/2021		
1	pH	--	8.24	8.09	8.12	8.19	7.46	7.69	6.5 to 9.0	IS3025(P11)83Re.02
2	Total Suspended Solids	mg/L	21	17	10	16	15	18	100	IS3025(P17)84Re.02
3	BOD (3 days @ 27 ⁰ C)	mg/L	23	19	15	14	13	15	30	IS 3025 (P44)1993Re.03Edition2.1
4	Residual Chlorine	mg/L	0.6	0.7	0.7	0.8	0.7	0.8	--	APHA(22ndEdi)4500 Cl
5	Fecal Coliform	MPN/100 ml	350	540	350	430	540	430	1000	APHA (22ndEdi) 9221 C&E

SR. NO	TEST PARAMETERS	Unit	AMSIPL SAMUNDRA TOWNSHIP STP OUTLET							
			JULY-2021		AUGUST-2021		SEPTEMBER-2021		GPCB Permissible Limit	TEST METHOD
			06/07/2021	16/07/2021	06/08/2021	17/08/2021	07/09/2021	24/09/2021		
1	pH	--	6.73	8.28	8.14	7.49	7.03	7.63	6.5 to 9.0	IS3025(P11)83Re.02
2	Total Suspended Solids	mg/L	14	12	19	14	15	19	100	IS3025(P17)84Re.02
3	BOD (3 days @ 27 ⁰ C)	mg/L	13	15	17	12	16	11	30	IS 3025 (P44)1993Re.03Edition2.1
4	Residual Chlorine	mg/L	0.7	0.6	0.7	0.6	0.8	0.7	--	APHA(22ndEdi)4500 Cl
5	Fecal Coliform	MPN/100 ml	430	350	540	430	350	920	1000	APHA (22ndEdi) 9221 C&E



H. T. Shah

Lab Manager





Dr. Arun Bajpai

Lab Manager (Q)

**POLLUCON****LABORATORIES PVT. LTD.**Environmental Auditors, Consultants & Analysts
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RESULT OF CETP INTLET

SR. NO.	TEST PARAMETERS	UNIT	CETP INLET						GPCB Permissible Limit CETP INLET	TEST METHOD
			APRIL-21	MAY-21	JUN-21	JUL-21	AUG-21	SEPT-21		
1	pH	--	8.40	7.57	7.76	7.46	7.46	7.15	6.5 to 8.5	IS3025(P11)83Re.02
2	Temperature	°C	30.30	30.1	30.2	29.9	30.1	30	--	IS3025(P9)84Re.02
3	Colour	Co-pt	45	50	40	50	35	40	100	IS3025(P4)83Re.02
4	Total Suspended Solids	mg/L	25	14	35	25	27	21	800	IS3025(P17)84Re.02
5	Oil & Grease	mg/L	5.10	Not Detected	4.8	2.9	5.1	4.3	20	APHA(22 nd Edi)5520D
6	Phenolic Compound	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	2	IS3025(P43)92Re.03
7	Fluorides	mg/L	0.53	0.77	0.67	0.62	0.73	0.69	2	APHA(22 nd Edi)4500 F D SPANDS
8	Iron	mg/L	0.40	0.66	0.59	0.43	0.69	0.57	3	AAS APHA(22 nd Edi)3111 B
9	Zinc as Zn	mg/L	0.23	0.12	0.17	0.085	0.21	0.38	15	AAS APHA(22 nd Edi)3111 B
10	Trivalent Chromium	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	3	AAS APHA(22 nd Edi)3111 B
11	Sulphide as S	mg/L	Not Detected	0.52	0.16	Not Detected	0.20	0.28	2	APHA(22 nd Edi)4500-S
12	Ammonical Nitrogen as NH ₃	mg/L	10.3	37.06	26	21.6	21.86	27.4	50	IS3025(P34)88C la.2.3
13	BOD (3 Days @ 27°C)	mg/L	48	67	123	118	130	118	1000	IS 3025 (P44)1993Re.03 Edition2.1
14	COD	mg/L	257	291	571	424	589	514	2000	APHA(22 nd Edi)5520-D Open Reflux
15	Chloride as Cl	mg/L	889	882	832	419	718	780	1000	IS3025(P32)88Re.99
16	Sulphate as SO ₄	mg/L	135	226	214	328	192	224	1000	APHA(22 nd Edi)4500 SO ₄ E
17	Total Dissolved Solids	mg/L	1987	1976	2078	1948	2040	1613	2100	IS3025(P16)84Re.02
18	Total Residual Chlorine	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	2	APHA(22 nd Edi)4500 Cl
19	Copper as Cu	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	3	AAS APHA(22 nd Edi)3111 B
20	%Sodium	%	53.58	74.94	63.12	64.39	57.79	66.48	--	By Calculation

H. T. Shah

Lab Manager



Dr. ArunBajpai

Lab Manager (Q)

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RESULT OF CETP OUTLET

SR. NO.	TEST PARAMETERS	UNIT	CETP OUTLET						GPCB Permissible Limit CETP OUTLET	TEST METHOD
			APRIL-21	MAY-21	JUN-21	JUL-21	AUG-21	SEPT-21		
1	pH	--	8.83	8.27	7.74	8.13	7.98	7.68	6 to 9	IS3025(P11)83Re.02
2	Temperature	°C	30.1	30.2	30.3	30.1	30.1	30	Shall Not exceed more than 5 °C above ambient water temperature	IS3025(P9)84Re.02
3	Colour	Co-pt	30	20	25	30	20	25	100	IS3025(P4)83Re.02
4	Total Suspended Solids	mg/L	17	32	23	19	17	16	100	IS3025(P17)84Re.02
5	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	10	APHA(22 nd Edi)5520D
6	Phenolic Compound	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	1	IS3025(P43)92Re.03
7	Fluorides	mg/L	0.23	0.79	0.18	0.37	0.42	0.52	2	APHA(22 nd Edi)4500 F D SPANDS
8	Iron	mg/L	0.17	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	3	AAS APHA(22 nd Edi)3111 B
9	Zinc as Zn	mg/L	0.14	0.071	0.093	0.063	0.075	0.094	15	AAS APHA(22 nd Edi)3111 B
10	Trivalent Chromium	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	2	AAS APHA(22 nd Edi)3111 B
11	Sulphide as S	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	2	APHA(22 nd Edi)4500-S
12	Ammonical Nitrogen as NH ₃	mg/L	2.86	2.43	3	3.80	4.68	5.28	50	IS3025(P34)88Cla.2.3
13	BOD (3 Days @ 27°C)	mg/L	37	28	21	13	40	27	100	IS 3025 (P44)1993Re.03Edition2.1
14	COD	mg/L	198	165	153	62	124	139	250	APHA(22 nd Edi)5520-D Open Reflux
15	Chloride as Cl	mg/L	879	846	729	567	628	740	1000	IS3025(P32)88Re.99
16	Sulphate as SO ₄	mg/L	93	215	164	172	152	173	1000	APHA(22 nd Edi)4500 SO ₄ E
17	Total Dissolved Solids	mg/L	1840	1894	1812	1639	1912	1594	2100	IS3025(P16)84Re.02
18	Total Residual Chlorine	mg/L	0.8	0.6	0.6	0.7	0.7	0.6	1	APHA(22 nd Edi)4500 Cl
19	Copper as Cu	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	3	AAS APHA(22 nd Edi)3111 B
20	%Sodium	%	44.47	71.18	54.07	56.23	56.94	58.10	--	By Calculation
21	Bio-assay Test	--	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent	OECD 203 B/IS 6582 2001

H. T. Shah

Lab Manager



Dr. ArunBajpai

Lab Manager (Q)



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RESULTS OF BORE HOLE WATER

SR. NO	TEST PARAMETERS	UNIT	RESULTS		TEST METHOD
			OPP. DRUB RAILWAY STATION	NEAR CETP MAIN GATE	
	Sampling Date		31/05/2021	31/05/2021	
1	pH	--	7.73	7.76	IS3025(P11)83Re.02
2	Salinity	ppt	5.83	2.97	APHA 2520B
3	Oil & Grease	mg/L	Not Detected	Not Detected	APHA(22ndEdi)5520D
4	Hydrocarbon	mg/L	Not Detected	Not Detected	GC/GC-MS
5	Lead as Pb	mg/L	Not Detected	0.058	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	0.039	0.037	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	0.63	0.42	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	0.41	0.27	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	2.2	--

H. T. Shah

Lab Manager



Dr. ArunBajpai

Lab Manager (Q)

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RESULTS OF D.G. STACK MONITORING

		25/09/2021	21/08/2021	25/09/2021			
SR. NO.	TEST PARAMETERS	Unit	Adani House	Adani Hospital	PUB	GPCB Limit	Test Method
			D.G. Set-6 (750 KVA)	D.G. Set (500KVA)	DG Set (500 KVA)		
1	Particulate Matter	mg/Nm ³	21.62	21.62	15.30	150	IS:11255 (Part-I):1985
2	Sulphur Dioxide	ppm	5.40	5.31	4.19	100	IS:11255 (Part-II):1985
3	Oxide of Nitrogen	ppm	35.37	35.36	24.27	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 %

08/05/2021					
SR. NO.	TEST PARAMETERS	Unit	WTP-CETP	GPCB Limit	Test Method
			D.G. Set (380KVA)		
1	Particulate Matter	mg/Nm ³	25.62	150	IS:11255 (Part-I):1985
2	Sulphur Dioxide	ppm	5.51	100	IS:11255 (Part-II):1985
3	Oxide of Nitrogen	ppm	38.40	50	IS:11255 (Part-VII):2005
4	Carbon Monoxide	mg/m ³	15.95	Not Specified	Digital Gas Analyzer
5	Hydro Carbon NMHC	ppm	Not Detected	Not Specified	Gas Chromatography

*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****Dr. Arun Bajpai****Lab Manager (Q)**



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Minimum Detection Limit [MDL]

Water parameter(mg/L)		
Sr. No.	Test parameter	MDL
1	pH	2
2	Temperature	2
3	Colour	2
4	Total Suspended Solids	2
5	Oil & Grease	1
6	Phenolic Compound	0.01
7	Fluorides	0.05
8	Iron	0.01
9	Zinc as Zn	0.05
10	Trivalent Chromium	0.05
11	Sulphide as S	0.1
12	Ammonical Nitrogen as NH ₃	0.2
13	BOD (3 Days @ 27 °C)	1
14	COD	5
15	Chloride as Cl	1
16	Sulphate as SO ₄	1
17	Total Dissolved Solids	10
18	Total Residual Chlorine	0.1
19	Copper as Cu	0.01

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



Dr. Arun Bajpai

Lab Manager (Q)

**POLLUCON** LABORATORIES PVT. LTD.Environmental Auditors, Consultants & Analysts
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Ambient Air Parameters		
Sr. No.	Test Parameter	MDL
1	Particulate Matter (PM10) ($\mu\text{g}/\text{m}^3$)	10
2	Particulate Matter (PM 2.5) ($\mu\text{g}/\text{m}^3$)	10
3	Sulphur Dioxide (SO_2) ($\mu\text{g}/\text{m}^3$)	5
4	Oxides of Nitrogen ($\mu\text{g}/\text{m}^3$)	5
5	Hydrogen Sulphide as H_2S ($\mu\text{g}/\text{m}^3$)	6

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

Stack parameter		
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	Hydro Carbon NMHC(ppm)	1.0

H. T. Shah**Lab Manager****Dr. Arun Bajpai****Lab Manager (Q)**

"HALF YEARLY ENVIRONMENTAL MONITORING REPORT"

FOR



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

**MONITORING PERIOD:
APRIL 2021 TO SEPTEMBER 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.**

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Web: www.polluconlab.com

TC - 5945

ISO 9001:2015

ISO 14001:2015

ISO45001:2018

**RESULTS OF SOIL**

SR. NO.	TEST PARAMETERS	UNIT	RESULT			
			31/05/2021			
			Pub Building	Dhrub	Near Flyover Bridge	CETP
1	pH	--	9.18	8.92	8.32	9.11
2	Nitrogen as N	%	0.042	0.21	0.16	0.34
3	Phosphorus as P	mg/kg	316	268	158	379
4	Potassium as K	mg/kg	204	149	102	128
5	Baron as B	mg/kg	1.75	1.86	2.34	3.53
6	Calcium as Ca	mg/kg	318	374	419	479
7	Magnesium as Mg	mg/kg	352	382	742	628
8	Iron as Fe	%	0.49	0.61	0.73	0.53
9	Moisture	%	7.42	8.24	6.84	8.40
10	Organic Matter	%	0.31	0.73	0.61	0.21
11	CEC	meq/100 gm	10.32	9.92	10.38	10.12
12	TVC	CFU/gm	3.1×10^6	2.7×10^5	2.1×10^5	1.7×10^6
A	Heavy Metals					
13	Cadmium as Cd	mg/kg	Not Detected	Not Detected	Not Detected	Not Detected
14	Thorium as Th	mg/kg	Not Detected	Not Detected	Not Detected	Not Detected
15	Antimony as Sb	mg/kg	Not Detected	Not Detected	Not Detected	Not Detected
16	Arsenic as As	mg/kg	Not Detected	Not Detected	Not Detected	Not Detected
17	Lead as Pb	mg/kg	Not Detected	Not Detected	Not Detected	Not Detected
18	Chromium (VI) as Cr	mg/kg	Not Detected	Not Detected	Not Detected	Not Detected
19	Cobalt as Co	mg/kg	13.8	12.4	21.3	25.8
20	Copper as Cu	mg/kg	15.4	17.3	35.8	42.9
21	Nickel as Ni	mg/kg	8.32	19.8	19.3	13.8
22	Manganese as Mn	mg/kg	258	314	356	329
23	Vanadium as V	mg/kg	9.30	8.13	9.14	8.52

Not Detected [Minimum Detection Limit for Solid Waste/Soil sample prepared as per USEPA method 3050 B: Cadmium as Cd: 1.0 mg/kg, Thorium as Th: 0.1 mg/kg, Antimony as Sb: 1.0 mg/kg, Arsenic as As: 1.0 mg/kg, Lead as Pb: 1.0 mg/kg, Chromium (VI) as Cr: 0.1 mg/kg, Cobalt as Co: 1.0 mg/kg]

H. T. Shah**Lab Manager****Dr. Arun Bajpai****Lab Manager (Q)**

MOEF&CC (G.O.) Recognized Environment Lab
Laboratory under the EPA (1986) Act, 2006 to 17.03.2021

GPCB/NA357 Accredited QA
Consultant Organization

CPCB Recognized Environmental
Auditor (Semi-annual)

ISO 9001:2015
Certified Company

ISO 45001:2018
Certified Company

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : April - 2021

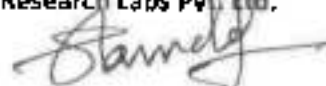
Name of Location : Village - Siracha

ID No. : URA/ID/A-21/04/001

Sr. No.	Sampling Date	Concentration In Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	02/04/2021	65.2	28.3	16.6	23.4		-
2.	05/04/2021	70.5	32.2	14.6	21.5		--
3.	09/04/2021	77.5	34.0	19.4	25.5	14.8	BDL
4.	12/04/2021	57.4	23.9	14.1	23.3		--
5.	16/04/2021	70.9	33.3	15.4	22.6		--
6.	19/04/2021	76.5	23.1	19.0	25.7		--
7.	23/04/2021	57.3	27.5	18.3	21.3		--
8.	26/04/2021	60.7	21.2	16.6	19.5		—
9.	30/04/2021	70.8	31.1	12.4	21.5		
Average		67.4	28.3	16.3	22.7		—

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

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : April - 2021

Name of Location : Village - Kandagara

ID No. : URA/ID/A-21/04/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	02/04/2021	74.1	29.7	14.2	22.5		—
2.	05/04/2021	67.2	23.4	21.6	27.3		--
3.	09/04/2021	59.3	21.5	18.2	21.7	19.2	BDL
4.	12/04/2021	74.5	22.8	15.0	26.7		--
5.	16/04/2021	76.7	34.9	12.9	21.0		--
6.	19/04/2021	52.7	23.0	16.5	22.6		--
7.	23/04/2021	60.3	28.5	13.4	17.2		--
8.	26/04/2021	57.0	21.5	15.6	23.7		--
9.	30/04/2021	68.0	31.0	13.2	18.6		
Average		65.5	26.3	15.6	22.4		—
Remarks: Calibrated and used.							

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

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

UniStar Environment &
Research Labs Pvt. Ltd.

(Authorized Signatory)

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : April - 2021

Name of Location : Village - Wandh

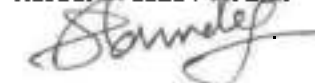
ID No. : URA/ID/A-21/04/003

Sr. No.	Sampling Date	Concentration In Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	02/04/2021	74.1	30.6	15.5	21.5		--
2.	05/04/2021	69.8	31.0	21.1	25.2		--
3.	09/04/2021	59.7	26.4	17.3	22.2	22.1	BDL
4.	12/04/2021	75.6	31.9	19.4	31.7		--
5.	16/04/2021	83.7	38.7	23.0	28.8		--
6.	19/04/2021	71.6	32.5	18.6	21.4		--
7.	23/04/2021	67.9	25.7	25.5	29.7		--
8.	26/04/2021	63.8	27.4	20.5	27.1		--
9.	30/04/2021	69.3	30.1	17.3	22.4		--
Average		70.6	30.5	19.8	25.6		--

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

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

UniStar Environment &
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ISO 14001:2015 Recognized Environmental
Laboratory under the ISO 19541:2015 (2015:2015) / ISO 14001

ISO 14001:2015 Accredited QA
Consulting Organization

ISO 14001:2015 Recognized Environmental
Audit for Schedule-1 Lab

ISO 9001:2015
Certified Company

ISO 45001:2018
Certified Company

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : April - 2021

Name of Location : Nr.20 MLD Plant

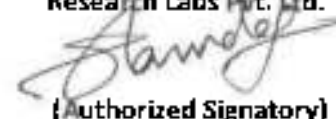
ID No. : URA/ID/A-21/04/004

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	07/04/2021	68.9	28.1	17.9	22.4	20.8	BDL
Average		68.9	28.1	17.9	22.4	20.8	BDL

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

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

UniStar Environment &
Research Labs Pvt. Ltd.



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MoEF&CC (G.O.) Recognized Environmental Laboratory under the EPA-1986 (12.01.2002 & 17.02.2028)

ISO 14001 Accredited QA Consultant Organization

CPCB Recognized Environmental Laboratory (State of Gujarat)

ISO 9001:2015, ISO 45001:2018 Certified Company

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : April – 2021

Name of Location : Nr. Shantiniketan - 1

ID No. : URA/ID/A-21/04/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide {SO ₂ } µg/M ³	Nitrogen Dioxide {NO ₂ } µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit {TWA for 24 hrs.}		100	60	80	80	100	N.A.
1	07/04/2021	60.4	22.4	14.2	20.7	18.1	BDL
Average		60.4	22.4	14.2	20.7	18.1	BDL

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

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

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : May - 2021

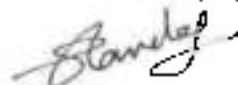
Name of Location : Village - Siracha

ID No. : URA/ID/A-21/05/001

Sr. No.	Sampling Date	Concentration in Ambient Air ($\mu\text{g} / \text{m}^3$)					
		PM ₁₀ $\mu\text{g} / \text{M}^3$	PM _{2.5} $\mu\text{g} / \text{M}^3$	Sulphur Dioxide {SO ₂ } $\mu\text{g} / \text{M}^3$	Nitrogen Dioxide {NO ₂ } $\mu\text{g} / \text{M}^3$	Ozone (O ₃) $\mu\text{g} / \text{M}^3$	Mercury (Hg) $\mu\text{g} / \text{M}^3$
GPCB Permissible Limit {TWA for 24 hrs.}		100	60	80	80	100	N.A.
1.	03/05/2021	63.4	27.0	15.7	19.6		—
2.	07/05/2021	73.1	30.2	20.4	25.5		—
3.	10/05/2021	72.7	27.1	18.4	23.0		—
4.	13/05/2021	68.0	22.0	17.1	21.4		—
5.	21/05/2021	71.7	32.0	13.8	17.3		—
6.	25/05/2021	58.0	22.9	15.3	19.1	16.2	BDL
7.	28/05/2021	68.3	26.5	19.5	24.4		--
Average		67.9	26.8	17.2	21.5		—

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

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



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Monthly Average Report

Ambient Air Quality Monitoring

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

Month of Monitoring : May - 2021

Name of Location : Village - Kandagara

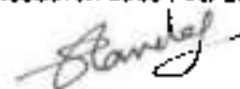
ID No. : URA/ID/A-21/05/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/05/2021	68.1	28.4	21.5	26.6		--
2.	07/05/2021	62.6	22.1	17.0	22.3		--
3.	10/05/2021	63.8	20.5	14.3	17.7		--
4.	13/05/2021	55.4	22.2	23.1	28.6		--
5.	21/05/2021	70.2	32.4	15.4	18.2		--
6.	25/05/2021	63.5	23.2	17.2	20.4	20.7	BDL
7.	28/05/2021	65.6	26.8	14.8	18.5		--
Average		64.2	25.1	17.6	21.8		--

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

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

UniStar Environment &
 Research Labs Pvt. Ltd.



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Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : May - 2021

Name of Location : Village - Wandh

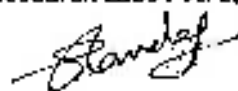
ID No. : URA/ID/A-21/05/003

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/05/2021	70.7	34.9	16.3	20.3		--
2.	07/05/2021	59.9	30.2	22.1	27.1		--
3.	10/05/2021	66.0	25.6	24.4	29.5		--
4.	13/05/2021	79.3	30.4	18.6	22.2		--
5.	21/05/2021	74.9	32.1	16.7	19.5		--
6.	25/05/2021	85.9	35.7	18.2	25.7	24.3	BDL
7.	28/05/2021	68.6	31.7	20.6	24.6		—
Average		72.2	31.5	19.6	24.1		—

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

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

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Research Labs Pvt. Ltd.**



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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : May - 2021

Name of Location : Nr.20 MLD Plant

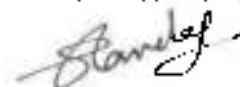
ID No. : URA/ID/A-21/05/004

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	19/05/2021	73.8	29.6	18.4	25.3	21.7	BDL
Average		73.8	29.6	18.4	25.3	21.7	BDL

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

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

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : May – 2021

Name of Location : Nr. Shantlniketan - 1

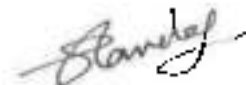
ID No. : URA/ID/A-21/05/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	19/05/2021	60.2	23.6	16.7	22.3	19.4	BDL
Average		60.2	23.6	16.7	22.3	19.4	BDL

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

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

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



(Authorized Signatory)

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : June - 2021

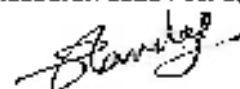
Name of Location : Village - Siracha

ID No. : URA/ID/A-21/06/001

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/06/2021	67.2	25.5	17.8	21.4		--
2.	08/06/2021	69.1	29.8	15.5	22.3		--
3.	11/06/2021	71.9	26.9	20.5	24.8	13.2	BDL
4.	15/06/2021	62.0	22.2	19.2	23.2		—
5.	18/06/2021	Rain Fall					
6.	22/06/2021	61.0	29.2	17.4	20.9		—
7.	25/06/2021	54.8	17.3	21.6	26.2		—
8.	29/06/2021	50.9	21.0	21.6	26.2		—
Average		62.4	24.6	19.1	23.6		--

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

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : June - 2021

Name of Location : Village Kandagara

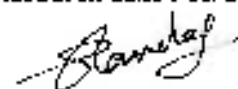
ID No. : URA/ID/A-21/06/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/06/2021	69.7	25.6	20.7	21.8		—
2.	08/06/2021	53.1	21.7	19.8	17.9		--
3.	11/06/2021	61.3	23.2	15.3	19.4	17.2	BDL
4.	15/06/2021	77.3	32.6	20.7	28.8		--
5.	18/06/2021	Rain Fall					
6.	22/06/2021	60.2	24.4	17.5	21.6		--
7.	25/06/2021	65.2	18.7	16.8	19.9		--
8.	29/06/2021	63.5	22.7	16.8	23.9		--
Average		64.3	24.1	18.2	21.9		--

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

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

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



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : June - 2021

Name of Location : Village - Wandh

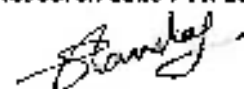
ID No. : **URA/ID/A-21/06/003**

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	04/06/2021	78.0	36.0	21.3	22.1		--
2.	08/06/2021	83.6	42.1	20.6	23.9		--
3.	11/06/2021	79.5	37.7	22.9	25.3	21.4	BDL
4.	15/06/2021	70.6	33.3	17.1	24.0		--
5.	18/06/2021	Rain Fall					
6.	22/06/2021	61.3	31.8	17.7	23.5		--
7.	25/06/2021	60.9	29.8	19.1	26.4		--
8.	29/06/2021	63.3	33.6	21.5	25.3		--
Average		71.0	34.9	20.0	24.4		--

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

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

UniStar Environment &
Research Labs Pvt. Ltd.



