

APSEZ/EnvCell/2018-19/014

Date: 30.04.2018

To,

Additional Principal Chief Conservator of Forests (C),

Ministry of Environment, Forest and Climate Change,

Regional Office (WZ), E-5, Kendriya

Paryavaran Bhawan, Arera Colony,

Link Road No. – 3, Bhopal – 462 016.

E-mail: rowz.bpl-mef@nic.in

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 : 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.

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 / CRZ Clearance for the period of October – 2017 to March - 2018 is enclosed here for your records. The stated information is also provided in form of a CD (soft copy).

Thank you,

Yours Faithfully,

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



Avinash Rai

Chief Executive Officer

Mundra & Tuna Port

Encl: As above

Copy to:

- 1) The Director (IA Division), Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003
- 2) Zonal Officer, Regional Office, CPCB – Western Region, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara – 390 023
- 3) Member Secretary, GPCB – Head Office, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar – 382 010
- 4) Deputy Secretary, Forests & Environment Department, Block – 14, 8th floor, Sachivalaya, Gandhi Nagar – 382 010
- 5) Regional Officer, Regional Office GPCB (Kutch-East), Gandhidham, 370201



Environmental Clearance Compliance Report

Multi Product SEZ,
Mundra, Dist. Kutch, Gujarat

Adani Ports and SEZ Limited

For the period of
October–2017 to March–2018

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
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.

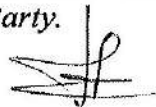
8. Further, Hon'ble Supreme Court video order dated 02.05.2014 in SLP 1526 of 2013 had ordered for stay of Ministry's letter dated 3.04.2014 addressed to Government of Gujarat to initiate legal action for the violation, also directed that the Ministry to complete the process of EC within eight weeks.

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.

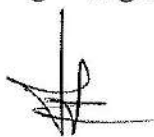
10. In view of the above and to comply with the orders of Hon'ble Courts, Ministry hereby accords necessary Environment Clearance for proposed Multi- Product SEZ in an area of 6641.2784 ha and CRZ clearance for desalination, seawater intake, outfall facility and pipeline for as per the provisions of 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,

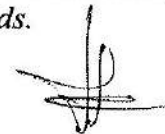


- (xix) *Proponent shall develop the green belt with 3 layers of canopy all along the periphery.*
- (xx) *All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for 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.*

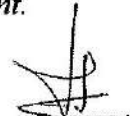
PART – B. GENERAL CONDITIONS

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.*

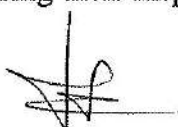
Operation Phase

- (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 Parisad/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 : Oct,17 To : March,18
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 : Oct,17 To : March,18
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 31.03.2018
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 Pvt. Ltd. (MUPL) 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.
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.

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.

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.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
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List of Industrial Units within SEZ area

Sr. No.	Name of Unit	Nature of Business	Status
1	SKAPS INDUSTRIES	Textile	Operation
2	TERRAM EOSYNTHETICS	Textile	Operation
3	AHLSTROM	Textile	Operation
4	ASHAPURA GARMENTS	Textile	Not in Operation
5	THERMAX	Textile	Operation
6	OWS	Ware House	Operation
7	DORF KETAL	Chemical	Operation
8	OCCL	Chemical	Operation
9	MUNDRA OIL	Oil	Operation
10	GARG TUBES LLP	Steel	Operation
11	EMPEZAR LOGISTICS	Ware House	Operation
12	SEABIRD CFS	CFS	Operation
13	HONEYCOMB CFS	CFS	Operation
14	ALL CARGO CFS	CFS	Operation
15	MUNDHRA CFS	CFS	Operation
16	SAURASHTRA CFS	CFS	Operation
17	FORBES CFS	CFS	Operation
18	TRANSWORLD CFS	CFS	Operation
19	MICT CFS	CFS	Operation
20	MARUTI SUZUKI INDIA LIMITED	Pre Delivery Inspection Yard	Operation
21	MSTPL (Mundra Solar Technopark Pvt. Ltd.)	Electronics Manufacturing Cluster	Operation
22	STEINWEIGE	FTWZ	Operation
23	KERRY INDEV LOGISTIC	FTWZ	Operation
24	BRITANNIA INDUSTRIES LIMITED	Food Products	Construction work completed

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
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Half yearly 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 31-03-2018
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.	Point noted and will be complied.
ii.	Properly conserve the creeks, river and the mangroves area in the area.	<p>Complied.</p> <p>All creeks are in existence allowing free flow of water and there is no filling or reclamation of any creek area. APSEZL has so far constructed 19 culverts having total length of approx. 1100 m with total cost of INR 20 Crores. Three RCC Bridges have been constructed over Kotdi creek with total length of 230 m and cost of INR 10 Crores. Details were submitted along with last compliance report submission for the period of Apr'17 to Sep'17.</p> <p>NCSCM has carried out detailed study on mapping of creeks in the Mundra region for 2017, which confirms the same. Progress reports of NCSCM were submitted along with past compliance reports. The stated study is completed and the final report will be submitted to the concerned authorities.</p> <p>1254 ha area identified as potential mangrove conservation is being conserved and there is no disturbance to the mangroves in this area. A monitoring report prepared by GUIDE was submitted along with last half yearly compliance report Oct'16 to Mar'17.</p> <p>The progress report of NCSCM as mentioned above confirms the presence of 2265 Hectare mangrove area.</p>
iii.	Ensure that mouths of all the creeks are kept open to ensure flushing of the creeks.	<p>Complied.</p> <p>As per Marine EIA of WFDP in 2008 carried out by NIO, prominent creek system (main creeks and small branches of creeks) in the study region are: (1) Kotdi (2) Baradimata (3) Navinal (4) Bocha (5) Mundra (Oldest port (Juna Bandar) leading to Bhukhi river).</p> <p>All above creek mouths are open allowing free flow of water in to the creeks and surrounding areas and there is no filling or</p>

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Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018
		reclamation of any creek area. The same has been confirmed from the recent study of NCSCM. Please refer specific condition no. ii above 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.	Complied Based on the final direction issued by MoEF&CC vide their letter dated 18 th Sept. 2015, APSEZ has submitted a letter dated 23.05.2016 to MoEF&CC.
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.	As per the directions of MoEF&CC these conditions stand null & void. Copy of direction letter and our letter submitted to MoEF&CC was submitted along with compliance submission for the period from Oct'16 to Mar'17.
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.	Complied. Based on the report submitted by Sunita Narain committee and subsequent correspondences, MoEF&CC issued an order vide letter dated 18.09.2015 containing 10 directions and thereby disposed-off the show cause notices. A detailed compliance report for the same is attached as Annexure – B .
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.	Complied. NEERI has been appointed to carry out the inspection study up to the year 2020 at a cost of INR 12 Lacs. Compliance report of the period from April'17 to Sept'17 was submitted to NEERI. Based on the site visit during period Oct'17 to Mar'18 as well as the said compliance report NEERI has given their feedback. Copy of the same is annexed as Annexure – 1 .
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.	Complied. 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 05 th Aug, 2014. The CtE was also submitted with compliance report submission for the period Oct'15 to Mar'16. APSEZ has been granted Consent to Operate (CtO) from GPCB

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Sr. No.	Conditions	Compliance Status as on 31-03-2018
		for common infrastructure facilities developed vide Order No. AWH-88998, dated 26.10.2017. Copy of the same was submitted with compliance report submission for the period Apr'17 to Sep'17.
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 will submit its recommendations to MoEF for approval.	Being complied This reply covers condition no. ix to xiii. APSEZ approached National Center for Sustainable Coastal Management (NCSCM), Chennai to carry out the studies as stated in these directions. Upon initiation of the study, progress reports of NCSCM were submitted to all concerned authorities along with past compliance reports. Further, NCSCM has carried out all necessary site surveys and based on the findings, mathematical modelling using computer software has been done. Based on the outcome of the modelling studies, conservation and protection plans for mangroves and other ecological areas are being prepared. The stated study is on the verge of completion and final report will be submitted to the concerned authorities. The action plan suggested by NCSCM in their final report will be discussed with GCZMA and MoEF&CC. The approved action plan will be implemented by APSEZ under supervision of NCSCM. Cost of the study as per the NCSCM proposal is 315.5 Lakhs.
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.	There is no allotment of plot(s) in CRZ area to any industry.
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.	

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Sr. No.	Conditions	Compliance Status as on 31-03-2018
	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.	Complied. As per the Lease Deed signed, all existing industries are well 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. Entire quantity of treated water 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 on need based assessment. List of CETP member units were submitted along with last compliance report submission Apr'17 to Sep'17. And there is no further change.
xv.	PP shall not carry out any river course modification.	Complied No river course modification is carried out.
xvi.	The individual industrial units shall obtain prior EC under EIA Notification, 2006 as applicable.	Complied. During the compliance period of Oct'17 to Mar'18, no new industry has been established at SEZ which requires EC under EIA Notification, 2006. The condition is being followed on case to case basis as applicable.
xvii.	Proponent shall identify 200 ha of land for mangrove plantation as per the condition laid by SEAC.	Complied. 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 last compliance submission i.e. Apr'17 to Sep'17. 100 Ha. Mangrove plantation is being carried out by GEC. Out of 100 ha., 38 ha. Plantation is completed at Tala Tadav village of

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
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Sr. No.	Conditions	Compliance Status as on 31-03-2018
		Khambhat Taluka of Anand district. Remaining 62 ha. Plantation is being carried out at Aliya Bet of Bharuch district. Progress report of ongoing plantation work is enclosed as Annexure – 2 .
xviii.	50 meter buffer from the existing mangrove area should be provided for any developmental activity.	Point noted and complied. All developmental activities are being carried out as per the approval only.
xix.	Proponent shall develop the green belt with 3 layers of canopy all along the periphery.	Being complied. 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. 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. Width of the green belt varies from 2 m to 8 m and density varies from 2000 to 2500 trees per hectare. Total 99.5 hectares of land with approx. 2.2 Lacs trees is developed within SEZ area till date. So, far more than 400 ha. area is developed as greenbelt with plantation of more than 8.0 Lacs trees within the entire APSEZ area. Please refer Annexure – 3 for further details regarding greenbelt development and mangrove afforestation. Updated green belt development plan was submitted along with last compliance report submission for the period Apr'17 to Sep'17. Total expenditures of the horticulture dept. for the F.Y. 2017-18 periods are INR 607 lakh.
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.	Complied. Compliance report of environmental management plan and mitigation measures proposed as part of the EIA report is attached as Annexure – 4 .
xxi.	There shall be no disturbance to the	Complied.

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Sr. No.	Conditions	Compliance Status as on 31-03-2018
	<p>sand dunes.</p> <p>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>	<p>There is no sand dune in the SEZ area.</p> <p>Point noted. No pipelines for intake and outfall of sea water are laid till now and feasibility will be studied as and when required.</p>
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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	<p>Complied.</p> <p>Most of the construction labours reside in the nearby villages where all basic facilities are easily available. However, for those residing near the construction site, infrastructure facilities such as water supply, drinking water, toilets, STP, sanitation, first aid, ambulance etc. are made available by APSEZ. Photographs showing the same were submitted along with last compliance report submission for the period Apr'17 to Sep'17.</p>
ii.	A first aid room will be provided in the project both during construction and operation of the project.	<p>Complied.</p> <p>APSEZ has established Occupational Health Center & First Aid facility, which will be utilized during entire construction as well as operation phase of SEZ project. Whereas in case of emergency situation requiring treatment at hospital facility will be provided at Adani Hospital located with SEZ area.</p>
iii.	All the topsoil excavated during construction phase should be stored for use in horticulture/landscape development within the project site.	<p>Complied.</p> <p>Excavated topsoil is used for the horticulture/landscape development within the project site.</p>
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.	<p>Complied.</p> <p>No excavated muck has been disposed-off outside the project premises. Construction waste is utilized for area development.</p>
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	<p>Complied.</p> <p>Environment Monitoring is being carried out on regular basis in Port & SEZ area through NABL accredited and MoEF approved agency.</p>

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Sr. No.	Conditions	Compliance Status as on 31-03-2018																																																																																																																																																																																				
	toxic contaminants.	<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. Summary of the same for duration from Oct'17 to Mar'18 is mentioned below.</p> <p>Sampling Locations: 4 nos.</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>8.12</td><td>6.93</td></tr><tr><td>2</td><td>Salinity</td><td>mg/L</td><td>29.51</td><td>0.54</td></tr><tr><td>3</td><td>Oil & Grease</td><td>mg/L</td><td>4.40</td><td>1.06</td></tr><tr><td>4</td><td>Hydrocarbon</td><td>mg/L</td><td>BDL*</td><td>BDL*</td></tr><tr><td>5</td><td>Lead as Pb</td><td>mg/L</td><td>22.20</td><td>0.02</td></tr><tr><td>6</td><td>Arsenic as As</td><td>mg/L</td><td>BDL*</td><td>BDL*</td></tr><tr><td>7</td><td>Nickel as Ni</td><td>mg/L</td><td>0.18</td><td>0.18</td></tr><tr><td>8</td><td>Total Chromium as Cr</td><td>mg/L</td><td>0.022</td><td>0.003</td></tr><tr><td>9</td><td>Cadmium as Cd</td><td>mg/L</td><td>0.17</td><td>0.01</td></tr><tr><td>10</td><td>Mercury as Hg</td><td>mg/L</td><td>BDL*</td><td>BDL*</td></tr><tr><td>11</td><td>Zinc as Zn</td><td>mg/L</td><td>2.74</td><td>0.02</td></tr><tr><td>12</td><td>Copper as Cu</td><td>mg/L</td><td>50.40</td><td>0.03</td></tr><tr><td>13</td><td>Iron as Fe</td><td>mg/L</td><td>16.30</td><td>0.04</td></tr><tr><td>14</td><td>Insecticides/Pesticides</td><td>mg/L</td><td>BDL*</td><td>BDL*</td></tr><tr><td>15</td><td>Depth of Water Level from GL</td><td>meter</td><td>2.84</td><td>1.70</td></tr></table> <p>*BDL = Below Detectable Limit</p> <p>Soil analysis was carried out by NABL accredited & MoEF&CC approved laboratory which indicates no threat to ground water quality by leaching of heavy metals and other toxic contaminants. Summary of the same for duration from Oct'17 to Mar'18 is mentioned below.</p> <p>Sampling Locations: 4 nos.</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>8.15</td><td>7.41</td></tr><tr><td>2</td><td>Nitrogen as N</td><td>%</td><td>0.0088</td><td>0.0045</td></tr><tr><td>3</td><td>Phosphorus as P</td><td>mg/kg</td><td>680</td><td>134</td></tr><tr><td>4</td><td>Potassium as K</td><td>mg/kg</td><td>52</td><td>16</td></tr><tr><td>5</td><td>Baron as B</td><td>mg/kg</td><td>3.2</td><td>2.1</td></tr><tr><td>6</td><td>Calcium as Ca</td><td>mg/kg</td><td>1210</td><td>55</td></tr><tr><td>7</td><td>Magnesium as Mg</td><td>mg/kg</td><td>1456</td><td>6</td></tr><tr><td>8</td><td>Iron as Fe</td><td>%</td><td>0.53</td><td>0.24</td></tr><tr><td>9</td><td>Moisture</td><td>%</td><td>14.8</td><td>10.4</td></tr><tr><td>10</td><td>Organic Matter</td><td>%</td><td>0.069</td><td>0.023</td></tr><tr><td>11</td><td>CEC</td><td>meq/100 gm</td><td>8.1</td><td>5.9</td></tr><tr><td>12</td><td>TVC</td><td>CFU/gm</td><td>2.2 x 10-6</td><td>4.0 x 10-7</td></tr><tr><td colspan="3">Heavy Metal</td><td></td><td></td></tr><tr><td>13</td><td>Cadmium as Cd</td><td>mg/kg</td><td>4.70</td><td>1.92</td></tr><tr><td>14</td><td>Thorium as Th</td><td>mg/kg</td><td>BDL*</td><td>BDL*</td></tr><tr><td>15</td><td>Antimony as Sb</td><td>mg/kg</td><td>BDL*</td><td>BDL*</td></tr><tr><td>16</td><td>Arsenic as As</td><td>mg/kg</td><td>BDL*</td><td>BDL*</td></tr><tr><td>17</td><td>Lead as Pb</td><td>mg/kg</td><td>30.6</td><td>17.8</td></tr><tr><td>18</td><td>Chromium as Cr</td><td>mg/kg</td><td>18.2</td><td>15.4</td></tr></table>	Sr. No.	Parameter	Unit	Max. Value	Min. Value	1	pH	--	8.12	6.93	2	Salinity	mg/L	29.51	0.54	3	Oil & Grease	mg/L	4.40	1.06	4	Hydrocarbon	mg/L	BDL*	BDL*	5	Lead as Pb	mg/L	22.20	0.02	6	Arsenic as As	mg/L	BDL*	BDL*	7	Nickel as Ni	mg/L	0.18	0.18	8	Total Chromium as Cr	mg/L	0.022	0.003	9	Cadmium as Cd	mg/L	0.17	0.01	10	Mercury as Hg	mg/L	BDL*	BDL*	11	Zinc as Zn	mg/L	2.74	0.02	12	Copper as Cu	mg/L	50.40	0.03	13	Iron as Fe	mg/L	16.30	0.04	14	Insecticides/Pesticides	mg/L	BDL*	BDL*	15	Depth of Water Level from GL	meter	2.84	1.70	Sr. No.	Parameter	Unit	Max. Value	Min. Value	1	pH	--	8.15	7.41	2	Nitrogen as N	%	0.0088	0.0045	3	Phosphorus as P	mg/kg	680	134	4	Potassium as K	mg/kg	52	16	5	Baron as B	mg/kg	3.2	2.1	6	Calcium as Ca	mg/kg	1210	55	7	Magnesium as Mg	mg/kg	1456	6	8	Iron as Fe	%	0.53	0.24	9	Moisture	%	14.8	10.4	10	Organic Matter	%	0.069	0.023	11	CEC	meq/100 gm	8.1	5.9	12	TVC	CFU/gm	2.2 x 10-6	4.0 x 10-7	Heavy Metal					13	Cadmium as Cd	mg/kg	4.70	1.92	14	Thorium as Th	mg/kg	BDL*	BDL*	15	Antimony as Sb	mg/kg	BDL*	BDL*	16	Arsenic as As	mg/kg	BDL*	BDL*	17	Lead as Pb	mg/kg	30.6	17.8	18	Chromium as Cr	mg/kg	18.2	15.4
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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018				
		19	Cobalt as Co	mg/kg	2.2	0.9
		20	Copper as Cu	mg/kg	12.6	10.1
		21	Nickel as Ni	mg/kg	136	64
		22	Manganese as Mn	mg/kg	490	88
		23	Vanadium as V	mg/kg	12.6	7.6
		*BDL = Below Detectable Limit				
		Please refer Annexure – 5 for detailed analysis reports. Approx. INR 27 Lakh is spent for all environmental monitoring activities during the FY 2017-18 period.				
v.	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.	Complied. Construction spoils including bituminous material is being kept at identified temporary storage area outside CRZ and is being utilized for filling / level raising purpose. Hazardous materials such as diesel, lube oil etc. are handled with utmost care. Storage area is provided with paving and spill kit to ensure there is no contamination to soil or ground water.				
vi.	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.	Complied. Hazardous waste such as Used Oil, Oily Rags, etc. is being disposed through registered recycler and co-processing (cement industries) respectively. Individual SEZ units are handling their hazardous wastes as per Hazardous waste rules – 2016 after obtaining necessary permissions from GPCB.				
vii.	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.	Complied. DG sets are being used as power back up source in case of power failure. Certificate showing Sulphur content in diesel was submitted along with the compliance submission for the period of Apr'16 to Sep'16. DG sets are being used in conformance to the EPA norms and proof for the same was submitted along with last compliance period i.e. Apr'17 to Sep'17.				
viii.	The diesel required for operating DG sets shall be stored in underground tanks if required; clearance from Chief Controller of Explosives shall be taken.	Complied. 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/WC/GJ/14/4671(P291058) dated 18.12.2015 and is valid till 31.12.2018. Copy of Certificate from CCE was provided in compliance submission for the period of April'16 to Sep'16 and there is no further change.				

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018																																								
ix.	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 after the fitness check at vehicle health-check centre established by APSEZ. APSEZ has also established a licenced PUC station at SEZ North Gate to monitor the compliance with applicable Motor Vehicle Act for vehicles. Details were submitted along with last compliance report for the period Apr'17 to Sep'17.</p> <p>Majority of the vehicles bringing construction materials are operated during non-peak hours.</p>																																								
x.	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 (twice in a week) and Noise (once in a month) 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 Oct'17 to Mar'18 is mentioned below.</p> <p>Total Sampling Locations: 5 Nos.</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>95.8</td><td>40.2</td><td>100</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>56.6</td><td>16.3</td><td>60</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>28.6</td><td>5.3</td><td>80</td></tr><tr><td>NO₂</td><td>µg/m³</td><td>45.1</td><td>9.6</td><td>80</td></tr><tr><th>Noise</th><th>Unit</th><th>Max</th><th>Min</th><th>Perm. Limit</th></tr><tr><td>Day Time</td><td>dB(A)</td><td>73.4</td><td>45.9</td><td>75</td></tr><tr><td>Night Time</td><td>dB(A)</td><td>68.4</td><td>41.8</td><td>70</td></tr></table> <p>[*] as per NAAQ standards, 2009 Values recorded confirms to the stipulated standards.</p> <p>Please refer Annexure – 5 for detailed analysis reports. Approx. INR 27.0 Lakh is spent for all environmental monitoring activities during the period FY 2017-18.</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• Development of greenbelt along the periphery of the storage	Parameter	Unit	Max	Min	Perm. Limit [*]	PM ₁₀	µg/m ³	95.8	40.2	100	PM _{2.5}	µg/m ³	56.6	16.3	60	SO ₂	µg/m ³	28.6	5.3	80	NO ₂	µg/m ³	45.1	9.6	80	Noise	Unit	Max	Min	Perm. Limit	Day Time	dB(A)	73.4	45.9	75	Night Time	dB(A)	68.4	41.8	70
Parameter	Unit	Max	Min	Perm. Limit [*]																																						
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	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018
		yards/back up area • D.G. Sets having Acoustic enclosures
xi.	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 only if the project site is located within 100 Kms of Thermal Power Stations).	Complied. Part of fly ash generated from Adani Power Limited, Mundra is being utilized by Adani Group to manufacture paver blocks and the same paver blocks are used for development of back up area, footpath, colonies area, parking area, approach road etc. APSEZ has utilized 787 MT of fly ash to manufacture paver block during the period of Oct'17 to Mar'18. Fly ash based PPC cement is used for construction activity.
xii.	Ready mixed concrete must be used in building construction.	Complied. Only RMC is used for construction activity.
xiii.	Storm water control and its re-use should be regulated as per CGWB and BIS standards for various applications.	Complied. The Central Public Health and Environmental Engineering Organization (CPHEEO) manual is followed for designing of storm water drainage system in the entire SEZ.
xiv.	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.
xv.	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 Narmada water through GWIL and desalination plant of APSEZ. Average approximate water requirement is 5.2 MLD.
xvi.	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Point noted and will be complied.
xvii.	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.	Complied. Water flow reducers are provided for taps at various locations of SEZ & Port to reduce the flow by one third. Water Free urinals are installed at Port User Buildings for water conservation.
xviii.	Use of glass may be reduced by up to 40% to reduce the electricity consumption and load on air-	Complied. This reply covers condition number xviii to xxi.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
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Sr. No.	Conditions	Compliance Status as on 31-03-2018
	conditioning. If necessary, use high quality double glass with special reflective coating in windows.	As a part of the Lease Deed (agreement) these conditions will be imposed on all member industries coming up within the SEZ areas.
xix.	Roof should meet prescriptive requirements as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirements.	
xx.	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 insulation material to fulfil these requirement.	
xxi.	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.	
xxii.	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.	Complied. 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.
xxiii.	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.	Point noted. Wherever applicable, construction activities have started only after obtaining environmental clearance.
	Operation Phase	
i.	The PP while issuing the allotment letter to individual member units shall specifically mention the	Point noted and will be complied. Provisions are made while issuing the allotment letter to individual member units for specifically mentioning the allowable

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Sr. No.	Conditions	Compliance Status as on 31-03-2018
	allowable maximum quantity of water usage and effluent generated by each member unit.	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.
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>APSEZ has a well structured Environment Management Cell, staffed with qualified manpower for reviewing the environmental monitoring data and suggest improvements. Environment Management Cell organogram is attached as Annexure – 6.</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.</p>
iii.	Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. Treatment of 100% grey water by 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>Complied.</p> <p>Sewage generated from individual industry is treated by individual industry itself. Some of the industries are giving their sewage to the CETP for treatment and final disposal. Details were were submitted along with last compliance report for the period of Apr'17 to Sep'17.</p> <p>A common effluent treatment plant of 2.5 MLD capacities is already constructed in SEZ area (having a separate independent environmental clearance) which takes care of effluent generated from member units. 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. Regular supervision is done to ensure there is no odour problem.</p>
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.	<p>Complied.</p> <p>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>Liquid Effluent & Sewage - It is being treated at ETP/STP plants, treated water from ETP/STP is being utilized for horticulture purposes within APSEZ premises in compliance with GPCB standards.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
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Sr. No.	Conditions	Compliance Status as on 31-03-2018									
		<p><u>Municipal Solid Waste</u> A well-established system for segregation of dry & wet waste is in place, by which all wet waste (Organic waste) is being segregated & utilized for compost manufacturing; compost is further used by in house horticulture team for green belt development. Whereas Dry Recyclable Waste is being sorted out in various categories. Presently manual sorting is being done for sorting of different types of solid waste, sorted out different stream of recyclable material is being sent to recycling like Paper, Plastic, Cardboard, PET Bottles, Glass etc., whereas remaining non-recyclable waste is bailed and sent to cement plant for Co-processing as RDF (Refused Derived Fuel).</p> <p>The following table summarizes the solid waste management practice (for Oct'17 to Mar'18) for different types of wastes at Mundra:</p> <table border="1"> <thead> <tr> <th>Type of Waste</th><th>Quantity</th><th>Method of Disposal</th></tr> </thead> <tbody> <tr> <td>Dry Waste</td><td>105.6</td><td>After recovery sent for recycling</td></tr> <tr> <td>Wet Waste</td><td>467.4</td><td>Converted to Manure for Horticulture use</td></tr> </tbody> </table> <p>Below given hazardous waste generated during operations of the individual units are being disposed as per applicable laws.</p> <p><u>E- Waste & Used Batteries</u> - is being sold to registered recycler.</p> <p><u>Solid Hazardous Waste</u> - is being disposed through common facility i.e. CHWIF and / or co-processing at cement industries.</p> <p><u>Used/Waste Oil</u> - It is being sold to authorized recycler/reprocessor.</p>	Type of Waste	Quantity	Method of Disposal	Dry Waste	105.6	After recovery sent for recycling	Wet Waste	467.4	Converted to Manure for Horticulture use
Type of Waste	Quantity	Method of Disposal									
Dry Waste	105.6	After recovery sent for recycling									
Wet Waste	467.4	Converted to Manure for Horticulture use									
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	<p>Complied.</p> <p>DG sets are used as power back up source only in case of power failure & DG sets are conforming to the Environment Protection Act 1986 and detail for the same was submitted along with last compliance report submission for the period Apr'17 to Sep'17.</p> <p>Heights of stacks are maintained as needed for the combined capacity of all attached DG Sets by different member units.</p> <p>Low sulphur diesel is being used as a fuel within APSEZ and details of the same was submitted with half yearly compliance</p>									

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Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018
	location of the DG sets may be decided in consultation with the Gujarat Pollution Control Board.	report submission for the period April'16 to Sep'16.
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 on regular basis within SEZ area. Out of the total five locations of noise monitoring, two are close to SEZ boundary. Please refer Point No. x of Part – B: General Conditions (Construction phase) for further details. From the data collected it can be inferred that Noise Levels are within the prescribed standards.</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>Complied.</p> <p>APSEZ has developed its own “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 Point No. xix of Part – A: specific conditions.</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 period.	<p>Complied.</p> <p>Boundary walls are constructed in such a way by keeping opening 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>
ix.	Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented.	<p>Complied.</p> <p>Operational units will be encouraged for rainwater harvesting within their premises.</p> <p>However, APSEZ has carried out rainwater harvesting activities in the nearby villages for benefit of the locals. Following measures are taken for the same during the year 2011 – 13 and the same have benefited to the local farmers.</p> <ol style="list-style-type: none"> 1. Pond deepening activities at villages 2. 18 check dams were constructed under the ‘Sardar Patel Sahbhagi Jalsanchay Yojna’ <p>Total cost of these efforts was approx. INR 320 lakh.</p> <p>Pond deepening work is completed in Mota Bhadiya, Vadala and Bhujpur villages. The total cost incurred for this work was INR 16.7 Lakhs during FY 2017-18.</p> <p><u>Participatory Ground Water Management:</u></p>

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Sr. No.	Conditions	Compliance Status as on 31-03-2018
		Adani foundation has started participatory ground water management project. The objective of the project was to reduce the salinity ingress in and around the coastal regions of Mundra, Kutchh and mitigate the ill-effects of this manmade problem to improve the livelihoods of the rural people. The Project will help to get water table high, also it will help in agricultural activities.
x.	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	Complied. Please refer point no. v of General condition (Construction phase) for details of monitoring summery. Letter has been submitted to CGWB with information of data on ground water quality and water.
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.	Complied. The entry and exit gates of SEZ and port are provided with ample parking area 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.
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.	Point noted and will be complied Few of the buildings in MSTPL are designed as green building. Motion sensors are provided at different buildings. Energy Conservation through Installation of Motion Sensor (Occu switch) & AC Temp. Controls in few of the buildings are provided. Energy audit of port user buildings is carried out once in three years. Last energy audit was done during Oct-2016. Report of the same was submitted along with compliance report submission for the period Ap'17 to Sep'17. Recommendations of this report will be implemented gradually. Some of the recommendations of these reports are as follows. <ul style="list-style-type: none"> • EMS should be installed in the plant so that the metering and monitoring of electrical consumption can be improved. • Set point of APFC to be set at unity power factor and it is to be operated in auto mode.
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	Complied. CFL / LED lighting are being used at various common areas of SEZ. Used CFL are collected and sent for recycling through authorized e-waste collection agency.

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Sr. No.	Conditions	Compliance Status as on 31-03-2018
	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.	APSEZ Installed & Commissioned 1.5 MW roof top solar plant at residential township. Details regarding the same are submitted as a part of half yearly compliance report submission for the period Apr – 2016 to Sep – 2016. APSEZ has also installed additional 1.7 MW roof top solar plants at the various locations of SEZ area and some of them are ready for commissioning. Details are attached as Annexure – 7 .
xiv.	Adequate measures should be taken to prevent odour problems from solid waste processing plant and STP.	Complied APSEZ adopted 5R concept for environmentally sound management of different types of solid & liquid waste. All organic waste is converted to compost for utilization by Horticulture dept. Other solid waste is being segregated and sent for recycling. Proper secondary treatment and disinfection provided to the domestic sewage and treated sewage is being utilized for horticulture purpose. These measures ensure that odor problem is not created in the surrounding area. Please refer Point No. iv of Part – B: General Conditions (Construction phase).
xv.	The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Complied. All the buildings 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.	Complied. Compliance report of environmental management plan and mitigation measures proposed in EIA is attached as Annexure – 4 .
xvii.	Adequate drinking water facility be provided.	Complied. Adequate provision of drinking water facility at approx. 200 locations within APSEZ area is provided.
xviii.	Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.	Complied. Environmental monitoring is being carried out by NABL accredited and MoEF&CC authorized agency namely M/s. Pollucon Laboratories Pvt. Ltd. Summary of the environmental monitoring carried at the time of EIA study (2012) and during this compliance period is mentioned below.

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Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018						
		Parameter	Unit	2012 (As per EIA)		2017-18		Perm. Limit ^s
				Max	Min	Max	Min	
		PM ₁₀	µg/m ³	92.20	48.48	95.8	40.2	100
		PM _{2.5}	µg/m ³	41.24	17.57	56.6	16.3	60
		SO ₂	µg/m ³	18.10	3.00	28.6	5.3	80
		NO ₂	µg/m ³	47.66	22.57	45.1	9.6	80
		Noise	Unit	Avg. Value				Perm. Limit
				2012 (As per EIA)		2017-18		
		Day Time	dB(A)	74.5		63.8		75
		Night Time	dB(A)	51.7		60.1		70
<p>Regular environmental monitoring for various attributes is being carried out on regular basis. Results of the same are submitted to all the concerned authorities as part of the six monthly compliance reports. Based on the same, the incremental pollution load on environment is identified to be well below the stipulated norms.</p> <p>Please refer Point No. v & x of Part – B: General Conditions (Construction phase) for summaries of environmental monitoring carried out at SEZ Locations.</p>								
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.	Complied. Please refer Point No. xiii Part – B: General Conditions (Operation phase).						
xx.	Ozone depleting substance (Regulation & Control) Rules should be followed while designing the air conditioning system of the project.	Complied. Inventorization is done by APSEZ for using Ozone friendly gases in ACs. All the HVAC system are with Ozone friendly gases within APSEZ. APSEZ has stopped procuring new AC's using ozone depleting gases. Out of total domestic AC's 22% AC's are already replaced with ozone friendly gases. Remaining AC's will be replaced with ozone friendly gases in phase wise manner. Industries are conveyed to follow Ozone depleting substance (Regulation & Control) Rules while designing the air conditioning system of the project. The same will be implemented by						

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018
		individual unit as per project suitability.
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.	<p>Complied.</p> <p>Full support is extended to officers of regulatory authorities visiting the project site.</p> <p>Last compliance report for the period of Apr'17 to Sep'17 was submitted to all concern authorities vide our letter dated 22.11.2017. Copy of the same is also available on our website: https://www.adaniports.com/ports-downloads</p> <p>Regional Officer, MoEF&CC, Bhopal visited APSEZ on 21-22 December'16 for monitoring the implementation of environmental safeguards. Full cooperation was extended to them and their team & all requisite documents including the updated compliance report was submitted.</p> <p>Last visit of Regional Office, GPCB was done on 11.12.2017 for Multi Product SEZ. APSEZ has submitted the reply to the site visit report vide dated 15.12.2017. Copy of the reply letter is enclosed as Annexure – 8.</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.
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.
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	<p>Not Applicable.</p> <p>The approvals of Fire department, Civil Aviation Department, Forest Conservation Act 1980 and Wildlife (Protection) Act 1972 and other applicable approvals will be availed by the member industries prior to construction of work if applicable.</p>

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Sr. No.	Conditions	Compliance Status as on 31-03-2018
	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.
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.	<p>Already complied. Not applicable at present.</p> <p>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>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 13.08.2014 to Ministry of Environment, Forests & Climate Change, Bhopal.</p>
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.
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.
20	A copy of the clearance letter shall	Already complied. Not applicable at present.

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Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Conditions	Compliance Status as on 31-03-2018
	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>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 the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	<p>Complied.</p> <p>Last compliance report including results of monitoring data for the period of Apr'17 to Sep'17 was submitted to Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. vide our letter dated 22.11.2017. Copy of the same is also available on our web site https://www.adaniports.com/ports-downloads.</p> <p>Last compliance report was also submitted in soft copy through e-mail on 15.12.2017 to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.</p>
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 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.	

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
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 : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Note:

With respect to the project components attracting CRZ recommendation from GCZAM, 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 waste water 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 form the desalination plant into sea will arise, constriction 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 : Oct,17 To : March,18
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 : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status
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.	Point Noted and agreed. After receipt of this order, so far APSEZ has not done any application to MoEF&CC for the proposed North port.
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.	Being complied This reply covers direction no ii, iv and v. APSEZ approached National Center for Sustainable Coastal Management (NCSCM), Chennai to carry out the studies as stated in these directions. Upon initiation of the study, progress reports of NCSCM were submitted to all concerned authorities along with past compliance reports. Further, NCSCM has carried out all necessary site surveys and based on the findings, mathematical modelling using computer software has been done. Based on the outcome of the modelling studies, conservation and protection plans for mangroves and other ecological areas are being prepared. The stated study is on the verge of completion and final report will be submitted to the concerned authorities. The action plan suggested by NCSCM in their final report will be discussed with GCZMA and MoEF&CC. The approved action plan will be implemented by APSEZ under supervision of NCSCM. Cost of the study as per the NCSCM proposal is 315.5 Lakh.
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.	Complied The last visit of Regional Officer, MoEF&CC, Bhopal was done on 21 st & 22 nd December, 2016 for compliance certification. APSEZ provided all requisite information and documents required by the Regional Officer. During the said compliance verification visit, there was no major non-compliance observed. As per the information provided by MoEF&CC, Regional Office, Bhopal they have already submitted the site inspection report to MoEF&CC, New Delhi.

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status
		It may also be noted that GPCB, Regional Office does regular site visit for various components. During the compliance period, one such site visit was carried out on 11.12.2017. During this visit as well, no major non-compliance was observed.
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>Being complied</p> <p>Direction no. iv and v being continuous part of the direction no. ii above, the present status is as per our reply against direction no. ii above.</p> <p>The study being carried out by NCSCM covers preparation of plan for protection of creeks/ mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary. It will also take note of the preservation of entire area to maintain the fragile ecological condition.</p> <p>The action plan suggested by NCSCM in their final report will be discussed with GCZMA and MoEF&CC. The approved action plan will be implemented by APSEZ under supervision of NCSCM.</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 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.	
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>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.</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 taken by Adani Foundation for protection of livelihood of the fisher folk community was submitted during compliance report submission for the period Oct'16 to Mar'17.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status				
		<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 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). Copy of the same is already submitted to MoEF&CC vide our letter dated 10.09.2016. Further, details regarding the expenditure incurred against the commitment are attached as Annexure - 9.</p> <p>Further, 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. Brief information about activities in the main five persuasions are mentioned below. Please refer Annexure – 10 for full details of CSR activities carried out by Adani Foundation in the Mundra region.</p> <table><tr><th>Area</th><th>Activity</th></tr><tr><td>Community Health</td><td><ul style="list-style-type: none">• The Adani Foundation operates Rural Dispensaries in 8 villages of Mundra block, 03 villages of Anjar block and 2 clinics at SEZ area. Mobile dispensary and rural clinics provide health services with</td></tr></table>	Area	Activity	Community Health	<ul style="list-style-type: none">• The Adani Foundation operates Rural Dispensaries in 8 villages of Mundra block, 03 villages of Anjar block and 2 clinics at SEZ area. Mobile dispensary and rural clinics provide health services with
Area	Activity					
Community Health	<ul style="list-style-type: none">• The Adani Foundation operates Rural Dispensaries in 8 villages of Mundra block, 03 villages of Anjar block and 2 clinics at SEZ area. Mobile dispensary and rural clinics provide health services with					

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status	
			<p>token charge of 10/- rupees per patient daily by a doctor and a volunteer. Total patient was treated under this scheme during the year 2017-18: 53757 Nos.</p> <ul style="list-style-type: none"> During the year 2017-18, total 9950 transactions were done by 8518 card holders of 66 villages of Mundra Taluka and they received cash less medical services under this project. During this year, anthropometry study done for 7202 children. Total 86 children became free of malnutrition due to efforts under "Suposhan" Project. Additionally, 1557 FGD were conducted during this year. Total 8770 haemoglobin screenings of RPA woman and adolescent girls was carried out, which helps in controlling anaemia in women and indirectly malnutrition. Total 7732 general health camp was organized during the year across the Mundra Taluka to provide primary medical care during various public events.
		Sustainable Livelihood – Fisher folk	<ul style="list-style-type: none"> Average 118 KL of water was supplied to 983 households from different settlements on a daily basis under Machhimar Shudhh Jal Yojana. Computer Training: 20 Fisherman Youth Sewing Training: 20 Women RTG Crane Operator: 02 Fisherman Youth Dori Work Training: 60 Women Mangrove Plantation: 4526 Man-days Painting Labour: 47 Fisherman AF has started poly culture project with consultancy of GUIDE In this system we stocked 6000 fingerlings fishes of 3 gm weight in six different cages. There was 80% survival with 100 to 150 gm each weight after 5 month culture period. We have facilitated 560 daughters with Kit (Small Bed sheet, Mosquito net, Soap and Cream with nutritious food for mother) under Beti Vadhavo Programme.
		Education	<ul style="list-style-type: none"> Total 2736 Schools and 203309 students have visited Adani Port, Adani Power & Adani Willmar facilities to get an insight upon the large scale business activity carried out at each of them as a part of project UDAAN. 111 Govt. primary schools in total 62 villages of Mundra Taluka, 3 villages of in Anjar taluka and two villages of Mandvi Taluka every year on an average 2550 to 2700 children gets enrolled in 1st std in Taluka For 2017-2018 total 2500 children got enrolled & Adani foundation provided

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status	
			<p>the "Enrollment kit" to all new enrollee in Taluka.</p> <ul style="list-style-type: none"> AF provided green board support at Tuna, Taluka shala Mundra, Lalji Sumar Mundra, Teacher's table support to Mota bhadiya vadi school number 2 & 3, fan at Shekhadiya, science equipment at Luni high school, Girls sanitation at Sadau primary school, water tank renovation at Shekhadiya and Mahesh nagar school.
		Rural Infrastructure	<ul style="list-style-type: none"> A large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) and ground recharge activities (pond deepening work for more than 15 ponds) were built leading to a significant increase in water table and higher returns to the farmers. Adani Foundation has studied impact of Check Dam Strengthening carried out in two villages before two years period. <ol style="list-style-type: none"> Pond Deepening work at Vadala Pond Deepening work at Mota Bhadiya Participatory Ground Water Management. The objective of the project was to reduce the salinity ingress in and around the coastal regions of Mundra, Kutchh and mitigate the ill-effects of this manmade problem to improve the livelihoods of the rural people. The Project will help to get water table high, also it will help in agricultural activities. Other works completed <ol style="list-style-type: none"> Prayer Shed - Govt Primary School at Ragha and Bhadreshwar Grill work - Kumar Shala Zarpara RO Plant - Samaghogha, Siracha village & Vallabh Vidyalaya at Mundra Basic sanitation facility (18 Nos) at Balvadi, medical centre and retiring places at labour settlements
		Skill Development	<ul style="list-style-type: none"> Soft skill training - 675 Nos. Technical Training - 278 Nos.
		Budget for CSR Activity for the FY 2017-18 is to the tune of INR 1565 lakh. Out of which, Approx. INR 1399 lakh are spent during the year.	
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 voluntarily given 400 acres of land back to Zarpara village for the purpose of Gauchar.</p>	

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status
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 PP.	<p>Being complied</p> <p>This reply covers direction no ix and x.</p> <p>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. Cholanmandalam MS Risk Services Ltd. to carry out the studies as stated in these directions. Upon initiation of the study, a progress report with detailed baseline information and action plan was submitted to all concerned authorities as part of the compliance report for the period Oct'16 to Mar'17. Further, CMSRSL finalized the objectives, methodology and data inputs for carrying out modelling of the impact assessment (through dedicated mathematical modelling tools) of various environmental attributes. Following modelling exercises have been carried out.</p> <ul style="list-style-type: none"> • Ambient air quality • Marine (Hydrodynamic, Thermal & Salinity dispersion, Sediment transport) • Noise • Traffic • Oil spill • Water resource and salinity ingress • Land Use / Land Cover • Socioeconomic, Regional infrastructure • Waste management • Ecology, Bio diversity and Fisheries • Shoreline change <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 findings of the modeling reports, an Environmental Management Plan (regional level) is also prepared. The final report is being prepared and the same will be submitted to GCZMA for their consideration.</p> <p>Total cost of the study is approx. INR 1.3 cr. which is financed by APSEZ.</p>

	Adani Ports and Special Economic Zone Limited, Mundra.	From : Oct,17 To : March,18
Status of the conditions stipulated in Environment and CRZ Clearance		

Sr. No.	Condition	Compliance Status
x	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 additional of the capacities.	Being complied. The study mentioned at Sr. No. ix above covers the necessary study on salinity aspect along with its potential environmental impact.