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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : June - 2021

Name of Location : Nr.20 MLD Plant

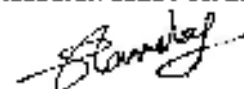
ID No. : URA/1D/A-21/06/004

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	24/06/2021	70.9	26.7	17.9	21.4	18.9	BDL
Average		70.9	26.7	17.9	21.4	18.9	BDL

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

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

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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : June - 2021

Name of Location : Nr. Shantiniketan - 1

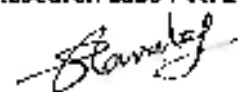
ID No. : URA/ID/A-21/06/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg / m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	24/06/2021	61.4	22.1	14.7	19.6	17.8	BDL
Average		61.4	22.1	14.7	19.6	17.8	BDL

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

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

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



(Authorized Signatory)

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : July - 2021

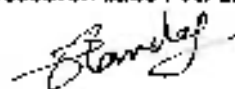
Name of Location : Village - Siracha

ID No. : URA/ID/A-21/07/001

Sr. No.	Sampling Date	Concentration In Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	02/07/2021	61.6	26.6	17.3	22.7		--
2.	06/07/2021	42.8	15.9	10.6	19.5		--
3.	09/07/2021	51.3	19.3	13.1	16.3	11.6	BDL
4.	13/07/2021	Rain Fall					--
5.	16/07/2021						--
6.	20/07/2021						--
7.	23/07/2021						--
8.	27/07/2021						--
9.	30/07/2021						
Average		51.9	20.6	13.7	19.5		--

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

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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : July - 2021

Name of Location : Village Kandagara

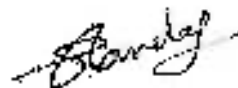
ID No. : URA/ID/A-21/07/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	02/07/2021	44.2	15.6	11.8	17.4		--
2.	06/07/2021	63.2	21.7	18.0	21.9		--
3.	09/07/2021	59.5	23.2	15.3	18.5	15.8	BDL
4.	13/07/2021	Rain Fall					--
5.	16/07/2021						--
6.	20/07/2021						--
7.	23/07/2021						--
8.	27/07/2021						--
9.	30/07/2021						--
Average		55.6	20.2	15.0	19.3		--

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

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

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Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : July - 2021

Name of Location : Village - Wandh

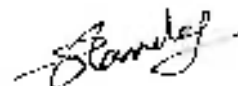
ID No. : URA/ID/A-21/07/003

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	02/07/2021	61.1	26.0	16.5	17.6		--
2.	06/07/2021	53.8	22.1	13.6	20.8		--
3.	09/07/2021	70.6	30.7	18.2	24.0	18.3	BDL
4.	13/07/2021	Rain Fall					--
5.	16/07/2021						--
6.	20/07/2021						--
7.	23/07/2021						--
8.	27/07/2021						--
9.	30/07/2021						--
Average		61.8	26.3	16.1	20.8		—

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

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

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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : July - 2021

Name of Location : Nr.20 MLD Plant

ID No. : URA/ID/A-21/07/004

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	07/07/2021	60.5	26.1	15.8	20.3	20.4	BDL
Average		60.5	26.1	15.8	20.3	20.4	BDL

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

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

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



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : July - 2021

Name of Location : Nr. Shantiniketan - 1

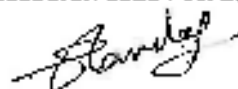
ID No. : URA/ID/A-21/07/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit {TWA for 24 hrs.}		100	60	80	80	100	N.A.
1	07/07/2021	53.0	21.2	13.9	22.4	16.4	BDL
Average		53.0	21.2	13.9	22.4	16.4	BDL

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

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

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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : August - 2021

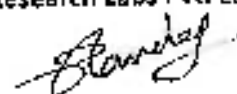
Name of Location : Village - Siracha

ID No. : URA/ID/A-21/08/001

Sr. No.	Sampling Date	Concentration in Ambient Air ($\mu\text{g}/\text{m}^3$)					
		PM ₁₀ $\mu\text{g}/\text{M}^3$	PM _{2.5} $\mu\text{g}/\text{M}^3$	Sulphur Dioxide (SO ₂) $\mu\text{g}/\text{M}^3$	Nitrogen Dioxide (NO ₂) $\mu\text{g}/\text{M}^3$	Ozone (O ₃) $\mu\text{g}/\text{M}^3$	Mercury (Hg) $\mu\text{g}/\text{M}^3$
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/08/2021	52.9	17.4	14.2	16.7		-
2.	06/08/2021	56.9	20.7	12.0	15.2		--
3.	10/08/2021	50.5	22.2	17.2	21.5		--
4.	13/08/2021	52.4	22.5	15.0	18.9		--
5.	17/08/2021	57.4	25.9	12.7	16.4		--
6.	20/08/2021	61.1	23.2	10.5	13.9	13.7	BDL
7.	24/08/2021	70.7	21.6	15.7	17.2		--
8.	27/08/2021	63.2	20.5	13.8	19.4		--
Average		58.1	21.8	13.9	17.4		--

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

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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : August - 2021

Name of Location : Village - Kandagara

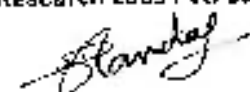
ID No. : URA/ID/A-21/08/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/08/2021	54.9	17.1	16.5	20.2		--
2.	06/08/2021	60.1	23.9	11.2	14.6		--
3.	10/08/2021	55.1	19.2	14.8	18.5		--
4.	13/08/2021	56.4	22.3	12.7	15.3		--
5.	17/08/2021	52.7	24.4	17.6	20.8		--
6.	20/08/2021	60.5	23.3	13.5	16.9	17.4	BDL
7.	24/08/2021	64.8	21.0	10.2	13.5		--
8.	27/08/2021	72.2	28.3	12.7	20.3		--
Average		59.6	22.4	13.7	17.5		--

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

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

UniStar Environment &
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Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : August - 2021

Name of Location : Village - Wandh

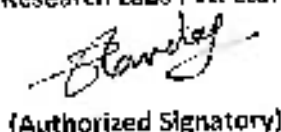
ID No. : URA/ID/A-21/08/003

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m ³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	03/08/2021	55.3	29.7	19.3	18.5		--
2.	06/08/2021	64.9	31.4	21.2	24.6		--
3.	10/08/2021	68.5	28.7	20.4	23.1		--
4.	13/08/2021	59.8	32.8	13.0	15.7		--
5.	17/08/2021	60.7	34.3	14.9	20.6		--
6.	20/08/2021	68.5	31.1	16.7	22.2	20.2	BDL
7.	24/08/2021	72.2	28.6	17.6	19.8		--
8.	27/08/2021	63.4	20.6	15.2	22.3		--
Average		64.2	29.6	17.3	20.9		--

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

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5} - Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2003, NO_x - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method 3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS - 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
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Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : August 2021

Name of Location : Nr.20 MLD Plant

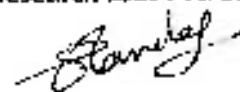
ID No. : URA/ID/A-21/08/004

Sr. No.	Sampling Date	Concentration in Ambient Air ($\mu\text{g}/\text{m}^3$)					
		PM ₁₀ $\mu\text{g}/\text{M}^3$	PM _{2.5} $\mu\text{g}/\text{M}^3$	Sulphur Dioxide (SO ₂) $\mu\text{g}/\text{M}^3$	Nitrogen Dioxide (NO ₂) $\mu\text{g}/\text{M}^3$	Ozone (O ₃) $\mu\text{g}/\text{M}^3$	Mercury (Hg) $\mu\text{g}/\text{M}^3$
GPCB Permissible Limit (TWA for 24 hrs.)		100	50	80	80	100	N.A.
1	11/08/2021	63.4	24.0	13.9	22.1	21.9	BDL
Average		63.4	24.0	13.9	22.1	21.9	BDL

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

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

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : August 2021

Name of Location : Nr. Shantiniketan - 1

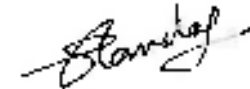
ID No. : URA/ID/A-21/08/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M ³	PM _{2.5} µg/M ³	Sulphur Dioxide (SO ₂) µg/M ³	Nitrogen Dioxide (NO ₂) µg/M ³	Ozone (O ₃) µg/M ³	Mercury (Hg) µg/M ³
GPCB Permissible Limit {TWA for 24 hrs.}		100	60	80	80	100	N.A.
1	11/08/2021	56.2	19.8	12.1	19.7	18.5	BDL
Average		56.2	19.8	12.1	19.7	18.5	BDL

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

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5} - Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO_x - IS: 5182 (Part 6), 2006, Hg: AA5 by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS – 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : September - 2021

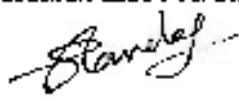
Name of Location : Village - Siracha

ID No. : URA/ID/A-21/09/001

Sr. No.	Sampling Date	Concentration in Ambient Air ($\mu\text{g}/\text{m}^3$)					
		PM ₁₀ $\mu\text{g}/\text{M}^3$	PM _{2.5} $\mu\text{g}/\text{M}^3$	Sulphur Dioxide (SO ₂) $\mu\text{g}/\text{M}^3$	Nitrogen Dioxide (NO ₂) $\mu\text{g}/\text{M}^3$	Ozone (O ₃) $\mu\text{g}/\text{M}^3$	Mercury (Hg) $\mu\text{g}/\text{M}^3$
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/09/2021	Rainfall					--
2.	05/09/2021						--
3.	18/09/2021						--
4.	12/09/2021						--
5.	15/09/2021						--
6.	17/09/2021	53.6	22.2	10.2	13.4	14.5	BDL
7.	21/09/2021	49.2	18.7	13.7	17.2		--
8.	26/09/2021	Rainfall					--
9.	29/09/2021						--
Average		51.4	20.5	12.0	15.3		--

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

UniStar Environment &
Research Labs Pvt. Ltd.


(Authorized Signatory)

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : September - 2021

Name of Location : Village - Kandagara

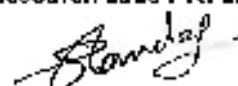
ID No. : URA/ID/A-21/09/002

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	50	80	80	100	N.A.
1.	01/09/2021	Rainfall					--
2.	05/09/2021						--
3.	18/09/2021						--
4.	12/09/2021						--
5.	15/09/2021						--
6.	17/09/2021	58.0	23.6	12.8	15.3	16.4	BDL
7.	21/09/2021	43.7	19.9	10.2	13.5		--
8.	26/09/2021	Rainfall					--
9.	29/09/2021						--
Average		50.8	21.8	11.5	14.4		--

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

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

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report
Ambient Air Quality Monitoring

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

Month of Monitoring : September - 2021

Name of Location : Village Wandh

ID No. : URA/ID/A-21/09/003

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M²	Sulphur Dioxide (SO ₂) µg/M²	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M²	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1.	01/09/2021	Rainfall					—
2.	05/09/2021						—
3.	18/09/2021						—
4.	12/09/2021						—
5.	15/09/2021						—
6.	17/09/2021	66.4	30.8	15.3	20.7	19.7	BDL
7.	21/09/2021	51.8	21.6	14.6	16.8		--
8.	26/09/2021	Rainfall					--
9.	29/09/2021						--
Average		59.1	26.2	15.0	18.8		--

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

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

UniStar Environment &
Research Labs Pvt. Ltd.


(Authorized Signatory)

ISO 15189:2013 Recognized Environmental
Laboratory under the ISO 15189:2013 (17.03.2023)

ISO 14001 Accredited LIA
Consultant Organization

GPCB Recognized by Government
of Gujarat (S.No. 110-111)

ISO 9001:2015
Certified Company

ISO 45001:2018
Certified Company

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : September - 2021

Name of Location : Nr. 20 MLD Plant

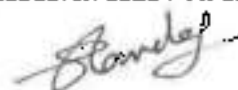
ID No. : URA/ID/A-21/09/004

Sr. No.	Sampling Data	Concentration in Ambient Air ($\mu\text{g}/\text{m}^3$)					
		PM ₁₀ $\mu\text{g}/\text{M}^3$	PM _{2.5} $\mu\text{g}/\text{M}^3$	Sulphur Dioxide (SO ₂) $\mu\text{g}/\text{M}^3$	Nitrogen Dioxide (NO ₂) $\mu\text{g}/\text{M}^3$	Ozone (O ₃) $\mu\text{g}/\text{M}^3$	Mercury (Hg) $\mu\text{g}/\text{M}^3$
	GPCB Permissible Limit (TWA for 24 hrs.)	100	60	80	80	100	N.A.
1	18/09/2021	60.2	27.8	13.8	18.9	14.8	BDL
Average		60.2	27.8	13.8	18.9	14.8	BDL

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

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5} Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO₂ - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edison & Hg: 2 ppb O₃: IS - 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

Monthly Average Report Ambient Air Quality Monitoring

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

Month of Monitoring : September - 2021

Name of Location : Nr. Shantiniketan - 3

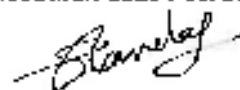
ID No. : URA/ID/A-21/09/005

Sr. No.	Sampling Date	Concentration in Ambient Air (µg /m³)					
		PM ₁₀ µg/M³	PM _{2.5} µg/M³	Sulphur Dioxide (SO ₂) µg/M³	Nitrogen Dioxide (NO ₂) µg/M³	Ozone (O ₃) µg/M³	Mercury (Hg) µg/M³
GPCB Permissible Limit (TWA for 24 hrs.)		100	60	80	80	100	N.A.
1	18/09/2021	54.4	22.3	12.7	16.7	13.2	BDL
Average		54.4	22.3	12.7	16.7	13.2	BDL

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

Analysis Method Reference: SPM - IS: 5182 (Part 4), 1999, PM₁₀ - IS: 5182 (Part 23), 2006, PM_{2.5} - Guidelines by CPCB (Vol-1), SO₂ - IS: 5182 (Part 2), 2001, NO₂ - IS: 5182 (Part 6), 2006, Hg: AAS by VGA Method -3112 B APHA 22 Edlson & Hg: 2 ppb O₃: IS - 5182 (Part 9) 2009 Ozone BDL limit: 5 $\mu\text{g}/\text{m}^3$

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



(Authorized Signatory)

ISO 9001:2015 Recognized Environment
Laboratory under ISO 14001:2015 (17/05/2021)

ISO 14001:2015 Accredited EA
Certification Organisation

ISO 14001:2015 Accredited
Auditor (Schedule 1)

ISO 9001:2015
Certified Company

ISO 14001:2015
Certified Company

TEST REPORT (AMBIENT AIR MONITORING)

Test Report No.:	URA/21/09/A-AP001	Report Issue Date	30/09/2021
Sample ID No.:	URA/ID/A-21/09/001		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch, GUJARAT - 370 435.		
Dates of Sampling:	17/09/2021	Date of Testing	20/09/2021
Sampling Procedure:	CPCB Guideline		
Location of Sampling / Monitoring:	Village - Siracha		

Details of Master Instrument Used for Monitoring

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/24	Respirable Dust Sampler	2345-DTB-2012 1039-DTC-2012	02/08/2021	01/08/2022
UERL/AIR/FPS/30	Fine Particulate Sampler	132-DTL-2012	02/08/2021	01/08/2022

General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.22
3.	Volume of Air Sampled for PM ₁₀	m ³	1756
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

Environmental Conditions during testing: Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

Test Parameter Results

Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQM5)	Test Method
1.	Particulate Matter. (PM ₁₀)	µg/m ³	53.6	100	IS - 5182, Part - 23
2.	Particulate Matter. (PM _{2.5})	µg/m ³	22.2	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide	µg/m ³	10.7	80	IS - 5182, Part - 2
4.	Nitrogen Dioxide	µg/m ³	13.4	80	IS - 5182, Part - 6
5.	Carbon Monoxide	mg/m ³	1.03	4.0	IS - 5182, Part - 10
6.	Ozone	µg/m ³	14.5	180	IS - 5182, Part - 9
7.	Ammonia	µg/m ³	<70	400	UERL/AIR/SOP/05
8.	Lead	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo pyrene	ng/m ³	<0.1	1.0	IS - 5182, Part - 12

Note: NAAQM5: National Ambient Air Quality Monitoring Standard.

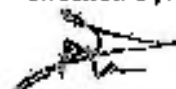
BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:

Opinion & Interpretation (if required):

***** End of Report *****


Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/05

Note: This report is subject to Terms and Conditions mentioned overleaf.

ISO 14001:2015
Laboratory under the CMA 1986 (12.01.2002 to 12.01.2022)

COC NABL Accredited as
Consulting Organization

CPCB Recognized Bureau for
Air Monitoring (Schedule-I)

ISO 9001:2015
Certified Company

ISO 45001:2018
Certified Company

TEST REPORT (AMBIENT AIR MONITORING)

Test Report No.:	URA/21/09/A-AP002	Report Issue Date	30/09/2021
Sample ID No.:	URA/ID/A-21/09/002		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch, GUJARAT - 370 435.		
Dates of Sampling:	17/09/2021	Date of Testing	20/09/2021
Sampling Procedure:	CPCB Guideline		
Location of Sampling / Monitoring:	Village - Kandagara		

➤ Details of Master Instrument Used for Monitoring

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RD5/25	Respirable Dust Sampler	1744-DTA-2013 1127-DTJ-2012	02/08/2021	01/08/2022
UERL/AIR/FPS/41	Fine Particulate Sampler	137-DTD-2013	03/08/2021	02/08/2022

➤ General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.24
3.	Volume of Air Sampled for PM ₁₀	m ³	1786
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ Environmental Conditions during testing: Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ Test Parameter Results

Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQMS)	Test Method
1.	Particulate Matter. (PM ₁₀)	µg/m ³	58.0	100	IS - 5182, Part - 23
2.	Particulate Matter. (PM _{2.5})	µg/m ³	23.6	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide	µg/m ³	12.8	80	IS - 5182, Part - 2
4.	Nitrogen Dioxide	µg/m ³	15.3	80	IS - 5182, Part - 6
5.	Carbon Monoxide	mg/m ³	0.85	4.0	IS - 5182, Part - 10
6.	Ozone	µg/m ³	16.4	180	IS - 5182, Part - 9
7.	Ammonia	µg/m ³	<20	400	UERL/AIR/SOP/05
8.	Lead	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo pyrene	ng/m ³	<0.1	1.0	IS - 5182, Part - 17

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:

Opinion & Interpretation (if required):

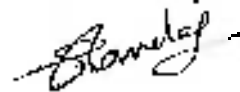
***** End of Report *****

Checked By:



Nikunj D. Patel
(Chemist)
Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/D5

Note: This report is subject to Terms and Conditions mentioned overleaf.

ISO 9001:2015 Recognized Environment Laboratory under the EPA-1792 (12.01.2020 to 12.01.2023)

ISO 14001:2015 Accredited QA Consultant Organization

ISO 45001:2018 Accredited Environment Auditor (Schedule 1)

ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

TEST REPORT (AMBIENT AIR MONITORING)

Test Report No.:	URA/21/09/A-AP003	Report Issue Date	30/09/2021
Sample ID No.:	URA/ID/A-21/09/003		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch, GUJARAT - 370 435.		
Dates of Sampling:	17/09/2021	Date of Testing	20/09/2021
Sampling Procedure:	CPCB Guideline		
Location of Sampling / Monitoring:	Village - Wandh		

> Details of Master Instrument Used for Monitoring

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/26	Respirable Dust Sampler	1745-DTA-2013, 1139 DTA-2013	02/08/2021	01/08/2022
UERL/AIR/FPS/42	Fine Particulate Sampler	125-DTD-2013	03/08/2021	02/08/2022

> General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.26
3.	Volume of Air Sampled for PM ₁₀	m ³	1814
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.1
6.	Volume of Air Sample for Gas	L	288

> Environmental Conditions during testing: Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

> Test Parameter Results

Sr. No.	Test Parameter	Unit	Result	Permissible Limit [As per NAAQMS]	Test Method
1.	Particulate Matter. (PM ₁₀)	µg/M ³	66.4	100	IS - 5182, Part - 23
2.	Particulate Matter. (PM _{2.5})	µg/M ³	30.8	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide	µg/M ³	15.3	80	IS - 5182, Part - 2
4.	Nitrogen Dioxide	µg/M ³	20.1	80	IS - 5182, Part - 6
5.	Carbon Monoxide	mg/m ³	1.10	4.0	IS - 5182, Part - 10
6.	Ozone	µg/M ³	19.7	180	IS - 5182, Part - 9
7.	Ammonia	µg/m ³	<20	400	UERL/AIR/SOP/05
8.	Lead	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo pyrene	ng/m ³	<0.1	1.0	IS - 5182, Part - 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

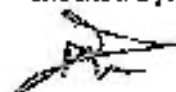
BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:

Opinion & Interpretation (if required):

***** End of Report *****

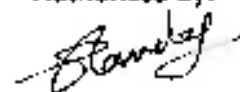
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/05

Note: This report is subject to Terms and Conditions mentioned overleaf.

ISO/IEC 17025:2005 Recognized Environmental
Laboratory under the PCA-964-2017/2020:17.03.2023

ISO/IEC 17025:2005 Recognized Environmental
Consulting Organisation

ISO/IEC 17025:2005 Recognized Environmental
Auditor (Schedule 11)

ISO 9001:2015
Certified Company

ISO 45001:2018
Certified Company

TEST REPORT
(AMBIENT AIR MONITORING)

Test Report No.:	URA/21/09/A-AP004	Report Issue Date	30/09/2021
Sample ID No.:	URA/ID/A-21/09/001		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch, GUJARAT - 370 435.		
Dates of Sampling:	18/09/2021	Date of Testing	20/09/2021
Sampling Procedure:	CPCB Guideline		
Location of Sampling / Monitoring:	Nr.20 MLD Plant		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cal. Date	Next Cal. Date
UERL/AIR/RD5/03	Respirable Dust Sampler	1117-DTC-2008 3355-DTB-2008	02/08/2021	01/08/2022
UERL/AIR/FPS/06	Fine Particulate Sampler	270 DTE 2010	02/08/2021	01/08/2022

➤ **General Sampling / Monitoring Observation as per CPCB Guideline**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.22
3.	Volume of Air Sampled for PM ₁₀	m ³	1756
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQMS)	Test Method
1.	Particulate Matter. (PM ₁₀)	µg/M ³	60.2	100	IS - 5182, Part - 23
2.	Particulate Matter. (PM _{2.5})	µg/M ³	27.8	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide	µg/M ³	13.8	80	IS - 5182, Part - 2
4.	Nitrogen Dioxide	µg/M ³	18.9	80	IS - 5182, Part - 6
5.	Carbon Monoxide	mg/m ³	1.13	4.0	IS - 5182, Part - 10
6.	Ozone	µg/M ³	14.8	180	IS - 5182, Part - 9
7.	Ammonia	µg/m ³	<20	400	UERL/AIR/SOP/05
8.	Lead	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo pyrene	ng/m ³	<0.1	1.0	IS - 5182, Part - 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

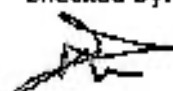
BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:

Opinion & Interpretation (If required):

*** End of Report ***

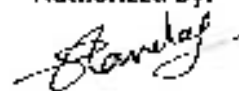
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-D5/D5

Note: This report is subject to Terms and Conditions mentioned overleaf.

ISO 15189 (2013) Recognized Environmental
Laboratory under the EPA Act 1986 & ISO 15189:2013

ISO 14001 Accredited
Consulting Organization

CPCB Recognized Environmental
Monitoring Schedule - II

ISO 9001:2015
Certified Company

ISO 45001:2018
Certified Company

TEST REPORT
(AMBIENT AIR MONITORING)

Test Report No.:	URA/21/09/A-AP005	Report Issue Date	30/09/2021
Sample ID No.:	URA/ID/A-21/09/005		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch, GUJARAT - 370 435.		
Dates of Sampling:	18/09/2021	Date of Testing	20/09/2021
Sampling Procedure:	CPCB Guideline		
Location of Sampling / Monitoring:	Nr. Shantiniketan - 1		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/27	Respirable Dust Sampler	1751-DTA-2013 1142-DTA-2013	07/08/2021	01/08/2022
UERL/AIR/FPS/50	Fine Particulate Sampler	129 DTL 2012	03/08/2021	02/08/2022

➤ **General Sampling / Monitoring Observation as per CPCB Guideline**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.25
3.	Volume of Air Sampled for PM ₁₀	m ³	1800
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQMS)	Test Method
1.	Particulate Matter, (PM ₁₀)	µg/m ³	54.4	100	IS - 5182, Part - 23
2.	Particulate Matter, (PM _{2.5})	µg/m ³	22.3	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide	µg/m ³	12.7	80	IS - 5182, Part - 7
4.	Nitrogen Dioxide	µg/m ³	16.7	80	IS - 5182, Part - 6
5.	Carbon Monoxide	mg/m ³	1.09	4.0	IS - 5182, Part - 10
6.	Ozone	µg/m ³	13.2	180	IS - 5182, Part - 9
7.	Ammonia	µg/m ³	<20	400	UERL/AIR/SOP/05
8.	Lead	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo pyrene	ng/m ³	<0.1	1.0	IS - 5182, Part - 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

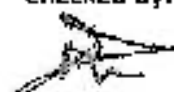
BDL: Below Detection Limit: 1) Hg: 0.001 µg/m³, 2) Ozone: 5.0 µg/m³

Remarks:

Opinion & Interpretation (If required):

***** End of Report *****

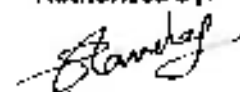
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jalvik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/05

Note: This report is subject to Terms and Conditions mentioned overleaf.

Monthly Average Report Stack Monitoring

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

Month of Monitoring : September - 2021

Sr. No.	Unit	Date of Monitoring	ID No.	Particulate Matter (mg/Nm ³)	Sulphur Dioxide (mg/Nm ³)	Oxide of Nitrogen (mg/Nm ³)	Mercury (mg/Nm ³)
GPCB Permissible Limit				SD	600	450	0.03
1.	Unit – 1	18/09/2021	URA/ID/S-21/09/001	33.3	472.8	233.6	BDL
2.	Unit – 2	18/09/2021	URA/ID/S-21/09/002	30.8	453.6	244.7	BDL
3.	Unit – 3	18/09/2021	URA/ID/S-21/09/003	38.1	468.7	251.4	BDL
4.	Unit – 4	30/09/2021	URA/ID/S-21/09/004	32.4	470.2	242.6	BDL
5.	Unit – 5	22/09/2021	URA/ID/S-21/09/005	33.2	519.7	233.3	BDL

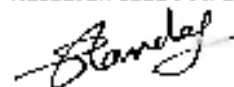
Remark: Calibrated instruments were used during monitoring & analysis of above identified sample.

Analysis Method Reference: Particulate Matter – IS 11255(Part 1), Sulphur Dioxide – IS 11255(Part 2), Oxide of Nitrogen IS 11255(Part 7), Mercury – AAS by VGA Method -3112 B APHA 22 Edison.

BDL: Below Detection Limit: Hg: 0.018mg/ Nm³

Note: As per MOEFCC letter CG-DL-E-22102020-222659 dt. 22.10.2020 revised NOx limit.

UniStar Environment &
Research Labs Pvt. Ltd.



[Authorized Signatory]

Monthly Average Report Stack Monitoring

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

Month of Monitoring : September – 2021

Sr. No.	Unit	Date of Monitoring	ID No.	Plant Load Capacity (MW)	GPCB Permissible Limit	Particulate Matter (mg/Nm ³)
1.	Unit – 1	18/09/2021	URA/ID/S-21/09/001	330	50	33.3
2.	Unit – 2	18/09/2021	URA/ID/S-21/09/002	330	50	30.8
3.	Unit – 3	18/09/2021	URA/ID/S-21/09/003	330	50	38.1
4.	Unit – 4	30/09/2021	URA/ID/S-21/09/004	660	50	32.4
5.	Unit – 5	22/09/2021	URA/ID/S-21/09/005	660	50	33.2

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

Analysis Method Reference: Particulate Matter - IS 11255(Part 1), Sulphur Dioxide - IS 11255(Part 2), Oxide of Nitrogen IS 11255(Part 7), Mercury - AAS by VGA Method - 3112 B APHA 22 Edison.

BDL: Below Detection Limit: Hg: 0.018mg/ Nm³

UniStar Environment &
Research Labs Pvt. Ltd.



(Authorized Signatory)

MOEF&CC (GO) Recognized Environmental
 Laboratory under the EPA-1986 (1) 201 2020 is 17.03.2023

 ISO 14001 Accredited by
 Certification Organisation

 ISO 9001:2015
 Accredited by Certification Organisation

 ISO 9001:2015
 Accredited by Certification Organisation

 ISO 14001:2015
 Accredited by Certification Organisation

TEST REPORT (STACK MONITORING)

Test Report No.	URA/21/09/S-AP001	Report Issue Date	30/09/2021
Sample ID No.	URA/ID/S-21/09/001		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Stracha, Tal. Mundra, Dist.: Kutch, GUJARAT - 370 435.		
Date of Sampling	18/09/2021	Date of Testing	19/09/2021
Stack Attached to	Unit - 1 (Boiler)		
Air Pollution Control Device	Electrostatic Precipitator (ESP).		
Fuel Used	Imported Coal		

Details of Instrument Used for Monitoring

Instrument Id No.	UURL/AIR/SMK/51		
Instrument Name	Stack Monitoring Kit, VSS1	Serial Number	319, DTE - 14
Calibration Date	01/07/2021	Next Calibration Due On	30/06/2022

General Stack Monitoring Observation

Sr. No.	Description	Unit of measurement	Observation
1.	Stack Height	m	220
2.	Stack Dia	m	5.2
3.	Ambient Temperature	°C	33
4.	Flue Gas Temperature	°C	110
5.	Exit Gas Velocity	m/s	22.6
6.	Capacity (MW)	MW	330
7.	Operating load during monitoring	MW	320

Test Parameter Results

Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm ³	33.3	50	IS 11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm ³	472.8	600	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm ³	233.6	450	IS 11255 (Part 3)
4.	Mercury	mg/Nm ³	BDL	0.03	AAS by VGA Method - 3112 B APHA 22 Edison

Note: All Monitored Values for SO₂ and NO_x corrected at 6% Oxygen, on Dry Basis.

As per MOEFCC letter CG-DL-E-22102020-222659 dt. 22.10.2020 revised NO_x limit

BDL: Below Detection Limit: Hg: 0.018mg/Nm³.

Remarks:

Opinion & Interpretation (If required):

***** End of Report *****

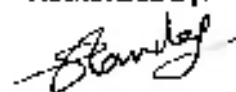
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UURL/AIR/F-04/04

Note: This report is subject to Terms and Conditions mentioned overleaf.

MAHACCI (COI) Recognized Environmental Laboratory under the EPA 1986 (Part 200) to 1987/2002

ISO 14001 Accredited EA Consultant Organization

GHGS Emission Environmental Auditor (Scheme 6.1.1)

ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

TEST REPORT (STACK MONITORING)

Test Report No.	URA/21/09/S-AP002	Report Issue Date	30/09/2021
Sample ID No.	URA/ID/S-21/09/002		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch. GUJARAT - 370 435.		
Date of Sampling	18/09/2021	Date of Testing	19/09/2021
Stack Attached to	Unit - 2 Boiler (S2)		
Air Pollution Control Device	Electrostatic Precipitator (ESP).		
Fuel Used	Imported Coal		

> Details of Instrument Used for Monitoring

Instrument Id No.	UERL/AIR/SMK/51		
Instrument Name	Stack Monitoring Kit, VSS1	Serial Number	319, DTE - 14
Calibration Date	01/07/2021	Next Calibration Due On	30/06/2022

> General Stack Monitoring Observation

Sr. No.	Description	Unit of measurement	Observation
1.	Stack Height	m	220
2.	Stack Dia	m	5.2
3.	Ambient Temperature	°C	32
4.	Flue Gas Temperature	°C	115
5.	Exit Gas Velocity	m/s	23.1
6.	Capacity (MW)	MW	330
7.	Operating load during monitoring	MW	315

> Test Parameter Results

Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm ³	30.8	50	IS 11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm ³	453.6	600	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm ³	244.7	450	IS 11255 (Part 7)
4.	Mercury	mg/Nm ³	BDL	0.03	AAS by VGA Method - 3112 B APHA 22 Edison

Note: All Monitored Values for SO₂ and NO_x corrected at 6% Oxygen, on Dry Basis.

As per MOEFCC letter CG-DL-E-22102020-222659 dt. 22.10.2020 revised NO_x limit

BDL: Below Detection Limit; Hg: 0.018mg/Nm³.

Remarks:

Opinion & Interpretation (If required):

***** End of Report *****

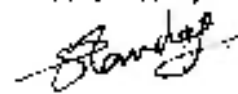
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-04/04

Note: This report is subject to Terms and Conditions mentioned overleaf.