Annexure – 1



Dr. N.S. Raman
Deputy Director & Head
Environmental Audit and
Sustainability

राष्ट्रीय
पर्यावरण
अभियांत्रिकी
अनुसंधान
संस्थान
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EAC/Feb/2018/001
12 February, 2018

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.4800027105, dated: 02.08.2017**

With reference to 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 Condition No. (vii).

Accordingly, the site visit of SEZ was undertaken during the period October-2017 to March-2018 and concluded that all the conditions stipulated in environment clearance has been complied and there is no violation of any condition.

The compliance report (April - September, 2017) was reviewed by us and found adequate. It was further assessed from the monitoring reports submitted to us as part of the compliance report that all the environmental norms meet the applicable standards. The existing practices shall be continued in future as well to ensure meeting with the applicable norms.

Regards,

Yours faithfully

(Dr. N.S. Raman)

Annexure – 2



ગુજરાત ઇકોલોજી કમિશન

ગુજરાત સરકાર

હોલક નં. ૧૮, પ્રથમ માળ, ઉદ્યોગ ભવન, સેક્ટર-૧૧, ગાંધીનગર-૩૮૨૦૧૧

ફોન નં. : ૨૩૨૫૭૫૭, ફેક્સ નં. : ૦૭૯-૨૩૨૫૭૫૭

No. GEC/AP&SEZ/MP/523 /2018

Dt. 08-03-2018

To:

Mr. Shalin Shah
Head (Environment)
Adani Ports and Special Economic Zone Ltd.,
Shikhar, Nr. Mithakali Circle, Navrangpura,
Ahmedabad - 380 009, Gujarat, India

Sub: Regarding Mangrove Plantation by Gujarat Ecology Commission.

Ref.: As per the MoU between AP&SEZ and GEC; Dt.:26/06/2015

Dear Sir,

Greetings from Gujarat Ecology Commission!!!

This is with reference to above mentioned subject and per the MoU between AP&SEZ and GEC; Dt.: 26/06/2015 under reference. Please find attached herewith Remain Grant Requisition for the "**Restoration, Plantation & Conservation of Mangroves**".

In this regards, GEC had already completed **38 Ha.** of the mangrove plantation activities at Tadatalav village in Khambhat block of Anand district in the year: 2015 – 16 & initiate the remain mangrove plantation activities of **62 Ha.** at Aaliya Bet, Ta. Hansot, Di. Bharuch in the year: 2017 - 18.

As per the MoU, it is requested to release remain balance amount of **Rs. 10.50 lakh** (Payment Terms & Condition No. 3 & 4 of 2015 – 16) to GEC, the invoice of the same is attached herewith for your ready reference.

The payment to be made by **Demand Draft/Cheque/RTGS** in favor of **Gujarat Ecology Commission** payable at **Gandhinagar**.

Thanking You,

*Encl: as above



[Sr. Manager (Projects)]

Sr. Manager (Projects)
Gujarat Ecology Commission
Gandhinagar.

PROGRESS REPORT
OF
MANGROVE PLANTATION ACTIVITIES
UNDER
PUBLIC PRIVATE PARTNERSHIP

**Financial & Monitoring Support
By**



**ADANI PORTS & SPECIAL ECONOMIC ZONE LTD.
AHMEDABAD**

Technical Partner



**Gujarat Ecology Commission
Gandhinagar**

Implemented By
Koteshwar Paryavaran Vyavasthapan Samiti

Mangrove Plantation Year

2017 – 18

PROGRESS REPORT OF MANGROVE PLANTATION ACTIVITIES
CARRIED OUT IN THE F. Y.: 2017 - 18
FOR ADANI PORTS & SPECIAL ECONOMIC ZONE LTD.

1.	Name of Partner Agency/Company: Adani Ports & Special Economic Zone Ltd. Plantation Year: 2017 - 18 Total Ha.: 62 Ha.	
2.	Name of the plantation site: Lalavi area of Alia Bet Village: Katpor; Ta. Hansot, Dist.: Bharuch	
3.	Name of the CBO: Aaliya Bet Paryavaran Vikas Vyavasthapan Samiti, At. Ambheta, Ta. Hansot, Di. Bharuch	
4.	GPS Locations of Plantation area:	
4.1	GPS Locations of Plantation area year: 2017 – 18 (Annexure – I)	
	Latitude	Longitude
a.	21 31 43.20	72 39 04.62
b.	21 31 43.56	72 38 28.75
c.	21 31 23.53	72 38 28.69
d.	21 31 23.62	72 39 04.67
5.	<p>Short Description of the Site: The intertidal region in this district is very large as compared to other costal district of South Gujarat. Therefore, human habitations are far off from the mangrove habitats.</p> <p>Hansot taluka has in important deltaic region locally known as “Aliya bet”. This area had been in important area for the nomadic tribe-Jat Maldhari-who wear using this large population of migratory cattle including their veterinary care. The delta has now disappeared and it has become a saline Westland due to siltation. Initially, this area was lush green locally known as “Aal” (<i>Porteresia coarctata</i>) on which thousands of cattle used to depend for grazing. Hence, it was very important centre for animal husbandry.</p> <p>The plantation site is locally called as “Lalavi area of Alia Bet” in Katpor village of Hansot block of Bharuch district. The site is little far away from the approach road. The plantation site is very close to water front. A small creeks passes through the plantation site. The plantation site is near the aquacultures.</p>	
6.	Soil Observations: a) Land form: Mud flats b) Soil Texture: Clayey Loam c) Colour: Brownish-grey	
8.	Month of Plantation & Year: July: 2017 – March: 2018	
9.	Mangrove species planted: <i>Avicennia marina</i> & <i>Rhizophora</i> Spp.	
10.	<p>Details of <i>Avicennia marina</i> Nursery: (Plantation Year: 2017 – 18)</p> <p>1. Month of Nursery raised: August – October: 2017 2. Total area of Nursery: 50 Ha. 3. No. of Plants/bed: 1000 Plant/Bed 4. Species Used: <i>Avicennia marina</i> 5. No. of Plants/Ha. : 2000 6. Spacement of Plants: 2.5 x 2 mt. 7. Total Plants: 100000 8. Survival Rate till Dt.: Approx. 60 – 65 % 9. Height of Plant till Dt.: 20 – 25 cm.</p>	
11.	<p>Proposed Details of <i>Rhizophora</i> Propagules: (Plantation Year: 2017 – 18)</p> <p>1. Month & Year: March - April: 2018 2. Total area of Propagule: 12 Ha. 3. Total No. of Propagules/Ha.: 2000 4. Spacement of Propagules: 2.5 x 2 mt. 5. Total No. of <i>Rhizophora</i> Propagule: 24000</p>	
14.	<p>Health of the Nursery:</p> <p>a. Healthy: Good b. Infection by pests: NIL c. Others: NIL</p>	
17.	<p>Other Technical Parameter:</p> <p>1. The status of the biodiversity in plantation area: Crabs; Snake; Birds; Mudskipper; Other Fish 2. Tidal level of plantation area: Daily 3. Any artificial water provided to Nursery: No 4. Any by local community: Nil</p>	
18.	Any trenching technique used: No	

19.	Data collection/monitored: Monthly
20.	<p>Conclusion:</p> <ul style="list-style-type: none"> ➤ The entire nursery process of nursery plantation is being carried out by the Members of Aaliya Bet Parvyavaran Vikas Vyasthapan Samiti (Community Based Organization). ➤ Village community is being empowered under project in the context of capacity buildings, gender equity and Livelihood opportunities. ➤ Model of Industrial partnership in managing and restoring mangroves ecosystem will be successfully established. ➤ This will help to motivate the company for replicating the model elsewhere. ➤ Plantation Activity wise photographs are annexed herewith in Annexure – II. ➤ Nursery Plantation activities will be carried out in the month of February – March: 2018 ➤ As per the micro-planning developed by CBO, a total 12 ha area will be plant through propagules plantation of Rhizophora mucronata. It will increase the biodiversity status in the region. As selected site has one species stand, therefore it is essential to increase Mangrove biodiversity in the region,

[Authorized Signatory]



Proposed Mangrove Plantation Area for APSEZ

Village: Ambheta (PAN: 30, Category - A)

Legend

- Area: 63 Ha.
- Feature 1
- Polygon Measure

Area: 63 Ha.

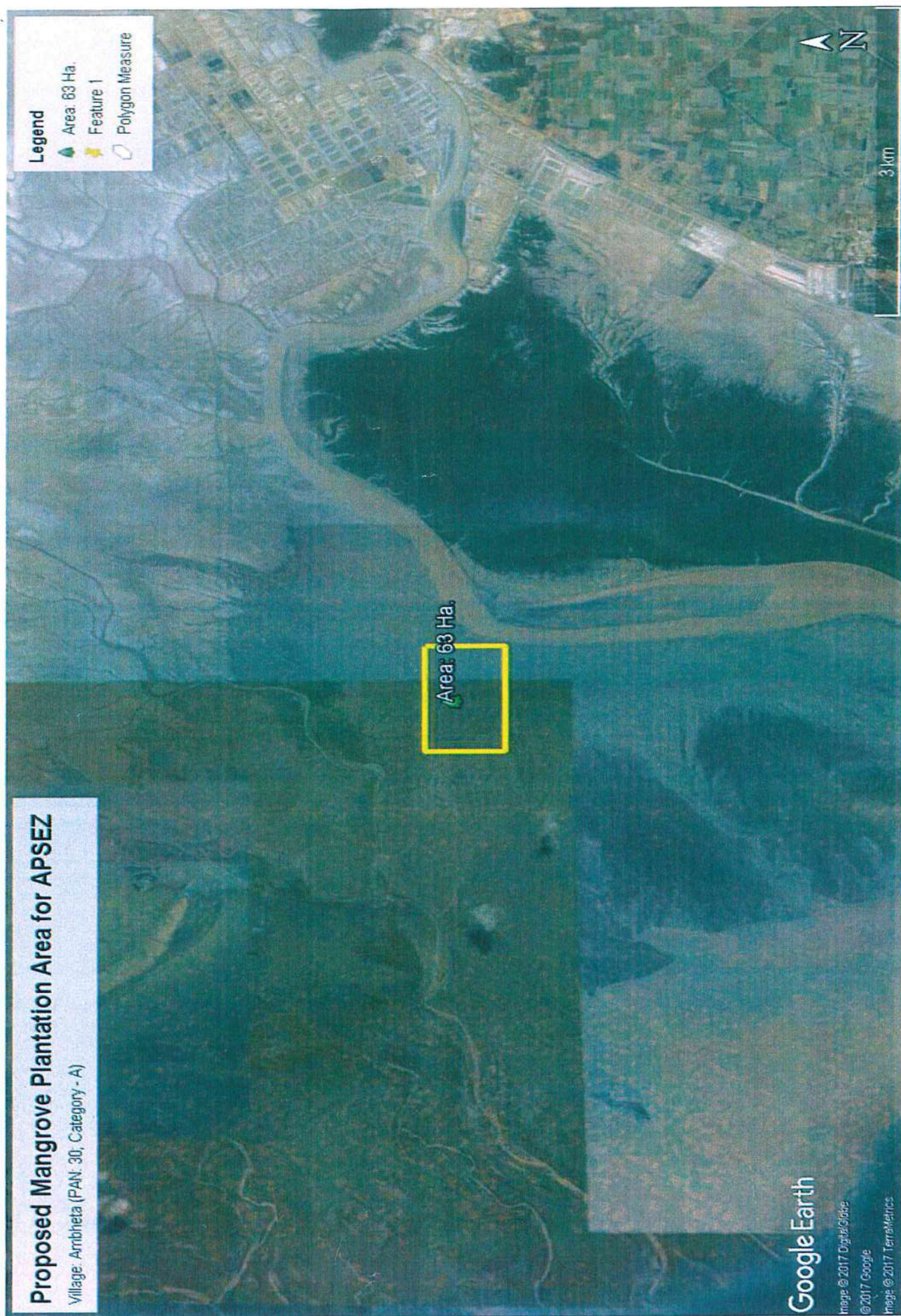
Google Earth

Image © 2017 DigitalGlobe

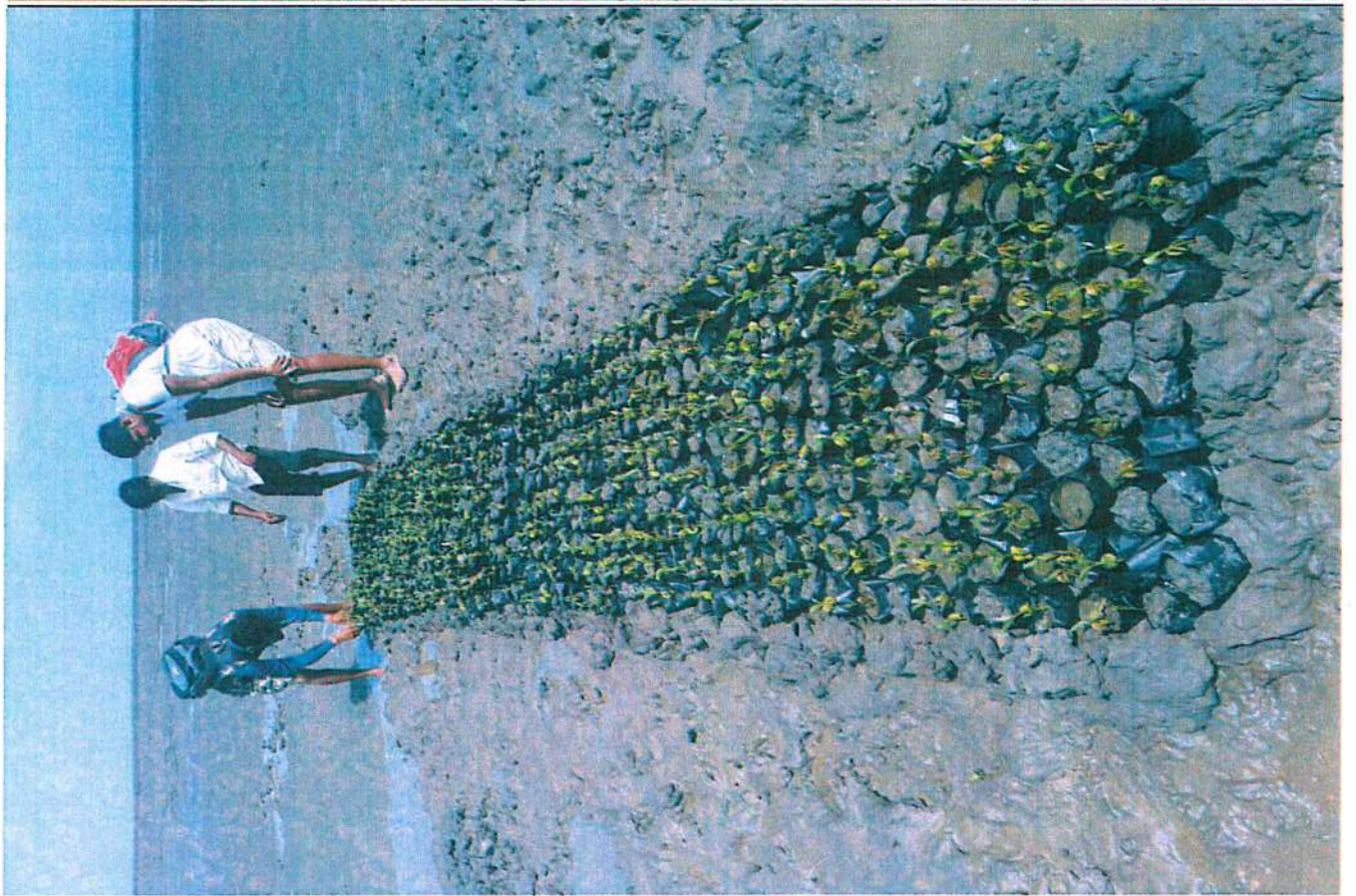
© 2017 Google

Image © 2017 TerraMetrics

3 km



Annexure – III: Activity wise Photographs





















Annexure – 3

Details of Greenbelt development at APSEZ, Mundra

LOCATION	Total Green Zone Detail				
	Area (In Ha.)	Trees (Nos.)	Palm (Nos.)	Shrubs (SQM)	Lawn (SQM)
SV COLONY	65.34	30051.00	6965.00	51138.00	80069.00
PORT & NON SEZ	77.52	131942.00	18613.00	68166.78	58455.18
SEZ	99.52	227135.00	15924.00	220449.60	27462.03
MITAP	2.48	8168.00	33.00	1670.00	4036.00
WEST PORT	83.20	182118.00	50221.00	24112.00	22854.15
AGRI PARK	7.63	17244.00	1332.00	5400.00	2121.44
SOUTH PORT	14.08	25150.00	3430.00	3882.00	4826.97
Samudra Township	38.72	44872.00	11818.00	19978.07	35071.67
Productive Farming (Vadala Farm)	23.79	27976.00	0.00	0.00	0.00
TOTAL (APSEZL)	412.27	694656.00	108336.00	394796.45	234896.44
		<i>802992.00</i>			



Details of Mangrove Afforestation done by APSEZ

Sl. no.	Location	Area (ha)	Duration	Species	Implementation agency
1	Mundra Port	24.0	-	Avicennia marina	Dr. Maity, Mangrove consultant of India
2	Mundra Port	25.0	-	Avicennia marina	Dr. Maity, Mangrove consultant of India
3	Luni/Hamirmora (Mundra, Kutch)	160.8	2007 - 2015	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GUIDE, Bhuj
4	Kukadsar (Mundra, Kutch)	66.5	2012 - 2014	Avicennia marina	GUIDE, Bhuj
5	Forest Area (Mundra)	298.0	2011 - 2013	Avicennia marina	-
6	Jangi Village (Bhachau, Kutch)	50.0	2012 - 2014	Avicennia marina	GUIDE, Bhuj
7	Jakhau Village (Abdasa, Kutch)	310.6	2007-08 & 2011-13	Avicennia marina, Rhizophora mucronata, Ceriops tagal	GUIDE, Bhuj
8	Sat Saida Bet (Kutch)	255.0	2014-15 & 2016-17	Avicennia marina & Bio diversity	GUIDE, Bhuj
9	Dandi Village (Navsari)	800.0	2006 - 2011	Avicennia marina, Rhizophora mucronata, Ceriops tagal	SAVE, Ahmedabad
10	Talaza Village (Bhavnagar)	50.0	2011-12	Avicennia marina	SAVE, Ahmedabad
11	Narmada Village (Bhavnagar)	250.0	2014 - 2015	Avicennia marina	SAVE, Ahmedabad
12	Malpur Village (Bharuch)	200.0	2012-14	Avicennia marina	SAVE, Ahmedabad

13	Kantiyajal Village (Bharuch)	50.0	2014-15	Avicennia marina	SAVE, Ahmedabad
14	Devla Village (Bharuch)	150.0	210-16	Avicennia marina	SAVE, Ahmedabad
15	Village Tala Talav (Khambhat, Anand)	100.0	2015 - 2016	Avicennia marina	SAVE, Ahmedabad
16	Village Tala Talav (Khambhat, Anand)	38.0	2015 - 2016	Avicennia marina	GEC, Gandhinagar
Total Mangrove Plantation:		2827.90 Ha			