MOEF&CC (GCI) Recognition - Environmental
Monitoring under the EPA-1986 (12.01.2020 to 13.01.2023)

GCI-NARFT Accredited EIA
Consultant Organization

GCI-5 Environmental Protection
Auditor (S.No.001-11)

ISO 9001:2015
Certified Company

ISO 43001:2019
Certified Company

TEST REPORT (STACK MONITORING)

Test Report No.	URA/21/09/S-AP003	Report Issue Date	30/09/2021
Sample ID No.	URA/ID/S 21/09/003		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch. GUJARAT - 370 435.		
Date of Sampling	18/09/2021	Date of Testing	19/09/2021
Stack Attached to	Unit - 3 Boiler (S3)		
Air Pollution Control Device	Low Nox Burner (LNB) and Electrostatic Precipitator (ESP).		
Fuel Used	Imported Coal		

Details of Instrument Used for Monitoring

Instrument Id No.	UURL/AIR/SMK/S1		
Instrument Name	Stack Monitoring Kit, YSS1	Serial Number	319, DTE - 14
Calibration Date	01/07/2021	Next Calibration Due On	30/06/2022

General Stack Monitoring Observation

Sr. No.	Description	Unit of measurement	Observation
1.	Stack Height	m	275
2.	Stack Dia	m	5.4
3.	Ambient Temperature	°C	31
4.	Flue Gas Temperature	°C	118
5.	Exit Gas Velocity	m/s	23.6
6.	Capacity (MW)	MW	330
7.	Operating load during monitoring	MW	280

Test Parameter Results

Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm ³	38.1	50	IS 11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm ³	468.7	600	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm ³	251.4	450	IS 11255 (Part 7)
4.	Mercury	mg/Nm ³	BDL	0.03	AAS by VGA Method - 3112 B APHA 22 Edison

Note: All Monitored Values for Sox and Nox corrected at 6% Oxygen, on Dry Basis.

As per MOEFCC letter CG-DL-E-22102020-222659 dt. 22.10.2020 revised NOx limit.

BDL: Below Detection Limit; Hg: 0.018mg/Nm³.

Remarks:

Opinion & Interpretation (if required):

***** End of Report *****

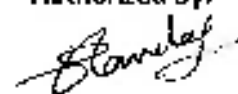
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jalvik S. Tandel
(Manager - Operations)
UURL/AIR/F-01/04

Note: This report is subject to Terms and Conditions mentioned overleaf.

MOEF&CC (G.O.) Recognized Environmental
 Laboratory under the EPA-1986 (P.C.I) WAO No. 1703/2003

 OCA-ABDT Accredited QA
 Consultant Organization

 CPCB Recognized Environmental
 Auditor (Scheme No. 5-11)

 ISO 9001:2015
 Certified Company

 ISO 45001:2018
 Certified Company

TEST REPORT (STACK MONITORING)

Test Report No.	URA/21/09/S-AP004	Report Issue Date	04/10/2021
Sample ID No.	URA/ID/S 21/09/004		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch. GUJARAT - 370 435.		
Date of Sampling	30/09/2021	Date of Testing	01/10/2021
Stack Attached to	Unit - 4 Boiler (S4)		
Air Pollution Control Device	Electrostatic Precipitator (ESP).		
Fuel Used	Imported Coal		

Details of Instrument Used for Monitoring

Instrument Id No.	UERL/AIR/SMK/51		
Instrument Name	Stack Monitoring Kit, VSS1	Serial Number	319, DTE - 14
Calibration Date	01/07/2021	Next Calibration Due On	30/06/2022

General Stack Monitoring Observation

Sr. No.	Description	Unit of measurement	Observation
1.	Stack Height	m	275
2.	Stack Dia	m	5.4
3.	Ambient Temperature	°C	33
4.	Flue Gas Temperature	°C	134
5.	Exit Gas Velocity	m/s	23.5
6.	Capacity (MW)	MW	330
7.	Operating load during monitoring	MW	312

Test Parameter Results

Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm ³	32.4	50	IS 11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm ³	470.2	600	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm ³	742.6	450	IS 11255 (Part 7)
4.	Mercury	mg/Nm ³	BDL	0.03	AAS by VGA Method - 3112 B APHA 22 Edison

Note: All Monitored Values for So_x and No_x corrected at 6% Oxygen, on Dry Basis.

As per MOEFCC letter CG DL-E 22102020 222659 dt. 22.10.2020 revised NO_x limit

BDL: Below Detection Limit: Hg: 0.018mg/Nm³.

Remarks:

Opinion & Interpretation (if required):

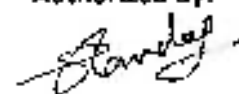
***** End of Report *****

Checked By:



Nikunj D. Patel
(Chemist)
Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-04/04

Note: This report is subject to Terms and Conditions mentioned overleaf.

ISO 15189:2013 Recognized Environmental Laboratory under the ISO 15189:2013 of 17.03.2020

GOVERNMENT Approved Environmental Consultant Organization

ISO 15189:2013 Recognized Environmental Auditor (Schedule 1)

ISO 9001:2015 Certified Company

ISO 14001:2015 Certified Company

TEST REPORT (STACK MONITORING)

Test Report No.	URA/21/09/S-AP005	Report Issue Date	30/09/2021
Sample ID No.	URA/ID/S-21/09/005		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch. GUJARAT - 370 435.		
Date of Sampling	22/09/2021	Date of Testing	23/09/2021
Stack Attached to	Unit - 5 Boiler (S5)		
Air Pollution Control Device	Electrostatic Precipitator (ESP).		
Fuel Used	Imported Coal		

Details of Instrument Used for Monitoring

Instrument Id No.	UURL/AIR/SMK/S1		
Instrument Name	Stack Monitoring Kit, VSS1	Serial Number	319, DTE - 14
Calibration Date	01/07/2021	Next Calibration Due On	30/06/2022

General Stack Monitoring Observation

Sr. No.	Description	Unit of measurement	Observation
1.	Stack Height	m	275
2.	Stack Dia	m	7.3
3.	Ambient Temperature	°C	33
4.	Flue Gas Temperature	°C	148
5.	Exit Gas Velocity	m/s	23.2
6.	Capacity (MW)	MW	660
7.	Operating load during monitoring	MW	480

Test Parameter Results

Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm ³	33.2	50	IS 11255 (Part 1)
2.	Sulphur Dioxide	mg/Nm ³	519.7	200	IS 11255 (Part 2)
3.	Oxide of Nitrogen	mg/Nm ³	233.3	450	IS 11255 (Part 7)
4.	Mercury	mg/Nm ³	BDL	0.03	AMS by VGA Method 3112 B APHA 22 Edison

Note: All Monitored Values for So_x and No_x corrected at 6% Oxygen, on Dry Basis.

As per MOEFCC letter CG-DL E 22102020-222659 dt. 22.10.2020 revised NO_x limit

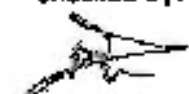
BDL: Below Detection Limit: Hg: 0.018mg/Nm³

Remarks:

Opinion & Interpretation (If required):

***** End of Report *****

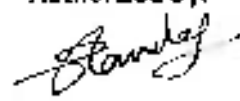
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaiwalk S. Tandel
(Manager Operations)
UURL/AIR/F 04/04

Note: This report is subject to Terms and Conditions mentioned overleaf.

**TEST REPORT
(STACK MONITORING)**

Test Report No.	URA/21/09/S-AP006	Report Issue Date	30/09/2021
Sample ID No.	URA/ID/S-21/09/006		
Name & Add. of Customer	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch. GUJARAT - 370 435.		
Fuel Used	Imported Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Name	Flue Gas Analyzer	Serial Number	01902183
Calibration Date	02/01/2021	Next Calibration Due On	01/01/2022

➤ **Test Parameter Results**

Unit	Date of Monitoring	Plant Load Capacity (MW)	Plant Load during Monitoring (MW)	CO ₂ Emission %
Unit - 1	18/09/2021	330	320	13.2
Unit - 2	18/09/2021	330	315	12.7
Unit - 3	18/09/2021	330	280	12.6
Unit - 4	30/09/2021	330	312	13.3
Unit - 5	22/09/2021	660	480	11.6

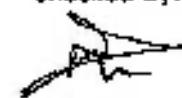
Note: The flue gas analyzer consists of different sensor and it works on Electrochemical Sensor.

Remarks:

Opinion & Interpretation (If required):

***** End of Report *****

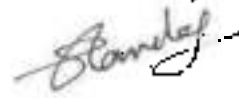
Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-04/04

Note: This report is subject to Terms and Conditions mentioned overleaf.

TEST REPORT
AMBIENT NOISE LEVEL MONITORING REPORT

Test Report No.:	URA/21/09/AM-AP001	Date of Report:	30/09/2021
Name & Add. Of Industries	M/s. Adani Power (Mundra) Ltd. Village: Tunda & Siracha, Tal. Mundra, Dist.: Kutch. GUJARAT - 370 435.		
Sampling Method	IS: 9889: 1981		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UURL/AIR/SIM/09A	Sound Level Meter	24 DTE 2008	23/07/2021	22/07/2022

Date of Monitoring: 15-16.09.2021

Result

Sr. No.	Location	Noise Level dB(A)			
		Sampling Time	Day Time dB(A) 06 am - 10 pm	Sampling Time	Night Time dB(A) 10 pm - 06 am
			Limit 75 dB(A)		Limit 70 dB(A)
1.	Nr. LDO Pump House	11:40 am - 13:30 pm	62.7	22:50 pm - 00:30 am	61.5
2.	Nr. 20 MLD Plant		61.5		59.9
3.	Nr. Pump House		61.1		58.4
4.	Nr. Coal Handling plant		64.1		61.1
5.	Nr. Gate No.4		56.0		55.7
6.	Nr. Integrated Ash Silo		62.3		60.5
7.	Nr. Main Gate		59.5		56.8
8.	Nr. APCH Building		61.0		58.7
9.	Nr. Shantlniketan-I		61.2		59.2
10.	Nr. OHC Building		60.5		59.7

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

Remarks:

Opinion & Interpretation (if required):

***** End of Report *****

Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UURL/AIR/F-18/03

Note: This report is subject to Terms and Conditions mentioned overleaf.

Report No: - EE/ENV/2021/07/073

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/AA1
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	Near Security Gate
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	IS 5182: Part - 5: 2014
Analysis Completion On	24/07/2021	Sample Received Date	21/07/2021

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
1.	Particulate Matter (PM ₁₀)	µg/m ³	40.12	100	IS 5182 Part 23 : 2017
2.	Particulate Matter (PM _{2.5})	µg/m ³	15.43	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO ₂)	µg/m ³	04.21	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO ₂)	µg/m ³	09.52	80	IS 5182 Part 6 : 2017

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judicially purpose without our prior permission.
- Samples will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/07/074

Date: 27/07/2021

ANALYSIS REPORT

(for the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST1
Address	Survey No. 169/P, Adani Port & Special Economic Zone, Ta, Mundra, Dist, Kutch	Location	L2-C BS-11
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-'4
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L2-C-BS-11	
1.	Oxygen (O ₂)	%	15.6	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	6.5	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	06	EPA method 10
4.	Stack Temperature (ST)	°C	216	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	24.12	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	3.54	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	4.15	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be retained for 15 Days from the date of sampling.



Report No: EE/ENV/2021/07/075

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/S12
Address	Survey No. 168/p, Adani Port & Special Economic Zone, Ta, Mundra, Dist. Kutch.	Location	L2-C-B5 21
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L2-C-B5-21	
1.	Oxygen (O ₂)	%	16.7	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	7.1	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	01	EPA method 10
4.	Stack Temperature (ST)	°C	241	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	22.17	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	4.16	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	3.87	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/07/076

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST3
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L2-C-B5-31
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L2-C-B5-31	
1.	Oxygen (O ₂)	%	14.2	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	6.9	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	03	EPA method 10
4.	Stack Temperature (S _t)	°C	363	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	26.14	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	6.41	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	5.87	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/07/077

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST4
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L2-C BS-41
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earin Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/90/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sl. No.	Parameters	Unit	Results	Reference Method
			L2-C-B5-41	
1.	Oxygen (O ₂)	%	16.4	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	4.1	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	05	EPA method 10
4.	Stack Temperature (S1)	°C	383	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	22.71	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	5.64	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	4.87	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be retained 11-15 Days from the date of sampling.

Report No. : EE/ENV/2021/07/078

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST5
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L2-C-BS
		Nature of Sample	Stack Monitoring Kil
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/PO/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L2-C-BS	
1.	Oxygen (O ₂)	%	15.8	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	4.3	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	04	EPA method 10
4.	Stack Temperature (ST)	°C	238	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	24.19	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	6.20	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	5.12	IS 11255 (P-2)

Analyzed By:




- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Date: 27/07/2021

Report No.: EE/ENV/2021/07/079

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST6
Address	Survey No. 169/3, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L1-SD-B5-11
Sampling Done By	Earth Envirotech Team	Nature of Sample	Stack Monitoring KIt
		Quantify	N/A
Analysis Starts on	21/07/2021	Date of Sampling	20/07/2021
Analysis Completion On	24/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013 14
		Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L1-SD-B5-11	
1.	Oxygen (O ₂)	%	15.8	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	5.1	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	07	EPA method 10
4.	Stack Temperature (ST)	°C	156	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	22.87	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	6.41	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	6.03	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No. - EE/ENV/2021/07/080

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July - 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BL/ST7
Address	Survey No. 169/p, Adani Port & Special Economic Zone, To. Mundra, Dist. Kutch	Location	L1-SD-B5-21
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-'4
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L1-SD-B5-21	
1.	Oxygen (O ₂)	%	14.8	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	3.6	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	13	EPA method 10
4.	Stack Temperature (ST)	°C	231	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	26.74	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	6.98	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	5.64	IS 11255 (P-7)

Analyzed By:



Authorized Signatory:



- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No. - EE/ENV/2021/07/081

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST8
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	LI-SD-B5-31
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			LI-SD-B5-31	
1.	Oxygen (O ₂)	%	13.9	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	6.12	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	17	EPA method 10
4.	Stack Temperature (ST)	°C	245	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	30.54	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	8.4	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	7.1	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/07/082

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST9
Address	Survey No. 169/p, Adam Port & Special Economic Zone, Tal. Mundra, Dist. Kutch	Location	L1-SD-BS-41
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring IATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L1-SD-B5-41	
1.	Oxygen (O ₂)	%	15.2	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	6.1	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	07	EPA method 10
4.	Stack Temperature (St)	°C	309	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	23.58	IS 11265 (P-1)
6.	Sulphur Di Oxide	ppm	7.15	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	5.90	IS 11255 (P-2)

Analyzed By:

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No.: EE/ENV/2021/07/093

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Brilliant Industries Ltd.	Sample Code	BIL/ST10
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L1-SD-BS
		Nature of Sample	Stack Monitoring KIL
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L1-SD-BS	
1.	Oxygen (O ₂)	%	14.6	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	5.8	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	14	EPA method 10
4.	Stack Temperature (ST)	°C	274	EPA method 3A
5.	Suspended Particulate matter	Mg/Nm ³	26.78	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	06.21	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	05.74	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained 30-45 Days from the date of sampling.

Report No. : EE/ENV/2021/07/084

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	3IL/S111
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L3-RB-BS-11
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013 14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L3-RB-BS-11	
1.	Oxygen (O ₂)	%	16.9	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	3.7	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	67	EPA method 10
4.	Stack Temperature (St)	°C	109	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	24.85	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	06.15	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	04.51	IS 11255 (P-7)

Analyzed By:




- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: • EE/ENV/2021/07/085

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST12
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L3-RB-BS-21
		Nature of Sample	Stack Monitoring Kil
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L3-RB-BS-21	
1.	Oxygen (O ₂)	%	15.9	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	3.3	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	51	EPA method 10
4.	Stack Temperature (ST)	°C	211	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	27.86	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	06.20	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	07.56	IS 11255 (P-7)

Analyzed By




- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/07/086

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BL/S713
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L3-RT-BS-11
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L3-RT-BS-11	
1.	Oxygen (O ₂)	%	12.7	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	6.7	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	74	EPA method 10
4.	Stack Temperature (ST)	°C	168	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	31.45	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	65.84	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	66.92	IS 11255 (P-2)

Analyzed By:



Authorized Signatory:



- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: • EE/ENV/2021/07/087

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST14
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L3-RT-BS-21
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
		Sampling Done By	
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L3-RT-BS-21	
1.	Oxygen (O ₂)	%	3.1	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	7.1	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	240	EPA method 1C
4.	Stack Temperature (ST)	°C	11	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	28.41	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	07.19	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	06.84	IS 11255 (P-2)

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/07/088

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/ST15
Address	Survey No. 169/p, Aadani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	L3-R7-BS-31
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			L3-R7-BS-31	
1.	Oxygen (O ₂)	%	15.7	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	6.8	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	4	EPA method 10
4.	Stack Temperature (ST)	°C	184	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	26.81	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	07.54	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	05.71	IS 11255 (P-3)

Analyzed By:




- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained 15 Days from the date of sampling.

Report No.: - EE/ENV/2021/07/069

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Brillannia Industries Ltd.	Sample Code	BIL/ST16
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	D.G set
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			D.G set	
1.	Oxygen (O ₂)	%	15.8	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	4.7	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	29B	EPA method 10
4.	Stack Temperature (ST)	°C	59	EPA method 3A
5.	Suspended Particulate matter	Mg/NM ³	85.11	IS 11255 (P-1)
6.	Sulphur Di Oxide	ppm	14.23	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	08.54	IS 11255 (P-7)

Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained (il 15 Days) from the date of sampling.

Report No.: EE/ENV/2021/07/090

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	3IL/ST17
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Id, Mundra, Dist. Kutch.	Location	Diesel Engine Pump
		Nature of Sample	Stack Monitoring Kit
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013 14
Analysis Completion On	24/07/2021	Sample Received Date	20/07/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
			Diesel Engine Pump	
1.	Oxygen (O ₂)	%	10.3	EPA method 3A
2.	Carbon dioxide (CO ₂)	%	4.8	EPA method 3A
3.	Carbon Monoxide (CO)	ppm	220	EPA method 10
4.	Stack Temperature (ST)	°C	67	EPA method 3A
5.	Suspended Particulate matter	Mg/Nm ³	64.02	IS 11255 (P-1)
6.	Sulphur Dioxide	ppm	09.41	IS 11255 (P-2)
7.	Oxides of Nitrogen	ppm	06.74	IS 11255 (P-2)

Analyzed By:



Authorized Signatory:



- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: EE/ENV/2021/07/091

Date: 27/07/2021

ANALYSIS REPORT

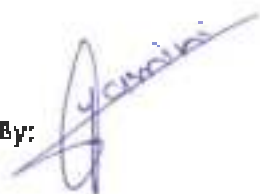
(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/N1-N4
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	As per table
		Quantity	NA
		Date of Measurement	20/07/2021
Sampling Done By	Earth Envirotech Team	Sampling Instrument	Sound Level Meter (HTC/SL-1350)
Measurement Completion Date	20/07/2021	Sampling Method	IS 9876 : 1981 & 9989 : 1981

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day time	
			Observed Value	Standard Limit
1.	Near Admin Office	dB (A)	56.7	75.0
2.	Near Cream Area	dB (A)	63.4	75.0
3.	Near Cream Preparation Room	dB (A)	70.1	75.0
4.	Near Biscuit Outline Sugar Grinder	dB (A)	72.4	75.0
5.	Near D.G.Set Area	dB (A)	71.8	75.0

Checked By:




- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports cannot be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

Report No: EE/ENV/2021/07/092

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/L1-L6
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	As per table
		Quantity	NA
		Date of Measurement	20/07/2021
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Lux Meter (LX-101 A)
Measurement Completion Date	20/07/2021	Sampling Method	Lutron - LX-101 Inst, Manual

LUX MONITORING RESULTS

Sr. No.	Location Name	In Lux
1.	Near Cream Area	173
2.	Near Sugar Grading Room	205
3.	In RM storage room	311
4.	In Finished product storage Area	267
5.	Rusk Line	169
6.	Biscuit Line	179

Checked By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one (1) days from the date of sampling.

Report No: - EE/ENV/2021/07/D93

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Birannala Industries Ltd.	Sample Code	BII /WW1
Address	Survey No. 169/p.	Location	ETP Outlet
	Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Quantity	5 L
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	IS 3025 (P-1)
Analysis Completion On	27/07/2021	Sample Received Date	21/07/2021

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	GPCB Limit.
1.	pH	—	7.7	6.5 – 8.5
2.	Temperature	°C	29	45°C
3.	Colour	Units	14	100
4.	Suspended Solids	mg/l	32	100
5.	Oil & Grease	mg/l	1.9	10
6.	Phenolic Compound	mg/l	BDL	01
7.	% Sodium	mg/l	50.5	60
8.	Biochemical Oxygen Demand (5 days at 20°C)	mg/l	1.25	30
9.	Chemical Oxygen Demand	mg/l	31.7	100
10.	Chlorides	mg/l	230.43	600
11.	Sulphate as SO ₄	mg/l	84	1000
12.	Total Dissolved Solids	mg/l	749.8	2100

Analyzed By:




- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.



Report No. : EE/ENV/2021/07/094

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/WW2
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	SIP Outlet
		Quantity	5 L
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	IS 3025 (P-1)
Analysis Completion On	27/07/2021	Sample Received Date	21/07/2021

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	GPCB Limit
1.	pH	—	7.5	6.5 – 9.0
2.	Temperature	°C	28	45°C
3.	Colour	Units	21	100
4.	Suspended Solids	mg/l	28	50
5.	Oil & Grease	mg/l	3.9	10
6.	Ammonical Nitrogen	mg/l	7.5	100
7.	Biochemical Oxygen Demand (5 days at 20°C)	mg/l	28	20
8.	Chemical Oxygen Demand	mg/l	99.2	100
9.	Chlorides	Mg/l	591.28	600
10.	Total Dissolved Solids	mg/l	1180	2100

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2021/07/095

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/DWI
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Ta. Mundra, Dist. Kutch	Location	Drinking Water
		Quantity	2 L
Sampling Done By	Earth Envirotech Team	Date of Sampling	20/07/2021
Analysis Starts on	21/07/2021	Sampling Method	IS 3025 (P-1)
Analysis Completion On	27/07/2021	Sample Received Date	21/07/2021

DRINKING WATER ANALYSIS RESULTS

Sr. No.	Parameter	Unit	Result	Desirable Limit IS-10500-2012 Max-limit
1.	pH	--	7.9	6.5-8.5
2.	Odor	-	Odorless	Unobjectionable
3.	Color	Pt. Co.	Colorless	05
4.	Taste	-	Agreeable	Agreeable
5.	Turbidity	NTU	Nil	05
6.	TDS	Mg/l	166.3	500
7.	Total Hardness (as CaCO ₃)	Mg/l	10	300
8.	Chloride	Mg/l	32.50	250
9.	Iron	Mg/l	BDL	0.3
10.	Residual Free Chlorine	Mg/l	BDL	0.2
11.	Calcium (as Ca)	Mg/l	6.41	75
12.	Magnesium	Mg/l	0.871	30
13.	Copper	Mg/l	BDL	0.08
14.	Manganese	Mg/l	BDL	0.12
15.	Sulphate	Mg/l	38	200
16.	Fluoride	Mg/l	BDL	0.87
17.	Zinc	Mg/l	BDL	03
18.	Anionic Detergents	Mg/l	BDL	0.1



Report No: - EE/ENV/2021/07/095				Date: 27/07/2021
Sr. No.	Parameter	Unit	Result	Desirable Limit
19	Mineral Oil	Mg/l	BDL	0.01
20	Alkalinity	Mg/l	20	200
21	Aluminum	Mg/l	BDL	0.02
22	Boron	Mg/l	BDL	0.84
23	Barium	Mg/l	BDL	0.7
24	Silver	Mg/l	BDL	0.1
25	Selenium	Mg/l	BDL	0.01
26	Molybdenum	Mg/l	BDL	0.07
27	Sulphide	Mg/l	BDL	0.05
28	Ammonia	Mg/l	BDL	0.5
29	Chloramine	Mg/l	BDL	4.0
30	Phenolic Compound	Mg/l	BDL	0.001
31	Nitrate	Mg/l	0.1	46
32	Bacteriological Examination			
	(i) E.Coli Test	Per 100 ml	Absent	Absent

Note: ND: - Not Detected, BDL – Below Detectable Limit.

Analyzed By:




Authorized Signatory:

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2021/07/096

Date: 27/07/2021

ANALYSIS REPORT

(For the Month of July- 2021)

Client Details		Sample Details	
Name	Britannia Industries Ltd.	Sample Code	BIL/W1
Address	Survey No. 169/p, Adani Port & Special Economic Zone, Tal. Mundra, Dist. Kutch	Location	Raw Water (Namada)
		Quantity	2 L
Sampling Done By	Earth Envirotech team	Date of Sampling	23/07/2021
Analysis Starts on	21/07/2021	Sampling Method	IS 3025 (P-1)
Analysis Completion On	27/07/2021	Sample Received Date	21/07/2021

WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
1.	pH	—	7.7	IS 3025 (P-1)
2.	Total Dissolved Solids	mg/l	194.2	IS 3025 (P-16)
3.	Total Suspended Solids	mg/l	5.8	IS 3025 (P-17)
4.	Chloride as Cl	mg/l	261.44	IS 3025 (P-32)
5.	Total Hardness as CaCO ₃	mg/l	76	IS 3025 (P-21)

Analyzed By:



Authorized Signatory



- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judicial purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

FORM NO.37

[Prescribed under rule 12-B]

Register containing particulars of monitoring of working environment required under section 7-A (a) (e).

 Name of the Department/Plant: **Britannia Industries Limited.**

1. Raw materials, by products and finished products involving in the process : Total Dust
2. Particular of sampling

 Date of Sampling: **20/07/2021**

ISSUE DATE	27/07/2021
REF. NO	BIL/F37/097

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling Instrument used	Air borne Contamination			TWA concentration (As given in second schedule)	Reference Method	No of workers Exposed at the location being monitored	Remarks	Name of Person person taking sample
				No of samples	Range	Average	Mg/m ³				
1	Packing Area (Rusk Twaisting)	RSPM (Total Dust)	RDS	02	5-6	5.22	10	Gravimetric	08	--	Mr. Sagar Bhandari

For: Earth envirotech



FORM NO.37

(Prescribed under rule 12-8)

Register containing particulars of monitoring of working environment required under section 7-A (a) (c).

 Name of the Department/Plant: **Britannia Industries Limited.**

1. Raw materials, by products and finished products involving in the process : Total Dust
2. Particular of sampling

Date of Sampling: 20/07/2021

ISSUE DATE	27/07/2021
REF. NO	BIL/F37/098

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling Instrument used	Air borne Contamination			TWA concentration (As given in second schedule)	Reference Method	No of workers Exposed at the location being monitored	Remarks	Name of Person taking sample
				No of samples	Range	Average	Mg/m ³				
1	Mixing Area -Rusk Plant	RSPM (Total Dust)	RDS	02	5.6	5.37	10	Gravimetric	09	---	Mr. Sagar Bhandari



FORM NO.37

{Prescribed under rule 12-B}

Register containing particulars of monitoring of working environment required under section 7-A (a) (e).

Name of the Department/Plant: **Britannia Industries Limited.**

1. Raw materials, by products and finished products involving in the process : Total Dust
2. Particular of sampling

Date of Sampling: 20/07/2021

ISSUE DATE	27/07/2021
REF. NO	BIL/F37/099

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling instrument used	Air borne Contamination			TWA concentration (As given in second schedule)	Reference Method	No of workers Exposed at the location being monitored	Remarks	Name of Person taking sample
				No of samples	Range	Average	Mg/m ³				
1	Raw Material Area	RSPM (Total Dust)	RDS	02	5-6	5.10	10	Gravimetric	05	--	Mr. Sagar Bhandari



FORM NO.37

(Prescribed under rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A (a) (c).

 Name of the Department/Plant: **Britannia Industries Limited.**

1. Raw materials, by products and finished products involving in the process : Total Dust
2. Particular of sampling

 Date of Sampling: **20/07/2021**

ISSUE DATE	27/07/2021
REF. NO	BIL/F37/100

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling Instrument used	Air borne Contamination			TWA concentration (As given in second schedule)	Reference Method	No of workers Exposed at the location being monitored	Remarks	Name of Person person taking sample
				No of samples	Range	Average	Mg/m ³				
1	Maida and Sugar Handling area	RSPM, (Total Dust)	RDS	02	5-6	5.46	10	Gravimetric	08	--	Mr. Sagar Ghanderi

 For: **EARTH Envirotech**


Authorized Signatory

FORM NO.37

(Prescribed under rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A (a) (e).

 Name of the Department/Plant: **Britannia Industries Limited.**

1. Raw materials, by products and finished products involving in the process : Total Dust
2. Particular of sampling

Date of Sampling: 20/07/2021

ISSUE DATE	27/07/2021
REF. NO	BIL/F37/101

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling Instrument used	Air borne Contamination			TWA concentration (As given in second schedule)	Reference Method	No of workers Exposed at the location being monitored	Remarks	Name of Person person taking sample
				No of samples	Range	Average	Mg/m ³				
1	Maida Handling area - Rusk	RSPM (Total Dust)	RDS	02	5-6	5.41	10	Gravimetric	07	---	Mr. Sagar Bhandari



FORM NO.37

(Prescribed under rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A (a) (c).