Annexure – 4

Compliance Report of EMP & Mitigation Measures

Sr. No.	Suggested Measures	Compliance Status
 Construction Phase:		
1	Proper care is warranted while dredging which should be in a controlled manner. It should also be insured that reclamation, dredging, widening and silt stabilization measures do not significantly alter the stabilized erosional-accretional regime and prevailing rate of exchange of water between the outer area of the intricate creek system as well as the free flow of tidal water, to protect the mangroves.	<p>All construction and operation activities as well as dredging and reclamation activities are being carried out as per the approvals.</p> <p>Please refer condition no. 8 & 9 of the CRZ recommendation compliance report for further details.</p>
2	Good sanitation, water and fuel should be made available to the work force. Labour colonies should be set-up landward of the HTL and away from mangrove.	<p>Most of the construction labours resides in the nearby villages where all basic facilities are easily available. However, for those residing near the construction site, infrastructure facilities such as water supply, fuel, sanitation, first aid, ambulance etc. are provided by APSEZ. Details were submitted as a part of compliance report submission for the period Apr'17 to Sep'17.</p> <p>Please refer general condition no. ii of the EC & CRZ clearance for further details.</p>
 Operation Phase:		
1	Wastewater such as generated during cleaning of jetties, floor washing, domestic use etc. should be collected in a settling pond and released to marine environment only after ascertaining that it is free from oil and SS. The toilets on the jetties must have compact sewage treatment facilities.	<p>Entire quantity of sewage generated from APSEZ premises is being treated in designated ETP / STP and treated sewage is used for Horticulture purposes.</p> <p>Please refer specific condition no. xii of the EC & CRZ clearance or further details.</p>
2	Dust should be routinely monitored at the vantage points and corrective measures such as water sprinkling should be practiced if it increases beyond permissible limits.	<p>Ambient Air Quality (twice in a week) monitoring is being carried out by NABL and MoEF&CC accredited agency namely M/s. Pollucon Laboratories Pvt. Ltd.</p> <p>Adequate safeguard measures are being taken for abatement of dust emissions.</p> <p>Please refer specific condition no. xi of the EC & CRZ clearance or further details.</p>
3	It should be ensured that the effluent released into the Gulf meets the	Entire quantity of effluent / sewage generated from APSEZ premises is being treated in

Sr. No.	Suggested Measures	Compliance Status
	prescribed GPCB criteria at all times.	designated ETP / STP and treated water is being utilized on land for Horticulture purposes after compliance with GPCB standards. Please refer specific condition no. xii of the EC & CRZ clearance or further details.
4	Appropriate spill response scheme (Tier-1 to Tier-3) should be in place to minimize impacts on marine environment, should a spill occur.	Oil spill contingency plan is in place to handle Tier 1 level oil spills considering different accident scenarios, and the vulnerable areas are identified and mitigation plan is prepared. A copy of the plan updated & approved by coast guard was submitted during last compliance report submission for the period Apr'17 to Sep'17.
5	MPSEZL should commit mangrove restoration programme through afforestation in a defined time frame over larger and promising areas and should monitored periodically and protect from anthropogenic pressures.	APSEZ has carried out mangrove afforestation in more than 2800 ha. area across the coast of Gujarat. Please refer specific condition no. i & vii of the EC & CRZ clearance or further details.
6	A comprehensive marine quality monitoring programme with periodic investigations at predetermined locations should be undertaken by a specialized agency.	Marine monitoring is being carried out once in a month by NABL and MoEF&CC accredited agency namely M/s. Pollucon Laboratories Pvt. Ltd. Please refer specific condition no. ix of the EC & CRZ clearance or further details.
7	The dust and noise levels at pre-decided locations including the jetty sites should be periodically monitored and remedial action taken if the levels exceed the prescribed norms.	Ambient Air Quality (twice in a week) and Noise (once in a month) monitoring are being carried out by NABL and MoEF&CC accredited agency namely M/s. Pollucon Laboratories Pvt. Ltd. Please refer specific condition no. xi of the EC & CRZ clearance or further details.
8	MPSEZL should establish an Environment Management Cell (EMC) directly under the control of the Chief Executive.	M/s APSEZ has a well structured Environment Management Cell, staffed with qualified manpower for implementation of the Environment Management Plan. The Environment Management Cell is headed by Sr. Manager who directly reports to the top management. The organogram of Environment Cell is attached as Annexure – 12 .

Annexure – 5



POLLUCON

LABORATORIES PVT. LTD.

Environmental Auditors, Consultants & Analysts.
Cleaner Production / Waste Minimization Facilitator

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"HALF YEARLY ENVIRONMENTAL MONITORING REPORT"

FOR



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

**MONITORING PERIOD:
OCTOBER 2017 TO MARCH 2018**

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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TC - 5945

ISO 9001:2015

ISO 14001:2015

OHSAS 18001:2007

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RESULTS OF STP WATER OUTLET

SR. NO	TEST PARAMETERS	Unit	ADANI HOUSE STP OUTLET							
			October-17		November-17		December-17		GPCB Permissible Limit	TEST METHOD
			04/10/2017	24/10/2017	06/11/2017	23/11/2017	05/12/2017	21/12/2017		
1	pH	--	7.17	7.03	7.28	7.20	7.02	7.25	--	IS3025(P11)83Re.02
2	Total Suspended Solids	mg/L	26	26	24	14	26	16	100	IS3025(P17)84Re.02
3	BOD (3 days @ 270 C)	mg/L	16	18	18	13	18	19	30	IS 3025 (P44)1993Re.03Edition 2.1
4	Fecal Coliform	MPN/100 mL	---	---	---	---	---	---	< 1000	APHA (22ndEdi) 9221 C&E

SR. NO	TEST PARAMETERS	Unit	ADANI HOUSE STP OUTLET							
			January-18		February-18		March-18		GPCB Permissible Limit	TEST METHOD
			08/01/2018	22/01/2018	06/02/2018	22/02/2018	06/03/2018	20/03/2018		
1	pH	--	7.16	7.09	7.01	7.03	6.95	6.56	--	IS3025(P11)83Re.02
2	Total Suspended Solids	mg/L	18	22	23	26	16	14	100	IS3025(P17)84Re.02
3	BOD (3 days @ 270 C)	mg/L	20	18	15	12	18	12	30	IS 3025 (P44)1993Re.03Edition 2.1
4	Fecal Coliform	MPN/100 mL	84	110	430	920	350	920	< 1000	APHA (22ndEdi) 9221 C&E

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



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RESULT OF AMBIENT AIR QUALITY MONITORING

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 $\mu\text{g}/\text{m}^3$
1	03/10/2017	70.29	38.73	16.62	24.86	0.33	BDL*	BDL*
2	06/10/2017	64.59	33.73	13.21	29.47	0.64	BDL*	BDL*
3	10/10/2017	76.37	36.64	8.97	30.50	0.96	BDL*	BDL*
4	13/10/2017	60.13	25.40	11.77	28.29	0.23	BDL*	BDL*
5	17/10/2017	74.49	40.74	22.28	44.80	0.52	BDL*	BDL*
6	20/10/2017	85.73	35.40	15.00	32.54	0.25	BDL*	BDL*
7	24/10/2017	66.89	28.73	20.59	38.46	0.62	BDL*	BDL*
8	27/10/2017	72.59	30.40	7.95	22.71	0.82	BDL*	BDL*
9	31/10/2017	53.37	23.74	18.55	26.52	0.71	BDL*	BDL*
10	03/11/2017	55.48	22.49	18.29	43.59	0.81	BDL*	BDL*
11	07/11/2017	65.58	27.48	11.08	28.51	1.09	BDL*	BDL*
12	10/11/2017	71.72	18.74	13.47	35.31	0.92	BDL*	BDL*
13	14/11/2017	69.61	30.40	10.97	32.37	1.26	BDL*	BDL*
14	17/11/2017	78.60	35.40	12.92	26.36	0.30	BDL*	BDL*
15	21/11/2017	62.42	28.73	17.49	37.40	0.68	BDL*	BDL*
16	24/11/2017	82.63	43.72	21.79	29.57	0.33	BDL*	BDL*
17	28/11/2017	53.19	25.40	15.85	25.52	0.44	BDL*	BDL*
18	01/12/2017	57.49	21.38	9.88	22.24	0.31	BDL*	BDL*
19	05/12/2017	61.12	34.30	17.21	39.84	0.62	BDL*	BDL*
20	08/12/2017	78.60	26.55	14.88	24.46	0.32	BDL*	BDL*
21	12/12/2017	88.59	48.63	8.61	17.79	0.18	BDL*	BDL*
22	15/12/2017	70.37	29.63	11.89	20.15	0.94	BDL*	BDL*
23	19/12/2017	52.28	23.71	15.86	30.58	0.79	BDL*	BDL*
24	22/12/2017	63.42	31.21	18.50	33.36	0.55	BDL*	BDL*
25	26/12/2017	58.57	20.59	6.15	15.57	0.63	BDL*	BDL*
26	29/12/2017	84.29	46.84	10.76	28.46	0.78	BDL*	BDL*
27	02/01/2018	83.38	38.47	13.36	24.25	0.41	BDL*	BDL*
28	05/01/2018	62.69	32.46	9.58	15.27	0.82	BDL*	BDL*
29	09/01/2018	72.37	28.34	15.87	36.41	0.81	BDL*	BDL*
30	12/01/2018	65.41	35.63	11.42	26.35	0.97	BDL*	BDL*

Continue ...

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



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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 $\mu\text{g}/\text{m}^3$
31	16/01/2018	58.39	22.46	18.97	37.19	0.40	BDL*	BDL*
32	19/01/2018	78.30	33.42	12.65	29.64	1.04	BDL*	BDL*
33	23/01/2018	64.20	26.42	19.46	38.32	0.60	BDL*	BDL*
34	26/01/2018	74.49	39.42	7.91	18.19	0.24	BDL*	BDL*
35	30/01/2018	68.62	42.26	10.87	28.26	0.94	BDL*	BDL*
36	02/02/2018	57.43	24.71	8.95	15.19	0.61	BDL*	BDL*
37	06/02/2018	70.50	38.30	10.51	20.97	0.31	BDL*	BDL*
38	09/02/2018	64.81	35.84	13.57	26.47	0.63	BDL*	BDL*
39	13/02/2018	59.42	30.34	9.64	18.22	0.69	BDL*	BDL*
40	16/02/2018	74.49	33.59	11.32	24.71	0.82	BDL*	BDL*
41	20/02/2018	54.52	29.34	15.96	31.46	0.38	BDL*	BDL*
42	23/02/2018	82.42	40.38	17.73	29.83	0.45	BDL*	BDL*
43	27/02/2018	61.48	36.76	12.77	25.08	0.73	BDL*	BDL*
44	02/03/2018	74.61	32.63	9.84	21.46	0.80	BDL*	BDL*
45	06/03/2018	66.68	40.38	10.36	29.34	0.71	BDL*	BDL*
46	09/03/2018	77.58	33.26	16.76	18.04	0.29	BDL*	BDL*
47	13/03/2018	62.51	36.76	7.92	15.40	0.57	BDL*	BDL*
48	16/03/2018	72.37	30.38	14.79	22.56	0.64	BDL*	BDL*
49	20/03/2018	57.61	24.84	5.61	19.26	0.18	BDL*	BDL*
50	23/03/2018	76.61	42.55	13.46	36.19	0.42	BDL*	BDL*
51	27/03/2018	65.59	28.59	8.79	20.36	0.60	BDL*	BDL*
52	30/03/2018	59.30	34.34	13.03	27.51	0.36	BDL*	BDL*
	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

*Below detection limit

H. T. Shah
Lab Manager



Dr. Arun Bajpai
Lab Manager (Q)

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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	Hydrogen sulphide(H ₂ S) µg/m ³
1	04/10/2017	89.39	39.52	14.22	26.53	BDL*
2	07/10/2017	95.78	51.59	22.91	33.41	BDL*
3	11/10/2017	85.61	48.68	18.67	28.30	BDL*
4	14/10/2017	75.37	33.70	16.59	37.59	BDL*
5	18/10/2017	90.42	55.48	20.67	40.24	BDL*
6	21/10/2017	78.48	42.44	17.79	25.06	BDL*
7	25/10/2017	93.29	37.44	19.56	30.29	BDL*
8	28/10/2017	82.62	34.53	23.77	44.66	BDL*
9	01/11/2017	89.33	50.76	18.19	34.61	BDL*
10	04/11/2017	95.30	39.52	26.53	42.49	BDL*
11	08/11/2017	80.31	35.36	21.56	38.49	BDL*
12	11/11/2017	71.23	43.68	14.20	28.43	BDL*
13	15/11/2017	85.30	47.43	19.23	36.71	BDL*
14	18/11/2017	78.60	33.70	24.85	39.38	BDL*
15	22/11/2017	88.41	46.60	16.86	43.60	BDL*
16	25/11/2017	92.62	56.58	20.77	30.40	BDL*
17	29/11/2017	83.41	38.69	28.85	32.38	BDL*
18	02/12/2017	66.43	27.69	20.69	30.15	BDL*
19	06/12/2017	85.58	48.48	15.13	37.32	BDL*
20	09/12/2017	79.42	44.42	22.84	33.14	BDL*
21	13/12/2017	86.31	51.61	18.37	28.67	BDL*
22	16/12/2017	72.59	30.41	24.67	42.26	BDL*
23	20/12/2017	81.37	43.42	16.66	24.69	BDL*
24	23/12/2017	90.83	54.29	21.36	39.37	BDL*
25	27/12/2017	70.70	36.39	14.33	25.70	BDL*
26	30/12/2017	63.93	29.40	12.69	35.83	BDL*
27	03/01/2018	86.80	40.78	13.45	26.35	BDL*
28	06/01/2018	66.18	35.72	21.51	36.18	BDL*
29	10/01/2018	81.19	42.83	15.83	42.48	BDL*
30	13/01/2018	77.53	37.85	19.12	33.30	BDL*

Continue ...

H. T. Shah
Lab ManagerDr. Arun Bajpai
Lab Manager (Q)

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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 (SO2) $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen (NO2) $\mu\text{g}/\text{m}^3$	Hydrogen sulphide(H2S) $\mu\text{g}/\text{m}^3$
31	17/01/2018	61.49	33.38	23.25	39.29	BDL*
32	20/01/2018	92.41	54.62	17.52	21.56	BDL*
33	24/01/2018	82.23	49.42	16.67	38.57	BDL*
34	27/01/2018	73.32	30.62	20.64	29.47	BDL*
35	31/01/2018	89.30	51.53	26.29	32.34	BDL*
36	03/02/2018	76.67	32.46	20.68	31.58	BDL*
37	07/02/2018	92.41	51.40	13.44	25.56	BDL*
38	10/02/2018	80.40	44.54	18.82	33.63	BDL*
39	14/02/2018	59.47	25.76	15.37	38.41	BDL*
40	17/02/2018	62.52	30.24	22.40	23.39	BDL*
41	21/02/2018	83.63	46.38	25.25	42.67	BDL*
42	24/02/2018	93.33	53.75	14.29	34.48	BDL*
43	28/02/2018	87.59	39.61	19.55	26.69	BDL*
44	03/03/2018	73.38	31.75	23.12	40.28	BDL*
45	07/03/2018	82.29	45.38	18.34	37.64	BDL*
46	10/03/2018	76.43	35.47	19.39	32.58	BDL*
47	14/03/2018	67.71	28.40	21.81	35.66	BDL*
48	17/03/2018	94.30	54.33	25.85	39.13	BDL*
49	21/03/2018	75.58	47.68	28.63	45.12	BDL*
50	24/03/2018	85.58	50.40	16.91	29.27	BDL*
51	28/03/2018	79.30	44.38	20.51	42.55	BDL*
52	31/03/2018	91.50	49.23	22.15	31.69	BDL*
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)	IS:5182(Part VII) 1973

*Below detection limit

H. T. Shah
Lab ManagerDr. 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 (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	04/10/2017	79.42	33.68	9.67	16.81
2	07/10/2017	85.82	47.40	17.41	28.28
3	11/10/2017	94.30	55.71	20.43	32.89
4	14/10/2017	66.49	29.52	11.90	24.60
5	18/10/2017	76.49	46.63	14.89	29.48
6	21/10/2017	57.52	31.60	8.64	21.27
7	25/10/2017	61.42	25.78	16.59	36.40
8	28/10/2017	73.38	28.69	21.16	30.26
9	01/11/2017	75.58	41.58	12.36	20.35
10	04/11/2017	82.41	36.59	22.74	38.24
11	08/11/2017	62.40	28.69	16.56	35.54
12	11/11/2017	48.37	22.45	11.80	25.49
13	15/11/2017	68.62	33.68	14.90	30.44
14	18/11/2017	72.40	26.19	18.22	41.43
15	22/11/2017	60.33	22.45	20.91	27.70
16	25/11/2017	76.49	31.60	8.83	23.61
17	29/11/2017	61.18	24.53	21.31	26.69
18	02/12/2017	52.28	20.61	17.56	20.90
19	06/12/2017	40.37	18.62	12.37	26.68
20	09/12/2017	62.57	35.28	18.30	30.14
21	13/12/2017	74.29	26.39	20.46	33.79
22	16/12/2017	42.60	19.41	8.72	24.45
23	20/12/2017	47.81	24.31	5.32	18.01
24	23/12/2017	56.31	32.62	9.58	25.69
25	27/12/2017	64.80	28.51	16.65	15.12
26	30/12/2017	58.29	22.31	14.27	31.62
27	03/01/2018	65.42	29.42	9.67	15.52
28	06/01/2018	54.32	20.53	14.15	33.28
29	10/01/2018	77.39	26.35	19.23	25.38
30	13/01/2018	68.90	34.32	16.70	29.31

Continue..

H. T. Shah
Lab ManagerDr. 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	17/01/2018	57.49	21.36	11.42	27.37
32	20/01/2018	49.30	31.66	6.39	22.41
33	24/01/2018	69.33	30.40	12.34	32.33
34	27/01/2018	52.40	22.19	15.87	20.26
35	31/01/2018	60.28	36.40	18.43	19.16
36	03/02/2018	50.29	22.19	18.81	27.47
37	07/02/2018	65.42	35.78	9.74	15.18
38	10/02/2018	71.50	31.25	16.87	29.50
39	14/02/2018	41.49	16.58	11.64	25.37
40	17/02/2018	53.39	26.39	14.47	31.81
41	21/02/2018	68.52	37.36	19.64	36.22
42	24/02/2018	57.80	34.49	8.14	23.62
43	28/02/2018	49.42	20.36	6.33	17.57
44	03/03/2018	48.62	21.23	10.66	34.54
45	07/03/2018	59.41	33.45	20.72	26.84
46	10/03/2018	68.71	27.38	12.79	19.58
47	14/03/2018	46.51	19.45	15.34	30.31
48	17/03/2018	65.42	38.44	21.80	36.67
49	21/03/2018	52.59	29.67	18.51	28.38
50	24/03/2018	70.82	32.54	14.26	25.52
51	28/03/2018	66.23	26.43	11.55	31.29
52	31/03/2018	54.32	30.38	8.88	22.49
	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)

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RESULTS OF AMBIENT AIR QUALITY MONITORING

SAMUDRA TOWNSHIP CUSTOMER CARE					
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	04/10/2017	84.49	36.64	20.37	32.36
2	07/10/2017	75.59	43.72	15.89	24.46
3	11/10/2017	69.51	40.39	13.24	35.47
4	14/10/2017	48.63	21.65	9.61	19.57
5	18/10/2017	56.33	35.57	16.52	23.48
6	21/10/2017	82.93	46.63	19.92	34.56
7	25/10/2017	72.52	31.64	11.44	25.44
8	28/10/2017	65.78	27.48	14.86	27.40
9	01/11/2017	81.18	45.38	16.73	23.38
10	04/11/2017	69.33	29.56	24.58	32.56
11	08/11/2017	76.79	38.72	14.18	30.27
12	11/11/2017	65.42	34.56	12.33	20.38
13	15/11/2017	91.17	43.72	17.55	33.89
14	18/11/2017	55.30	23.73	10.34	36.18
15	22/11/2017	68.30	27.48	7.95	39.63
16	25/11/2017	78.77	35.39	15.75	35.44
17	29/11/2017	67.28	32.48	19.95	22.37
18	02/12/2017	59.08	23.42	12.78	23.88
19	06/12/2017	65.37	35.42	9.59	20.09
20	09/12/2017	53.39	19.30	14.38	25.05
21	13/12/2017	69.43	22.39	10.65	24.33
22	16/12/2017	56.41	25.60	13.40	19.87
23	20/12/2017	64.83	30.30	11.26	27.03
24	23/12/2017	49.51	18.39	19.84	22.32
25	27/12/2017	67.79	32.41	7.96	17.86
26	30/12/2017	46.79	25.31	17.69	27.01
27	03/01/2018	74.33	33.60	7.08	18.39
28	06/01/2018	47.52	24.20	16.79	30.30
29	10/01/2018	68.40	36.53	10.73	32.46
30	13/01/2018	58.29	23.54	13.32	25.53

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	17/01/2018	42.61	35.37	8.74	20.34
32	20/01/2018	66.28	38.38	15.10	29.33
33	24/01/2018	52.48	21.39	9.59	26.45
34	27/01/2018	57.62	26.47	12.48	23.80
35	31/01/2018	72.27	42.38	5.33	21.42
36	03/02/2018	58.41	29.56	11.69	24.20
37	07/02/2018	72.39	38.30	7.19	18.39
38	10/02/2018	54.17	23.42	14.57	22.43
39	14/02/2018	64.52	27.34	9.75	20.33
40	17/02/2018	47.58	22.64	16.19	27.58
41	21/02/2018	59.20	31.75	12.55	33.39
42	24/02/2018	68.22	39.62	10.56	29.28
43	28/02/2018	55.32	24.37	13.54	19.60
44	03/03/2018	54.48	24.57	14.40	31.42
45	07/03/2018	67.91	36.86	12.93	23.32
46	10/03/2018	56.59	29.27	9.91	20.62
47	14/03/2018	61.56	22.47	11.24	26.51
48	17/03/2018	50.18	27.62	18.40	32.64
49	21/03/2018	65.61	39.46	21.68	35.59
50	24/03/2018	48.60	18.47	7.11	27.49
51	28/03/2018	57.50	33.52	16.95	22.34
52	31/03/2018	69.43	38.47	17.60	34.24
	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)

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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	04/10/2017	71.77	30.41	7.94	21.49	0.48	BDL*	BDL*
2	07/10/2017	62.80	35.41	10.39	38.28	0.71	BDL*	BDL*
3	11/10/2017	75.29	45.40	16.99	25.69	0.39	BDL*	BDL*
4	14/10/2017	60.62	26.66	13.41	32.46	0.85	BDL*	BDL*
5	18/10/2017	87.30	51.77	9.79	35.42	0.40	BDL*	BDL*
6	21/10/2017	66.38	36.66	11.15	29.39	0.52	BDL*	BDL*
7	25/10/2017	52.37	21.66	14.31	33.10	0.41	BDL*	BDL*
8	28/10/2017	78.50	39.57	19.85	36.31	0.36	BDL*	BDL*
9	01/11/2017	67.89	39.57	7.14	18.64	0.37	BDL*	BDL*
10	04/11/2017	58.50	29.57	13.43	35.56	0.53	BDL*	BDL*
11	08/11/2017	71.53	32.49	6.18	20.58	0.31	BDL*	BDL*
12	11/11/2017	53.41	24.58	9.78	22.37	0.25	BDL*	BDL*
13	15/11/2017	75.29	38.74	12.81	19.24	0.34	BDL*	BDL*
14	18/11/2017	84.20	42.49	15.21	26.39	0.30	BDL*	BDL*
15	22/11/2017	93.60	52.48	11.52	33.55	0.40	BDL*	BDL*
16	25/11/2017	63.41	28.74	5.37	15.66	0.14	BDL*	BDL*
17	29/11/2017	55.41	22.49	17.67	29.30	0.21	BDL*	BDL*
18	02/12/2017	42.39	16.30	15.21	34.56	0.15	BDL*	BDL*
19	06/12/2017	55.30	31.32	17.55	32.11	0.34	BDL*	BDL*
20	09/12/2017	70.58	40.30	10.71	27.20	0.27	BDL*	BDL*
21	13/12/2017	81.61	30.57	14.41	20.07	0.13	BDL*	BDL*
22	16/12/2017	63.22	27.62	6.36	16.60	0.53	BDL*	BDL*
23	20/12/2017	54.51	33.40	9.78	30.54	0.40	BDL*	BDL*
24	23/12/2017	77.71	37.39	13.56	35.67	0.29	BDL*	BDL*
25	27/12/2017	58.59	22.58	5.28	21.30	0.37	BDL*	BDL*
26	30/12/2017	69.79	34.60	19.81	17.61	0.11	BDL*	BDL*
27	03/01/2018	56.27	26.16	5.57	21.61	0.29	BDL*	BDL*
28	06/01/2018	74.48	41.67	12.86	25.29	0.15	BDL*	BDL*
29	10/01/2018	61.21	33.56	16.77	29.39	0.18	BDL*	BDL*
30	13/01/2018	51.22	20.46	10.58	22.33	0.37	BDL*	BDL*

H. T. Shah
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AIR STRIP								
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 $\mu\text{g}/\text{m}^3$
31	17/01/2018	48.78	28.53	14.24	32.18	0.47	BDL*	BDL*
32	20/01/2018	78.38	43.55	13.48	15.56	0.24	BDL*	BDL*
33	24/01/2018	62.41	24.48	6.21	18.44	0.21	BDL*	BDL*
34	27/01/2018	40.19	16.84	17.86	34.58	0.20	BDL*	BDL*
35	31/01/2018	68.21	39.47	8.84	26.80	0.23	BDL*	BDL*
36	03/02/2018	41.60	17.18	16.28	33.71	0.18	BDL*	BDL*
37	07/02/2018	57.19	31.86	6.27	22.23	0.27	BDL*	BDL*
38	10/02/2018	77.77	36.39	10.89	26.32	0.36	BDL*	BDL*
39	14/02/2018	69.31	30.32	13.47	31.10	0.48	BDL*	BDL*
40	17/02/2018	72.78	33.56	11.72	21.27	0.14	BDL*	BDL*
41	21/02/2018	52.37	28.49	15.36	31.42	0.16	BDL*	BDL*
42	24/02/2018	63.09	23.54	5.72	16.53	0.39	BDL*	BDL*
43	28/02/2018	80.33	33.86	9.91	23.44	0.23	BDL*	BDL*
44	03/03/2018	68.39	28.41	20.25	26.72	0.21	BDL*	BDL*
45	07/03/2018	52.37	23.67	23.39	30.15	0.17	BDL*	BDL*
46	10/03/2018	47.62	18.47	17.70	27.70	0.29	BDL*	BDL*
47	14/03/2018	55.30	25.62	18.90	33.54	0.50	BDL*	BDL*
48	17/03/2018	60.29	34.56	13.72	29.34	0.33	BDL*	BDL*
49	21/03/2018	42.57	18.34	16.93	23.17	0.14	BDL*	BDL*
50	24/03/2018	80.51	37.60	19.37	34.32	0.46	BDL*	BDL*
51	28/03/2018	71.50	42.34	8.10	18.53	0.18	BDL*	BDL*
52	31/03/2018	85.32	45.63	12.79	17.65	0.23	BDL*	BDL*
	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

*Below detection limit

H. T. Shah
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Lab Manager (Q)

RESULTS OF NOISE LEVEL MONITORING

Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	ADANI HOUSE					
		Result [Leq dB(A)]					
	Sampling Date & Time	10/10/2017	07/11/2017	08/12/2017	23/01/2018	13/02/2018	13/03/2018
1	6:00-7:00	68.4	63.9	58.1	65.1	62.4	59.4
2	7:00-8:00	62.3	67.2	63.4	62.4	63.8	65.1
3	8:00-9:00	63.1	70.6	62.8	64.3	68.1	62.7
4	9:00-10:00	61.8	71.2	68.4	68.8	60.1	63.8
5	10:00-11:00	73.4	70.8	65.2	70.3	62.8	68.4
6	11:00-12:00	65.1	68.0	71.4	70.1	65.1	64.1
7	12:00-13:00	62.8	64.3	68.8	69.1	61.4	62.1
8	13:00-14:00	68.4	69.1	65.5	65.5	63.8	61.7
9	14:00-15:00	68.2	68.1	63.4	63.1	69.4	69.1
10	15:00-16:00	68.4	63.1	69.1	62.8	64.7	70.5
11	16:00-17:00	65.1	65.2	66.1	65.1	70.4	65.2
12	17:00-18:00	61.8	69.9	62.4	61.9	70.5	62.8
13	18:00-19:00	60.4	67.2	68.4	68.4	68.1	65.6
14	19:00-20:00	67.1	64.8	65.1	65.3	62.4	63.2
15	20:00-21:00	63.4	58.1	62.8	62.1	65.5	61.8
16	21:00-22:00	65.1	67.9	62.1	62.9	63.4	68.4
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)]					
	Sampling Date & Time	10/10/2017 & 11/10/2017	07/11/2017 & 08/11/2017	08/12/2017 & 09/12/2017	23/01/2018 & 24/01/2018	13/02/2018 & 14/02/2018	13/03/2018 & 14/03/2018
1							
2	22:00-23:00	60.4	63.1	65.5	65.7	63.4	68.4
3	23:00-00:00	68.4	63.9	62.1	67.1	68.1	64.2
4	00:00-01:00	65.2	65.8	63.4	61.5	59.4	62.1
5	01:00-02:00	63.4	58.2	68.1	60.4	60.4	62.1
6	02:00-03:00	61.4	65.3	62.7	60.3	62.4	60.4
7	03:00-04:00	63.4	62.8	60.1	62.8	60.7	64.8
8	04:00-05:00	68.1	64.2	60.9	64.1	61.8	63.1
9	05:00-06:00	64.1	58.3	63.1	62.9	63.7	61.7
Night Time Limit*		70 Leq dB(A)					



H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

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

SR. NO.	Name of Location	CETP					
		Result [dB(A) Leq]					
	Sampling Date & Time	11/10/2017	01/11/2017	13/12/2017	03/01/2018	07/02/2018	21/03/2018
1	6:00-7:00	63.1	57.2	57.1	57.3	60.4	60.4
2	7:00-8:00	65.1	59.3	62.4	59.1	63.7	64.1
3	8:00-9:00	65.9	62.1	63.1	63.1	67.1	63.8
4	9:00-10:00	66.8	61.9	65.4	65.5	62.5	67.2
5	10:00-11:00	69.1	68.8	62.1	63.7	68.4	62.8
6	11:00-12:00	72.1	69.3	68.4	67.9	64.1	65.4
7	12:00-13:00	65.8	70.1	63.1	67.1	62.6	65.1
8	13:00-14:00	63.1	65.2	61.2	62.4	60.4	65.9
9	14:00-15:00	69.4	69.3	63.4	62.9	61.8	66.8
10	15:00-16:00	66.4	67.2	68.4	68.4	65.4	69.4
11	16:00-17:00	62.8	62.9	62.1	65.1	63.4	64.1
12	17:00-18:00	68.4	62.3	60.1	66.3	61.8	60.8
13	18:00-19:00	65.1	60.2	63.1	69.2	69.4	63.2
14	19:00-20:00	70.4	59.3	65.1	71.4	69.1	65.4
15	20:00-21:00	71.8	59.8	64.8	70.3	62.4	64.8
16	21:00-22:00	69.4	58.7	62.1	65.1	65.3	67.2
Day Time Limit*		75 dB(A) Leq					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	CETP					
		Result [dB(A) Leq]					
	Sampling Date & Time	11/10/2017 & 12/10/2017	01/11/2017 & 02/11/2017	13/12/2017 & 14/12/2017	03/01/2018 & 04/01/2018	07/02/2018 & 08/02/2018	21/03/2018 & 22/03/2018
1	22:00-23:00	68.4	58.7	66.2	68.4	62.4	65.4
2	23:00-00:00	65.1	56.9	62.1	61.4	60.1	62.4
3	00:00-01:00	63.4	60.2	60.4	63.4	68.4	59.7
4	01:00-02:00	64.8	59.1	63.1	64.5	65.1	57.8
5	02:00-03:00	62.4	60.0	61.4	62.4	63.1	63.4
6	03:00-04:00	63.8	57.9	60.1	60.4	61.7	60.1
7	04:00-05:00	64.1	52.1	60.8	57.4	61.8	59.4
8	05:00-06:00	62.8	58.1	62.8	60.1	65.4	60.1
Night Time Limit*		70 dB(A) Leq					

H. T. Shah
Lab ManagerDr. Arun Bajpai
Lab Manager (Q)

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

SR. NO.	Name of Location	SAMUNDRA TOWNSHIP STP					
		Result [Leq dB(A)]					
		25/10/2017	11/11/2017	20/12/2017	24/01/2018	17/02/2018	07/03/2018
1	6:00-7:00	60.4	60.1	60.8	58.4	56.4	57.1
2	7:00-8:00	63.1	67.2	63.4	62.1	60.4	60.4
3	8:00-9:00	61.8	53.9	59.4	63.4	58.4	59.1
4	9:00-10:00	65.7	57.2	63.1	65.2	65.1	62.4
5	10:00-11:00	65.2	60.0	60.7	68.1	62.7	61.4
6	11:00-12:00	63.8	65.3	60.8	68.3	68.4	63.1
7	12:00-13:00	68.4	63.1	63.4	65.4	62.1	65.4
8	13:00-14:00	64.8	64.8	65.1	64.2	63.4	62.4
9	14:00-15:00	62.4	69.2	65.2	69.4	61.8	62.8
10	15:00-16:00	68.2	62.7	66.8	65.7	69.4	62.9
11	16:00-17:00	63.4	67.4	62.7	66.1	61.5	63.4
12	17:00-18:00	61.8	65.1	67.1	68.4	63.4	61.7
13	18:00-19:00	70.8	69.1	65.7	62.1	68.7	64.7
14	19:00-20:00	69.1	58.2	64.1	61.8	64.1	67.1
15	20:00-21:00	65.4	61.2	62.8	65.4	66.2	65.1
16	21:00-22:00	64.2	59.3	63.8	61.8	65.8	61.8
Day Time Limit*		75 Leq dB(A)					

Result of Noise level monitoring [Night Time]

SR. NO.	Name of Location	SAMUNDRA TOWNSHIP STP					
		Result [Leq dB(A)]					
		25/10/2017 & 26/10/2017	11/11/2017 & 12/11/2017	20/12/2017 & 21/12/2017	24/01/2018 & 25/01/2017	17/02/2018 & 18/02/2018	07/03/2018 & 08/03/2018
1	22:00-23:00	63.4	62.8	60.4	63.4	65.4	63.4
2	23:00-00:00	62.9	58.9	59.4	61.8	62.8	61.2
3	00:00-01:00	64.1	57.5	62.4	57.4	65.1	60.2
4	01:00-02:00	63.4	52.8	61.7	59.1	60.4	62.1
5	02:00-03:00	68.4	57.5	60.3	60.4	61.4	61.2
6	03:00-04:00	62.8	54.8	62.8	60.8	59.7	62.4
7	04:00-05:00	64.1	58.5	61.8	63.4	60.8	63.1
8	05:00-06:00	63.7	52.9	60.9	61.4	63.4	60.7
Night Time Limit*		70 Leq dB(A)					

H. T. Shah
Lab ManagerDr. Arun Bajpai
Lab Manager (Q)

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Result of Noise level monitoring [Day Time]

SR. NO.	Name of Location	SAMUNDRA TOWNSHIP CUSTOMER CARE					
		Result [Leq dB(A)]					
	Sampling Date & Time	04/10/2017	22/11/2017	06/12/2017	10/01/2018	21/02/2018	14/03/2018
1	6:00-7:00	55.1	51.2	56.2	62.4	54.4	56.1
2	7:00-8:00	59.1	58.6	60.1	60.1	58.7	59.4
3	8:00-9:00	63.4	67.2	62.8	62.8	61.4	61.7
4	9:00-10:00	65.1	64.9	64.0	69.4	62.7	63.1
5	10:00-11:00	62.1	68.3	63.1	67.1	68.4	61.7
6	11:00-12:00	60.4	62.1	67.4	67.3	65.1	62.7
7	12:00-13:00	68.4	59.3	63.4	65.2	61.8	68.4
8	13:00-14:00	62.4	61.2	62.8	65.3	66.7	64.1
9	14:00-15:00	59.8	69.3	65.1	65.9	69.3	62.4
10	15:00-16:00	60.7	67.8	66.4	61.4	61.5	68.4
11	16:00-17:00	60.6	68.0	66.1	61.3	62.8	62.4
12	17:00-18:00	62.4	64.2	63.1	60.4	68.4	63.4
13	18:00-19:00	64.3	62.1	62.4	65.2	61.8	65.1
14	19:00-20:00	62.8	64.6	62.8	62.8	63.4	67.4
15	20:00-21:00	65.1	65.1	64.1	63.4	65.1	63.4
16	21:00-22:00	61.5	60.5	60.8	65.8	67.7	65.2
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)]					
	Sampling Date & Time	04/10/2017 & 05/10/2017	22/11/2017 & 23/11/2017	06/12/2017 & 07/12/2017	10/01/2018 & 11/01/2018	21/02/2018 & 22/02/2018	14/03/2018 & 15/03/2018
1	22:00-23:00	65.1	59.7	62.1	64.1	63.4	61.4
2	23:00-00:00	60.4	60.1	58.4	58.4	60.0	60.4
3	00:00-01:00	58.4	61.4	56.1	52.4	59.7	54.1
4	01:00-02:00	56.1	54.8	57.1	54.1	54.1	56.4
5	02:00-03:00	51.4	59.7	60.1	51.6	55.2	59.1
6	03:00-04:00	58.2	57.6	52.1	59.7	56.7	51.4
7	04:00-05:00	56.1	52.1	57.1	62.4	59.4	60.1
8	05:00-06:00	61.7	60.8	60.8	62.7	60.4	62.7
Night Time Limit*		70 Leq dB(A)					

H. T. Shah
Lab ManagerDr. Arun Bajpai
Lab Manager (Q)

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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]					
		18/10/2017	29/11/2017	27/12/2017	18/01/2018	25/02/2018	10/03/2018
1	6:00-7:00	49.1	48.2	55.1	55.1	51.4	49.1
2	7:00-8:00	46.1	45.9	58.4	59.4	56.7	52.4
3	8:00-9:00	50.8	58.2	60.1	62.1	62.1	63.1
4	9:00-10:00	62.1	56.3	62.4	63.4	55.7	61.4
5	10:00-11:00	60.8	61.1	59.1	60.8	62.1	59.7
6	11:00-12:00	63.4	61.3	63.4	60.4	60.4	62.7
7	12:00-13:00	59.4	64.5	62.8	61.7	63.4	68.4
8	13:00-14:00	54.1	59.3	59.4	59.4	61.7	63.4
9	14:00-15:00	58.1	56.1	61.2	63.4	62.8	60.4
10	15:00-16:00	53.4	54.2	61.8	65.1	66.4	62.4
11	16:00-17:00	57.4	61.3	60.8	61.4	61.8	61.8
12	17:00-18:00	61.8	59.3	62.4	62.8	63.7	65.4
13	18:00-19:00	60.4	54.2	63.4	61.5	68.7	62.4
14	19:00-20:00	62.7	63.1	61.8	63.7	66.4	63.4
15	20:00-21:00	60.8	61.9	62.8	62.4	61.7	60.4
16	21:00-22:00	60.3	49.7	65.2	60.8	63.4	60.8
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]					
		18/10/2017 & 19/10/2017	29/11/2017 & 30/11/2017	27/12/2017 & 28/12/2017	18/01/2018 & 19/01/2018	25/02/2018 & 26/02/2018	10/03/2018 & 11/03/2018
1	22:00-23:00	56.1	48.3	55.0	53.4	60.1	59.4
2	23:00-00:00	52.1	52.9	53.1	56.1	57.1	60.1
3	00:00-01:00	53.1	51.7	56.8	49.8	55.1	52.1
4	01:00-02:00	50.4	41.8	57.1	52.7	51.4	50.3
5	02:00-03:00	61.4	48.6	50.1	57.4	55.7	56.1
6	03:00-04:00	60.8	52.3	50.8	60.4	62.7	59.2
7	04:00-05:00	62.4	43.7	53.1	60.8	60.7	60.7
8	05:00-06:00	59.4	48.7	55.8	61.8	59.1	61.7
Night Time Limit*		70 dB(A) Leq					

H. T. Shah
Lab ManagerDr. Arun Bajpai
Lab Manager (Q)



25/02/2018

SR. NO.	TEST PARAMETERS	Unit	Adani House	
			D.G. Set* (750 KVA)	Test Method
1	Particulate Matter	mg/Nm ³	15.62	IS:11255 (Part-I):1985
2	Sulphur Dioxide	ppm	4.53	IS:11255 (Part-II):1985
3	Oxide of Nitrogen	ppm	31.72	IS:11255 (Part-VII):2005
4	Carbon Monoxide	mg/m ³	5.80	Digital Gas Analyzer
5	Hydro Carbon NMHC	ppm	BDL*	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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RESULTS OF BORE HOLE WATER