 Name of the Department/Plant: **Britannia Industries Limited.**

1. Raw materials, by products and finished products involving in the process : Total Dust
2. Particular of sampling

 Date of Sampling: **20/07/2021**

ISSUE DATE	27/07/2021
REF. NO	BIL/F37/102

Sr. No	Location/ Operation Mentioned	Identified Contaminant	Sampling Instrument used	Air borne Contamination			TWA concentration (As given in second schedule)	Reference Method	No of workers Exposed at the location being monitored	Remarks	Name of Person taking sample
				No of samples	Range	Average					
1	Mixing area - Discult Plant	SSPM (Total Dust)	RDS	02	5-6	5.61	10	Gravimetric	09	---	Mr. Sagar Bhandari

For, Earth Envirotech





Royal

Environment Auditing & Consultancy Service

303-304, Shivaji-7, B/s. Bal Adalat, Gondal Road, RAJKOT - 360 002.

Ph.: +91 281 2380695 • E-mail : royaleenvironment@live.com • admin@royalconsultancy.com

Ref.No.: 404/04/2021-22

Date: 30/04/2021

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of Company: Ahlstrom Munksjo Fibercomposites India Pvt. Ltd.

Address: Mundra SEZ Integrated Textile & Apparell Park,

(MITAP), Plot No. - 07

Survey No. -141, Mundra,

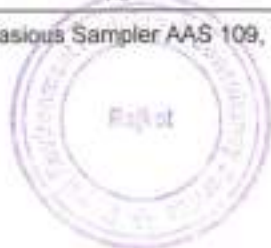
Kutch-370421

Test Method : As per IS Standards - 5182_2/4/6

Sr.No.	Particulars	Unit	Location No. 1	Location No. 2
01.	Location of Sampling	---	Nr. New Security Gate	Nr. Old Security Gate
02.	Date of sampling	---	24/04/2021	24/04/2021
03.	Time of sampling	Hr.	11.20	11.50
04.	Duration of sampling	Hrs.	24.00	24.00
05.	Dominant Wind Direction (From)	---	NE	NE
06.	Average Wind Speed	Km/Hr.	7.3	7.5
07.	Average flow rate during sampling	m ³ /minute	1.2	1.1
08.	Average flow rate for Gas sampling	Meter	0.2	0.2
09.	Permissible Limits of PM _{2.5}	µg/m ³	60	60
10.	Measured Concentration of PM _{2.5}	µg/m ³	33	42
11.	Permissible Limits of PM ₁₀	µg/m ³	100	100
12.	Measured Concentration of PM ₁₀	µg/m ³	71	62
13.	Permissible Limits of SO ₂	µg/m ³	80	80
14.	Measured Concentration of SO ₂	µg/m ³	15.3	12.8
15.	Permissible Limits of NO ₂	µg/m ³	80	80
16.	Measured Concentration of NO ₂	µg/m ³	21.5	25.3

Instrument Used : Ecotech make AAS - 217 BL , Gaseous Sampler AAS 109, PM 2.5 Sampler AAS 127

Calibration Done on : 15/06/2020





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Environment Auditing & Consultancy Service

303-304, Shivnagar-7, B/s. Bai Adalat, Gondal Road, RAJKOT - 360 002.

Ph.: +91 281 2360695 ■ E-mail : royaleenvironment@live.com ■ admin@royalconsultancy.com

Ref.No.: 405/04/2021-22

Date: 30/04/2021

REPORT OF AMBIENT NOISE LEVEL MEASUREMENT

Name of Company : Ahlstrom Munksjo Fibercomposites India Pvt. Ltd.

Address: Mundra SEZ Integrated Textile & Apparell Park,

(MITAP), Plot No. - 07

Survey No. -141, Mundra,

Kutch-370421

Date of sampling : 24/04/2021

Sr. No.	Location of Sampling	Day Time	Night Time
		6:00 AM - 10:00 PM	10:00 PM - 6:00 AM
	Permissible Limits	75 dB(A)	70 dB(A)
01.	Nr. Sec.Main Gate	53.4	55.3
02.	Nr. STP	65.4	56.8
03.	Nr. FO Storage Area	70.5	57.8

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB,C-80 to 130 Meter

Calibration Done On : 12/09/2020


Royal Environment Auditing & Consultancy Service




Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s. Bal Adalat, Gondal Road, RAJKOT - 360 002.

Ph.: +91 281 2360695 • E-mail : royaleenvironment@live.com • admin@royalconsultancy.com

Ref.No.: 504/07/2021-22

Date: 26/07/2021

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of Company: Ahlstrom Munksjo Fibercomposites India Pvt. Ltd.

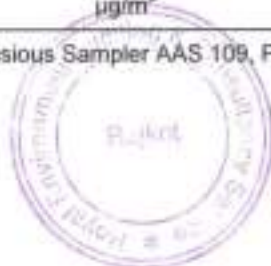
Address: Mundra SEZ Integrated Textile & Apparell Park,
(MITAP), Plot No. - 07
Survey No. -141, Mundra,
Kutch-370421

Test Method : As per IS Standards - 5182_2/4/6

Sr.No.	Particulars	Unit	Location No. 1	Location No. 2
01.	Location of Sampling	---	Nr. New Security Gate	Nr. Old Security Gate
02.	Date of sampling	---	16/07/2021	16/07/2021
03.	Time of sampling	Hr.	11.30	10.55
04.	Duration of sampling	Hrs.	24.00	24.00
05.	Dominant Wind Direction (From)	---	SW	SW
06.	Average Wind Speed	Km/Hr.	10.7	10.4
07.	Average flow rate during sampling	m ³ /minute	1.1	1.2
08.	Average flow rate for Gas sampling	Meter	0.2	0.2
09.	Permissible Limits of PM _{2.5}	µg/m ³	60	60
10.	Measured Concentration of PM _{2.5}	µg/m ³	37	40
11.	Permissible Limits of PM ₁₀	µg/m ³	100	100
12.	Measured Concentration of PM ₁₀	µg/m ³	66	60
13.	Permissible Limits of SO ₂	µg/m ³	80	80
14.	Measured Concentration of SO ₂	µg/m ³	13.2	11.1
15.	Permissible Limits of NO ₂	µg/m ³	80	80
16.	Measured Concentration of NO ₂	µg/m ³	19.8	22.8

Instrument Used : Ecotech make AAS - 217 BL , Gaseous Sampler AAS 109, PM 2.5 Sampler AAS 127

Calibration Done on. : 15/06/2020





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Ph.: +91 281 2360685 ■ E-mail : royaleenvironment@live.com ■ admin@royalconsultancy.com

Ref.No.: 505/07/2021-22

Date: 26/07/2021

REPORT OF AMBIENT NOISE LEVEL MEASUREMENT

Name of Company : Ahlstrom Munksjo Fibercomposites India Pvt. Ltd.

Address: Mundra SEZ Integrated Textile & Apparell Park,
(MITAP), Plot No. - 07
Survey No. -141, Mundra,
Kutch-370421

Date of sampling : 16/07/2021

Sr. No.	Location of Sampling	Day Time	Night Time
		6:00 AM - 10:00 PM	10:00 PM - 6:00 AM
	Permissible Limits	75 dB(A)	70 dB(A)
01.	Nr. Sec.Main Gate	51.9	49.8
02.	Nr. STP	67.2	54.6
03.	Nr. FO Storage Area	68.4	55.4

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB,C-80 to 130 Meter

Calibration Done On : 12/09/2020

Royal Environment Auditing & Consultancy Service

Ashish
Analyst





ANALYSIS REPORT
(AMBIENT AIR QUALITY MONITORING)

Report No.:	ECS/OCCL/A/21-22/481
Report issue Date:	07/08/2021
Field Data Sheet No.:	ECS/FDS/07/21/032
Sample ID No.:	ECS/ID/A-150-153/08/21/01-04
Name & Add. of Industry:	ORIENTAL CARBON & CHEMICALS LIMITED (PCB ID: 13896) Plot No: 141/P, Mundra SEZ, Tal:- Mundra, Dist.: Kutch 370421.
Analysis Started on:	28/07/2021
Analysis Completed on:	05/08/2021
Sampling Done By:	Envirochem Consultancy Services Team.
Sampling Method:	CPCB Guideline.

> Test Parameter Results

Sr. No.	Test Parameter	Unit	Location	Nr. Office Area	Nr. R O Plant	Nr. Storage Area (U34)	Nr. (CF) Boiler Area	Permissible Limit (As per NAAQMS)
			Date of Sampling	26/07/2021	26/07/2021	27/07/2021	27/07/2021	
			Test Method	Results				
1.	Particulate Matter. (PM ₁₀)	µg/m ³	IS - 5182, Part - 23	78.64	85.83	88.47	74.29	100
2.	Particulate Matter. (PM _{2.5})	µg/m ³	ECS/AIR/SOP/11	26.56	33.16	48.52	24.57	60
3.	Sulphur Dioxide (SO ₂)	µg/m ³	IS - 5182, Part - 2	16.32	19.34	21.84	17.65	80
4.	Nitrogen Dioxide (NO _x)	µg/m ³	IS - 5182, Part - 6	20.49	24.18	21.61	22.83	80

Sampling Done by:

Tested By:

Authorized by:





TEST REPORT
(STACK EMISSION ANALYSIS REPORT)

Report No.:	ECS/OCCL/S/21-22/482
Report issue Date:	07/08/2021
Field Data Sheet No.:	ECS/FDS/07/21/032
Sample ID No.:	ECS/ID/S-190-193/08/21/01-04
Name & Add. of Industry:	ORIENTAL CARBON & CHEMICALS LIMITED (PCB ID: 13896) Plot No: 141/P, Mundra SEZ, Tal:- Mundra, Dist.: Kutch 370421.
Analysis Started on:	28/07/2021
Analysis Completed on:	04/08/2021
Sampling Done By:	Envirochem Consultancy Services Team.
Sampling Method:	Sampling: Guidelines on methodologies for source emission monitoring LATS/80/2013-14

> **General Stack Monitoring Observation**

Stack Attached to	CF Boiler	D. G. Set (1010 KVA)	Refiner (U1)	Refiner (U2)
Fuel Used	Coal/Agro waste	HSD	HSD	HSD
Stack Height in (Meter)	40	22	10	10

> **Test Parameter Results**

Sr. No.	Test Parameter	Unit	Stack attached to	CFB Boiler	D. G. Set (1010 KVA)	Refiner (U1)	Refiner (U2)	Permissible Limit as per GPCB Consent
			Sampling Date	26/07/21	27/07/21	27/07/21	27/07/21	
			Test Method	Results				
1.	Particulate Matter (PM)	mg/Nm ³	IS: 11255 (Part-1)	34.28	72.41	41.64	38.15	150
2.	Sulphur Dioxide (SO ₂)	ppm	IS: 11255 (Part-2)	26.74	24.96	21.58	22.46	100
3.	Oxide of Nitrogen (NO _x)	ppm	IS: 11255 (Part-7)	18.56	14.38	12.39	14.28	50

Sampling Done by:

Tested By:

Authorized by:

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TEST REPORT
WASTE WATER ANALYSIS REPORT

Report No.:	ECS/OCCL/W/21-22/483
Report issue Date:	07/08/2021
Field Data Sheet No.:	ECS/FDS/07/21/032
Sample ID No.:	ECS/ID/W-141-144/08/21/01-04
Name & Add. of Industry:	ORIENTAL CARBON & CHEMICALS LIMITED (PCB ID: 13896) Plot No: 141/P, Mundra SEZ, Tal:- Mundra, Dist.: Kutch 370421.
Date of Sampling:	27/07/2021
Analysis Started on:	29/07/2021
Analysis Completed on:	05/08/2021
Sampling Done By:	Envirochem Consultancy Services Team.
Sampling Procedure:	IS 3025 Part 1
Mode of Collection	Grab
Parameters Analyzed onsite	pH & Temperature

> **Test Parameter Results**

Sr. No.	Parameters	Test Method	GPCB limit for Treated Effluent	Results			
				ETP Inlet	Aeration	Without Filtration	ETP Outlet
1.	pH @ 25 °C	(APHA 23 rd Ed.,2017, 4500-H ⁺ B)	6.5 - 8.5	6.65	6.57	6.95	7.14
2.	Temperature	(APHA 23 rd Ed.,2017,2550)	40 °C	28.6	27.2	26.4	27.8
3.	Color (pt. co. scale.)	(APHA 23 rd Ed.,2017,2120)	100 Units	2.8	3.9	0.8	Colorless
4.	Suspended Solids	(APHA 23 rd Ed.,2017,2540 -D)	100 mg/L	58	84	31	23
5.	Oil & Grease (mg/L)	(APHA 23 rd Ed.,2017,5220-B)	10 mg/L	1.9	1.3	1.0	BDL
6.	BOD (3 days at 27 °C)	(APHA 23 rd Ed.,2017,5210-B)	30 mg/L	11.6	10.8	6.3	6.2
7.	COD	(APHA 23 rd Ed.,2017,5220-B)	100 mg/L	183	145	58	57
8.	Chlorides	(APHA 23 rd Ed.,2017,4500-Cl)	600 mg/L	568	674	497	482





9.	Sulphates	(APHA 23 rd Ed.,2017,4500-E)	1000 mg/L	93	98	104	102
10.	Total Dissolved Solids	(APHA 23 rd Ed.,2017,2540- C)	2100 mg/L	1131	1361	1385	1377
11.	Phenolic Compound	IS 3025(Part 43)1992, Amd.2	02 mg/L	BDL	BDL	BDL	BDL
12.	Ammonical Nitrogen	(APHA 23 rd Ed.,2017,4500 NH ₃ -B&C)	50 mg/L	5.4	8.6	3.4	3.3
13.	Sodium Absorption Ratio	IS 11624	26	7.2	9.1	9.3	9.2
14.	Total Chromium (As Cr)	(APHA 23 rd Ed.,2017,3111-B)	0.2 mg/L	BDL	BDL	BDL	BDL
15.	Hexavalent Chromium (As Cr+6)	(APHA 23 rd Ed.,2017,3500 Cr-B)	0.1 mg/L	BDL	BDL	BDL	BDL
16.	Total Copper (As Cu)	(APHA 23 rd Ed.,2017,3111-B)	1.0 mg/L	BDL	BDL	BDL	BDL
17.	Total Iron (As Fe)	(APHA 23 rd Ed.,2017,3111-B)	1.0 mg/L	BDL	BDL	BDL	BDL

BDL = Below Detectable Limit.


Sampling Done by:


Tested By:




Authorized by:



TEST REPORT
WASTE WATER ANALYSIS REPORT

Report No.:	ECS/OCCL/W/21-22/484
Report issue Date:	07/08/2021
Field Data Sheet No.:	ECS/FDS/07/21/032
Sample ID No.:	ECS/ID/W-145-146/08/21/01-02
Name & Add. of Industry:	ORIENTAL CARBON & CHEMICALS LIMITED (PCB ID: 13896) Plot No: 141/P, Mundra SEZ, Tal:- Mundra, Dist:- Kutch 370421.
Date of Sampling:	27/07/2021
Analysis Started on:	29/07/2021
Analysis Completed on:	05/08/2021
Sampling Done By:	Envirochem Consultancy Services Team.
Sampling Procedure:	IS 3025 Part 1
Mode of Collection	Grab
Parameters Analyzed onsite	pH & Temperature

➤ **Test Parameter Results**

Sr. No.	Parameters	Test Method	GPCB limit for Treated Effluent	Results	
				STP Inlet	STP Outlet
1.	pH @ 25 °C	(APHA 23 rd Ed,2017, 4500-H+B)	6.5 - 8.5	7.00	6.70
4.	Suspended Solids	(APHA 23 rd Ed,2017,2540 -D)	30 mg/L	156.8	25.9
6.	BOD (3 days at 27 °C)	(APHA 23 rd Ed,2017,5210-B)	20 mg/L	189.3	14.3
8.	Residual Chlorine	(APHA 23 rd Ed,2017,4500 Cl-B)	0.5 Min	--	0.67

BDL = Below Detectable Limit.

Sampling Done by:

Tested By:



Authorized by:



TEST REPORT
(NOISE MONITORING REPORT)

Report No.:	ECS/OCCL/N/21-22/485
Report issue Date:	07/08/2021
Field Data Sheet No.:	ECS/FDS/07/21/032
Sample ID No.:	ECS/ID/N-49/08/21/01
Name & Add. of Industry:	ORIENTAL CARBON & CHEMICALS LIMITED (PCB ID: 13896) Plot No: 141/P, Mundra SEZ, Tal:- Mundra, Dist.: Kutch 370421.
Date of Monitoring:	27/07/2021
Sampling Done By:	Envirochem Consultancy Services Team.
Sampling Method:	IS : 9989 : 1981

> **Results**

Sr. No.	Location	Noise Level dB(A) (Day Time)	Permissible Limit GPCB
1.	Near Office Area	53.2	<75 dB(A) (Day Time)
2.	Near Main Gate	54.1	
3.	Near RO Plant	54.2	
4.	Near ETP	65.2	
5.	Near STP	70.4	
6.	Near CFPC Boiler	66.8	
7.	Near Material Gate	63.3	
8.	Near Refiner Gate	72.8	
9.	Near Storage Area	67.4	
10.	Near Plant Boundary	58.3	

> **Note:** Ambient Air Quality Standards in respected of Noise as per CPCB.

Area Code	Category of Area/Zone	Limit in dB (A) Leq	
		Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Sampling Done by:

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Authorized by:



TEST REPORT
(HAZARDOUS WASTE ANALYSIS REPORT)

Report No.:	ECS/OCCL/H/21-22/486
Report issue Date:	07/08/2021
Field Data Sheet No.:	ECS/FDS/07/21/032
Sample ID No.:	ECS/ID/H-14/08/21/01
Name & Add. of Industry:	ORIENTAL CARBON & CHEMICALS LIMITED (PCB ID: 13896) Plot No: 141/P, Mundra SEZ, Tal:- Mundra, Dist.: Kutch 370421.
Date of Sampling:	27/07/2021
Analysis Started on:	28/07/2021
Analysis Completed on:	03/08/2021
Sampling Done By:	Envirochem Consultancy Services Team.
Sampling Location:	ETP Sludge
Sampling Method:	EPA SW 846

➤ **Test Parameter Results**

Sr. No.	Parameters	Test Method	Unit	Results
1.	pH @ 25 °C	(APHA 23 rd Ed.,2017,4500-H*B)	---	8.24
2.	Moisture Content	(APHA 23 rd Ed.,2017, 2540 D)	%	28.51
3.	Loss of Ignition	(APHA 23 rd Ed.,2017, 2540 E)	%	45.28
4.	Volatile Solids	(APHA 23 rd Ed.,2017, 2540 E)	%	31.67

Sampling Done by:

Tested By:



Authorized by:

Report No.: - EE/ENV/2021/09/028

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/AA1
Address	Plot No.: 5, Block - B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	Near Security Gate
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/09/2021
Analysis Starts on	04/09/2021	Sampling Method	IS 5182: Part - 5: 2014
Analysis Completion On	07/09/2021	Sample Received Date	04/09/2021

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
			Near Security Gate		
1.	Particulate Matter PM_{10}	$\mu g/m^3$	61.52	100	IS 5182 Part 23 : 2017
2.	Particulate Matter $PM_{2.5}$	$\mu g/m^3$	22.65	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO_2)	$\mu g/m^3$	16.87	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	20.71	80	IS 5182 Part 6 : 2017


Analyzed By:


Authorized Signatory:

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/09/029

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/AA2
Address	Plot No.: 5, Block - B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	Near Canteen Area
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/09/2021
Analysis Starts on	04/09/2021	Sampling Method	IS 5182: Part - 5: 2014
Analysis Completion On	07/09/2021	Sample Received Date	04/09/2021

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
			Near Security Gate		
1.	Particulate Matter PM ₁₀	µg/m ³	56.25	100	IS 5182 Part 23 : 2017
2.	Particulate Matter PM _{2.5}	µg/m ³	19.43	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO ₂)	µg/m ³	15.29	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO ₂)	µg/m ³	18.06	80	IS 5182 Part 6 : 2017



Analyzed By:



Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/09/030

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/ST1
Address	Plot No.: 5, Block - B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	Boiler
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/09/2021
Analysis Starts on	04/09/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	07/09/2021	Sample Received Date	04/09/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Limit as per GPCB Norms	Reference Method
			Boiler		
1.	Particulate Matter (PM)	mg/Nm ³	78.21	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO ₂)	ppm	26.57	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NO _x)	ppm	22.33	50	IS 11255 : Part 7


Analyzed By:



- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2021/09/031

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/ST2
Address	Plot No.: 5, Block - B, Sector-12 - S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	D.G.Set
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/09/2021
Analysis Starts on	04/09/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	07/09/2021	Sample Received Date	04/09/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Limit as per GPCB Norms	Reference Method
			D.G.Set		
1.	Particulate Matter (PM)	mg/Nm ³	73.25	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO ₂)	ppm	22.68	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NO _x)	ppm	18.74	50	IS 11255 : Part 7


Analyzed By:


- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/09/032

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/NT-N5
Address	Plot No.: 5, Block - B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	As per table
		Quantity	NA
		Date of Measurement	04/09/2021
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Sound Level Meter (HTC/SL-1350)
Measurement Completion Date	04/09/2021	Sampling Method	IS 9876 : 1981 & 9989 : 1981

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time	Night Time
			Spot Noise Level dB (A) Maximum	Spot Noise Level dB (B) Maximum
Standard Limit		dB	75	70
1.	Brattice	dB	73.5	70.8
2.	Extruder Floor	dB	69.2	67.5
3.	HDPE Area	dB	69.8	65.8
4.	Near Capstan Machine	dB	70.6	68.1
5.	Near Winder Area	dB	68.1	66.4
6.	Utility Area	dB	67.8	64.7


Analyzed By:


Authorized Signatory:

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2021/09/033

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terrom Geosynthetics Pvt. Ltd.	Sample Code	TGPL/L1
Address	Plot No.: 5, Block - B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	As per table
		Quantity	NA
		Date of Measurement	04/09/2021
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Lux Meter (LX-101 A)
Measurement Completion Date	16/05/2021	Sampling Method	Lutron - LX-101 Inst. Manual

LUX MONITORING RESULTS

Sr. No.	Location Name	In Lux (Day Time)	In Lux (Night Time)
1.	Near Capstan Machine	306	300


Analyzed By:

Authorized Signatory:

- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one 15 days from the date of sampling.

Report No: - EE/ENV/2021/09/034

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/WW1
Address	Plot No.: 5, Block - B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	STP outlet
		Quantity	2 L
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/09/2021
Analysis Starts on	04/09/2021	Sampling Method	APHA 1060
Analysis Completion On	09/09/2021	Sample Received Date	04/09/2021

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
1.	pH	---	6.7	IS 3025 (P-11)
2.	Total Suspended Solids	mg/l	27	IS 3025 (P-17)
3.	Biochemical Oxygen Demand (5 days at 20°C)	mg/l	19.3	APHA 5210
4.	Fecal coli form MPN/100	MPN/100 ml	absent	APHA 9221



Analyzed By:



- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/09/035

Date: 09/09/2021

ANALYSIS REPORT

(For the month of September - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/WW2
Address	Plot No.: 5, Block - 8, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	ETP outlet
		Quantity	2 L
Sampling Done By	Earth Envirotech Team	Date of Sampling	04/09/2021
Analysis Starts on	04/09/2021	Sampling Method	APHA 1060
Analysis Completion On	09/09/2021	Sample Received Date	04/09/2021

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
1.	pH	—	7.1	IS 3025 (P-11)
2.	Temperature	°C	31	APHA 2550 B
3.	Colour	Units	12	IS 3025 (P-4)
4.	Total Dissolved Solids	mg/l	1984	IS 3025 (P-16)
5.	Total Suspended Solids	mg/l	26	IS 3025 (P-17)
6.	Oil & Grease	mg/l	1.4	IS 3025 (P-39)
7.	Ammonical Nitrogen	mg/l	9.3	IS 3025 (P-34)
8.	Chemical Oxygen Demand	mg/l	80.9	IS 3025 (P-58)
9.	Biochemical Oxygen Demand (5 days at 20°C)	mg/l	18.6	APHA 5210
10.	Residual Chlorine	mg/l	Nil	IS 3025 (P-26)
11.	Percent Sodium	%	5.9	IS 3025 (P-45)

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Analyzed By:



- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/05/020

Date: 24/05/2021

ANALYSIS REPORT

(For the month of May - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/AA1
Address	Plot No.: 5, Block – B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch	Location	Near Security Gate
		Quantity	N/A
Sampling Done By	Earth Envirotech Team	Date of Sampling	15/05/2021
Analysis Starts on	15/05/2021	Sampling Method	IS 5182: Part – 5: 2014
Analysis Completion On	21/05/2021	Sample Received Date	15/05/2021

AMBIENT AIR MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS)	Reference Method
			Near Security Gate		
1.	Particulate Matter PM ₁₀	µg/m ³	77.54	100	IS 5182 Part 23 : 2017
2.	Particulate Matter PM _{2.5}	µg/m ³	31.20	60	CPCB manual Volume I
3.	Sulphur Dioxide (SO ₂)	µg/m ³	23.54	80	IS 5182 Part 2 : 2017
4.	Nitrogen Dioxide (NO ₂)	µg/m ³	21.47	80	IS 5182 Part 6 : 2017


Analyzed By:



- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/05/021

Date: 24/05/2021

ANALYSIS REPORT

(For the month of May - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/ST1
Address	Plot No.: 5, Block – B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	Boiler
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	Earth Envirotech Team	Date of Sampling	15/05/2021
Analysis Starts on	15/05/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	21/05/2021	Sample Received Date	15/05/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Limit as per GPCB Norms	Reference Method
			Boiler		
1.	Particulate Matter (PM)	mg/Nm ³	90.78	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO ₂)	ppm	25.41	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NO _x)	ppm	24.24	50	IS 11255 : Part 7

A. Amin
Analyzed By:



- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2021/05/022

Date: 24/05/2021

ANALYSIS REPORT

(For the month of May - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/ST2
Address	Plot No.: 5, Block – B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch,	Location	D.G.Set
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	Earth Envirotech Team	Date of Sampling	15/05/2021
Analysis Starts on	15/05/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	21/05/2021	Sample Received Date	15/05/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Limit as per GPCB Norms	Reference Method
			D.G.Set		
1.	Particulate Matter (PM)	mg/Nm ³	81.27	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO ₂)	ppm	26.87	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NO _x)	ppm	21.14	50	IS 11255 : Part 7

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Report No: - EE/ENV/2021/05/023

Date: 24/05/2021

ANALYSIS REPORT

(For the month of May - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/ST3
Address	Plot No.: 5, Block – B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch,	Location	Drying Oven
		Sampling Instrument	Stack Monitoring Kit
Sampling Done By	Earth Envirotech Team	Date of Sampling	15/05/2021
Analysis Starts on	15/05/2021	Sampling Method	Guidelines on methodologies for source emission monitoring LATS/80/2013-14
Analysis Completion On	21/05/2021	Sample Received Date	15/05/2021

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Limit as per GPCB Norms	Reference Method
			Drying Oven		
1.	Particulate Matter (PM)	mg/Nm ³	88.56	150	IS 11255 : Part 1
2.	Sulphur dioxide (SO ₂)	ppm	26.54	100	IS 11255 : Part 2
3.	Oxides of Nitrogen (NO _x)	ppm	24.74	50	IS 11255 : Part 7

Analyzed By:




- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2021/05/024

Date: 24/05/2021

ANALYSIS REPORT

(For the month of May - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/N1-N5
Address	Plot No.: 5, Block - B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch,	Location	As per table
		Quantity	NA
		Date of Measurement	15/05/2021
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Sound Level Meter (HTC/SL-1350)
Measurement Completion Date	16/05/2021	Sampling Method	IS 9876 : 1981 & 9989 : 1981

NOISE MONITORING RESULTS

Sr. No.	Location Name	Units	Day Time	Night Time
			Spot Noise Level dB (A) Maximum	Spot Noise Level dB (B) Maximum
Standard Limit		dB	75	70
1.	Converting area	dB	69.1	65.8
2.	Near Capstan Machine	dB	73.6	66.4
3.	Near Winder Area	dB	71.4	68.6
4.	Extruder Floor	dB	74.5	69.2
5.	Brattice	dB	74.8	69.7
6.	Utility Area	dB	69.7	67.1

Analyzed By:




- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 days from the date of sampling.

Report No: - EE/ENV/2021/05/025

Date: 24/05/2021

ANALYSIS REPORT

(For the month of May - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/L1
Address	Plot No.: 5, Block – B, Sector-12 S, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	As per table
		Quantity	NA
		Date of Measurement	15/05/2021
Measurement Done By	Earth Envirotech Team	Sampling Instrument	Lux Meter (LX-101 A)
Measurement Completion Date	16/05/2021	Sampling Method	Lutron - LX-101 Inst. Manual

LUX MONITORING RESULTS

Sr. No.	Location Name	In Lux (Day Time)	In Lux (Night Time)	Illumination Lux (As per Standard IS-3646 Part-II)
1.	Near Capstan Machine	290	246	200

Analyzed By:




- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one 15 days from the date of sampling.