SR. NO	TEST PARAMETERS	UNIT	RESULTS						TEST METHOD
			OPP. DRUB RAILWAY STATION		NEAR PUB BUILDING		NEAR ETP OFFICE		
	GPS Location		N 22° 43.073′ E 069° 39.861′		N 22° 46.761′ E 069° 40.999′		N 22° 44.549′ E 069° 41.464′		
	Sampling Date	14/10/2017	18/01/2018	14/10/2017	18/01/2018	14/10/2017	18/01/2018		
Sampling Time		11:10	10:45	9:45	10:25	10:30	11:15		
1	pH	--	6.95	7.41	6.93	7.82	7.45	7.76	IS3025(P11)83Re.02
2	Salinity	mg/L	29.51	4.32	0.56	6.07	0.54	6.34	APHA 2520B
3	Oil & Grease	mg/L	BDL*	BDL*	BDL*	BDL*	1.16	1.71	APHA(22ndEdi)5520D
4	Hydrocarbon	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	GC/GC-MS
5	Lead as Pb	mg/L	0.092	BDL*	BDL*	0.015	0.058	0.05	AAS APHA(22ndEdi)3111 B
6	Arsenic as As	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	AAS APHA 3114 B
7	Nickel as Ni	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	0.18	AAS APHA(22ndEdi)3111 B
8	Total Chromium as Cr	mg/L	0.017	0.015	0.022	0.016	0.011	0.004	AAS 3111B
9	Cadmium as Cd	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	AAS APHA(22ndEdi)3111 B
10	Mercury as Hg	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	AAS APHA- 3112 B
11	Zinc as Zn	mg/L	0.068	0.081	0.021	0.12	0.022	0.051	AAS APHA(22ndEdi)3111 B
12	Copper as Cu	mg/L	0.063	BDL*	BDL*	BDL*	BDL*	0.05	AAS APHA(22ndEdi)3111 B
13	Iron as Fe	mg/L	0.037	0.29	0.23	0.056	0.038	0.58	AAS APHA(22ndEdi)3111 B
14	Insecticides/Pesticides	mg/L	BDL*	Absent	BDL*	Absent	BDL*	Absent	GC/GC-MS
15	Depth of Water Level from Ground Level	meter	2.6	1.7	2.1	1.94	2.84	2.7	--



H. T. Shah
Lab Manager




Dr. Arun Bajpai
Lab Manager (Q)

**RESULTS OF BORE HOLE WATER**

SR. NO	TEST PARAMETERS	UNIT	RESULTS		TEST METHOD
			NEAR CETP MAIN GATE		
	GPS Location		N 22° 48.630' S 069° 42.393'		
	Sampling Date		14/10/2017	18/01/2018	
Sampling Time			12:30	12:55	
1	pH	--	7.59	7.81	IS3025(P11)83Re.02
2	Salinity	mg/L	3.52	3.37	APHA 2520B
3	Oil & Grease	mg/L	1.12	BDL*	APHA(22 nd Edi)5520D
4	Hydrocarbon	mg/L	BDL*	BDL*	GC/GC-MS
5	Lead as Pb	mg/L	0.43	0.012	AAS APHA(22 nd Edi)3111 B
6	Arsenic as As	mg/L	BDL*	BDL*	AAS APHA 3114 B
7	Nickel as Ni	mg/L	0.13	BDL*	AAS APHA(22 nd Edi)3111 B
8	Total Chromium as Cr	mg/L	0.012	0.019	AAS 3111B
9	Cadmium as Cd	mg/L	BDL*	BDL*	AAS APHA(22 nd Edi)3111 B
10	Mercury as Hg	mg/L	BDL*	BDL*	AAS APHA- 3112 B
11	Zinc as Zn	mg/L	0.088	0.048	AAS APHA(22 nd Edi)3111 B
12	Copper as Cu	mg/L	0.33	BDL*	AAS APHA(22 nd Edi)3111 B
13	Iron as Fe	mg/L	10.14	0.22	AAS APHA(22 nd Edi)3111 B
14	Insecticides/Pesticides	mg/L	BDL*	Absent	GC/GC-MS
15	Depth of Water Level from Ground Level	meter	2.8	1.86	--

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

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RESULTS OF SOIL

SR. NO.	TEST PARAMETERS	UNIT	RESULT			
			OCTOBER - 2017			
			Opp. Dhrub Railway Station	Nr. Flyover Bridge	Nr. Pub Building	CETP Gate
1	pH	--	7.43	7.41	8.15	7.87
2	Nitrogen as N	%	0.0067	0.0088	0.0072	0.0045
3	Phosphorus as P	mg/kg	134	276	214	680
4	Potassium as K	mg/kg	52	36	16	29
5	Baron as B	mg/kg	2.2	2.1	3.2	3.1
6	Calcium as Ca	mg/kg	550	436	54.8	1210
7	Magnesium as Mg	mg/kg	60	60.84	6.12	1456
8	Iron as Fe	%	0.53	0.35	0.24	0.47
9	Moisture	%	10.4	14.8	13.2	12.4
10	Organic Matter	%	0.038	0.069	0.023	0.05
11	CEC	meq/100 gm	8.1	7.9	5.9	7.2
12	TVC	CFU/gm	2.2 x 10 ⁻⁶	3.0 x 10 ⁻⁷	4.0 x 10 ⁻⁷	3.6x 10 ⁻⁶
Heavy Metal						
13	Cadmium as Cd	mg/kg	1.92	4.7	2.0	2.44
14	Thorium as Th	mg/kg	BDL*	BDL*	BDL*	BDL*
15	Antimony as Sb	mg/kg	BDL*	BDL*	BDL*	BDL*
16	Arsenic as As	mg/kg	BDL*	BDL*	BDL*	BDL*
17	Lead as Pb	mg/kg	18.8	28	30.6	17.8
18	Chromium as Cr	mg/kg	15.4	16.4	18.2	16.6
19	Cobalt as Co	mg/kg	1.6	0.9	2.2	1.4
20	Copper as Cu	mg/kg	10.2	12.6	10.1	10.8
21	Nickel as Ni	mg/kg	76	64	136	70
22	Manganese as Mn	mg/kg	220	490	88	162
23	Vanadium as V	mg/kg	10.8	12.6	8.4	7.6

H. T. Shah
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Minimum Detection Limit [MDL]

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

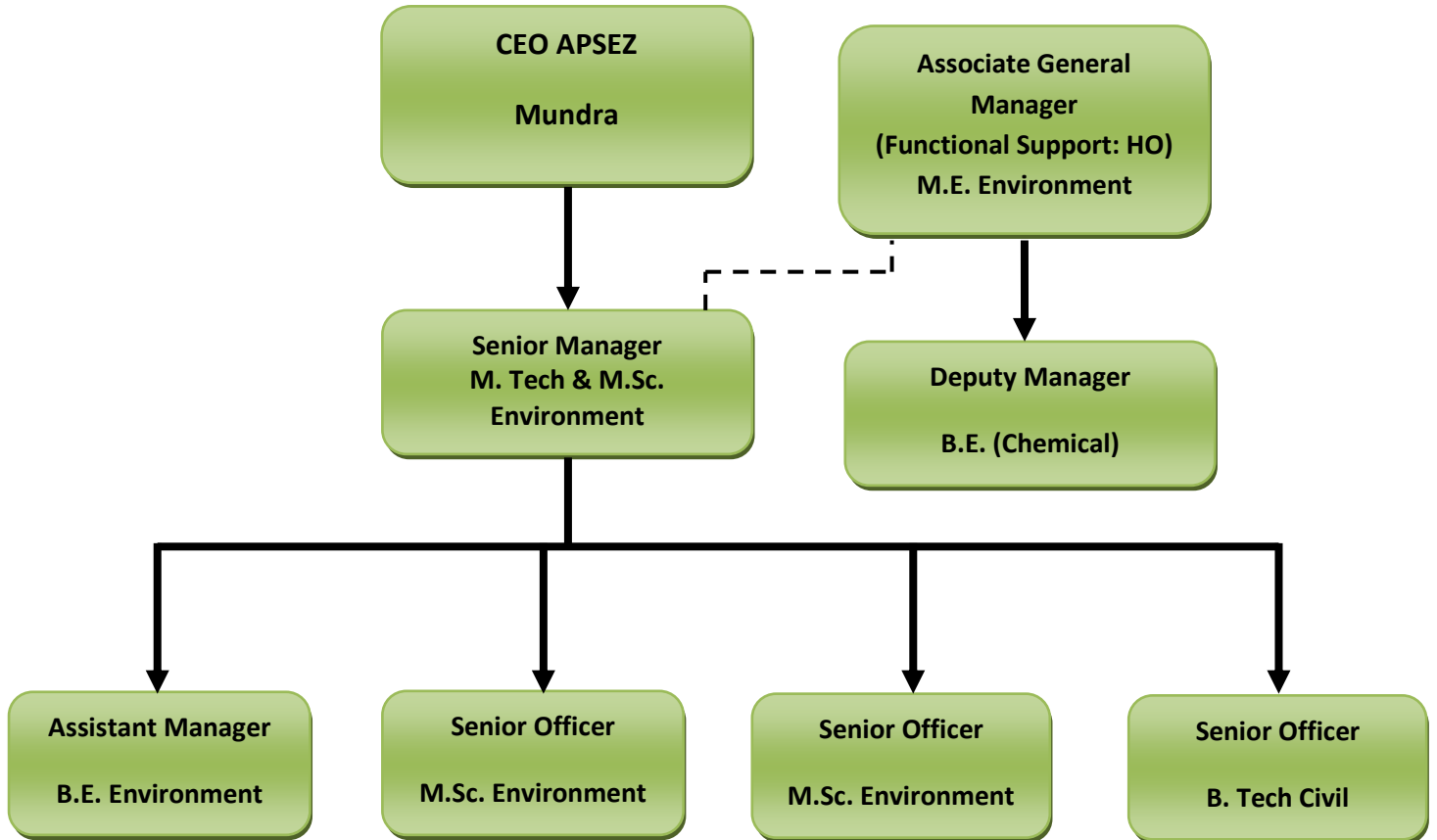
Stack Parameters		
Sr.No.	Test Parameter	MDL
1	Particulate Matter (mg/Nm ³)	10
2	Sulphur Dioxide (ppm)	1.52
3	Oxides of Nitrogen (ppm)	2.65
4	Carbon Monoxide (mg/Nm ³)	0.1
5	Hydro Carbon NMHC (ppm)	1.0

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

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

Annexure – 6

Organogram of Environment Management Cell, APSEZ, Mundra



Annexure – 7

Roof Top Solar Plants at APSEZ, Mundra

Sr. No.	Location	Capacity in MW	Status
1	Samudra Township	1.5	Commissioned
2	Adani House	0.1	Commissioned
3	Port User Building	0.1	Commissioned
4	MITAP Sub Station	0.03	Commissioned
5	MRSS	0.025	Commissioned
6	Air Strip	0.045	Commissioned
7	Agri Park	1.2	Ready for Commissioning
8	Adani Hospital	0.069	Ready for Commissioning
9	Water Treatment Plant	0.054	Ready for Commissioning
10	RM Plant 4 MLD	0.058	Ready for Commissioning
11	PMC Store	0.015	Installation is in process
	TOTAL	3.2	

Annexure – 8

APSEZ/EnvCell/2017-18/047

Date: 15.12.2017

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

Subject: Submission of compliance to observation / suggestion / instruction made by GPCB Officials during inspection.

Reference: GPCB Inspection letter dated 11.12.2017, 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:

Compliance against your inspection remark.

Specific Condition – i: Hon'ble High Court of Gujarat passed an order on 13th January, 2014 with respect to writ petition filed as PIL for units in Mundra SEZ. In reference of that one of the SEZ Industries i.e. M/s. Skaps Industries India Pvt. Ltd. has appealed in Supreme Court under Special Leave Petition (Civil) on 18th January, 2014 having case no. SLP(C) No. 1526/2014 for staying against this Gujarat High Court order. Hon'ble Supreme Court stayed the order of Gujarat High Court vide their order dated 21st January, 2014 and directed MoEF to decide in the matter of grant of EC & CRZ clearance to Mundra SEZ. Copy of the order is enclosed here as **Annexure – B** for your reference.

After that APSEZ has been granted EC & CRZ Clearance for Multi-Product SEZ vide ref. no. 10-138/2008- IA.III dated 15th July, 2014. However the said case is still pending for final judgement. Copy of the case status is enclosed here as **Annexure – C** for your reference.

Specific Condition – iv & v: The Ministry appointed a committee headed by Ms. Sunita Narain for inspection of M/s. Adani Ports and SEZ Ltd. Mundra. The committee submitted its report and the Ministry issued a show cause notice dated 30.9.2013. In the said show cause notice dated 30.9.2013, it was stated that "Bocha Island should be declared as conservation zone and the area should be protected. All the creeks, water bodies and reclaimed land in these areas should be restored and brought back to pre- 2005 status within six months".

While the said show cause notice dated 30.9.2013 was pending for adjudication, the EC & CRZ clearance was granted to Multi-Product SEZ at Mundra on 15.7.2014, inter alia, on the following specific conditions, amongst others.

- (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 has taken place."

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As is evident, the aforesaid conditions were imposed in the said EC & CRZ clearance dated 15.7.2014 because of the pendency of the same issue for consideration with the Ministry at the relevant time. Subsequently, the Ministry adjudicated the show cause notice and passed final order dated 18.9.2015, whereby it issued certain directions and disposed of the said show cause notice dated 30.9.2013.

In respect to the issue of restoring all the creeks, water bodies and reclaimed land in these areas and bringing back it to pre-2005 status within six months, the Ministry has passed the following directions in its order dated 18.9.2015.

- (iv) A comprehensive and integrated conservation plan including detailed bathymetry study and protection of creeks/mangrove area including buffer zone, mapping of co-ordinates, running length, HTL CRZ boundary should be put in place...
- (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 E(P) Act 1986 do not provide for any authority to impose. ERF by the Government, the plan should be financed by PP. The implementation should be carried out by GCZMA. The monitoring of the implementation should be carried by NCSCM.

The Ministry has now adjudicated the 'issue of restoring all the creeks, water bodies and reclaimed land in these areas and bringing back it to pre-2005 status in terms of its final order dated 18.9.2015 as above and thus, any conditions in respect of bringing the creeks and water bodies area at Mundra back to pre-2005 condition, including that in the EC & CRZ clearance dated 15.7.2014, should be consistent with the final order dated 18.9.2015 of the Ministry in this regard.

In view of the above, we humbly state and submit that the specific condition nos. (iv) and (v) of the EC & CRZ clearance dated 15.7.2014 granted to Multi-Product SEZ at Mundra have become redundant and are not required to be complied with. We have also submitted our letter dated 23.05.2016 to the MoEF&CC with proper justification against compliance status of specific condition no. iv, v & vi of EC & CRZ clearance granted dated 15.7.2014 and copy of the same is enclosed here as **Annexure – D** for your ready reference.

APSEZ is submitting the compliances regularly to all concerned authorities including SPCB and hope the above mentioned submission is in line with requirement. We are also uploading this inspection compliance report on GPCB-XGN site as recommended by your good office.

Thanking you,

For, **Adani Ports and Special Economic Zone Limited**



Authorised Signatory

Copy to:

Unit Head (Kutch Unit),
Gujarat Pollution Control Board,
Paryavaran Bhavan, Sector – 10A,
Gandhinagar - 382010.

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ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ

પ્રાદેશિક કચેરી : કચ્છ (પૂર્વ)

દિનદયાલ પોર્ટ ટ્રસ્ટનું વહીવટ મકાન રૂમ નં. ૨૧૫, ૨૧૬, ૨જો માળ,
સેક્ટર નં. ૮, ગાંધીધામ-૩૭૦૨૦૧, કચ્છ. ફોન : ૦૨૮૩૬-૨૩૦૮૨૮

પ્રતિ, Adani Port & SEZ Ltd.
Mumbai, Kutch

તારીખ : 11/12/17.

જીપીસીની આઈડી : 31463

ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડના અધિકારીઓ દ્વારા આપના એકમની આજરોજ જુદા જુદા પર્યાવરણીય નિયમોને આધિન સ્થળ મુલાકાત લેવામાં આવેલ. આપના એકમના સ્થળ મુલાકાત દરમિયાન કરેલ અવલોકનો, આપે આપેલ માહિતી / દસ્તાવેજો અને પર્યાવરણીય નિયમોની જોગવાઈ આધીન, આપને નીચે મુજબ સૂચનાઓ આપવામાં આવે છે જેની પૂર્તતા/સ્પષ્ટતા અંગેનો અહેવાલ (કોમ્પલાયન્સ રીપોર્ટ) આ આદેશ મળ્યાની તારીખથી કામકાજના દિવસ-૩ માં લેખીત/એક્ઝીક્યુટિવ/ઇલેક્ટ્રોનિક માધ્યમ મારફતે બોર્ડની વડી કચેરી ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ, પર્યાવરણ ભવન, સેક્ટર ૧૦-એ, ગાંધીનગર-૩૮૨૦૧૦ ને આ કચેરીની જાણ હેઠળ અચૂક મોકલી આવવો.

- ① આજરોજ જાહેર દ.સ. 15/11/14 ની સંપર્કીકૃત કચેરીના નોંધણી, 4, 5 ના કચેરીના નોંધણીના પુરાવાની હાજરીની રીત ગણતરી કરીને તેમજ XPS નાં સમાવેશ કરવો.

[Signature]

એકમના પ્રતિનિધિનું નામ અને હોદ્દો
(Mr. Sumit Patelwal)
Sr. Manager

[Signature]

(R.J. Acharya)
A.E.

[Signature]

(R.H. Jivani)
S.O.



ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ

પ્રાદેશિક કચેરી : કચ્છ (પૂર્વ)

દિનદિવાલ પોર્ટ ટ્રસ્ટનું પહીવટ મકાન રૂમ નં. ૨૧૫, ૨૧૬, ૨જો માળ,
સેક્ટર નં. ૮, ગાંધીધામ-૩૭૦૨૦૧, કચ્છ. ફોન : ૦૨૮૩૬-૨૩૦૮૨૮

તપાસ માટે દાખલ થવાની સૂચના (નોટીસ)

પાણી અધિનિયમ ૧૯૭૪ ની કલમ - ૨૩, હવા અધિનિયમ ૧૯૮૧ ની કલમ - ૨૪ અને પર્યાવરણ (સુરક્ષા) અધિનિયમ - ૧૯૮૬ની કલમ-૧૦ હેઠળ બાયો મેડીકલ વેસ્ટ નિયમ-૨૦૦૮ હેઠળ અમોને મળેલ સત્તાની રૂએ અમો નીચે સહી કરનાર અમોને જરૂરી લાગે તેની સહાય લઈને તમામ સમયે નીચેના હેતુઓ માટે આપની જગ્યામાં દાખલ થવાનો અને તપાસ કરવાનો અધિકાર ધરાવીએ છીએ.

- (૧) અમોને સોંપેલા રાજ્ય બોર્ડ/કેન્દ્ર સરકારના કાર્ય બજાવવાના હેતુ માટે
- (૨) આવા 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 એમ માનવાને કારણ હોય કે આ કાયદા કે તે હેઠળ કરેલા નિયમો મુજબ કોઈ ગુનો કરવામાં આવ્યો છે, અથવા થવાની તૈયારીમાં છે, તેવી કોઈ જગ્યાની ઝડતી લેવા માટે અને તેને એમ માનવાને કારણ હોય કે આ કાયદા કે તે હેઠળ કરેલ નિયમો હેઠળ કરેલ શિક્ષાપાત્ર કોઈ ગુનો કર્યાનો પુરાવો, તેવા સાધન સામગ્રી ઔદ્યોગિક પ્લાન્ટ, રેકર્ડ, રજીસ્ટર, દસ્તાવેજ અથવા અન્ય મહત્વની વસ્તુ કબજે લેવા માટે અમે નીચે જણાવેલ સમયે દાખલ થઈએ છીએ.

ઉદ્યોગ/.....માં દાખલ થવાનો સમય : સવારના / સાંજના.....તા. ૧૧/૧૨/૨૦૧૭
અમારી સાથે સહાય માટે નીચેની વ્યક્તિઓ પણ છે.

૧. R. J. Acharya (AEE)
૨. 1
૩.

પ્રતિ, 7A-31463

Adani Port & S.S. Ltd.

Minerals

Dist - Kutch

નકલ મળેલ છે.

આ સૂચના (નોટીસ) મેળવનારની સહી

સહી : R.H. Jivani

અધિકારીનું નામ : R.H. Jivani

હોદ્દો : SO

Mr. Sumit Paliwal
(Sr. Manager)

SLP(C) No. 1526 of 2014 etc.

1

ITEM NO.326

COURT NO.5

SECTION IX

S U P R E M E C O U R T O F I N D I A
R E C O R D O F P R O C E E D I N G S

997977

Petition(s) for Special Leave to Appeal (Civil) No(s).1526/2014
(From the judgement and order dated 13/01/2014 in WP No.21/2013 of
The HIGH COURT OF GUJARAT AT AHMEDABAD)

SKAPS INDUSTRIES INDIA PVT LTD

Petitioner(s)

VERSUS

GAJUBA (GAJENDRASINH) BHIMJI JADEJA&ORS
(With prayer for interim relief and office report)

Respondent(s)

WITH

SLP(C) NO. 1607 OF 2014
(With prayer for interim relief and office report)

SLP(C) NO. 1606 OF 2014
(With prayer for interim relief and office report)

SLP(C) NO. 1490 OF 2014
(With applns. for exemption from filing c/c of the impugned judgment,
prayer for interim relief and office report)

SLP(C) NO. 1519 OF 2014
(With applns. for exemption from filing c/c of the impugned judgment,
prayer for interim relief and office report)

SLP(C) NO. 1554 OF 2014
(With applns. for exemption from filing c/c of the impugned judgment,
prayer for interim relief and office report)

SLP(C) NO. 1799 OF 2014
(With prayer for interim relief and office report)

SLP(C) NO. 2198 OF 2014
(With prayer for interim relief and office report)

SLP(C) ... CC 1389/2014
(With appln. for permission to file SLP and office report)

Date: 27/01/2014 These Petitions were called on for hearing today.

Certified to be true copy
Assistant Registrar (Civil)
Supreme Court of India

CORAM :

HON'BLE MR. JUSTICE A.K. PATNAIK
HON'BLE MR. JUSTICE SURINDER SINGH NIJJAR
HON'BLE MR. JUSTICE FAKKIR MOHAMED IBRAHIM KALIFULLA

For the parties:

Mr. Mukul Rohatgi, Sr. Adv.
Mr. Mihir Joshi, Sr. Adv.
Ms. Radhika Gautam, Adv.
Mr. Kishore N. Shriyan, Adv.
Mr. Mahesh Agarwal, Adv.
Mr. Rishi Agrawala, Adv.
Mr. E.C. Agrawala, Adv.
Mr. Shashank Manish, Adv.
Mr. Abhinav Agrawal, Adv.
Mr. Abhinav Mukherji, Adv.
Mr. Avinash Modi, Adv.
Ms. Ritika Pal, Adv.
Mr. Sandeep Singhi, Adv.
Ms. Shamik Bhatt, Adv.

Mr. Chandra Uday Singh, Adv.
Mr. Ajay Bhargava, Adv.
Ms. Vanita Bhargava, Adv.
Mr. Nitin Mishra, Adv. for
M/s. Khaitan & Co., Adv.

Mr. Abhimanue Shrestha, Adv.
Ms. Kamini Jaiswal, Adv.

Mr. Harish Salve, Sr. Adv.
Mr. Harin P. Rawal, Sr. Adv.
Mr. Ranjit Kumar, Sr. Adv.
Mr. Vikram Nankani, Adv.
Mr. Kirat Singh Nagra, Adv.
Mr. Monish Panda, Adv.
Mr. Avneesh Arputtham, Adv.
Mr. Praveen Kumar, Adv.
Mr. Kartik Yadav, Adv.

Ms. Indira Jai Singh, ASG
Ms. Anindita Pujari, Adv.
Mr. S.N. Terdal, Adv.

Mr. Abhishek M. Singhvi, Sr. Adv.
Mr. R. Sudhinder, Adv.
Mr. Ashok Mathur, Adv.
Mr. S.N. Mitra, Adv.

Mr. M.L. Lahoty, Adv.
Mr. Paban K. Sharma, Adv.
Mr. Mohit Lahoty, Adv.
Ms. Gargi B. Bharuli, Adv.
Mr. Himanshu Shekhar, Adv.

UPON hearing counsel the Court made the following
O R D E R

Heard learned counsel for the petitioners.

Issue notice returnable in a month.

Learned counsel for the petitioners will take necessary steps for effecting service of notice within a week.

Ms. Kamini Jaiswal, advocate accepts notice on behalf of Respondent No.1. Mr. S.N. Terdal, advocate accepts notice in respect of Union of India. Hence, no formal notice be issued to the Respondent Nos. 1 and 5.

In the meanwhile, the units in the SEZ in respect of which the impugned order has been passed may continue to function, but no further construction activity with regard to any unit existing or upcoming, will be carried out.

Respondent No. 12, Mundra Port and Special Economic Zone Ltd., and the Revisional Development Commissioner of the SEZ will file affidavits by the next date as to the units which were functioning at the time the impugned order was passed.

We make it clear that the direction to the Ministry of Environment and Forests to complete the process of environmental clearance is not stayed by us. This direction is without prejudice to the case of the petitioners that no further clearance was required from the Ministry of Environment and Forests. In case, the Ministry of Environment and Forests 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.

List after one month.

sd
(G. SUDHAKARA RAO)
COURT MASTER

sd
(SHARDA KAPOOR)
COURT MASTER

**SUPREME COURT OF INDIA (/)**

॥ यतो धर्मस्ततो जयः ॥

Diary Number	Case Number	Party Name	AOR	Court / Tribunal	Free Text
Case Type		Number	Year		
SPECIAL LEA <input checked="" type="checkbox"/>		1526	2014 <input checked="" type="checkbox"/>		Submit
Diary No.- 2097 - 2014					
SKAPS INDUSTRIES INDIA PVT .LTD. vs. GAJUBA (GAJENDRASINH) BHIMJI JADEJA					
Case Details					
Diary No.	2097/2014 Filed on 17-01-2014 02:07 PM [SECTION: III]				PENDING
Case No.	SLP(C) No. 001526 / 2014 Registered on 18-01-2014				
Present/Last Listed On					
Status/Stage	PENDING (Motion Hearing) [ORDERS (INCOMPLETE MATTERS / IAs / CRIMPS)]				
Tentatively case may be listed on (likely to be listed on)	02-02-2018 (Computer generated)				
Category	0816-Letter Petition & Pil Matters : SLPs filed against judgments / orders passed by the High Courts in Writ Petitions filed as PIL				
Act					
Petitioner(s)	1 SKAPS INDUSTRIES INDIA PVT .LTD. PLOT 10, ROAD 12F,SECTOR12S,MUNDRA INTEGRATED TEXTILE AND APPERAL PARK, NEAR SHANTIPATH 4, MUNDRA SEZ, MUNDRA GUJARAT THROUGH ITSMANAGING DIRECTOR MR. UTKARSHA N. PARIKH , , GUJARAT				

	<p>1 GAJUBA (GAJENDRASINH) BHIMJI JADEJA VILLAGE NANIVAL, MUNDRA PORT , Kachchh , GUJARAT</p> <p>2 KUMBHAR ISMAIL HASAN VILLAGE NANIVAL MUNDRA PORT , Kachchh , GUJARAT</p> <p>3 MAHIPATSINH RANUBHAI JESAR VILLAGE NANIVAL MUNDRA PORT , Kachchh , GUJARAT</p> <p>4 BHAGUBHA MADHUBHA CHAVADA VILLAGE NANIVAL MUNDRA PORT , Kachchh , GUJARAT</p> <p>5 UNION OF INDIA,THROUGH THE JOINT SECRETARY.MINISTRY OF ENVIRONMENT AND FORESTS PARYAVARAN BHAVAN, CGO COMPLEX, LODHI ROAD, NEW DELHI , , DELHI</p> <p>6 MINISTRY OF COMMERCE, NOTICE THROUGH ADDITIOANL SECRETARY CHAIRMAN SPECIAL ECONOMIC ZONE,DEPARTMENT OF COMMERCE, UDYOG BHAVAN, NEW DELHI , , DELHI</p> <p>7 EXPERT APPRAISAL COMMITTEE, NOTICE THROUGH ITS CHAIRMAN, MINISTRY OF ENVIRONMENT FOREST, GOVT. OF INDIA GOVERNMENT OF INDIA, PARYAVARAN BHAVAN C.G.O COMPLEX LODHI ROAD, NEW DELHI , , DELHI</p> <p>8 THE DIRECTOR, DEPARTMENT OF ENVIRONMENT, MINISTRY OF ENVIRONMENT AND FORESTS PARYAVARAN BHAVAN, CGO COMPLEX, LODHI ROAD, NEW DELHI , , DELHI</p> <p>9 DEVELOPMENT COMMISSIONER MUNDRA PORT AND SPECIAL ECO. ZONE, MUNDRA TALUKA MUNDRA, DIST. KUTCH, GUJRAT , Kachchh , GUJARAT</p> <p>10 PRINCIPAL SECRETARY DEPARTMENT OF ENVIRONMENT FOREST, GOVT.OFGUJARAT PARYAVARAN BHAVAN, SECTOR-10A, GANDHINAGAR, GUJRAT , Gandhinagar , GUJARAT</p> <p>11 GUJRAT POLLUTION CONTROL BOARD THROUGH MEMBER SECRETARY PARYAVARAN BHAVAN, SECTOR-10A GANDHINAGAR GUJARAT , Gandhinagar , GUJARAT</p> <p>12 MUNDRA PORT AND SPECIAL ECONOMIC ZONE LTD. THROUGH ITS CHAIRMAN/MANAGING DIRECTOR SHIKAR, NEW MITHAKHALI SIX ROADS,NAVRAGPURA AHMEDABAD , Gandhinagar , GUJARAT</p>
Respondent(s)	<p>13 COLLECTOR, COLLETOR KACHERI JILLA SEVA SADAN, BHUJ,DIST KUTCH GUJARAT , Kachchh , GUJARAT</p> <p>14 AHLSTROM FIBER COMPOSITES(I) PVT. LTD THROUGH ITS DIRECTOR SURVEY NO. 141, PLOTNOT.7, MUNDRA SEZ TEXTILE , Kachchh , GUJARAT</p> <p>15 AADI GROUP, AADI OIL PVT. LTD. THROUGH ITS DIRECTOR, CORPORATE OFFICE ADDRESS : 406B, SHAPATH IV,OPPOSITE KARNAVATI CLUB, S.G. HIGHWAY,AHMEDABAD, GUJRAT , Ahmedabad , GUJARAT</p> <p>16 EMPEZAR LOGISTICS PVT. LTD. THROUGH ITS DIRECTOR 1ST FLOOR, ABOVE CARGO HONDASHOWROOM,PLOT NO. 351, WARD 12/B, TAGORE ROAD, GANDHIDHARM, GUJRAT , , GUJARAT</p> <p>17 AVESTA PROCESS EQUIPMENT ANDMODULAR AVESTA ENGINEERING PVT. LTD. THROUGH ITS DIRECTOR SURVEY NO.169, SECTOR 12 SOUTH MITAP MPSEZ MUNDRA, GUJARAT , , GUJARAT</p> <p>18 ASHAPURA GARMENTSLTD. THROUGH ITS DIRECTOR, REGISTERED OFFICE: PLOT NO. 3, BLOCK-C, SECTOR-12S, ADANI PORTS , , GUJARAT</p> <p>19 TERRAM GEOSYNTHETICS PVT. LTD. THROUGH ITS DIRECTOR SURVEY NO. 141 MITAP, MPSEZ MUNDRA-KACHCHH, GUJARAT , , GUJARAT</p> <p>20 THERAMAX LIMITED (SEZ UNIT) THROUGH ITS DIRECTOR PART OF SURVEY NO. 169,VILLAGE DHRUB, TALUKAMUNDRA DISTRICT KACHCHH GUJARAT AND REGISTERED OFFICE AT : D-13, MIDC INDUSTRIAL AREAD, R.D. AGA ROAD,CHINCHWAD PUNE 411019.GUJARAT , Kachchh , GUJARAT</p> <p>21 OILFIELD WAREHOUSE SERVICES, A MATERIALMANAGEMENT COMPANY THROUGH ITS DIRECTOR 3RD FLOOR,ELECTRONICSADAN NO. 1, PLOTNO. A61 NEAR GTLCOMPANY,MAHPE.NAVI MUMBAI AND ALSO AT :SECTOR 8, MUNDRA KUTCH GUJARAT , NAVI MUMBAI , MAHARASHTRA</p> <p>22 DORF KETAL SPECIALITY CATALYST PVT. LTD. THROUGH ITS DIRETOR PLOT NO.2, BLOCKFSECTOR12N, ADANI PORTS , Kachchh , GUJARAT</p> <p>23 ANJANI UDYOG PVT. LTD. THROUGH ITS DIRECTOR PLOT NO. 481, FIRST FLOOR, UDYOG BHAVAN, PHASE-V, GURGAON HARYANA , Gurgaon , HARYANA</p> <p>24 ORIENTAL CARBON CHEMICALS LTD. THROUGH ITS DIRECTOR SEZ DIVISION SURVEYNO. 141 PAIKI,MOUJE VILLAGE MUNDRA TALUKA MUNDRA,MUNDRA SEZ,DISTRICT KUTCH, GUJARAT , Kachchh , GUJARAT</p>
Pet. Advocate(s)	E. C. AGRAWALA

Resp. Advocate(s)	B. KRISHNA PRASAD HEMANTIKA WAHI PRAVEEN KUMAR[Caveat] KAMINI JAISWAL[Caveat]
U/Section	
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Earlier Court Details	
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Notices	
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Adjustments	
Mention Memo	
Restoration Details	
Drop Note	
Appearance	
Office Report	
Similarities	
Caveat	

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e-mail :-
supremecourt@nic.in
(<mailto:supremecourt@nic.in>)

History ([/history](#))
Constitution
([/constitution](#))
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([/jurisdiction](#))
Former Chief Justices
([/former-chief-justices](#))
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Organizational Structure
([/organizational-structure](#))
Amenities ([/amenities](#))
Pay Scales ([/payscales](#))
Officers / Officials
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Officers Servant Rules
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Telephone Directory
([/telephone-directory](#))

Publication
([/publication](#))
Accounts ([/principal-accounts-office](#))
Grievance Management
(<http://courtnic.nic.in/supremecourt/status/index.asp>)
Practice And Procedure
([/practice-and-procedure](#))
SC Rules - 1966
([/supreme-court-rules-1966](#))
SC Rules - 2013
([/supreme-court-rules-2013](#))
GSICC ([/gsicc](#))

Guidelines & Orders
([/guidelines-orders](#))
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23rd May 2016

The Joint Secretary – IA.III
Ministry of Environment, Forests and Climate Change,
Government of India,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi – 110 003.

सी. आर. अनुमान द्वारा प्राप्त किया
Received by C.R. Section
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forests & Climate Change
भारत सरकार / Govt. of India
इन्दिरा पर्यावरण भवन/Indira Paryavaran Bhawan
जोर्बाग रोड, जलौगंज/Jorbagh Road, New Delhi-110003

Subject: Condition (iv), (v) and (vi) under specific condition imposed as part of the Environmental / CRZ clearance for the Multi Product SEZ and desalination project at Mundra

Reference: EC & CRZ clearance dated 15.7.2014 to Multi-Produce SEZ at Mundra

Dear Sir,

We refer to the specific condition nos. (iv), (v) and (vi) in the EC & CRZ clearance dated 15.7.2014 granted to Multi-Product SEZ at Mundra (copy attached as **Annexure - 1**) and would like to submit as under.

The Ministry appointed a committee headed by Ms. Sunita Narain for inspection of M/s. Adani Ports and SEZ Ltd, Mundra. The committee submitted its report and the Ministry issued a show cause notice dated 30.9.2013 (copy attached as **Annexure - 2**).

In the said show cause notice dated 30.9.2013, it was stated that "*North Port area and Bocha Island should be declared as conservation zone and the area should be protected. All the creeks, water bodies and reclaimed land in these areas should be restored and brought back to pre- 2005 status within six months*".

While the said show cause notice dated 30.9.2013 was pending for adjudication, the EC & CRZ clearance dated 15.7.2014 was granted to Multi-Product SEZ at Mundra, inter alia, on the following specific conditions, amongst others.

"(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 has 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."

Adani Ports and Special Economic Zone Ltd
Adani House
Nr Mithakhali Circle, Navrangpura
Ahmedabad 380 009
Gujarat, India

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Fax +91 79 2555 5500
Info@adani.com
www.adani.com



As is evident, the aforesaid conditions were imposed in the said EC & CRZ clearance dated 15.7.2014 because of the pendency of the same issue for consideration with the Ministry at the relevant time. Subsequently, the Ministry adjudicated the show cause notice and passed final order dated 18.9.2015 (copy attached as **Annexure - 3**) whereby it issued certain directions and disposed of the said show cause notice dated 30.9.2013.

In respect to the issue of restoring all the creeks, water bodies and reclaimed land in these areas and bringing back it to pre-2005 status within six months, the Ministry has passed the following directions in its order dated 18.9.2015.

iv. A comprehensive and integrated conservation plan including detailed bathymetry study and protection of creeks/mangrove area including buffer zone, mapping of co-ordinates, running length, HTL, CRZ boundary should be put in place...

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 E(P) Act 1986 do not provide for any authority to impose ERF by the Government, the plan should be financed by PP. The implementation should be carried out by GCZMA. The monitoring of the implementation should be carried out by NCSCM.

The Ministry has now adjudicated the issue of restoring all the creeks, water bodies and reclaimed land in these areas and bringing back it to pre-2005 status in terms of its final order dated 18.9.2015 as above and thus, any conditions in respect of bringing the creeks and water bodies area at Mundra back to pre-2005 condition, including that in the EC & CRZ clearance dated 15.7.2014, should be consistent with the final order dated 18.9.2015 of the Ministry in this regard.

In view of the above and also the condition no (vi) of the EC & CRZ clearance dated 15.7.2014, we humbly state and submit that the special condition nos. (iv) and (v) of the EC & CRZ clearance dated 15.7.2014 granted to Multi-Product SEZ at Mundra have become redundant and are not required to be complied with.

Kindly acknowledge receipt of this letter.

Thanking you.

Shalin Shah
Head, Environment

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23rd May 2016

Ministry of Environment, Forests and Climate Change,
Government of India,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi - 110 003.

Kind Attn: Mr. Bishwanath Sinha, Joint Secretary

Subject: Condition (iv), (v) and (vi) under specific condition imposed as part of the Environmental / CRZ clearance for the Multi Product SEZ and desalination project at Mundra

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Annexure - 1

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

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

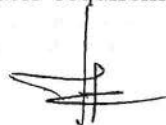
Dated: July 15, 2014

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

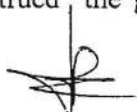
Subject: EC for proposed Multi- Product SEZ and CRZ clearance for Desalination, sea water intake, outfall facility and pipeline, at Mundra by M/s Adani Port and SEZ Ltd. – Reg.

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 OMs 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.

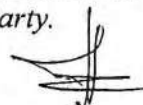
8. Further, Hon'ble Supreme Court video order dated 02.05.2014 in SLP 1526 of 2013 had ordered for stay of Ministry's letter dated 3.04.2014 addressed to Government of Gujarat to initiate legal action for the violation, also directed that the Ministry to complete the process of EC within eight weeks.

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 out come 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.*



Annexure – 9

Expense Details for Fisherfolk Amenities work in different core areas						
Sr.	Details	2016-17	2017-18	plan 2018-19 as per proposed	TOTAL	AMT IN LACS
Expenditure Details (Amount in Rs.)						
1	Vidya Deep Yojana	2069300	2118000	2400000	6587300	65.87
2	Vidya Sahay Yojana	552580	495000	65000	1112580	11.13
3	Adani Vidya Mandir – Shaping Lives	4200000	4030000	4340000	12570000	125.70
4	SENIOR CITIZEN HEALTH CARD	2933333	2810000	2900000	8643333	86.43
5	FINANCIAL SUPPORT TO POOR PATIENTS	4439507	1275000	1500000	7214507	72.15
6	Machhimar Kaushalya Vardhan Yojana	188708	200000	380000	768708	7.69
7	Machhimar Sadhan Sahay Yojana	250000	1875000	950000	3075000	30.75
8	Machhimar Awas Yojana	4592106	1165000	1500000	7257106	72.57
9	Machhimar Shudhh Jal Yojana	2236050	2700000	2700000	7636050	76.36
10	Sughad Yojana	1367300	170000	500000	2037300	20.37
11	Machhimar Akshay kiran Yojana	860850	100000	750000	1710850	17.11
12	Machhimar Suraksha Yojana			0	0	0.00
13	Machhimar Ajivika Uparjan Yojana-Mangroves plantation	1059000	1100000	1400000	3559000	35.59
14	Bandar Svachhata Yojana	106400	50000	0	156400	1.56
15	Cricket league and Cycle Marathon	432000	657119	600000	1689119	16.89
16	Sports Material For Children & Youth at Vasahats	197797	0	0	197797	1.98
17	New Pilot Initiative for Polyculture	398240	160000	0	558240	5.58
18	New Pilot Initiative for Cage farming Asian Seabass & Lobster	864000	660000	0	1524000	15.24
		26747171	19565119	19985000	66297290	662.97

Annexure – 10

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2017-18

Adani Foundation, Mundra



Adani Foundation

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

Your Hard Work and Team Effort Will Speak Louder Than Voice – This has been the core philosophy enlivened by Adani Act over the years, on its path of sustainable community development. Adani Group also firmly believes that growth is possible only by working together with and for the community, and enriching the environment – ecology.

Year 2017-18 witnessed many major milestones achieved by Adani Foundation, Mundra that brought national fame and big laurels to the organization for its high standard CSR projects aiming at sustainable development of the community at large. The unit was crowned with coveted CII Sustainability Recognition, Gold Award for "Ek Kam Desh K Nam" and the First Position in Gujarat CSR Authority Award in "Sustainable and Impactful" CSR category.

Besides, the last fiscal was also a year of new development initiatives for AF, Mundra. In the first quarter, the unit initiated fodder cultivation and individual fodder development projects in five periphery villages along with rejuvenating of check dams and deepening of major ponds. The initiatives were successfully implemented through community participatory approach in the line of sustainable development.

With the greater objective to make our healthcare services more sustainable and value-added, in the second quarter we introduced token charges from the beneficiaries for community medical facilities such as, MHCU and Rural Clinic. Here also the idea of injecting community ownership feeling worked very well for long-term good health of the people-welfare project.