Report No: - EE/ENV/2021/05/026

Date: 24/05/2021

ANALYSIS REPORT

(For the month of May - 2021)

Client Details		Sample Details	
Name	M/s. Terram Geosynthetics Pvt. Ltd.	Sample Code	TGPL/WW1
Address	Plot No.: 5, Block - B, Sector-12 5, Adani Port & SEZ, Tal: Mundra, Dist: Kutch.	Location	ETP outlet
		Quantity	2 L
Sampling Done By	Earth Envirotech Team	Date of Sampling	15/05/2021
Analysis Starts on	15/05/2021	Sampling Method	APHA 1060
Analysis Completion On	21/05/2021	Sample Received Date	15/05/2021

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
1.	pH	—	7.23	IS 3025 (P-11)
2.	Temperature	°C	25	APHA 2550 B
3.	Colour	Units	15	IS 3025 (P-4)
4.	Total Dissolved Solids	mg/l	1715	IS 3025 (P-16)
5.	Total Suspended Solids	mg/l	23	IS 3025 (P-17)
6.	Oil & Grease	mg/l	1.9	IS 3025 (P-39)
7.	Ammonical Nitrogen	mg/l	8.1	IS 3025 (P-34)
8.	Chemical Oxygen Demand	mg/l	56	IS 3025 (P-58)
9.	Biochemical Oxygen Demand (5 days at 20°C)	mg/l	12.3	APHA 5210
10.	Residual Chlorine	mg/l	Nil	IS 3025 (P-26)
11.	Percent Sodium	%	6.3	IS 3025 (P-45)

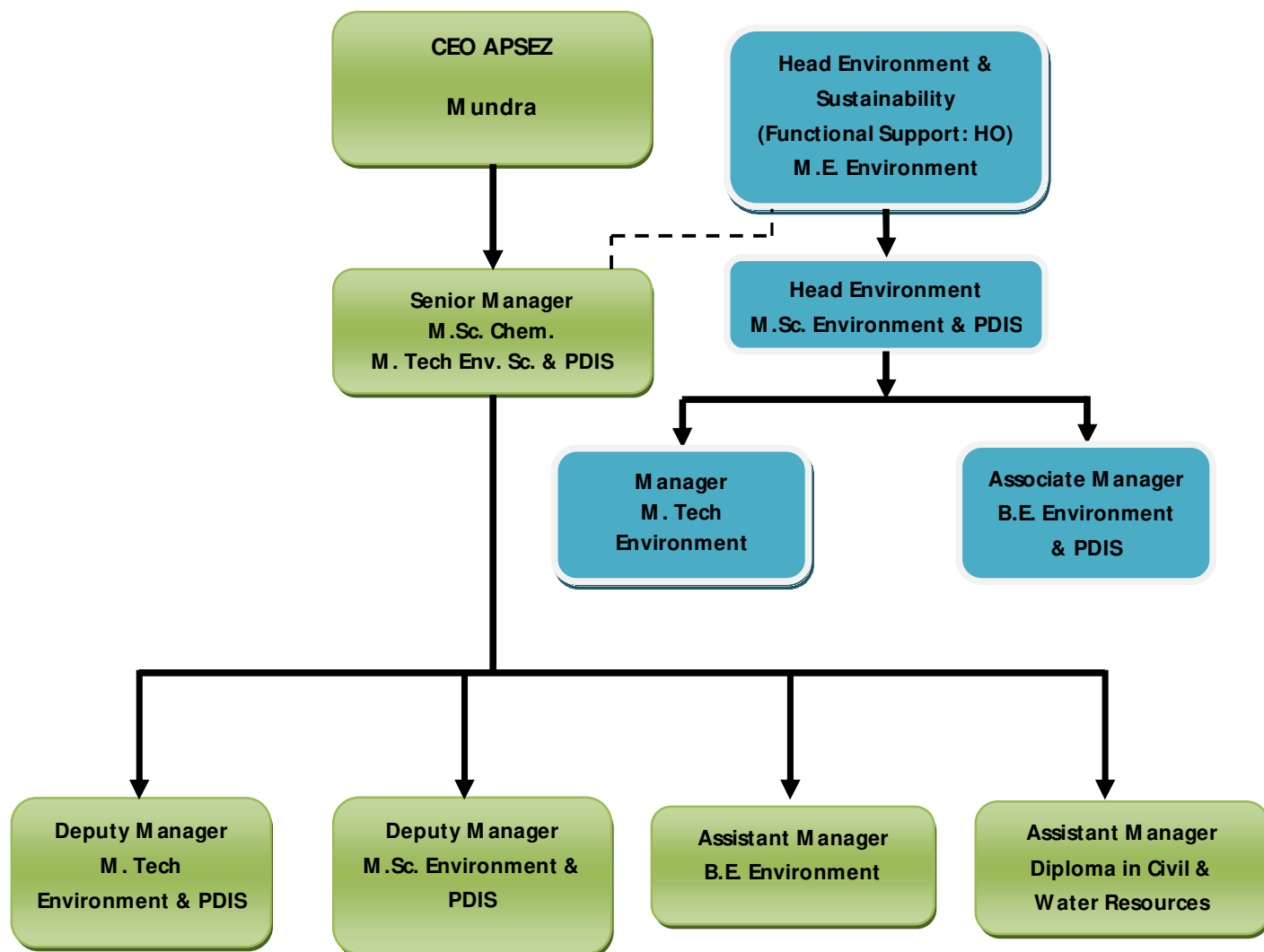
Analized By:



- Analysis is subject to the condition in which the Sample is received at our Laboratory.
- Reports can not be used as an evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till 15 Days from the date of sampling.

Annexure – 6

Organogram of Environment Management Cell, APSEZ, Mundra



Annexure – 7

Cost of Environmental Protection Measures

Sr. No.	Activity	Cost incurred (INR in Lacs)			Budgeted Cost (INR in Lacs)
		2019 – 20	2020 – 21	2021 – 22 (Till Sep'21)	2021 – 22
1.	Environmental Study / Audit and Consultancy	0.33	6.2	6.82	7.0
2.	Legal & Statutory Expenses	0.84	10.58	10.04	12.0
3.	Environmental Monitoring Services	21.74	19.17	9.56	20.0
4.	Hazardous / Non-Hazardous Waste Management & Disposal	108.43	83.55	57.64	114.10
5.	Environment Days Celebration and Advertisement / Business development	1.5	5.3	1.81	7.0
6.	Treatment and Disposal of Bio-Medical Waste	1.62	2.09	0.89	2.04
7.	Mangrove Plantation, Monitoring & Conservation	Nil	32.59	Nil	Nil
8.	Other Horticulture Expenses	734.18	689	605.58	865.11
9.	O&M of Sewage Treatment Plant and Effluent Treatment Plant (including STP, ETP of Port & SEZ & Common Effluent Treatment Plant)	110.18	148.49	95.53	219.24
10.	Expenditure of Environment Dept. (Apart from above head)	105.13	89.11	88.28	85.35
Total		1083.95	1086.08	876.15	1331.84

Annexure – 8

Certificate

Standard: **Zero Waste to Landfill Management System
(ZWTL MS 2020)**

Certificate Holder: **Adani Ports and Special Economic Zone Limited**
Mundra Port, Kutch - 370421,
Gujarat, India

Scope: **Providing Port Facilities for Import and Export of
Bulk, Break Bulk, Liquid and Containerized Cargo,
its Storage and RORO Operation for Export of
Vehicles**

Proof has been furnished by means of an audit that the
Requirements of ZWTL MS 2020 are met, with the
achievement of waste diversion rate of above 99%

Validity: This certificate is valid from 01-06-2021 until 31-05-2024
Subject to satisfactory annual surveillance audits.

Certificate No. TUV/ZWLMS/2021/Adani Ports/0501



New Delhi, 01-06-2021

TÜV Rheinland India Pvt. Ltd.
Office 610, 6rd Floor, iThum
Tower, A-40, Sector-62,
Noida- 201301, India



CII-ITC Centre of Excellence
for Sustainable Development



Confederation of Indian Industry

Certificate

Single-use Plastic Free

Adani Ports and Special Economic Zone Limited

Adani Mundra Port, Adani House, PO Box No. 1, Mundra, Kutch 370 421, Gujarat, India

This is to certify that Adani Ports and Special Economic Zone Limited, at the location mentioned above, is Single-use Plastic Free as verified by the Confederation of Indian Industry, under the provisions of the **Plastics-use Protocol: Verification and Certification (1.0)**.

This Certificate is valid from 26 May 2021 to 25 May 2022.

PLASTICS-USE
PROTOCOL



Ms Seema Arora
Deputy Director General
Confederation of Indian Industry (CII)
Centre of Excellence for Sustainable Development (CESD)

Certificate Date: 07 June 2021

Certificate No.: CII/PuP/2021/012

This certificate has been awarded after the company fulfilled the requirements for phasing-out single-use plastics and providing evidence for it. Responsibility for the data provided to CII rests solely with the company. The conditions of certification and terms are detailed in the Annex.



CII-ITC Centre of Excellence
for Sustainable Development



Confederation of Indian Industry

Annex

The certification applies to the following single-use plastic items:

- Cutlery (knives, forks, spoons, chopsticks)
- Crockery (plates, glasses, cups, lids, bowls)
- Food containers
- Straws
- Stirrers
- Carry bags
- Items of decoration (polystyrene)
- Garbage bags

Organizational Boundary: Adani Ports and Special Economic Zone Limited

Operational Boundary: Administration, canteen, kitchen and operational areas

Material Boundary: Single-use Plastics

Reference

Verification Date: 26 May 2021

Verification Report No.: PuP/Verification/2021/AdaniPorts/004

Mode: On account of the COVID-19 pandemic, the verification process was virtual and followed provisions outlined in the Verification Procedure 1.0 of the Protocol

Chiragsing Rajput

From: Chiragsing Rajput
Sent: Tuesday, November 16, 2021 6:36 PM
To: 'rdwcr-cgwb@nic.in'
Cc: Snehal Jariwala
Subject: Submission of Ground Water Monitoring Report_APSEZ, Mundra
Attachments: Submission of Ground Water Monitoring Report_APSEZ, Mundra.pdf

Kind Attn: The Regional Director,
CGWB, West Central Region, Ahmedabad

Dear Sir,

As part of the compliance requirement for our project activities at Adani Ports and SEZ Ltd., Mundra (Kutch), we hereby submit the analysis results of ground water samples taken from the project site through bore hole. This is for your records and suggestions, if any.

Thanks & Regards,
Chiragsing Rajput
Environment Cell | Adani Ports & Special Economic Zone Ltd.
Mob +91 9687678443 | chiragsing.rajput@adani.com | www.adani.com
Adani Corporate House, 8th Floor, East Wing, Shantigram, Ahmedabad - 382421, Gujarat, India.



Annexure – 9

To,
The Regional Director,
Central Ground Water Board West Central Region
Swami Narayan College Building,
Shah Alam Tolnaka,
Ahmadabad,
Gujarat – 380022.

Sub: Intimation regarding monitoring of ground water level & quality through bore hole

Dear Sir,

With reference to above stated subject, Adani Ports and Special Economic Zone Limited (APSEZ) located at Mundra, Tal. Mundra, Dist. Kutch – 370421 would like to clarify you as below.

APSEZ has constructed 02 Nos. of bore holes within Multi-product SEZ for regularly monitoring of ground water level and its quality. Locations of bore holes are as below.

Sr. No.	Location	Latitude	Longitude
1	Nr. Dhrub Railway Station	22°48'07.3"N	69°39'85.6"E
2	Nr. Common Effluent Treatment Plant	22°48'64.0"N	69°42'39.0"E

Ground water monitoring is being carried out at every six months (Pre-monsoon and Post-monsoon) by NABL accredited and MoEF&CC recognized agency namely M/s. Pollucon Laboratories Pvt. Ltd., Surat since 2015. Latest ground water monitoring reports are enclosed here as **Annexure – A** for you reference.

APSEZ is requesting you to kindly consider above mentioned facts and provide your opinion regarding the same.

Thanks & Regards,
Adani Ports and Special Economic Zone Limited


Bhagwat Swaroop Sharma
Head – Environment

Encl: As Above

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 5110
info@adani.com
www.adani.com

"HALF YEARLY ENVIRONMENTAL MONITORING REPORT"

FOR



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

MONITORING PERIOD:
APRIL 2021 TO SEPTEMBER 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.com Web: www.polluconlab.com**

TC - 5945

ISO 9001:2015

ISO 14001:2015

ISO45001:2018

**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
			OPP. DRUB RAILWAY STATION	
	Sampling Date		31/05/2021	
1	pH	--	7.73	IS 3025 (Part 5) 2017 Electrometric Method
2	Salinity	ppt	58.3	APHA 2520 B
3	Oil & Grease	mg/L	Not Detected	APHA (23rd Edition) 5520 B 2017
4	Hydrocarbon	mg/L	Not Detected	GC/GC-MS
5	Lead as Pb	mg/L	Not Detected	APHA (23rd Edition) 3111 B 2017
6	Arsenic as As	mg/L	Not Detected	APHA (23rd Edition) 3114 B 2017
7	Nickel as Ni	mg/L	Not Detected	APHA (23rd Edition) 3111 B 2017
8	Total Chromium as Cr	mg/L	0.039	APHA (23rd Edition) 3111 B 2017
9	Cadmium as Cd	mg/L	Not Detected	APHA (23rd Edition) 3111 B 2017
10	Mercury as Hg	mg/L	Not Detected	APHA (23rd Edition) 3112 B 2017
11	Zinc as Zn	mg/L	0.63	APHA (23rd Edition) 3111 B 2017
12	Copper as Cu	mg/L	Not Detected	APHA (23rd Edition) 3111 B 2017
13	Iron as Fe	mg/L	0.41	APHA (23rd Edition) 3500 Fe B 2017
14	Insecticides/Pesticides	mg/L	Absent	GC/GC-MS
15	Depth of Water Level from Ground Level	meter	2.1	--

H. T. Shah**Lab Manager****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

RESULTS OF BORE HOLE WATER

SR. NO	TEST PARAMETERS	UNIT	RESULTS	TEST METHOD
			NEAR CETP MAIN GATE	
	Sampling Date		31/05/2021	
1	pH	--	7.76	IS 3025 (Part 5) 2017 Electrometric Method
2	Salinity	ppt	2.97	APHA 2520 B
3	Oil & Grease	mg/L	Not Detected	APHA(23rd Edition) 5520 B 2017
4	Hydrocarbon	mg/L	Not Detected	GC/GC-MS
5	Lead as Pb	mg/L	0.058	APHA (23rd Edition) 3111 B 2017
6	Arsenic as As	mg/L	Not Detected	APHA (23rd Edition) 3114 B 2017
7	Nickel as Ni	mg/L	Not Detected	APHA (23rd Edition) 3111 B 2017
8	Total Chromium as Cr	mg/L	0.037	APHA (23rd Edition) 3111 B 2017
9	Cadmium as Cd	mg/L	Not Detected	APHA (23rd Edition) 3111 B 2017
10	Mercury as Hg	mg/L	Not Detected	APHA (23rd Edition) 3112 B 2017
11	Zinc as Zn	mg/L	0.42	APHA (23rd Edition) 3111 B 2017
12	Copper as Cu	mg/L	Not Detected	APHA (23rd Edition) 3111 B 2017
13	Iron as Fe	mg/L	0.27	APHA (23rd Edition) 3500 Fe B 2017
14	Insecticides/Pesticides	mg/L	Absent	GC/GC-MS
15	Depth of Water Level from Ground Level	meter	2.2	--

H. T. Shah**Lab Manager****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

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	0.005
6	Arsenic as As	mg/L	0.001
7	Nickel as Ni	mg/L	0.01
8	Total Chromium as Cr	mg/L	0.05
9	Cadmium as Cd	mg/L	0.002
10	Mercury as Hg	mg/L	0.0006
11	Zinc as Zn	mg/L	0.05
12	Copper as Cu	mg/L	0.02
13	Iron as Fe	mg/L	0.05
14	Insecticides/Pesticides	mg/L	0.1

H. T. Shah**Lab Manager****Dr. Arun Bajpai****Lab Manager (Q)**

Annexure – 10



Ports and
Logistics

PCB ID: 31463

APSEZ/EnvCell/2021-22/020

Date: 14.05.2021

To,
The Regional Officer,
Regional Office,
Gujarat Pollution Control Board (East – Kutch),
Sector No. 8, Gandhidham,
Kutch – 370201.

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

Reference: GPCB Inspection letter dated 07.05.2021, PCB ID: 31463 (**Annexure – A**)

Dear Sir,

With reference to the above mentioned subject, APSEZ is submitting the compliance details of your observations as below:

Sr. No.	Inspection Remark	Compliance
1.	W.r.t. progress report of the project Submit Chartered Engineer Certificate for project components developed and to be developed so far.	• Chartered Engineer certificate stating project components / infrastructure developed and to be developed so far within notified SEZ area of 8434.5890 Ha is attached as Annexure – B .

APSEZ is submitting the compliances regularly and hope the above mentioned submission is in line with requirement.

Thanking you,
For, **Adani Ports and Special Economic Zone Ltd.**

Bhagwat Swaroop Sharma
(Head – Environment)

Copy to:

Unit Head (Kutch unit)
Gujarat Pollution Control Board,
Gandhinagar – 382010.

25/05/2021
Gujarat Pollution Control Board
Head Office
Sector No. 18-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 5110
info@adani.com
www.adani.com

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

APSEZ/EnvCell/2021-22/020

Date: 14.05.2021

To,

The Regional Officer,
Regional Office,
Gujarat Pollution Control Board (East – Kutch),
Sector No. 8, Gandhidham,
Kutch – 370201.

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

Reference: GPCB Inspection letter dated 07.05.2021, PCB ID: 31463 (Annexure – A)

Dear Sir,

With reference to the above mentioned subject, APSEZ is submitting the compliance details of your observations as below:

Sr. No.	Inspection Remark	Compliance
1.	W.r.t. progress report of the project Submit Chartered Engineer Certificate for project components developed and to be developed so far.	<ul style="list-style-type: none"> Chartered Engineer certificate stating project components / infrastructure developed and to be developed so far within notified SEZ area of 8434.5890 Ha is attached as Annexure – B.

APSEZ is submitting the compliances regularly and hope the above mentioned submission is in line with requirement.

Thanking you,

For, Adani Ports and Special Economic Zone Ltd.

Bhagwat Swaroop Sharma
(Head – Environment)

Copy to:**Unit Head (Kutch unit)**

Gujarat Pollution Control Board,
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 5110
info@adani.com
www.adani.com

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

2025-5-21
Received
Gujarat Pollution Control Board
Regional Office
Kutch (East)

ANNEXURE – A

GPCB INSPECTION LETTER



ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ

પ્રાદેશિક કચેરી : કચ્છ (પૂર્વ)

વિભાગીય પોર્ટ ટ્રસ્ટનું મહાનગર મહાનગર મ. ૧૧૫, ૧૧૬, ૧૧૭, બીએ મળ,
સેક્ટર નં. ૮, નાંદોદરા-૩૭૦૨૧૧, કચ્છ, રીલ : ૦૨૮૩૯-૨૩૦૮૨૮

તપાસ માટે દાખલ થવાની સૂચના (નોટીસ)

પાણી અધિનિયમ ૧૯૭૪ ની કલમ - ૨૩, ૪૫ અધિનિયમ ૧૯૮૧ ની કલમ - ૨૪ અને પર્યાવરણ (સુરક્ષા) અધિનિયમ - ૧૯૮૬ ની કલમ-૧૦ હેઠળ જાણીતી/અજાણી/અન્ય નિયમ-સંબંધિત કાર્યો અંગેના મનેલ સત્તાની રૂએ અમે નીચે સહી કરનાર અમેને જરૂરી લાગે તેની સહાય લાભે તમામ સમયે નીચેના હેતુઓ માટે આપની જગ્યામાં દાખલ થવાનો અને તપાસ કરવાનો અધિકાર ધરાવીએ છીએ.

- (૧) અમેને સંપિલા રાજ્ય બોર્ડ/કેન્દ્ર સરકારના કાર્ય બજાવવાના હેતુ માટે
- (૨) આપા કોઈ કાર્યો બજાવવાના છે કે કેમ અને તેમ હોય તો કઈ રીતે બજાવવાના છે અથવા આ અધિનિયમ અથવા તે હેઠળ કરેલા નિયમોની અથવા આ અધિનિયમ હેઠળ બજાવેલી કોઈ નોટીસની, કરેલા કોઈ હુકમની, આદેશની અથવા આપેલા કોઈ અધિકાર પત્રની કોઈ જોગવાઈનું પાલન કરવામાં આવી રહ્યું છે કે પાલન કરવામાં આવ્યું છે કે કેમ તે નક્કી કરવાના હેતુ માટે.
- (૩) કોઈ સાધન સામગ્રી, ઔદ્યોગિક પ્લાન્ટ રેકર્ડ, રજીસ્ટર, દસ્તાવેજ અથવા અન્ય કોઈ મહત્વની વસ્તુની તપાસ કરવા અને તેની કસોટી કરવાના હેતુ માટે અથવા જે જગ્યામાં તેને સેમ માનવાને કારણ હોય કે આ કારણ કે તે હેઠળ કરેલા નિયમો મુજબ કોઈ ગુનો કરવામાં આવ્યો છે, અથવા થવાની ટીકાટીમાં છે, તેવી કોઈ જગ્યાની ઝડપી લેવા માટે અને તેને સેમ માનવાને કારણ હોય કે આ કારણ કે તે હેઠળ કરેલ નિયમો હેઠળ કરેલ શિક્ષાપત્ર કોઈ ગુનો કરવાનો પુરાવો, તેવા સાધન સામગ્રી ઔદ્યોગિક પ્લાન્ટ, રેકર્ડ, રજીસ્ટર, દસ્તાવેજ અથવા અન્ય મહત્વની વસ્તુ કબજે લેવા માટે અને નીચે જણાવેલ સમયે દાખલ થઈએ છીએ.

ઉધોગ/.....માં દાખલ થવાનો સમય : સવારના / સાંજના.....તા. ૦૪/૦૬/૨૦૨૧

અમારી સાથે સહાય માટે નીચેની વ્યક્તિઓ પણ છે.

૧. Hanishal B. Kumar - AFE
૨. _____
૩. _____

(PCB ID- 31463)

પ્રતિ,
Adani Ports & SEZ Limited,
Mundra, Kutch
નકલ મળેલ છે.

આ સૂચના (નોટીસ) મેળવનારની સહી

MS Bhagwat Sharma

સહી : _____
અધિકારીનું નામ : M. B. Patel
પોસ્ટ : AFE

07/05/21

Written Instruction

1. એજન્સી પ્રોવિડેડ માહિતી પ્રમાણિત મુદ્દાઓ અને
25 એપ્રિલના પાયાના સુધી થયેલા જોના થાઇ
મોડેલ ના બાકી રહેલા માહિતીના પ્રમાણિત
સમાપ્તિની રજીસ્ટ્રાર તરફથી

Mr. Bhagat Sharma
S. Manager

Harshal Parmars
APZ

Harshal Patel
APZ

Dr. P. J. Gandhi

© 2002 Reserved with Dr P J Gandhi

Ph D, M Tech (NITs), MBA (IIMK), C Eng (I), MCE (I), MIETE (Elect.), MIChE, M Val (IP),
 PG in Computers & Infoⁿ Tech. (Systems) MBA, AMCSI, B E – AMIE (I), M E (Mech), FIV,
 PGDM (Mktg), PGDM (HR), PGDEd (V&S), PG Dip T&D, MIMA, MFACT, MRICS, LL B (Special)
 Chartered Engineer, Govt. Approved Valuer, Arbitrator & Conciliator (FICCI)

Tel / Fax # 0261 – 23 22 976

CHARTERED ENGINEER'S CERTIFICATE

For Area Utilization in their premises

This is to certify that the inline to the statutory approvals obtained from MOEF & CC & State Pollution Control Board, **M/s. Adani Ports and SEZ Limited, Mundra** has utilized the area of 1684 Ha from the total notified multi product SEZ area of 8434.5890 Ha, i.e. 20% of the total area.

As per the details and project schedule furnished to the undersigned, it can be said that the remaining area will be developed phase wise, as per the future requirement which includes processing zone, non-processing zone, water and wastewater treatment plants, desalination plant & intake / outfall channel, rail & road network, water supply network, effluent connection network, power supply network, IT network, drainage system, recycling water network and other utilities approved in Environmental & CRZ clearance.

This certificate is issued after the checking of the documented records produced before us, carried out the site visit, and at the request of the party without any prejudice as well as without any financial / legal liability on me as a chartered engineer & valuer and to the best of my knowledge and belief. I have no direct or indirect interest in the projects, its plant and machinery and in a company.

Date : 10.05.2021

Place : Surat, Gujarat



Dr. P. J. Gandhi
 Chartered Engineer
 Govt. Approved Valuer
 AM 089164 / 1; F 15927

Annexure – 11

Ref No. APSEZL/EnvCell/2021-22/041

09.06.2021

To,
Member Secretary
Gujarat Pollution Control Board
Paryavaran Bhavan,
Sector-10-A, Gandhinagar-382010

Dear Sir,

Sub: Environmental Statement for the financial year ending 31st March, 2021 for **Adani Ports and SEZ Limited (Multi Product SEZ)**.

Ref: 1. AWH – 88998 Date of issue 23.11.2017 Valid till 21.08.2022
2. CC&A Amendment Letter No. PC/CCA-KUTCH-1044(2)/GPCB ID: 31463/480505 Date of issue 31.12.2018 Valid till 21.08.2022

With reference to the above mentioned subject and reference, please find enclosed Environmental Statement in Form V prescribed under Rule 14 of the Environment (Protection) Rules 1986, for **M/s Adani Ports and SEZ Limited (Multi Product SEZ), Village & Taluka: Mundra, Dist. Kutch - 370421** for the financial year ending 31st March 2021.

Thank you,

Yours faithfully,

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

Glump

13/06/2021
Gujarat Pollution Control Board
Head Office
Sector No.-10-A,
Gandhinagar-382010.

Authorized Signatory

Encl: As above.

Copy to: **The Regional Officer, Gujarat Pollution Control Board, Gandhidham.**

Adani Ports and Special Economic Zone Ltd Tel: +91 2838 25 5000
Adani House, Fax: +91 2838 25 5110
PO Box No. 1 info@adani.com
Mundra, Kutch 370 421 www.adani.com
Gujarat, India

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India

adani

Ports and
Logistics

PCB ID: 31463

Ref No. APSEZL/EnvCell/2021-22/041

09.06.2021

To,
Member Secretary
Gujarat Pollution Control Board
Paryavaran Bhavan,
Sector-10-A, Gandhinagar-382010

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With reference to the above mentioned subject and reference, please find enclosed Environmental Statement in Form V prescribed under Rule 14 of the Environment (Protection) Rules 1986, for **M/s Adani Ports and SEZ Limited (Multi Product SEZ)**, Village & Taluka: **Mundra, Dist. Kutch - 370421** for the financial year ending 31st March 2021.

Thank you,

Yours faithfully,

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

[Signature]

Authorized Signatory

Encl: As above.

[Signature]
Received
Gujarat Pollution Control Board
Regional Office
Kutch (East)

Copy to: **The Regional Officer, Gujarat Pollution Control Board, Gandhidham.**

Adani Ports and Special Economic Zone Ltd Tel +91 2838 25 5000
Adani House, Fax +91 2838 25 51110
PO Box No. 1 info@adani.com
Mundra, Kutch 370 421 www.adani.com
Gujarat, India

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India

Annexure – 12

Expense Details for Fisherfolk Amenities work in different core areas Till Sep'21									
Sr.	Details	2016-17	2017-18	2018-19	2019-20	2020-21	April -Sep-21	TOTAL	AMT IN LACS
Expenditure Details (Amount in Rs.)									
1	Vidya Deep Yojana	2069300	193000	2087000	1771000	110225	--	6230525	62
2	Vidya Sahay Yojana	552580	495000	691000	708000	504336	622889	3573805	36
3	Adani Vidya Mandir – Shaping Lives	4200000	4030000	3472000	6434020	1593805	1265000	19729825	197
4	SENIOR CITIZEN HEALTH CARD	--	8430000	1750000	2975000	1750000	--	14905000	149
5	FINANCIAL SUPPORT TO POOR PATIENTS	4439507	1275000	813000	1296063	763800	450000	9037370	90
6	Machhimar Kaushalya Vardhan Yojana	188708	200000	397000	73000	--	--	858708	9
7	Machhimar Sadhan Sahay Yojana	--	--	315000	522000	--	--	837000	8
8	Machhimar Awas Yojana	4592106	1165000	--	2311000	2424016	--	10492122	105
9	Machhimar Shudhh Jal Yojana	2236050	2700000	2038000	1773000	2348300	573275	11668625	117
10	Sughad Yojana	1367300	170000	--	192000	30000	--	1759300	18
11	Machhimar Akshay kiran Yojana	860850	100000	68000	--	--	--	1028850	10
12	Machhimar Ajivika Uparjan Yojana-Mangroves plantation	1558800	500000	1382000	1400000	1900272	1914432	8655504	87
13	Bandar Svachhata Yojana	106400	50000	--	--	367000	--	523400	5
14	Cricket league and Cycle Marathon	432000	657119	638000	610800	--	--	2337919	23
15	Sports Material For Children & Youth at Vasahats	197797	--	--	--	--	--	197797	2
16	New Pilot Initiative for Polyculture	398240	160000	--	--	--	--	558240	6
17	New Pilot Initiative for Cage farming Asian Seabass & Lobster	864000	660000	--	--	--	--	1524000	15
18	Sea Weed Culture Project	--	--	--	200000	--	--	200000	2
19	Mangrove Biodiversity Project	--	--	1890000	684000	499210	--	3073210	31
20	Approach road restoration at 9 vasahat	--	--	--	--	599000	--	599000	6
		24063638	20785119	15541000	20949883	12889964	4825596	97790200	978

Annexure – 13

Compliance Report of CIA Study Environment Management Plan

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance
1	Land Use Change						
1.1	<p>It is predicted that the built up land in the rural areas would increase by an order 50% from the baseline 2015.</p> <p>New settlements near the SEZ area might create slums.</p> <p>Unorganized urban development leading to poor sanitation and proliferation of vectors and disease.</p>	Level - 1	<p>APSEZ has developed two townships (Shantivan and Samudra) presently accommodating 1668 households. Necessary permissions from concerned authorities were already obtained for the development of townships and Associated infrastructure facilities.</p>	<p>The existing townships will be expanded to accommodate about 4 lakh people when the APSEZ is fully developed.</p>	APSEZ	As and when Required	<p>APSEZ has developed two townships (Shantivan and Samudra) accommodating 2180 households and associated infrastructure facilities. Accommodation is made available for all interested employees working within Adani group & SEZ industries. Out of which 88% Occupancies are accommodated within the townships and rest are available for employees working within APSEZ.</p> <p>At present 60 nos. of industries (processing & non-processing) are present within the SEZ (45 nos. are in operation). Township facilities are also made by some of SEZ industries within Mundra town for their employees with basic infrastructure facilities and requirements.</p> <p>Most of the employees working in SEZ industries are residing in Mundra township having all basic requirements and associated facilities.</p> <p>The existing social infrastructure facilities are adequate for present development at APSEZ. The existing townships with associated facilities will be expanded as per requirement.</p> <p>APSEZ has also been granted permission for receiving domestic sewage @ 2.5 MLD from Mundra village (which was earlier discharged into open area within Mundra region)</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
							in to wastewater treatment plant for treatment and disposal. APSEZ has already started receiving of domestic sewage from Mundra, which abates the poor sanitation and unhygienic condition within Mundra region. Total project cost for laying domestic sewage underground pipeline with other associated facilities from Mundra to APSEZ is 362 Lacs.
1.2	Once the project is fully developed, due to increase in built up land in the APSEZ area, there will be an increase in the storm water runoff from the facility.	Level-1	The study area experiences scanty rainfall less than 400 mm/year. Considering the natural gradient, ASPEZ have designed and implemented storm water drains in the existing facility to meet the peak daily rainfall of 440 mm/hr. Hence flooding of	Technical feasibility study can be carried out to explore the possibility of developing storm water collection ponds to utilize maximum possible storm water runoff for dust suppression in the coal yard areas during non-rainy days.	APSEZ	Technical Study - one time, Implementation - Continual process	<p>Presently, ~40% of the total SEZ is developed. Based on technical studies, APSEZ has developed adequate storm water facilities that meets with daily demand as per recorded highest rainfall.</p> <p>At present all existing coal yards are designed with drain, for collection of water during water sprinkling and rainfall, which is carried away to dump pond. Supernatant water from dump pond is being collected and used for dust suppression activities or after sedimentation, discharged to sea. Details of drain and dump pond has been submitted in along with EC compliance report (Oct 19 to March 20). Analysis of said water discharging into sea during monsoon season is being carried out (twice in a year during monsoon) through NABL / MoEF&CC accredited laboratory. Analysis report of the same shows there is no any contamination. The report is attached herewith as Annexure – i.</p> <p>During compliance period April 2021 to Sept 2021, the maximum recorded rain fall was 85.4 mm/hr observed, which was much less than the design capacity of existing storm water drainage system. So our existing storm water management facility is adequate to handle the storm water</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
			water in the neighboring areas is not envisaged.				runoff from the area. Hence flooding of water in the neighboring areas is not envisaged.
			As per the directions given in the environmental clearance issued for the proposed Multi-Product SEZ and CRZ clearance for Desalination, sea water intake, outfall facility and pipeline project, the master plan of the project was designed and being implemented without disturbing the natural flow of rainwater	The channel depth in all the natural streams shall be maintained to accommodate peak flood flow during the monsoon and periodical de-silting activities in the natural streams passing through the APSEZ area	APSEZ, District Administration* and Irrigation department	As and When Required	Presently there is no Desalination plant, sea water intake and outfall facility developed as part of EC & CRZ clearance of Multiproduct SEZ. The project will be designed and implemented as per requirement without disturbing the natural flow of rainwater in all the seasonal streams.

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
			in all the seasonal streams.				
1.3	Due to conservation and protection of mangroves in the designated conservation area, it has been predicted that the current mangrove footprint area would marginally increase in next 15 years due to natural growth. This will enhance the overall biodiversity in the local coastal eco-	Positive Impact with ecological benefits	In addition to conservation of the identified 1254 ha mangrove areas around Mundra port and SEZ, APSEZ has taken up large scale mangrove afforestation activities in an area of more than 2800 ha at various locations across the coast of Gujarat state in consultation with various organizations	APSEZ will continue mangrove afforestation as per the commitment made with concerned regulatory authority	APSEZ	Short Term	<p>APSEZ has carried out mangrove afforestation in 2890 ha. area across the coast of Gujarat till date.</p> <p>No further mangrove afforestation is pending w.r.t. commitment made with concerned regulatory authority for APSEZ, Mundra project.</p> <p>As per study conducted by NCSCM, Chennai in 2017, mangrove cover in and around APSEZ, Mundra has increased from 2094 Ha to 2340 ha (as compared between 2011 to 2017). The analysis has shown an overall growth of 246 ha. The cost for said study was INR 3.15 Cr.</p> <p>Recently study was carried out in the year 2019 and based on that there is an increase of mangrove cover between March 2017 (Total 2340) and September 2019 with an extent of 256 Ha (Total 2596 Ha Area) which is about 10.94% rise in growth rate, also It reveals that the mangrove and the tidal system in the creeks remained undisturbed over this period.</p> <p>Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019.</p> <p>Analysis of data between categories indicated that there was an increase in dense mangroves along with the conversion of scattered into sparse, that shows the growth</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance						
	system.						<p>of mangroves in a progressive direction.</p> <p>As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.</p> <table><tr><th>Sr. No.</th><th>Recommendations</th><th>Compliance</th></tr><tr><td>1.</td><td>Mangrove mapping and monitoring in and around APSEZ</td><td><ul style="list-style-type: none">APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island.As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.7%This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which</td></tr></table>	Sr. No.	Recommendations	Compliance	1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none">APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island.As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.7%This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion of scattered to sparse which
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S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ESMP	Responsible agency	Timeframe for implementation	Compliance		
									<p>also shows that the growth of mangroves in a progressive direction.</p> <ul style="list-style-type: none"> Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.
							2.	Tidal observation in creeks in and around APSEZ	<ul style="list-style-type: none"> APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal, Bocha and Khari creeks under the guidance of NCSCM. The observed tidal ranges indicate that the creeks experience normal tidal ranges, adequate for the growth of mangroves. The cost of the said activity was INR 1.0 Lacs.
							3.	Removal of Algal and Prosopis growth from mangrove areas	<ul style="list-style-type: none"> Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in some of the mangrove areas, which has been removed manually. The cost of the said activity was INR 1.2 Lacs.
							4.	Awareness of mangroves	<ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance		
								importance in surrounding communities	<p>awareness camps/activities created in the community regarding importance of mangroves.</p> <ul style="list-style-type: none"> Adani Foundation has also provided 8.95 lacs kg Dry Fodder and 24.25 lacs kg Green fodder in 21 villages of Mundra and Anjar Block to support the resource dependent villagers, to avoid their dependency on mangroves. The expenditure for fodder supporting activities was approx. 122.7 Lacs during FY 2021-22 (Till Sep'21). 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 Grassland development in Siracha – 85 Acre & Zarpara – 25 Acre done which resulted in total production of 82 ton. Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no any unauthorized persons allowed within coastal as well as mangrove areas. Refer CSR report attached as Annexure – 1.

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
							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. Current year 3 ha development is planned to extend multi-species mangrove plantation.
1.4	Development activities along the coast might cause certain changes in hydro-dynamic characteristics along the shoreline. Shoreline of any area also can be influenced by storm surges and other natural processes.		Detailed hydro-dynamic modelling and shoreline change prediction for a fully developed APSEZ facility has been studied. The study reveals that the erosion and accretion in the study area at the end of 15th year will be within the designated	It is recommended to map the coastal morphology (Shoreline) at least once in three years	APSEZ	Continual Process	<p>Shore line change study was carried out by M/s. Chola MS, Chennai (NABET accredited consultant) as a part of Waterfront Development Project – Expansion EIA study. The summary of the said study is as below.</p> <p>To estimate the shoreline change due to the earlier approved waterfront development plan, a historical shoreline change assessment has been undertaken using the satellite imagery for a period of 2008 to 2018. In order to avoid any major errors in estimating the shoreline, the satellite data for similar tidal condition was considered for 2008, 2013 and 2018. AMBUR Methodology was used to study the historical analysis</p> <p>10km radius stretch of shoreline on either side of the APSEZ project boundary has been considered for assessing the historical shoreline change scenario. The baseline shoreline change assessment depicts the influence of both natural causes and also possible changes in the shore due to various development activities in the study area during the designated period. For the purpose of this study, shoreline on left side of APSEZ is termed as West Side Shoreline and that of the right side as East Side Shoreline for ease of recognition.</p>

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			criteria of ± 0.5 m/year. which reconfirms that the waterfront development activities of APSEZ would pose insignificant impact on the Mundra shoreline.				<p>The maximum accretion and erosion rate of the west side shoreline over a period of 10 years during the year 2008 – 2018 are observed to be 4.78 m/yr and 1.93 m/yr respectively.</p> <p>The maximum accretion and erosion rate of the east side shoreline over a period of 10 years during the year 2008 – 2018 are observed to be 0.5 m/yr and 0.82 m/yr respectively.</p> <p>However, next shoreline assessment study will be conducted in FY 2021-22.</p>
2	Regional Traffic Management Plan						
2.1	The projected traffic data as per the EIA Report of Multi-Product Special Economic Zone, the peak vehicular traffic from the port and SEZ	Level-1	As per the master plan of APSEZ, eight artillery roads will be connected to either state highway or national highway for evacuating the goods from APSEZ. None of these roads	Additional road as per master plan will be built in future based on the overall progress of the project. Currently about 25% of cargo from APSEZ is transported by Rail and the same will be	APSEZ	As and When Required	<p>Presently, ~40% of the total SEZ is developed. Based on technical studies, APSEZ has developed adequate storm water facilities that meets with daily demand as per recorded highest rainfall.</p> <p>Existing road/rail/conveyer infrastructure facilities are adequate to evacuate the existing cargo. Further, APSEZ's cargo evacuation through rail / conveyer / pipeline has increased to ~40 % thereby reducing the usage of road.</p> <p>Additional road facilities will be built as per master plan considering future development.</p> <p>The facilities for transportation of cargo other than road will be enhanced considering future development, which will reduce the traffic volumes on the regional road Network.</p>

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	<p>operations (including supporting facilities and colony) could be in the order of 18,300 and 10,400 vehicles per day respectively.</p> <p>There could be a possible increase in traffic congestions on village-highway intersections and road accidents.</p>		<p>are passing through settlements, thereby avoiding traffic Congestions in the respective villages. The carrying capacity of the eight artillery roads connecting APSEZ is estimated to be about 16,000 PCU/hr as against the envisaged peak traffic volume of 4,500 PCU/hr.</p> <p>Out of eight artillery roads considered in</p>	enhanced to 40% when the facility is fully developed in future. This will further reduce the traffic volumes on the regional road network.			

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			APSEZ master plan, seven roads were already developed and functional.				
			APSEZ has been imparting Driver Training Programs to all their contractors to enhance awareness on road safety.	APSEZ can undertake technical feasibility of implementing Intelligent Transport System (ITS) for the freight carriers associated with their development activities.	APSEZ & GSRDC*	Long Term	<p>APSEZ is being imparting the regular in-house classroom and on-job training to all drivers and employees on below topics:</p> <ul style="list-style-type: none"> • Basic induction Training for drivers • ITV Driver Training • ITV Driver Induction for Supervisor • Defensive Driving for LMV & HMV • Defensive Driving & BBS • Driver Assessment • Road accident & rescue • Traffic Management & Road Signage • Driving safety training • RORO Driver training • Road Safety • Defensive Driving & Emergency Action Plan • Drivers Responsibilities & Safe driving • Emergency Rescue (Vehicle) Training <p>Approx. 2460 Participants (On roll and contractual manpower) were benefitted from above trainings in compliance period April 21 to Sept 21. The same will be continued in future also.</p>

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							<p>APSEZ has also implemented the Remote traffic management system (RTMS) to manage the traffic movements and capturing the violations to further improve the system.</p> <p>Following steps were taken by APSEZ to reduce the accidents.</p> <ul style="list-style-type: none"> ✓ Installation of approx. 100 Nos. of cameras which is being operated at ISCR (Integrated security control room) to monitor & manage the traffic system in APSEZ on real time basis. ✓ Installation of 05 Nos. RTMS - Remote traffic management system (having combination of Radar + OCR camera + LED display board - showing speed limit) to recognize the over speeded vehicles, so that timely capture the same and avoid any road accidents. ✓ Display of signboards at roadsides and various places within APSEZ, Mundra. ✓ Monitoring of vehicle speed through speed gun by security personnel on daily basis.
3	Water resources Management and sewage treatment & disposal Plan						
3.1	For a fully developed APSEZ facility, water demand will be in the order of	No-Impact	APSEZ is meeting the current water demand through Narmada water supply scheme and	As per the master plan and permissions granted under EC, APSEZ will be developing progressively	APSEZ	As and When Required	<p>Currently there are two fresh water sources available with APSEZ.</p> <p>Desalination Plant – 47 MLD</p> <p>Narmada water through GWIL – 9 MLD (sanctioned capacity).</p> <p>Current water demand for APSEZ along with SEZ industries including Adani Power Plant is an avg. of 32 MLD.</p>

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	4,30,000 m ³ /day (430 MLD). APSEZ will be sourcing majority of the water from the captive desalination plants, which will be developed in progressive manner.		47 MLD captive desalination plant at site. Necessary water allocation from concerned authorities was obtained and the same will be renewed from time to time as per the directions of state government.	4,50,000 m ³ /day (450 MLD) of desalination plants to meet the future demand. Hence stress on regional water resources due to these developmental projects will be less significant.			<p>So presently, these sources are adequate to fulfill the current freshwater requirement of entire APSEZ including member units.</p> <p>The desalination plant of additional capacities will be installed on modular basis considering future requirement of APSEZ.</p>
3.2	Existing water demand in the Mundra taluk is estimated as 8500 m ³ /day (@55 lpcd) and the potable	Level-2	Adani Foundation has been contributing to various watershed development projects in the Mundra region to	Adani Foundation is planning to implement the various water resource conservation programs in next ten years under various	APSEZ and CGWB*	Long Term	<p>Water needs of APSEZ is being met through existing Desalination Plant of APSEZ and GWIL which may be further enhanced on modular basis, At present Ground water is not utilized for any activities within APSEZ.</p> <p>However various works are being carried out by Adani Foundation continuously under Water Conservation Work to achieve water security in Mundra region by Adani Foundation. Following works are carried out as a part of water conservation work since April – 2018.</p>

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	and sanitation water needs would increase to 37,000 m ³ /day (@125 lpcd) in future when the area is fully grown into larger municipality due to induced economic growth. Water demand of the local communities is met through Narmada water supply system to some extent, but largely depending		enhance ground water resources in the area. Adani Foundation has contributed about Rs. 300 Lakhs so far for the development of 18 check dams.	schemes.			<p>Water conservation Projects i.e. Roof Top Rain Water Harvesting, Desilting of Check dams, Bore Well Recharge and Pond deepening were taken up in past years, review and monitoring of all water harvesting structures had been taken up.</p> <p>To make connections between human actions and the level of biological diversity found within a habitat and/or ecosystem, this year Adani Foundation launch project “Sanrakshan” in coordination with GUIDE and Sahjeevan.</p> <p>Since, 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain in current year 1.11 mtr ground water table increased as per increased in coastal belt of Mundra as per Government Figures.</p> <p>Our water conservation work is as below.</p> <ul style="list-style-type: none"> • Augmentation of 2 check dams in addition of existing 18 check dams (1 Check dam current year). • 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 90 Nos. (35 Nos current year) which is having 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family. • Recharge Borewell 125 Nos (50 Nos current year).

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	on the ground water in the study area. Mundra block is reported to be a safe ground block as on date. Due to influx of people and rapid urbanization due to the economic development, there could be some stress on the ground water resources in future.						<ul style="list-style-type: none"> Drip Irrigation 980 Farmers (56 Application current year) 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. Luni Pond Bund Repairing Work is completed. <p>With the objective of to preserve the rainwater to reduce the impact of salinity and recharge the ground water (the main source of water) to facilitate the Agricultural activities as well as for drinking water.</p> <p>Adani foundation has spent approx. INR 4977.63 lakhs from April – 2018 to Sep – 2021 for CSR activities which also includes water conservation projects as mentioned above.</p>
3.3	It is estimated that about 60,000 m ³ /day (60	No Impact	Seven sewage treatment plants with an aggregate	APSEZ is permitted to develop decentralized sewage	APSEZ	As and When Required	Current installed capacity of wastewater treatment plants is 6.05 MLD (ETP, STPs & CETP) for treatment of effluent & sewage generated at various locations of APSEZ excluding wastewater treatment plants installed within individual member units.

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	MLD) of sewage will be generated from the APSEZ facility when the project is fully developed.		capacity of 3.1 MLD have already built at APSEZ. Treated sewage is utilized for greenbelt development and sewage is not discharged into either seasonal natural streams or marine environment.	treatment plants of total 62 MLD capacities. Existing sewage treatment facilities will be augmented progressively based on the development at APSEZ in future. Similar to existing practices, treated sewage will be utilized for greenbelt development.			<p>Out of 45, only 4 operational industries within the SEZ are sending their partially treated industrial as well as domestic effluent to the CETP confirming to CETP inlet norms for further treatment and final disposal. Other SEZ industries have their own STPs / ETPs for treatment of wastewater generated from their industrial operation and discharging the treated water on land for horticulture purpose within their premises as per specific permission granted by SPCB.</p> <p>APSEZ also granted permission to treat 2.5 MLD of sewage generated from Mundra village through CETP and STP.</p> <p>Presently avg. 2.39 MLD of wastewater (in to ETP, STPs & CETP) is treated and being utilized on land for horticulture purpose within APSEZ premises during April'21 to September'21. Existing wastewater treatment plants are adequate to treat and handle the total effluent / sewage load considering current development.</p> <p>Existing wastewater treatment facilities will be augmented, or new plants will be developed on modular basis considering future requirement.</p>
4	Air quality management Plan						
4.1	Although all the regulated activities in the study area will be adopting	Level-2	APSEZ and other thermal power plants have obtained valid consent to operate	All existing and new industrial establishments will obtain requisite consents from GPCB and	APSEZ And Other Industries	Continual Process	<p>APSEZ has been granted requisite permissions from the concerned authorities with stipulated norms for air emission (flue gas as well as ambient air).</p> <p>Ambient Air Quality monitoring is being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Pollucon Laboratory Pvt. Ltd. and M/s. UniStar Environment</p>

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	promulgated emission norms, total air emission mass discharge from the study area would increase.		and have been operating the facilities as per the emission norms stipulated in respective consent orders. APSEZ and other two power plants are monitoring the ambient air quality on regular intervals as per GPCB/CPCB guidelines and the data is analyzed and presented to GPCB on monthly basis. Both	adhere to the stipulated emission norms regulations and guidelines issued by authorities from time to time.			<p>& Research Labs Pvt. Ltd. for APL as per NAAQ standards, 2009. Stack emission monitoring is also being carried out on regular basis. Reports of the same are being submitted to the concerned authorities on regular basis.</p> <p>Adani power plant has installed continuous emission and air quality monitoring instruments as per CPCB Directive and submitting the reports also. Another power plant of CGPL is outside APSEZ area.</p> <p>The AAQM summary for last six months (Apr'21 to Sep'21) are as below.</p> <p>Locations: 17 Nos. (APSEZ – 12 + APL – 5 including 3 villages) Frequency: Twice in a week</p> <table><tr><th>Parameter</th><th>Unit</th><th>Max</th><th>Min</th><th>Perm. Limit^{\$}</th></tr><tr><td>PM₁₀</td><td>µg/m³</td><td>95.62</td><td>40.22</td><td>100</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>57.32</td><td>15.58</td><td>60</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>30.55</td><td>6.22</td><td>80</td></tr><tr><td>NO₂</td><td>µg/m³</td><td>42.68</td><td>13.50</td><td>80</td></tr></table> <p>^{\$} as per NAAQ standards, 2009 Values recorded confirms to the stipulated standards.</p> <p>Approx. INR 9.56 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2021-22 (Till Sep'21), which also includes ambient air quality monitoring for overall APSEZ, Mundra.</p>	Parameter	Unit	Max	Min	Perm. Limit ^{\$}	PM ₁₀	µg/m ³	95.62	40.22	100	PM _{2.5}	µg/m ³	57.32	15.58	60	SO ₂	µg/m ³	30.55	6.22	80	NO ₂	µg/m ³	42.68	13.50	80
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			the thermal power plants located within the study area have installed continuous emission and air quality monitoring instruments as per CPCB directive.				<p>Other industries located within the SEZ have obtained requisite permissions from the competent authorities for their respective plant and they also carried out environmental monitoring within their premises to comply with the permission granted. The same has been ensured by APSEZ as well as SPCB during their regular visits. APSEZ carries out regular visits/inspections of member industries within SEZ and last visit was conducted during Feb & Mar' 2021 for EMS & compliance verification. During compliance verification, it was verified that monitoring of air emission was well within the permissible standards based on analysis reports. Same will be continued in future also.</p> <p>The monitoring reports of industries within SEZ are also being submitted to the regulatory authorities as a part of half yearly Compliance report of EC for Multi-Product SEZ.</p>
				A common air quality management committee may be framed under the guidance of the State Pollution Control Board and district administration to manage regional level	APSEZ and Other Industries, Stakeholders, District Administration and GPCB*	Long Term And Continual	<p>APSEZ will co-operate and comply with the directions from concerned regulatory authorities for air quality management within APSEZ area. However, at present, APSEZ has formed Internal Environment Monitoring Committee, involving officials from APSEZ, Adani Power Limited and other SEZ member units with following role and responsibilities:</p> <ul style="list-style-type: none"> • Identification of sources of air & noise emission and its dispersion in surrounding villages • Remedial measures to eliminate, control, reduce or capture air & noise emission • Identify available resource to abate the air and noise emission

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				emission inventory data that can help to manage regional level air quality management goals.			<ul style="list-style-type: none"> Required additional resources for control of air and noise emission Drinking water and its testing of all the available fresh water sources in surrounding villages Identify any surrounding villages affected by organization's improper waste disposal mechanism. <p>Last committee meeting was conducted on dated 11th Sept 2021, and below was the point of discussion for way forward.</p> <ul style="list-style-type: none"> Brief introduction about the Environment Management Plan (EMP) All members conveyed his environment management practices, issue & suggestions Discussed about the various ways to improve existing practice to control the emission in terms of Air, Water and Noise. Discussed about the proper management of the canteen waste. Discussed about the cleaning of outside of the SEZ units. Discussed about the management of rain water & cleaning of the storm water drains. <p>APSEZ and all the industries within SEZ are in compliance to NAAQS and same is being ensured by APSEZ. The monitoring reports of industries within SEZ are being submitted to the regulatory authorities as part of half yearly Compliance report of EC for Multi-Product SEZ.</p>
	Release of		APSEZ has				Following safeguard measures are taken by APSEZ for

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4.2	particulate emissions from handling and storage of coal at the port and power plants would influence PM10 and PM2.5 concentration in the background air. This could pose some health impacts such as asthma and COPD etc. among the local communities.	Health Impact	been implementing the following management plan to control emissions as per the applicable regulations and similar practices will be adopted in future: Entire bulk material handling facilities are mechanized. Regular water sprinkling on road and other open areas, regular cleaning of roads, dry fog dust suppression systems	All industries located in the APSEZ shall adhere to the emissions norms and minimum stack height guidelines issued by CPCB and consent to operate issued by Gujarat Pollution Control Board from time to time.	APSEZ and Other Industries	Continual Process	<p>abatement of dust emissions.</p> <ul style="list-style-type: none"> Adequate stack heights to the Boilers, D.G. Sets, TFHs & HWGs for proper dispersion of pollutants within APSEZ Using of liquid & Gaseous fuels instead of solid fuels in Boilers, Thermic fluid heaters and hot water generators. Regular sprinkling on road and other open area Regular cleaning of roads Dry fog Dust Suppression System (DSS) in hopper, transfer towers and conveyor belts Use of water mist canon Closed type conveyor belts Regular sprinkling on coal heaps Covering other types of dry bulk cargo heaps Installation of wind breaking wall Development of greenbelt along the periphery of the storage yards/back up area Mechanized handling system for coal and other dry bulk cargo Wagon loading and truck loading through closed silo <p>Adequate air pollution control measures like ESPs, FGDs, Bag Filters, etc. and adequate stack heights provisions are implemented within the thermal power plant.</p> <p>The stack monitoring summary for last six months (Apr'21 to Sep'21) are as below.</p> <p>Total Nos. of Stacks: 22 Nos.</p>

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			(DSS) in hoppers, transfer towers and conveyor belts, use of water mist canon, covered conveyor belts, regular sprinkling on coal heaps,				<p>Frequency: Monthly / Half Yearly</p> <table><tr><th>Parameter</th><th>Unit</th><th>GPCB Limit</th><th>Min</th><th>Max</th></tr><tr><td>PM</td><td>mg/Nm³</td><td>150</td><td>15.30</td><td>35.42</td></tr><tr><td>SO₂</td><td>Ppm</td><td>100</td><td>3.73</td><td>7.71</td></tr><tr><td>NO_x</td><td>ppm</td><td>50</td><td>24.27</td><td>38.50</td></tr></table> <p>Values recorded confirms to the stipulated standards.</p> <p>Approx. INR 9.56 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2021-22 (Till Sep'21), which also includes stack monitoring for overall APSEZ, Mundra.</p> <p>All other industries located within SEZ are adhere to provide adequate stack height and pollution control measures for proper dispersion of pollutants as per respective permissions granted by the board. The same is being inspected and ensured by APSEZ as well as SPCB officials on regular basis.</p>	Parameter	Unit	GPCB Limit	Min	Max	PM	mg/Nm ³	150	15.30	35.42	SO ₂	Ppm	100	3.73	7.71	NO _x	ppm	50	24.27	38.50
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SO ₂	Ppm	100	3.73	7.71																							
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			covering of other types of dry bulk cargo heaps by protective materials, installation of wind breaking wall, development of greenbelt along the	An internal Coal Dust Management Working Group shall be formed by APSEZ to effectively co-ordinate the approach to	APSEZ and Other Industries, Concerned Stake holders, District Administration*	Long Term	<p>As mentioned above, presently, APSEZ has formed Internal Environment Monitoring Committee, involving Officials of APSEZ, Adani Power Limited & other member units, with specific role and responsibilities as defined above.</p> <p>The dry cargo is being handled by mechanized system and transported by covered conveyer system, trucks and rail wagons.</p> <p>Wind breaking wall is provided around the coal storage yards of APSEZ as well as Adani Power Plant.</p> <p>Adequate air pollution control measures like ESPs, FGDs,</p>																				

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			periphery of the storage yards/back up area and mechanized handling system for coal and other dry bulk cargo and Wagon loading and truck loading through closed silo. Both thermal power plants in the study area have installed electrostatic precipitators on the boilers and are meeting the emission norms as per the respective ECs granted.	coal dust management and monitoring			<p>Bag Filters, etc. and adequate stack heights provisions within the thermal power plant for proper dispersion of pollutants.</p> <p>Green belt / plantation is provided around the periphery of dry cargo storage area and regular water sprinkling is also being done to abate the dust emission from coal hips.</p> <p>Last committee meeting was conducted on dated 11th Sept 2021, and below were the point of discussion for way forward.</p> <ul style="list-style-type: none"> Brief introduction about the Environment Management Plan (EMP) All members conveyed his environment management practices, issue & suggestions Discussed about the various ways to improve existing practice to control the emission in terms of Air, Water and Noise. Discussed about the proper management of the canteen waste. Discussed about the cleaning of outside of the SEZ units. Discussed about the management of rain water & cleaning of the storm water drains.

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			Due to installation of tall stacks as per CPCB guidelines and EC conditions, the relative air pollution impacts due to release of emissions from two power plants is insignificant.				
4.3	Ships are one of the significant sources of SO ₂ and NO _x emissions in the study area. Marine diesel engines on the ships often utilize fuel oils that	Level-2	A Standard Operating Procedure (SOP) has been developed to be included as a part of APSEZ environment management	The current global limit for Sulphur content of ships fuel oil is 3.5 % m/m (mass by mass). According to MARPOL, the new global cap on sulphur in the marine	APSEZ and Ship Owners	Long Term	<p>The ships coming to the APSEZ are complying with MARPOL and other shipping rules and regulations.</p> <p>APSEZ has already started providing shore power supply to the tugs (11 Nos.), dredgers (2 Nos.) and barges (1 No.). The feasibility of shore power will be explored and implemented on large scale for the visiting vessels to reduce idling stage ship emissions.</p>

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	might contain higher sulphur content. As per the international best practices, these marine diesel engines are designed to meet MARPOL regulations with NOX emissions less than 14.4 gram/Kwhr of engine. Due to lower stack heights of the marine diesel engine, ship emissions often gets		plan to verify that all ships anchored at the port are adopting the MARPOL4 regulations.	vessel fuels will be 0.50% m/m by the 1st January 2025. APSEZ should explore the possibility of providing shore power to the ships at the port to reduce idling stage ship emissions.			

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	dispersed in the local environment and might pose risk of fumigation during the early morning and evening hours due to atmospheric inversion break-up periods.						
4.4	Road vehicle emissions will be other major contributors to the air pollution in the region when the facility is fully	Level-2	Not Applicable	Due to implementation of Bharat VI fuels (MoEF&CC)6 in near future the vehicular and diesel engine emissions will be reduced by about 50% from the current national levels. APSEZ should	APSEZ and All Industries	Short Term	<p>Presently, cargo evacuation through rail / conveyer / pipeline has increased to ~40 % thereby reducing the usage of road.</p> <p>Vehicles having valid PUC certificate are only being allowed to enter within APSEZ area.</p> <p>In future, APSEZ will also explore the feasibility of using Electric Vehicles for internal cargo movement.</p>

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	developed.			develop a robust contractor environmental policy to ensure that Bharat Stage VI emission norms are adopted by all their contractors and sub-contractors.			
5	Noise emissions						
5.1	Noise emissions are envisaged from port operations, industrial operations and power plants in the study area. Any increase	Level-1	Due to adoption of various mechanized operations at the waterfront development, the noise emissions from the port cargo handling will be minimal.	APSEZ, all the tenant industries and facilities within APSEZ are required to undertake noise monitoring at their facilities to demonstrate the compliance	APSEZ	Continual Process	<p>Below Safeguard measures are already taken for abatement of noise emissions.</p> <ul style="list-style-type: none"> • Development of greenbelt along the periphery of the operational area. • D.G. Sets having Acoustic enclosures. • Maintenance of plant machineries and equipment's on regular frequency. <p>Noise monitoring is being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Pollucon Laboratory Pvt. Ltd. as per permission granted and reports are being submitted to the concerned authorities on regular basis.</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude1	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance															
	in noise levels beyond three decibels from the background levels would be perceived as noise nuisance (USEPA)7.		An adequate greenbelt is being developed by APSEZ to further reduce any residual impacts due to noise emissions from the facility. Periodic noise level monitoring programs were adopted by APSEZ. Predicted noise levels were found to be well within the designated noise standards for Industrial facilities.	with the Noise level standards. Continuous noise recording units can be installed by APSEZ at facility boundary to address the community grievances, when ever required. To assess the overall site wide compliance and also to address any community grievances related to noise issues due to operation of APSEZ facilities.			<p>The noise monitoring summary for last six months (Apr'21 to Sep'21) are as below.</p> <p>Locations: 12 Nos. Frequency: Once in a month (24 hourly)</p> <table><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>73.5</td><td>69.8</td><td>75</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>48.4</td><td>43.5</td><td>70</td></tr></table> <p>^{\$} as per GPCB standards</p> <p>Approx. INR 9.56 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2021-22 (Till Sep'21), which also includes noise monitoring for overall APSEZ, Mundra.</p> <p>All the results are well within the standards. From this it can be inferred that there no impacts on the surrounding community.</p> <p>All other industries located in the APSEZ are adhere to monitor and control the ambient noise level as per permission granted by SPCB and same is being confirmed by APSEZ as well as SPCB on regular basis.</p> <p>Further, till date APSEZ has not received any grievances/notice for noise issues from any of the stakeholders.</p>	Noise	Unit	Leq Max	Leq Min	Leq Perm. Limit ^{\$}	Day Time	dB(A)	73.5	69.8	75	Night Time	dB(A)	48.4	43.5	70
Noise	Unit	Leq Max	Leq Min	Leq Perm. Limit ^{\$}																		
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				In order to address the public grievances related to noise from the facility, an internal Noise Management Committee can be formed by APSEZ to investigate the root cause and to develop and implement noise mitigation plans in the specific zones.	APSEZ	Continual Process	<p>As mentioned above, presently, APSEZ has formed Internal Environment Monitoring Committee, involving Officials of APSEZ, Adani Power Limited & other member units, having role and responsibilities as defined above.</p> <p>Last committee meeting was conducted on dated 11th Sept 2021, and below were the point of discussion for way forward.</p> <ul style="list-style-type: none"> Brief introduction about the Environment Management Plan (EMP) All members conveyed his environment management practices, issue & suggestions Discussed about the various ways to improve existing practice to control the emission in terms of Air, Water and Noise. Discussed about the proper management of the canteen waste. Discussed about the cleaning of outside of the SEZ units. Discussed about the management of rain water & cleaning of the storm water drains. <p>No grievance received for noise related issues, and it is observed that ambient noise level are well within the permissible standards.</p>
6	Surface water quality (Terrestrial and Marine)						
6.1	In general, release of untreated	Level -1	As per the master plan of APSEZ, 67 MLD of	As per the master plan of APSEZ, the existing CETP	APSEZ	As and When Required	APSEZ has installed Common Effluent Treatment Plant (CETP) having 2.5 MLD capacities for treatment of partially treated effluent and sewage generated from industries within SEZ.

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	wastewater from industrial facilities would pose threat to water quality of streams, estuaries and marine water bodies.		wastewater is expected to be generated from the fully developed project scenario, for which necessary permissions to set up decentralized CETPs of various capacities are already obtained. Presently a CETP capacity of 2.5 MLD is in place. Presently member units treat their effluents to meet the CETP inlet norms and	shall be augmented to 67 MLD in progressive manner based on the future demand. The facility should limit the marine discharge of treated industrial wastewater to 16 MLD as per the permits. Remaining treated wastewater shall be utilized for horticulture purpose.			<p>Currently, CETP receives 685 KLD (Avg.) hydraulic load and considering the current development scenario, existing CETP is adequate to treat and handle the total effluent load coming from industries within SEZ.</p> <p>Out of 45 only 4 industries within SEZ are sending their partially treated industrial as well as domestic effluent to the CETP confirming CETP inlet norms for further treatment and final disposal. Other industries within SEZ have their own STPs / ETPs for treatment of wastewater generated from their industrial operation and discharging the treated water on land for horticulture purpose within their premises as per permission granted by SPCB.</p> <p>The capacities of CETP will be enhanced on modular basis as per future requirement.</p> <p>Presently avg. 2.39 MLD (from CETP, ETP & STPs) of treated water is being utilized on land for horticulture purpose within APSEZ premises during period April 21 to Sept'21 and no discharge is made to any other source.</p>

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			then send it to CETP. Treated wastewater from CETP meets the stipulated discharge norms for utilization for greenbelt development within the APSEZ areas.				
			Online wastewater quality monitoring systems are installed at CETP to ensure quality of treated effluent meets the requisite discharge norms. No wastewater	Efforts shall be made to recycle complete treated wastewater for port operations and industrial operations of APSEZ in future based on a detailed techno-economic feasibility	APSEZ	Based on outcome Techno-feasibility Study	Online continuous effluent monitoring system installed at the discharge point of CETP to track any deviation from discharge norms. Presently entire quantity of treated water from CETP is used for gardening / horticulture purpose within APSEZ premises.

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			from CETP is discharged into natural bodies as on date..	study.																															
			Runoff during monsoon from coal storage yards is collected in sedimentation ponds (dump pond) to remove any residual dust particulates for further disposal into sea	Storm water runoff from the facility during the first rain shall be sampled and analyzed for the presence of heavy metals or other criteria pollutants to adopt corrective and preventive actions to protect the marine water quality. All red and hazard category industry within APSEZ shall adopt spill	APSEZ	Continual	<p>There are provision of drains around coal stack yard to carry to runoff water to dump ponds. This water is either used for dust suppression or after sedimentation (to remove residual dust), is allowed disposal to sea.</p> <p>Presently Marine monitoring is being carried out once in a month by NABL and MoEF&CC accredited agency namely M/s. Pollucon Laboratory Pvt. Ltd. for APSEZ and M/s. UniStar Environment & Research Labs Pvt. Ltd. for APL. The analysis reports of the same are being submitted to the concerned authorities on regular basis.</p> <p>The marine water quality monitoring summary for last six months (Apr'21 to Sep'21) is as per below.</p> <p>Locations: 14 Nos. (APSEZ – 9 + APL – 5) Frequency: Once in a Month / Half Yearly</p> <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>8.47</td><td>8.02</td><td>8.48</td><td>7.95</td></tr><tr><td>TSS</td><td>mg/L</td><td>135</td><td>46</td><td>156</td><td>46</td></tr><tr><td>BOD (3 Days @27 °C)</td><td>mg/L</td><td>5</td><td>2.26</td><td>3.9</td><td>ND*</td></tr></table>	Parameter	Unit	Surface		Bottom		Max	Min	Max	Min	pH	--	8.47	8.02	8.48	7.95	TSS	mg/L	135	46	156	46	BOD (3 Days @27 °C)	mg/L	5	2.26	3.9	ND*
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				prevention and control program and no effluents shall be discharged into storm water-drains.			<table><tr><td>DO</td><td>mg/L</td><td>6.4</td><td>5.4</td><td>6</td><td>5</td></tr><tr><td>Salinity</td><td>ppt</td><td>37.4</td><td>34.3</td><td>37.7</td><td>33.8</td></tr></table> <p>Approx. INR 9.56 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2021-22 (Till Sep'21), which also includes noise monitoring for overall APSEZ, Mundra.</p>	DO	mg/L	6.4	5.4	6	5	Salinity	ppt	37.4	34.3	37.7	33.8
DO	mg/L	6.4	5.4	6	5														
Salinity	ppt	37.4	34.3	37.7	33.8														
			Detailed marine hydrodynamic modelling studies revealed that the current and proposed dredged soil disposal practices, sea water intake and outfall facilities and desalination plant outfall etc have shown insignificant impact on the marine eco-system. As	Good dredging practices shall be adopted by APSEZ: (i).Improving the dredging accuracy (ii).Improving onboard automation and monitoring, (iii). Reduce spill and loss, (iv). evaluating the need for installing silt screens near mangrove areas during the dredging phase operations, (v).	APSEZ	Long Term	<p>No capital dredging has been done, since Apr 2015. Dredged material generated during maintenance dredging is being disposed at designated locations within deep sea as identified by NIO.</p> <p>Dredging Management plan is adopted for carrying out dredging and management of dredge material. Presently there are 3 nos. (2 Nos. Cutter suction + 1 No. Trailer suction) of dredgers are in operation for dredging.</p> <p>Marine monitoring is being carried out once in a month by NABL and MoEF&CC accredited agency namely M/s. Pollucon Laboratory Pvt. Ltd. The analysis reports of the same are being submitted to the concerned authorities on regular basis. Summary of marine water for the last six months is as mentioned above.</p> <p>The same practice will be continued in future also as per direction by MoEF&CC as well as GPCB.</p> <p>Monitoring will be focused near ecological sensitive area in case of need to carryout capital dragging near such areas.</p>												

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			part of the comprehensive environmental monitoring program, APSEZ has been adopting marine water and sediment quality monitoring on monthly basis.	Environment friendly dredging activities can be undertaken in such a way that the overall turbidity levels near the mangrove and ecologically sensitive zones shall not exceed 100 NTU or 200 mg/l of TSS (10% lethal level of fish) Existing marine monitoring program shall be continued as per the directions of MoEF&CC and GPCB.			
7	Groundwater quality and salinity ingress						
	While Mundra		APSEZ is not utilizing	A dedicated desalination		As and When	Present source of water for various project activities is desalination plant of APSEZ and/or Narmada water through

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7.1	block is enjoying safe ground water status as on date (based on the data published by CGWB), due to induced economic and population growth, use of ground water resources by the local people might increase in Mundra region. This might increase the TDS and chloride levels in the ground water in	Level-2	ground water for any type of use. APSEZ is meeting the current water demand through Narmada water supply scheme and 47 MLD captive desalination plant at site.	plant of capacity 4,50,000 m ³ /day (450 MLD) will be developed in progressive manner to meet the APSEZ requirements.	APSEZ	Required	<p>Gujarat Water Infrastructure Limited and same is sufficient to meet the present water demand.</p> <p>APSEZ does not draw any ground water.</p> <p>The desalination plant of additional capacities will be installed on modular basis considering future development and requirement.</p>

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7.2	Due to induced growth in the region, pressure on the available ground water source would increase and this could pose some threat to salinity ingress.	Level-2	Ground water is not drawn by APSEZ for its operations. Natural streams (seasonal rivers) passing through the APSEZ area will not be disturbed, the micro-watershed in the area will not be disturbed. Due to the above reasons, the possibility of salinity ingress due to APSEZ development is not envisaged.	The Govt. of Gujarat, Narmada, Water Resources, Water Supply & Kalpsar Dept.,(WRD)12 has been implementing various salinity ingress prevention projects	District Administration*	Long Term	<p>APSEZ will co-operate and comply with the directions from concerned regulatory authorities.</p> <p>APSEZ does not draw any ground water for the fresh water requirement.</p> <p>However, Adani Foundation – CSR arm of Adani Group has carried out rainwater harvesting activities in the nearby villages for benefit of the locals.</p> <p>Water conservation Projects i.e. Roof Top Rain Water Harvesting, Desilting of Check dams, Bore Well Recharge and Pond deepening were taken up in past years, review and monitoring of all water harvesting structures had been taken up.</p> <p>To make connections between human actions and the level of biological diversity found within a habitat and/or ecosystem, this year Adani Foundation launch project “Sanrakshan” in coordination with GUIDE and Sahjeevan. Since, 10 years considerable Water Conservation Work carried out in Mundra Taluka. Due to satisfactory rain in current year 1.11 mtr ground water table increased as per increased in coastal belt of Mundra as per Government Figures.</p> <p>Our water conservation work is as below.</p> <ul style="list-style-type: none"> Augmentation of 2 check dams (1 Check dam current year).

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			Mundra and Anjar blocks fall under fresh water to medium salinity zones. It can be observed that little variation was observed in the ground water salinity levels from year 2013 to 2016 across the Mundra and Anjar blocks. This aspect confirms that the overall salinity ingress from the shore into the land due to existing				<ul style="list-style-type: none"> 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 90 Nos. (35 Nos current year) which is having 10,000 litre storage which is sufficient for one year drinking water purpose for 5 people family. Recharge Borewell 125 Nos (50 Nos current year) which is best ever option to. Drip Irrigation 980 Farmers (56 Application current year) 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. Luni Pond Bund Repairing Work is completed. <p>With the objective of to preserve the rainwater to reduce the impact of salinity and recharge the ground water (the main source of water) to facilitate the Agricultural activities as well as for drinking water.</p> <p>Narmada Water Resources, Water Supply & Kalpsar Dept.,(WRD)1 has been implementing various salinity ingress prevention projects. Under Sardar Sarovar canal project, Govt. of Gujarat has proposed to implement about 8200 Km</p>

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			APSEZ facilities and power plant outfalls are less significant.				stretch of water canal and the project is at various stages of implementation. Under this project about 112,000 ha of land in about 180 villages will be benefitted with irrigation needs. This will significantly reduce the pressure on the ground water resources in the region.																																								
				While the individual industries in the study area will continue to undertake ground water quality monitoring as per the environmental clearances issued for the respective projects, a regional level ground water conservation action committee can be formed under the guidance of state ground	All Concerned Stakeholders , District Administration and CGWB*	Continual Process	<div>APSEZ (7 Locations – half yearly) & Adani Power Ltd. (5 Locations – quarterly) is carrying out ground water sampling and reports of the same are being submitted to the regulatory authorities on regular basis.</div> <div>The summary of APSEZ ground water quality monitoring for last six months (Apr'21 to Sep'21) are as below.</div> <table><tr><th>Nos. of Location: 07Sr. No.</th><th>Parameter</th><th>Unit</th><th>Min</th><th>Max</th></tr><tr><td>1</td><td>pH</td><td>--</td><td>7.73</td><td>8.35</td></tr><tr><td>2</td><td>Salinity</td><td>ppt</td><td>0.91</td><td>7.44</td></tr><tr><td>3</td><td>Oil & Grease</td><td>mg/ L</td><td>ND*</td><td>ND*</td></tr><tr><td>4</td><td>Hydrocarbon</td><td>mg/ L</td><td>ND*</td><td>ND*</td></tr><tr><td>5</td><td>Lead as Pb</td><td>mg/ L</td><td>0.02</td><td>0.22</td></tr><tr><td>6</td><td>Arsenic as As</td><td>mg/ L</td><td>ND*</td><td>ND*</td></tr><tr><td>7</td><td>Nickel as Ni</td><td>mg/ L</td><td>ND*</td><td>ND*</td></tr></table>	Nos. of Location: 07Sr. No.	Parameter	Unit	Min	Max	1	pH	--	7.73	8.35	2	Salinity	ppt	0.91	7.44	3	Oil & Grease	mg/ L	ND*	ND*	4	Hydrocarbon	mg/ L	ND*	ND*	5	Lead as Pb	mg/ L	0.02	0.22	6	Arsenic as As	mg/ L	ND*	ND*	7	Nickel as Ni	mg/ L	ND*	ND*
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				water board and district Administration			<table><tr><td>8</td><td>Total Chromium as Cr</td><td>mg/L</td><td>0.02</td><td>0.04</td></tr><tr><td>9</td><td>Cadmium as Cd</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>10</td><td>Mercury as Hg</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>11</td><td>Zinc as Zn</td><td>mg/L</td><td>0.14</td><td>0.64</td></tr><tr><td>12</td><td>Copper as Cu</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>13</td><td>Iron as Fe</td><td>mg/L</td><td>0.27</td><td>3.86</td></tr><tr><td>14</td><td>Insecticides/Pesticides</td><td>mg/L</td><td>ND*</td><td>ND*</td></tr><tr><td>15</td><td>Depth of Water Level from Ground Level</td><td>meter</td><td>1.90</td><td>2.18</td></tr></table> <p>* ND – Not Detectable</p> <p>Approx. INR 9.56 Lakhs is spent by APSEZ for environmental monitoring activities during the FY 2021-22 (Till Sep'21), which also includes noise monitoring for overall APSEZ, Mundra.</p> <p>The freshwater requirement of all the industries within SEZ is being satisfied through APSEZ. All the industries are encouraged to monitor ground water quality as per the permissions granted by competent authorities.</p> <p>As mentioned above, presently, APSEZ has formed Internal Environment Monitoring Committee, involving Officials of</p>	8	Total Chromium as Cr	mg/L	0.02	0.04	9	Cadmium as Cd	mg/L	ND*	ND*	10	Mercury as Hg	mg/L	ND*	ND*	11	Zinc as Zn	mg/L	0.14	0.64	12	Copper as Cu	mg/L	ND*	ND*	13	Iron as Fe	mg/L	0.27	3.86	14	Insecticides/Pesticides	mg/L	ND*	ND*	15	Depth of Water Level from Ground Level	meter	1.90	2.18
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							<p>APSEZ, Adani Power Limited and other member units, having role and responsibilities as defined above.</p> <p>APSEZ will co-operate and comply with the directions from concerned regulatory authorities for ground water management.</p>
8	Waste Management						
8.1	Solid waste will be generated from industrial activities of APSEZ and other permitted facilities in the study area including Mundra town. These wastes would contain recyclable material, construction debris, organic	Level-2	APSEZ has been adopting Zero waste Initiatives and the entire waste generated from existing operations is segregated and disposed to recycling vendors, thereby APSEZ has achieved zero landfill status as on date.	APSEZ will continue to adopt Zero Waste Initiative and wastes will be segregated at source and disposed to various recycling vendors, co-processing in cement plants. This initiative helps not only to reduce the waste to landfill significantly, but also to recycle the materials there	APSEZ	Continual Process	<p>Presently APSEZ has implemented Zero waste Initiatives as per 5R (Reduce, Reuse, Recycle, Recover & Reprocess) principles of waste management. At present, APSEZ has developed material recovery facility for 6.0 TPD capacities. A well-established system for segregation of dry & wet waste is in place. All wet waste (Organic waste) is being segregated & utilized for compost manufacturing and/or biogas generation for cooking purpose. The compost is further used by in house horticulture team for greenbelt development. Whereas dry recyclable waste is being sorted in various categories. Presently manual sorting is being done for sorting of different types of solid waste. Segregated recyclable materials such as Paper, Plastic, Cardboard, PET Bottles, Glass etc. are then sent to respective recycling units, whereas remaining non-recyclable waste is bailed and sent to cement plants for Co-processing as RDF (Refused Derived Fuel). The same practice will be continued in future also. APSEZ has also been recognized for Zero Waste to Landfill certification from reputed organization.</p> <p>APSEZ, Mundra is certified for Zero Waste to Landfill management system (ZWTL MS 2020) by TÜVRheinland</p>

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	waste, inert material and e-waste etc. In the absence of any organized source segregation programs and material recycling strategies and infrastructure facilities, these wastes will enter into environment and would pose long term health impacts.			by avoiding ecological impacts.			<p>India Pvt. Ltd. (valid up to 31.05.2024). APSEZ, Mundra has also been certified as Single Use Plastic (SUP) Free Port by Confederation of Indian Industry (CII) (valid up to 25.05.2022). Details of the same are attached as Annexure – 8.</p> <p>APSEZ will continue proper solid waste management in his operational area.</p>
8.2	Considering an average solid waste generation	Level-2	APSEZ has made a provision for central waste management facilities	The existing waste segregation and material recycling facilities will	APSEZ	Continual Process	

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	of 0.25 Kg/person/day, the estimated solid waste from facilities within APSEZ will be in the order of 100 TPD (36,500 TPA).		within the existing site based on the future needs. As part of the Zero Waste Initiatives, no landfill facilities will be installed at APSEZ.	be augmented to dispose safely the wastes generated from APSEZ areas. Solid Waste Management Program shall be adopted and implemented as per Municipal Solid Waste Management Rules 2016 and Construction Waste Management Rules 2016			Industries located within the SEZ area are also complying with the waste management rules stipulated by statutory authorities and same is also being confirmed by APSEZ as well SPCB on regular basis.
8.3	About 35 TPD (13,000 TPA) of solid waste would be generated from the	Level-2	As per the MSW Rules 2016 all the industrial facilities and SEZs are required to	Solid Waste Management Program shall be adopted and implemented as per Municipal	All Industries	Continual Process	

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	proposed industrial areas located outside the APSEZ area.		adopt waste segregation facilities at the respective properties and non-recyclable waste shall be disposed to landfill sites.	Solid Waste Management Rules 2016 and Construction Waste Management Rules 2016			
9	Ecological aspects (terrestrial and marine)						
9.1	About 1576 ha of shrub forest land contiguous to APSEZ area is applied for land diversion for various developmen	Level -1	It is noted that the designated forest land is free from any native vegetation and comprises of Prosopis juliflora. It is also noted that no	APSEZ has approached concerned authorities for diversion of designated forest land. Suitable compensatory afforestation plan shall be adopted based on the recommendations and	APSEZ/State Forest Department*	Long Term	Stage – 1 forest Clearance for about 1576.81 Ha Forest land has been obtained. Presently APSEZ is in the process of compliance to the stage – 1 Forest Clearance conditions, for further submitting to Govt. authorities for issuance of Stage-2 Forest Clearance.

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	tal activities. This might have certain level of changes in the biodiversity in the study area.		endangered species are present at the shrub forests that are applied for land diversion. It is also noted that no forest produce is reported from this designated forest land parcel due to lack of economic importance of plant species reported in the shrub forest. It is also noted that no tribal lands are located in the	directions of the concerned authorities. Due to adoption of compensatory afforestation program through a scientific manner, the overall ecological footprint in the district will be increased. Due to plantation of native tree species as part of greenbelt development, the overall biodiversity of the region will increase considerably when the project is fully developed.			

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			designated forest land parcel. Hence there will not be any change in biodiversity due to the proposed diversion.				
9.2	Mangrove conservation areas are located adjacent to the APSEZ area. Accidental discharges of industrial effluents into the marine environment would pose certain ecological risk.	Level -1	No development activities will be undertaken within mangrove conservation areas. APSEZ has taken up large scale mangrove afforestation activities in an area of more than 2800 ha at various locations	Mangrove footprint and health status shall be monitored annually	APSEZ	Continual Process	<p>As per study conducted by NCSCM in 2017, mangrove cover in and around APSEZ, Mundra has increased from 2094 Ha to 2340 ha (as compared between 2011 to 2017). The analysis has shown an overall growth of 246 ha. The cost for said study was INR 3.15 Cr.</p> <p>Recently study was carried out in the year 2019 and based on that there is an increase of mangrove cover between March 2017 (Total 2340) and September 2019 with an extent of 256 Ha (Total 2596 Ha Area) which is about 10.94% rise in growth rate, also It reveals that the mangrove and the tidal system in the creeks remained undisturbed over this period.</p> <p>Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019.</p> <p>Analysis of data between categories indicated that there was an increase in dense mangroves along with the</p>

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			across the coast of Gujarat state in consultation with various organizations The Adani Foundation introduced 'Mangrove Nursery Development and Plantation' scheme in the area as an alternative income generating activity for the people of the region.				<p>conversion of scattered into sparse, that shows the growth of mangroves in a progressive direction.</p> <p>As a part of GCZMA recommendations and NCSCM mangrove conservation action plan, APSEZ has undertaken following activities.</p> <table><tr><th>Sr. No.</th><th>Recommendations</th><th>Compliance</th></tr><tr><td>1.</td><td>Mangrove mapping and monitoring in and around APSEZ</td><td><ul style="list-style-type: none">APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island.As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.7%This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion</td></tr></table>	Sr. No.	Recommendations	Compliance	1.	Mangrove mapping and monitoring in and around APSEZ	<ul style="list-style-type: none">APSEZ entrusted NCSCM, Chennai to carry out Monitoring of mangrove distribution in creeks in and around APSEZ and shoreline changes in Bocha island.As a part of this study, overall growth of mangroves in the creeks in and around APSEZ was assessed comparing Google earth images of 2017 & 2019 and it is observed that there was increase in mangrove cover between March 2017 and September 2019 to the extent of 256 Ha, which is about 10.7%This suggests that the mangroves and the tidal system in the creeks remain undisturbed over this period. Analysis of data between categories indicated that there was an increase in dense mangroves and also conversion
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									<p>of scattered to sparse which also shows that the growth of mangroves in a progressive direction.</p> <ul style="list-style-type: none"> Hence, there is an overall growth of mangroves in creeks in and around APSEZ, Mundra is 502 Ha between 2011 and 2019. The cost of the said study was INR 23.56 Lacs incurred by APSEZ.
							2.	Tidal observation in creeks in and around APSEZ	<ul style="list-style-type: none"> APSEZ carried out the tidal observations at locations similar to 2017 in Kotdi, Baradimata, Navinal, Bocha and Khari creeks under the guidance of NCSCM. The observed tidal ranges indicate that the creeks experience normal tidal ranges, adequate for the growth of mangroves. The cost of the said activity was INR 1.0 Lacs.
							3.	Removal of Algal and Prosopis growth from mangrove areas	<ul style="list-style-type: none"> Algal and Prosopis growth monitoring was done in and around mangrove area and algal encrustation was found in some of the mangrove areas, which has been removed manually. The cost of the said activity was INR 1.2 Lacs.

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							<p>4. Awareness of mangroves importance in surrounding communities</p> <ul style="list-style-type: none"> Adani Foundation – CSR Arm of Adani group has done awareness camps/activities created in the community regarding importance of mangroves. Adani Foundation has also provided 8.95 lacs kg Dry Fodder and 24.25 lacs kg Green fodder in 21 villages of Mundra and Anjar Block to support the resource dependent villagers, to avoid their dependency on mangroves. The expenditure for fodder supporting activities was approx. 122.7 Lacs during FY 2021-22 (Till Sep'21). 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 Grassland development in Siracha – 85 Acre & Zarpara – 25 Acre done which resulted in total production of 82 ton. Other than this dedicated security guard with gate system deployed by APSEZ across the coastal area and no any unauthorized persons allowed within coastal as well as mangrove areas. Refer CSR report attached as Annexure – 1.

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							<p>Other than this Adani Foundation – CSR Arm of Adani Group at Mundra-Kutch has initiated multi-species plantation of mangroves in Luni village in association with GUIDE, Gujarat. During 2018-2019 (Phase-I) multi-species mangrove plantation was carried out in 10 ha, during Phase-II (2019-2020) it was 02 ha and during Phase III (2020-2021) it is 01 ha. Current year 3 ha development is planned to extend multi-species mangrove plantation.</p> <p>Mangrove plantation done at Luni sea coast with fisher folk community during World Environment Day Celebration. 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. 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.</p> <p>Mangroves nursery is developed in a Khari creek behind IOCL & 50,000 Nos. of new saplings were planted in creek area by APSEZ.</p>
9.3	Outfall from the thermal power plants desalination and CETP would pose	Level-1	A detailed marine hydro-dynamic and dispersion modelling of the study area indicates that the	All approved marine outfalls shall be monitored for salinity, temperature and other designated	APSEZ and Concerned Industry	Continual Process	<p>Presently marine monitoring is being carried out by the Adani power plant at the marine outfall locations and reports are being submitted to the concerned authorities on regular basis.</p> <p>APSEZ is carrying out Marine monitoring once in a month at 9 locations in deep sea by NABL and MoEF&CC accredited agency namely M/s. Pollucon Laboratory Pvt. Ltd. The analysis reports of the same are being submitted to the</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude1	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance																						
	certain level of impact on the marine environment .		background temperature and salinity at mangrove conservation area will not increase from the prevailing background levels as the outfalls are located far away. APSEZ and respective power plants in the study area have been monitoring the marine water quality status on monthly basis for the stipulated environmental and ecological parameters.	parameters as per consent to establish issued by GPCB. Existing marine environmental monitoring program shall be continued.			<p>concerned authorities on regular basis.</p> <p>Adani power plant is also doing marine water quality at 5 locations (2 locations at outfall location) in deep sea by NABL and MoEF&CC accredited agency namely M/s. Unistar Environment & Research Labs Pvt. Ltd. The analysis reports of the same are being submitted to the concerned authorities on regular basis. The summary of marine water quality is shown above.</p> <p>The comparison of marine water results between CIA and current monitoring data are as below.</p> <table><tr><th rowspan="2">Parameter</th><th rowspan="2">Unit</th><th colspan="2">Max</th><th colspan="2">Min</th></tr><tr><th>CIA</th><th>Present</th><th>CIA</th><th>Present</th></tr><tr><td>Temp.</td><td>°C</td><td>30.2</td><td>29</td><td>28</td><td>28</td></tr><tr><td>Salinity</td><td>ppt</td><td>41.8</td><td>35.3</td><td>34.9</td><td>33.8</td></tr></table> <p>As per above results, it can be seen that there is no major deviation in the concentration of parameters and thus indicates that impacts are insignificant.</p>	Parameter	Unit	Max		Min		CIA	Present	CIA	Present	Temp.	°C	30.2	29	28	28	Salinity	ppt	41.8	35.3	34.9	33.8
Parameter	Unit	Max		Min																									
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9.4	Terrestrial Ecology: Study area doesn't have any notified national parks or ecological sanctuaries. Since the area falls under dry deciduous shrubs. Due to scanty rains in the area, the overall natural green-cover/vegetation in the area is very small.	Level-1	APSEZ has developed greenbelt in an area of 550ha as against the committed area of 430ha. A dedicated nursery is set up to promote plantation. APSEZ have undertaken a plantation with about 9.6 Lakh fully grown trees.	The compensatory afforestation area to be monitored annually to check the survival rate of the plantation.	APSEZ	Continual Process	<p>APSEZ has developed its own "Dept. of Horticulture" which is taking measures/ steps for terrestrial plantation/greenbelt development. APSEZ, Individual SEZ Industries and Adani Power Plant has developed more than 700 Ha. area as greenbelt with plantation more than 10 Lacs saplings within the APSEZ area including SEZ industries & Adani Power Plant.</p> <p>Dedicated horticulture department is maintaining and monitoring the terrestrial green belt development on regular basis to check the survival rate of plantation.</p> <p>Total expenditures of the horticulture dept. of APSEZ during the FY 2021-22 (Till Sep'21) within APSEZ is INR 605 lakhs.</p>
10	Socio-economic aspects						
10.1	Population growth in the Mundra region was reported to be in the order of	Level-1	Dedicated townships are developed within APSEZ area with necessary	The existing townships will be expanded to accommodate about 4lakh people when the	APSEZ	As and When Required	APSEZ has developed two townships (Shantivan and Samudra) accommodating 2180 households and associated infrastructure facilities. Accommodation is made available for all interested employees working within Adani group & SEZ industries. Out of which 88% Occupancies are

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	85% during the past decade (2001-2011). Further expansion of the urban area could be possible due to induced economic growth in the region. Increase in population will have an additional need for public infrastructure in the region.		community infrastructures such as hospital, school, recreational facilities, sewage treatment and waste collection facilities. Adani Foundation has been undertaking various CSR programs under the principal themes such as education, community health, sustainable livelihood and rural infrastructure. About Rs. 97 Cr has been spent on various CSR	project activity is fully developed.			<p>accommodated within the townships and rest are available for employees working within APSEZ.</p> <p>At present 45 nos. of industries (processing & non-processing) are operating within the SEZ. Township facilities are also made by SEZ industries within Mundra town for their employees having basic infrastructure facilities and requirements. Most of the employees working in SEZ industries are residing in Mundra township having all basic requirements and associated facilities.</p> <p>The existing social infrastructure facilities are adequate to accommodate the people considering present APSEZ development. The existing townships with associated facilities will be expanded as per requirement. Other infrastructure facilities have been developed for people as follows.</p> <ul style="list-style-type: none"> • Multi-Specialty Hospital • School • Commercial complex • Religious place <p>APSEZ is actively working with local community (including fishermen community) around the project area and provides required support for their livelihood and other concerns through the CSR arm – Adani Foundation in the main five persuasions is mentioned below.</p> <ul style="list-style-type: none"> • Community Health • Sustainability Livelihood – Fisher Folk • Education • Rural Infrastructures

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			activities in the Mundra region since 2010. Similar community development programs (based on need based assessment) will be continued in future as well with allocation of appropriate budget.				<p>Adani foundation has spent approx. INR 4977.63 lakhs from April – 2018 to Sep – 2021 for CSR activities which also includes cost of rural infrastructure projects.</p> <p>Major works carried out since April 2018 as a part of CSR activities are as below.</p> <ul style="list-style-type: none"> • Pond Deepening work at Vadala & Mota Bhadiya • Artificial recharge borewell in Borana, Mangara & Dhrub village. • Under Dignity of Drivers Project, Adani Foundation has constructed Resting Shed for Drivers entering in SEZ Premises. Total 50 beds are constructed, drinking water and sanitation plus recreational – TV Facilities. • Construction of 45 Toilet block and proper bathing place for labours. • RO Plant – Samaghogha, Siracha village & Vallabh Vidyalaya at Mundra • Basic sanitation facility (18 Nos) at Balvadi, medical centre and retiring places at labour settlements • 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. and Recharge Bore well 75 Nos. • Drip Irrigation 980 Farmers benefitted in coordination with Gujrat Green Revolution Company • Participatory Ground Water Management in ten villages with holistic approach for Kankavati Sandstone Aquifer Programme. • Bund construction on way of Nagmati River could save more than 575 MCFT water quantity which recharged in ground due

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							<p>to which bore well depth decreased by 50-100 Ft in Zarpara, Bhujpur and Navinal Vadi Vistar.</p> <ul style="list-style-type: none"> • Development of Prisha Park at Mundra. • Pond Bund strengthening at Zarpara Village • Approach Road Restoration at all Fisher folk vasahat . • Garden Development at Primary School Rampar village • Shed Development at Shukhpurvah Mundra • 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. • 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. • Sea Weed Culture - 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 sea weeds Kappaphycus alvarezii, Gracilaria dura and green sea weed Ulva. The initial trials have given very promising results and harvested 6-7 times the seeded material in a 40-45 days cultivation period. • 31 RRWHS structure have been completed • 45 Bore-well recharging activity is completed. • Development Approach road Prasala vadi vistar Gogan Pachim at Zarpara • Earthen bund Repairing work at Pond, Luni.

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							<ul style="list-style-type: none"> Pre-monsoon activity Approach repairing, Village Pond Lake strengthen, and river cleaning (babul cutting) work is ongoing in Various Villages Approach Road repairing at Various Fishermen Vasahat (ARC). <p>Similar community development programs (based on need based assessment) will be continued in future as well with allocation of appropriate budget.</p>
10.2	The overall sex ratio was found to reduce by 28% in the Mundra taluk (study area) during the period 2001 - 2011. This could be attributed to increase in influx of working men in the region due to rapid economic development. Similar trend might continue in future due to induced	Level-2	Adani foundation is taking up several girl child education programs as part of CSR activities to create awareness about girl child protection.	Suitable regional level awareness programs on the girl child protection and encouragement programs in line with state and national policies shall be adopted under Corporate Social Responsibility programs in association with district authorities.	APSEZ, Other development projects and District Administration*	Long Term	<p>Major works carried out since April 2018 as a part of CSR activities to create awareness about girl child protection are as below.</p> <ul style="list-style-type: none"> The Adani Foundation provided scholarship support to motivation and encouragement of fishermen boys and girls for higher education under this program. APSEZ provide 100% fees support to girls as a scholarship. Uthhan Project promotes girl child education, Creating awareness through various Govt schemes i.e. Vahali Dikri Yojana, Sukanya Samridhi Yojana etc. till date covered more than 1200 girl child to get benefit out of it. Separate sanitation facilities for girl child in schools. Suposhan Project focus on adolescent and Reproductive age women nutrition part. Till date covered more than 12500 women and 8700 adolescents under this Project and brought them to considerable status. .Beti Vadhavo Programme was organized in 32 Villages in the presence of Village Sarpanch and other leaders in year 2017-18. We explained people about the various topics i.e. importance of girl child, Sex Ratio, Gender

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	economic growth in the region.						<p>Equality and laws regarding Child abortion. This initiative was well accepted by community and we have observed a visible change in their mindset. We have facilitated 560 daughters with Kit (Small Bed sheet, Mosquito net, Soap and Cream with nutritious food for mother) To create awareness about health, personal hygiene, child education and nutritional diet in fishermen community, various awareness programs have been organized.</p> <ul style="list-style-type: none"> • 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. • Project Suposhan is initiated with the Motive ... Curb malnutrition amongst Children, Adolescent girls and Women in our CSR villages. <ul style="list-style-type: none"> ✓ 100 beneficiaries covered in Menstrual Hygiene Day - with slogan called "RED-ACHHA HAI" ✓ 204 beneficiaries covered in Breastfeeding Week ✓ 320 beneficiaries covered in National Deworming Day ✓ 20 villages covered in celebration of NATIONAL NUTRITION MONTH ✓ 42 FAMILY COUNSELLING • To reduce malnutrition and anemia amongst Children 95 % & adolescent girls and pregnant & lactating women by 70 % in three years • Reduction IMR and MMR • Support Awareness & Cover 100 % Vaccination taken by Child & women.

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							<ul style="list-style-type: none"> SuPoshan Thanksgiving program was organized. In this webinar DDO, CDPO Mundra and other dignitaries remained present and appreciated the efforts to overcome malnourishment in Mundra and Bitta. 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 upon the same day. Adani Foundation is working with 15 Self help group and supporting to develop entrepreneur skills to become self reliant, sourcing more than 350 women to absorb in various job –this will give them identity, confidence and right to speak in any decision for home, village and working area. <p>About INR 4977.63 lakhs has been spent on various CSR activities in the Mundra region since April 2018 till Mar 2021 including cost of community health and education for woman and girl child.</p>
10.4	Due to economic growth leading to rapid urbanization, which prompts the	Level-2	Adani hospitals, Mundra is setup by Adani group near Samudra township with a goal to provide	APSEZ will explore other possibilities to augment the primary and secondary healthcare facilities in future	APSEZ	Long Term	<p>Adani hospitals (Multi-specialty), Mundra is having 110 bed facility and same is setup by Adani group near Samudra township.</p> <p>Primary health center and community health center are in place within the Mundra taluka.</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
	need for healthcare facilities in the region. For an influx of 6 lakh people from APSEZ operations and additional 3 Lakh from induced growth by the year by 2030 (fully developed scenario), total hospitals facilities with about 540 beds would be required.		primary and secondary health care services to Adani group employees and the local populace of Mundra. The existing 100 bed Adani hospital at Mundra has been catering the services ranging from wellness and preventative care.	depending on the growth scenario at APSEZ development.			<p>Other than this Adani foundation is doing various activities as part of community health. The details of last year are as below.</p> <p>Adani foundation has spent approx. INR 4977.63 lakhs from April – 2018 to Mar – 2021 for CSR activities cost including cost of community health.</p> <ul style="list-style-type: none"> • Mobile Health Care Units and Rural Clinics • 9 Rural Clinics • 06 from Mundra, 02 from Anjar & 01 from Mandvi block treated; • 3843 patients • 31 villages covered, with 94 types of general and lifesaving medicines through Mobile healthcare unit • 3364 patients benefited during six months • 06 patients are provided Dialysis treatment at 133 times with nominal charges at Adani Hospital. • 471 –Economically Challenged patients have been supported for operation, OPD, IPD, Medicines and lab-test. • For Preventive health care General and multispecialty camps Pediatric camp, General Health camps in 9 villages and Super specialist camp which benefitted more than 1100 patients of Mundra Taluka. • 16 Senior Citizens have been linked with Government Niradhar pension scheme, 34 senior Citizens linked up with Ayushman Yojana and 67 Senior Citizens were referred to GKGH Bhuj for chronic illness. <p>Other than this, Adani Foundation has also worked for fight against COVID – 19 pandemic situations for last two years.</p> <p>Present Hospital facilities are adequate to avail the medical treatment for Mundra region considering present development. Other Occupational Health centres, primary</p>

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
							<p>health centres and community health centres are also in place in Mundra to take care the people residing in Mundra. Adani group is also operating high quality health care services to the people of Kutch at G. K. General Hospital, Bhuj having 750 beds facilities on public private partnership (PPP) model, which is 60 km far from Mundra.</p> <p>APSEZ will explore other possibilities to augment the primary and secondary healthcare facilities in future depending on the future development at APSEZ.</p>
10.5	<p>Due to rapid economic development in the region, several employment opportunities can be generated to the local people.</p> <p>When the area is fully developed by the end of 2030, the working population of the Mundra taluk would increase from</p>		<p>APSEZ has been giving preferences to people from Gujarat for providing employment opportunities based on eligibility and skills. In Mundra, special programmes have been conducted by Adani Foundation to enhance the employability of youth from fisherfolk</p>	<p>APSEZ is committed to provide support for fishermen livelihood activities and has submitted a detailed 5 years plan to MoEF&CC with a total budget of Rs.13.5 Cr.</p>	APSEZ	Short Term	<p>Following support provided during this compliance period as a fisherfolk livelihood.</p> <ul style="list-style-type: none"> Average 75 KL of water was supplied to 676 households at 5 fisherman vasahat on a daily basis under Machhimar Shudhh Jal Yojana and other 4 fisherman vasahat has linkaged with Narmada water through GWIL and Mundra Gram Panachayat from which 355 households get benefited. 11 Fisher Youth were interviewed among that 5 have been selected. Our target is to support 60+ Fisherman in alternative livelihood till March 2022. Facilitation of Pagadiya Welfare scheme & boat license sanction letter to 06 Fishermen. Till date 59 Form has been submitted to fisheries department, Bhuj for pagadiya and boat License. During the Taukate cyclone fishermen family had been shifted to safe Places As well as support to disaster management team for advance preparation. To promote Natural farming Adani Foundation has originated cow-based farming initiative with

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
	current level of 55,000 to as high as 4,00,000, which will be 45% of the total envisaged population in Mundra Taluk by the end of 2030.		communities. Based on the need assessment results, several livelihood options have been introduced by the Adani Skill Development Centre, Mundra. In these centres, youth can join and get vocational training for a number of technical and non-technical skills. An industrial Training Institute is set up at APSEZ, Mundra, to enhance the skill levels of the local youth to maximum				<p>interconnected techniques which can increase farmer yield.</p> <ul style="list-style-type: none"> • 23 wormicompost unit have been set-up. Which is facilitated through Government with farmer Contribution. • 50 Farmers have started to preparing Jiva Mrut & Gaukrupa Amrutam Bio-fertilizer and using in agricrop. Series of Training is arranged by ATMA and Adani Foundation. • Two Farmers Groups is registered with ATMA–Agricultural technology management Agency–it will leverage Government schemes. • Adani Foundation provides Good Quality dry and green fodder to 24 Villages. Project is covering total 14116 Cattels / 3008 farmers and hence enhancing cattle productivity. Dry Fodder 895398 Kg Green –2425230 Kg. • Fodder Cultivation-To made fodder sustain villages -25 Acre Gauchar land of Siracha village is being cultivated for the same. • Current year for the dates Packaging and Marketing, KKPC Started to sell 10 Kg capacity packaging Box at Minimum Profit Margin At Rs.29/Boxes which resulted in turn over of Rs. 24 Lacs with Profit of 1 Lac. This initiative has supported more than 1800 farmers indirectly. • Dragon fruit farming is on going by Five farmers each farmer is doing in 2 Acre farm –Total 11000 plants. • Skill Development and Income Generation –Adani Foundation is working with 15 Self help group and supporting to develop entrepreneur skills to become self reliant, sourcing more than 350 women to absorb in various job.

S. No.	Identified environmental and social impacts for the fully developed scenario (year 2030)	Type of Impact & Magnitude	Environment management plans adopted or being adopted by APSEZ as per permits, clearances, applicable regulations and guidelines etc.	Additional Risk Mitigation Measures/ ESMP	Responsible agency	Timeframe for implementation	Compliance
			possible extent.				<p>APSEZ is carrying out various initiatives specific to the Fisherfolk community which includes:</p> <ul style="list-style-type: none"> • Vidya Deep Yojana • Vidya Sahay Yojana – Scholarship Support • Adani Vidya Mandir • Fisherman Approach in SEZ • Machhimar Arogya Yojana • Machhimar Kaushalya Vardhan Yojana • Machhimar Sadhan Sahay Yojana • Machhimar Awas Yojana • Machhimar Shudhh Jal Yojana • Sughad Yojana • Machhimar Akshay kiran Yojana • Machhimar Suraksha Yojana • Machhimar Ajivika Uparjan Yojana • Bandar Svachhata Yojana <p>These initiatives are planned for the period 2016 – 2021 with a committed expense of INR 13.5 Cr as submitted earlier in detail in the report namely “Silent Transformation of Fisher folk at Mundra”, .</p> <p>Till, Sep’21 approx. 9.78 Cr. INR, has already been spent in support for fishermen livelihood activities.</p>

**TEST REPORT FOR WATER SAMPLE**

QF/7.8/19-WT

Page: 1 of 2

Customer's Name and Address :

M/s. ADANI PORT AND SPECIAL ECONOMIC ZONE LIMITED
C/O. ENVIRONMENT CELL, 3rd FLOOR,
ADANI HOUSE NAVINAL ISLAND, VILLAGE-MUNDRA,
TALUKA-MUNDRA, DIST-KUTCH-370421

Test Report No. : **PL/AM 0735**Issue Date : **31/08/2021**Customer's Ref. : **As Per W.O.**Description of Sample : **Nr. ATT -2A**Sampling Date : **24/08/2021**Quantity/No. of Samples : **05 Lit/One**Sampling By : **Pollucon Laboratories Pvt. Ltd.**Sampling Procedure : **Grab**Sample Receipt Date : **25/08/2021**Lab ID : **AM/2108/68**Packing/ Seal : **Sealed**Test Parameters : **As per table**Date of Starting of Test : **25/08/2021**Date of Completion : **31/08/2021****RESULT TABLE**

SR NO	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
			Nr. ATT -2A	
1	Colour	Co-pt	10	IS 3025 (Part – 4) 2017
2	Odour	--	Agreeable	IS 3025 (Part – 5) 2019
3	Total Suspended Solids	mg/L	21	IS 3025 (Part – 17) 2017
4	pH	--	7.43	IS 3025 (Part – 11) 2017 Electrometric Method
5	Temperature	°C	29.8	IS 3025 (Part-9) 2017
6	Oil & Grease	mg/L	Not Detected	APHA(23 rd Edition) 5520 B 2017
7	Total Residual Chlorine	mg/L	Not Detected	APHA(23 rd Edition 2017) 4500 Cl G- DPD colorimetric method
8	Ammonical Nitrogen	mg/L	1.85	IS 3025 (Part-34) 2019 Nesslerization Method
9	BOD	mg/L	6.0	IS 3025 (Part-44) 2019
10	COD	mg/L	48	APHA (23 rd Edition 2017) 5220 B Open Reflux Method
11	Arsenic as As	mg/L	Not Detected	APHA (23 rd Edition 2017) 3114 B
11	Mercury as Hg	mg/L	Not Detected	APHA (23 rd Edition 2017) 3112 B
12	Lead as Pb	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
13	Cadmium as Cd	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B

Continue...


H. T. Shah
Lab. Manager


Dr. Arun Bajpai
Lab Manager (Q)

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TEST REPORT FOR WATER SAMPLE

QF/7.8/19-WT

Page: 2 of 2

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TALUKA-MUNDRA, DIST-KUTCH-370421

Test Report No. : **PL/AM 0735**

Issue Date : **31/08/2021**

Customer's Ref. : **As Per W.O.**

RESULT TABLE

SR NO	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
			Nr. ATT -2A	
14	Hexavalent Chromium as Cr ⁺⁶	mg/L	Not Detected	APHA (23 rd Edition 2017) 3500 Cr B Colorimetric method
15	Total Chromium	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
16	Copper as Cu	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
17	Zinc as Zn	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
18	Selenium as Se	mg/L	Not Detected	APHA (23 rd Edition 2017) 3114 B
19	Nickel as Ni	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
20	Cyanide as CN	mg/L	Not Detected	APHA (23 rd Edition 2017) 4500 CN E Colorimetric Method
21	Fluorides as F	mg/L	0.60	APHA (23 rd Edition 2017) 4500 F D SPANDS Method
22	Dissolved Phosphate as P	mg/L	0.027	IS 3025 (Part-16) 2017
23	Sulphides as S	mg/L	Not Detected	APHA (23 rd Edition 2017) 4500 S2 F Iodometric method
24	Phenolic Compound as C ₆ H ₅ OH	mg/L	Not Detected	IS 3025 (Part - 43) 2019 Aminoantipyrine Method
25	Bio-assay Test	%	90% survival offish after 96hours in 100% sample	OECD 203 B/IS: 6582-2001
26	Manganese as Mn	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
27	Iron as Fe	mg/L	0.10	APHA (23 rd Edition 2017) 3500 Fe B
28	Vanadium as V	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
29	Nitrate Nitrogen as N	mg/L	0.11	IS 3025 (Part-34) 2019 Spectrophotometry

Not Detection Limit: Oil & Grease :2.0 mg/L, Total Residual Chlorine:0.2 mg/L Arsenic as As : 0.001 mg/L, Mercury as Hg:0.0006 mg/L, Lead as Pb : 0.02 mg/L, Cadmium as Cd : 0.004 mg/L, Total Chromium : 0.05 mg/L, Copper as Cu : 0.02 mg/L, Zinc : 0.05 mg/L, Selenium as Se:0.008mg/L, Hexavalent Chromium as Cr+6:0.05 mg/L, Nickel as Ni:0.02 mg/L, Cyanides as CN: 0.01 mg/L, Sulphides as S:0.1 mg/L, Phenolic Compound as C₆H₅OH: 0.01mg/L, Vanadium as V:0.25 mg/L, Manganese as Mn: 0.03.

H. T. Shah
Lab. Manager

Dr. Arun Bajpai
Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,
Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

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TEST REPORT FOR WATER SAMPLE

QF/7.8/19-WT

Page: 1 of 2

Customer's Name and Address :

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C/O. ENVIRONMENT CELL, 3rd FLOOR,
ADANI HOUSE NAVINAL ISLAND, VILLAGE-MUNDRA,
TALUKA-MUNDRA, DIST-KUTCH-370421

Test Report No. : **PL/AM 0736**

Issue Date : **31/08/2021**

Customer's Ref. : **As Per W.O.**

Description of Sample : **Nr. ATT -4**

Sampling Date : **24/08/2021**

Quantity/No. of Samples : **05 Lit/One**

Sampling By : **Pollucon Laboratories Pvt. Ltd.**

Sampling Procedure : **Grab**

Sample Receipt Date : **25/08/2021**

Lab ID : **AM/2108/69**

Packing/ Seal : **Sealed**

Test Parameters : **As per table**

Date of Starting of Test : **25/08/2021**

Date of Completion : **31/08/2021**

RESULT TABLE

SR NO	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
			Nr. ATT -4	
1	Colour	Hazen	5.0	IS 3025 (Part – 4) 2017
2	Odour	--	Agreeable	IS 3025 (Part – 5) 2019
3	Total Suspended Solids	mg/L	26	IS 3025 (Part – 17) 2017
4	pH	--	7.73	IS 3025 (Part – 11) 2017 Electrometric Method
5	Temperature	°C	30.0	IS 3025 (Part-9) 2017
6	Oil & Grease	mg/L	Not Detected	APHA(23 rd Edition) 5520 B 2017
7	Total Residual Chlorine	mg/L	Not Detected	APHA(23 rd Edition 2017) 4500 Cl G- DPD colorimetric method
8	Ammonical Nitrogen	mg/L	1.96	IS 3025 (Part-34) 2019 Nesslerization Method
9	BOD	mg/L	5.0	IS 3025 (Part-44) 2019
10	COD	mg/L	39	APHA (23 rd Edition 2017) 5220 B Open Reflux Method
11	Arsenic as As	mg/L	Not Detected	APHA (23 rd Edition 2017) 3114 B
11	Mercury as Hg	mg/L	Not Detected	APHA (23 rd Edition 2017) 3112 B
12	Lead as Pb	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
13	Cadmium as Cd	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B

Continue...


H. T. Shah
Lab. Manager


Dr. Arun Bajpai
Lab Manager (Q)

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TEST REPORT FOR WATER SAMPLE

QF/7.8/19-WT

Page: 2 of 2

Customer's Name and Address :

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Test Report No. : **PL/AM 0736**

Issue Date : **31/08/2021**

Customer's Ref. : **As Per W.O.**

RESULT TABLE

SR NO	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
			Nr. ATT -4	
14	Hexavalent Chromium as Cr ⁺⁶	mg/L	Not Detected	APHA (23 rd Edition 2017) 3500 Cr B Colorimetric method
15	Total Chromium	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
16	Copper as Cu	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
17	Zinc as Zn	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
18	Selenium as Se	mg/L	Not Detected	APHA (23 rd Edition 2017) 3114 B
19	Nickel as Ni	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
20	Cyanide as CN	mg/L	Not Detected	APHA (23 rd Edition 2017) 4500 CN E Colorimetric Method
21	Fluorides as F	mg/L	0.54	APHA (23 rd Edition 2017) 4500 F D SPANDS Method
22	Dissolved Phosphate as P	mg/L	0.021	IS 3025 (Part-16) 2017
23	Sulphides as S	mg/L	Not Detected	APHA (23 rd Edition 2017) 4500 S2 F Iodometric method
24	Phenolic Compound as C ₆ H ₅ OH	mg/L	Not Detected	IS 3025 (Part - 43) 2019 Aminoantipyrine Method
25	Bio-assay Test	%	90% survival offish after 96hours in 100% sample	OECD 203 B/IS: 6582-2001
26	Manganese as Mn	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
27	Iron as Fe	mg/L	0.13	APHA (23 rd Edition 2017) 3500 Fe B
28	Vanadium as V	mg/L	Not Detected	APHA (23 rd Edition 2017) 3111 B
29	Nitrate Nitrogen as N	mg/L	0.08	IS 3025 (Part-34) 2019 Spectrophotometry

Not Detection Limit: Oil & Grease :2.0 mg/L, Total Residual Chlorine:0.2 mg/L Arsenic as As : 0.001 mg/L, Mercury as Hg:0.0006 mg/L, Lead as Pb : 0.02 mg/L, Cadmium as Cd : 0.004 mg/L, Total Chromium : 0.05 mg/L, Copper as Cu : 0.02 mg/L, Zinc : 0.05 mg/L, Selenium as Se:0.008mg/L, Hexavalent Chromium as Cr+6:0.05 mg/L, Nickel as Ni:0.02 mg/L, Cyanides as CN: 0.01 mg/L, Sulphides as S:0.1 mg/L, Phenolic Compound as C₆H₅OH: 0.01mg/L, Vanadium as V:0.25 mg/L, Manganese as Mn: 0.03

H. T. Shah
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