Even as the third quarter was full of achievements, awards and

recognitions with independent evaluation teams visiting the site and highly praising our initiatives and objectives post physical verification of the projects, the last quarter was furthermore meaningful with regard to our key infrastructure projects with a long-term vision of nation development. Dignity of Labour, a project close to the heart of our promoters and the senior management was carried out very efficiently by AF, Mundra team. Apart from creating basic healthcare and hygiene, education infrastructures for large number of labour families in the project surroundings, a Rest-Shed for Drivers in the SEZ area of the port was constructed by the RID. This is remarked as a stand-alone infrastructure project by AF. Participatory Ground Water Management, which has been a buzz word in all major civil society and CSR conclaves, seminars and workshops in Kutchh district, was taken up as a sustainable project AF, Mundra. With involvement of expert bodies in the field, the project work has kick-started with the objective of ground water recharge in Kankavati Sandstone Aquifer.

All our above achievements were not possible without the valuable inputs and continued support and guidance of Mr. Mukesh Saxena (Site Head, CSR-Mundra), Mr. Rakshit Shah (Executive Director – APSEZ), PNR Sir (ED-AF) and the plentiful faith and passionate support by Dr. (Mrs.) Priti G Adani, Managing Trustee – Adani Foundation.

Community health

It is said that "health is wealth". Health is the basic need for development of community. Adani Foundation understands this fact and its committed to improve health care facilities in every corner of Mundra region. Following motto of "Health for All" the Foundation runs Mobile Dispensaries, Rural Clinics, Special Innovative Projects i.e. Health Card to Senior Citizens, "SuPoshan"- Fighting to Mal nourishment in Mundra and support to dialysis patients projects. Adani Foundation also organizes special medical camps during disease outbreak.



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Community health Mobile Van and Rural Clinic

The population of Mundra block is spread over various villages. There is no strong transportation facility available to reach for getting basic medical care. The patients have to spend minimum 200-500 INR for their common ailments like-cough, cold, fever, diarrhea etc.

The medical expenses and zero earning per day add surplus to their hardships.

To help the community in their medical needs, the service of mobile medical van has been started by the Adani Foundation in Mundra block. In big villages, rural dispensaries have been started considering their population and area.

The Main objective of Mobile Van is to reduce travel time, hardships and expenses. one mobile health care unit cover 25 villages and 07 fishermen settlements at Mundra. Another unit cover 8 villages at Bitta. Around 90 types of general and life saving medicines are available in these units. It has turned out to be a boon for women and children as the service is availed at their door - step. Total OPD for MHCU – Bitta is 6400 for year 2017-18.

The Adani Foundation operates Rural Dispensaries in 8 villages of Mundra block, 03 villages of Anjar block and 2 clinics at SEZ area. Mobile dispensary and rural clinics provide health services with token charge of 10/- rupees per patient daily by a doctor and a volunteer.

Project name	17-Apr	17-May	17-Jun	17-Jul	17-Aug	17-Sep	17-Oct	17-Nov	17-Dec	18-Jan	18-Feb	18-Mar	Total
Mobile van - Mundra	2758	2460	2157	1751	2024	1921	1642	2291	1932	2352	2213	1890	25391
Rural clinic	2999	2811	3034	2275	2390	2490	1929	2026	2127	2363	2097	1825	28366
Total	5757	5271	5191	4026	4414	4411	3571	4317	4059	4715	4310	3715	53757



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Community health Vadil Swasthya Yojana

When people become old, they start living a life of remoteness and isolation. The needs of old people are less looked after. Therefore, the Adani Foundation has started the Adani Health Programme for the aged to look after their health. To address the health care issues related to ageing, AF launched a 3 years long pilot project – 'Adani Vadil Swasthya Yojna' on 20th February 2011 at Mundra and further extended the same for the next three years i.e. up to 2017. Under this Programme, the individuals aged 60 years and above are benefitted. Health Cards are issued to them with the purpose of providing adequate and timely treatment. The families consisting of aged ones with a yearly income of Rs. 2 lacs or more get a Blue Card. The Blue Card holders can avail diagnosis facility and treatment at a subsidized rate in the Adani hospitals, Mundra. The families with a yearly income of less than Rs. 2 lacs are issued a Green Card. Green Card holder aged people get treatment for illness in Adani hospitals, Mundra

with an aid up to the limit of Rs. 50,000/- within a period of 3 years.
During the year 2017-18, total 9950 transactions were done by 8518 card holders of 66 villages of Mundra Taluka. They received cash less medical services under this project. In Green Card category, 6139 aged people got treated for various illness & diseases at Adani hospitals, Mundra with an aid up to a limit of Rs. 50,000/- within the period of 3 years. The 763 Blue Card Holders can avail diagnosis facility and treatment at a subsidized rate in the Adani hospitals, Mundra. Scheme is continue since seven years The third phase of this scheme was started in last year. The limit for the beneficiary was set to 30000/- within a period of 3 years, the senior citizens get emergency medical care at Adani Hospital, Mundra and they are referred to GAIMS, Bhuj for further treatment.



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Adani Vadil Swasthya Yojana : We Seek the blessings!!



This octogenarian will always greet you with an innocent smile no matter how she is physically and mentally. Age-related ailments like hypertension and osteoarthritis couldn't take away her inner happiness and the desire to live young.

Javerben Dayaram Rajgor of Pratappur village in Mundra locality is one important case study for the Senior Citizen Project of Adani Foundation. The elderly lady would teach you how life should be lived and how physical deformities can't be spoilsport for your healthy living in the true sense.

Adani Foundation feels it a great privilege to stand by such jovial and energetic senior citizens in their journey of old-age life and aims to extend all possible medical and emotional care to retain the invaluable smile on their faces. In return to our dedicated services for the elderly ones, we seek their blessings which would take our mission of selfless service to the society and attain sustainable development to greater heights.

As if luck has turned cruel to her, Bhagirathi Ben (72) has a heart-throbbing story of never-ending struggle and misery. Married at 19, she was widowed at just 32 with the challenge of raising her son and making a livelihood for the two. Toiling hard in local factories and working as housemaid for long years, she had harrowing times discharging her responsibility as a true parent. In this long journey of life, countless times she had to starve, but never did she allow a situation when her son would remain empty stomach. Moreover, she educated her son to become a graduate and serve a company in Mumbai.

As she is left behind in the village, again the loneliness and miseries of life haunt this elderly widow. Since she became a part of the senior citizen healthcare project of Adani Foundation since six years, taking care of her health and giving her the emotional support like a member of the family, has become an honor for the organization. Standing by her in the forward journey of life we strive to bring a sigh of relief and smile in the face of Bhagirathi Ben



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Dialysis Project

Drinking water of Mundra contains high Fluoride (amount of salt). Hence, the proportion of patients with urinary stone and kidney failure is more. A project for patients who need dialysis is thus initiated so that the poor patients can receive the treatment at Adani hospitals. The main objective of providing dialysis treatment is to help the extremely needy patients to live a healthy life. Total 5 Patients were being supported for regular dialysis (twice in a week) during this year.



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Awareness Sessions

Awareness sessions at various schools conducted to sensitize the future generations and teachers regarding importance of personal hygiene and cleanliness. We had included health issues related with personal hygiene such as worms, skin diseases, various infections etc. to promote awareness among the people. During this year more than 1500 students are benefitted by awareness sessions

Awareness Session			
Sr.no.	Month	Place	Villages Name
1	May-17	Sadipeni Vidhayalay school - pratappur	Pratapapur
2	Jun-17	Sukhpur vas Pra school - Maleria	Mundra
3	Jul-17	Seth R.D. High School Mundra- Swain Flu	Mundra
4	Jul-17	Adani Vidhya mandir-Bhadreshwar- Swain Flu	Bhadreshwar
5	Dec-17	Primry School Moti Bhujpur	Moti Bhujpur
6	Dec-17	Vanki- Primary School - Gaynec	Vanki
7	Dec-17	Dhrub- Primary School - Gaynec	Dhrub
8	Jan-18	Nari Samalan - Rotaray Club - Wonam Health	Mundra
9	Feb-18	Adani Hospital - Suposhan Sagini Meeting- Gaynec	Mundra
10	Feb-18	Samaghogha Kumar Sala	Sama Ghogha
11	Feb-18	Dhrub- High School - Gaynec	Dhrub
12	Feb-18	Baroi Aganvadi - Gaynec	Baroi
13	Feb-18	Patri - Aganvadi - Gaynec	Patri
14	Feb-18	Dakhan Faliyu Moti Bhujpur- Gaynec	Moti Bhujpur

Community health Suposhan

Malnutrition amongst Children, Adolescent girls and Women in India is an alarming phenomenon. (In India: 48 % or 54 million children under-five years were stunted. India accounted for 33 %of stunted children in the world. As per Global Nutrition Report released recently, Children below five years- 38.7 % Stunted and 15.1%are wasted. 69.5% children6-59 months old, 55.8% adolescent girls aged 15-18 years, 55.3% women aged 15-49 years have Anaemia. Moreover anaemia prevalence in pregnant women is as high as 58.7%) Curbing Malnutrition was part of Millennium Development Goals and again focussed through second and third Sustainable Development Goals on Zero hunger and Good Health & Wellbeing respectively.

- During this year, anthropometry study done for 7202 children. Total 86 children became free of malnutrition due to efforts under "Suposhan" Project. Additionally, 1557 FGD were conducted during this year.
- Total 8770 haemoglobin screenings of RPA woman and adolescent girls was carried out. Which helps in controlling anaemia in women and indirectly malnutrition.



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Worth Results of "SuPoshan"

Standing on her lush green kitchen garden in Zarpara village, Manek Gadhavi smiles herself thinking about her past conversations with a representative of Adani Foundation who was the source behind his motivation for the profitable vegetable farming. When the AF official had suggested her to experiment vegetable farming in some portion of 12-acre land, Manek bai had instantly rejected the idea and laughed at him thinking that he was talking something meaningless and unnecessary.

After repeated motivation and AF support of a 15x15 feet kitchen garden kit containing water tank, drip line, vegetable seed and fertilizer, the villager had ventured into vegetable farming last year. Continued support of AF remained in the form of extending technical support, knowledge sharing on pest control and possible market linkages for the farm produces.

Manek Gadhavi is quite happy that her kitchen garden could cater to all the vegetable and green leaf requirements for her large-size joint family round-the-year.



This is the story of "Veerbai"- 13 years adolescent girl living in vadi Vistar in Zarpara village. She was in the grip of an invisible enemy until she got lucky because her school teacher flagged her condition with help of Hemoglobin check up by Adani Foundation. With the objective to get most feasible solution, We have motivated adolescent girls and their mothers to develop kitchen garden at the back of their house. Total 22 Kitchen garden developed in Zarpara and Navinal villages. Kitchen garden has brought worth results for "Suposhan" in Adolescent girls. All the vegetables grown at the garden are consumed by their own house



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SaHil : Our Ray of Hope!!

Sahil- a ten month boy, the other name of boundless excitement, vigor and happiness, always smiling and bubbling with enthusiasm

Four months back, the picture was all different. Four months back, when Sahil was six months old, he was extremely thin and weak. He weighed only 4 kg and his M.A.U.C. was 8.5 cm. He appeared to be an extremely malnourished child.

Suposhan- a project run by the Adani foundation for children, adolescent girls, pregnant women and mothers feeding their new born. To spread this project to the innermost and remote areas, there is a team of well trained, dedicated members and they are known as Sangini workers.

One such Sangini worker – Sahemaben works on this activity in Baroi village. She met Sahil and Fatmaben during one health checkup camp for children. While talking to her in detail, Sahemaben came to know that Sahil had not been able to get mother's milk in the initial days. Mother's milk is the most powerful and must food for any child and its absence may cause malnutrition to children.

Later on, Sahemaben went to meet her at her place. There she observed and very mildly drew her attention towards the importance of cleanliness of the household and the utensils used for cooking. She also asked her about the food intake of Sahil. She informed her about 'Balbhog' (ready to eat therapeutic food RUTF by Amul). Convincing Fatemaben about her child's health was a herculean task but after a series of logical arguments, Sahemaben could convince her.

Sahil gradually started consuming the baby food (balbhog) and could show a noticeable improvement in his health.

Along with the improvement in Sahil's health, the household witnessed many positive changes like cleanliness and Fatemaben herself stopped consuming Tobacco.

The household is now surrounded with cleanliness and the small plants of Neem, chilly, pomegranate, lemon etc. embellish the household.

And Sahil is now hale and hearty. He weighs 6 kg and 700 grams. The vibrant smile of health and happiness on his face is the reward of Sahemaben's dedicated and sincere work.



Holistic Intervention to tackle malnutrition!!

When we talk about Kutch, we get two pictures - Kutch, before the earthquake and after the earthquake. After the earthquake, Kutch has witnessed green revolution along with industrial revolution. The crops which were earlier not possible to be cultivated here are now grown successfully because of the modern agricultural equipment and the methods like drip irrigation. This is one of the reasons why many labourers from outside Kutch come here to work and earn.

One such family is that of Deepika ben and Dinesh Bhai who have come here from Halol to earn their daily bread. They have settled themselves in Nani Bhujpur. The family consists of the couple and their five daughters. The couple in expectation of a baby boy gave birth to five daughters, thanks to the rigid and orthodox mentality of Indians! Probably it would take years to eradicate this mentality.

The family which could barely manage hand to mouth was to welcome one more member in the family. The situation was really crucial for Deepika ben as after delivering five children, her body had lost its ability to bear anymore. She started remaining unwell. Who would take care of this lady in the village which was far from her own village? But it is truly said that every dark night is followed by a bright morn. Deepika ben too got such a warm ray of hope in form of a Sangini worker.

Sangini workers are those workers who are the active harbingers of the good work of Adani Foundation and the Project Suposhan. The Project Suposhan aims at fighting the malnutrition prevalent in many states across India. These female workers are known as 'Sangini Bahen'. One such is Sangini Deval Ben. Deval Ben was once busy surveying the condition of the expecting mothers and how would Deepika Ben's condition stay out of her attention? She met her, talked to her and made her aware about her condition. She brought it to her notice that it would be dangerous for her to have a child in such a frail physical condition. It may be fatal for both- the baby and the mother. She motivated her to attend meetings of the Suposhan Project. She took her to Bhujpur PHC and got her tests done. To her great shock, she came to know that Deepikaben's hemoglobin level was just 4.2% which was really fatal for a pregnant woman. The doctor prescribed certain injections of Iron and bottles of blood for her body. Deval Ben stood by her in all her testing times.

As a result of Deval ben's efforts, Deepika ben's HB level went up to 10.5%. At the end of the ninth month, she gave birth to a completely normal and healthy baby girl weighing three kg. Thus, Deval Ben saved not only Deepika Ben's life but also the lives of the whole family.



Expected Outcomes

To reduce the occurrence of malnutrition amongst Children by 95 % in three years

- To reduce malnutrition and anaemia amongst adolescent girls and pregnant & lactating women by 70% in three years
- To create awareness about the issue of malnutrition and anaemia and related factors amongst all stakeholders and role they may play in curbing the issue
- To create a pool of resources to be utilised for combating the issue of Malnutrition and Anaemia and To support efforts in reducing IMR and MMR

Community Engagement and other Activities -2017-18		
Sr.No	Activity	Progress
1	No of Sangini	39
2	Total Village Cover	59
3	Total Anghanvadi Cover	99
4	Total PRA	10
5	SAM to MAM Monitoring Progress	45
6	MAM to Normal Monitoring Progress	86
7	SAM/MAM Child Camp	3
8	Focus Group Discussion	1557
9	Family Based Counselling	287
10	Village level Events	680
11	Formation of women's groups	274
12	Formation of adolescent's Groups	246
13	No of SAM children referred to CMTC	18
14	No of SAM children provided with RUTF	86
15	Total HB screening - RPA	3751
16	Total HB screening - Adolescent girls	5020
17	Women in RPA provided with IFA Tablets	246
18	Adolescent girls provided with IFA Tablets	351
19	Anthrometry Study (0 to 5)	7202
20	Sangini Meeting	24
21	Sangini Training	12
22	SuPoshan Workshop	1

Community health Suposhan

Base line data was provided for Mundra Taluka in initial phase of Project.

- Total Number Anganwadi in the selected area
- Information on Sub-centers/ Primary Health Centres/ Community Health centres/ Referral Hospitals
- Availability of Healthy worker- male & female both, ANMs, LHV's, Doctors, specialists such as Gynaecologist, Paediatricians, Pharmacist, Dietician Lab. Technician, Nursing Staff etc. at above centres (Number & names with contact details)
- Selected areas' Birth rate, Death rate, Infant Mortality Rate, Mother Mortality Rate, Sex ratio, Child Sex ratio against district, state and national average
- Total number of beneficiaries and against that enrolled beneficiaries at Anganwadi/ICDS: 0-6 year children, Adolescent girls, pregnant women and lactating mothers
- Identified malnourished and anaemic children/ adolescent girls and women (numbers & name as well as current level of malnutrition & anaemia with dates- Base Line data)
- Current Inputs provided through the Government machineries
- Other services available through CBOs, NGOs etc.- Details of inputs and contact details of those organizations
- Understanding & Listing of area specific cultural and behavioural barriers



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Community health "Suposhan" - Bitta

A child's entire life is determined in large measures by the food given to him/her during his/her first five years because childhood is the period of rapid growth and development. Nutrition is one of the most influencing factors in this period.

Project Suposhan is initiated at Bitta also with the objectives to **Curb malnutrition amongst Children and Adolescent girls and Women in our CSR villages**

- Total 18 Adolescent and 23 RPA groups are already formed. HB Testing completed for 766 RPA and 612 girls. **During this year, anthropometry study done for 400 children. Total 6 children became free of malnutrition due to efforts under "Suposhan" Project.**



My Daughter is glowing now !!

The village Nani Dhufi is situated in Abdasa taluka on Bhuj- Naliya highway. The village is 20 kilometers from Naliya and 67 kilometer from Bhuj. It is inhabited by many different communities like Darbar, Muslims, Koli, Dalits etc. who all are involved in various professions like driving, agriculture, cattle breeding etc. The population of the village is 800 but the level of education is very low. The reasons for the same may be poor financial conditions and some wrong beliefs. When the Adani Foundation started its SuPoshan Project in this village, a survey was conducted in the primary school and the Anganwadi. Later on, the Sangini surveyed the health condition of 50 children of the village in the age group of 0 to 5 years. Their height, weight and the other health criteria were assessed and based on this assessment, children were divided in the categories 'malnourished', 'less malnourished' and 'healthy'. The workers of Adani Foundation working in the SuPoshan Project had previously informed about the importance of nutritious food, its importance and the diseases caused when such food is not consumed. The people of the village were made aware about the harms caused by eating fast food or packet food readily available in shops. They got to know that the reason behind the malnutrition of their children is lack of nutritious food.

Working of the Project:

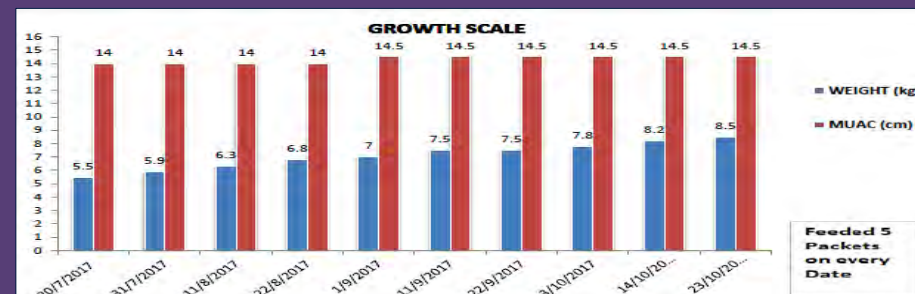
During the survey, it came to the notice of the workers that Priyanshi Rajeshbhai Yadav was one such malnourished child. She was 1 year, 7 months old but her weight was 5.5 kg. , her height was 75 cm and her M.U.A.C. was 14 cm. As Priyanshi was an underweight child, the worker talked to her parents, informed them about malnourishment and also the Suposhan project being run by the Adani Foundation.



Priyanshi's mother told the Sangini worker that Priyanshi is a pampered child and gets what she wanted. Thus she got into the habit of eating packet food and would eat two packet per day. Due to these packets, she consumed less of homemade nutritious food. She was taken to the doctor at the Adani Foundation and was given the packets of baby Amul food according to her weight. Every week the Sangini worker would go to measure her height and weight. The parents also started paying proper attention and giving her the baby Amul food regularly. Desired improvement could be noticed within the first week. For three months, every week she

was given the baby Amul food and her improvement was constantly monitored. She also started consuming the homemade food. A very constant improvement could be seen in her weight. She was given as many as 50 packets and it was noticed that she had gained 3 kg. She is now 8.5 kg. Her height is now 75 cm. Every month, the Sangini worker goes to visit her and monitor her progress.

Priyanshi's parents thank Adani Foundation and tell the villagers about the good work done by the team of Suposhan worker



Community health : Health Camps

Various health camps are organized at regular intervals to meet the specific requirements of the community. We organize special health camps during the season of disease outbreak. We also organize medical camps to provide primary medical care during various public events. We organized total 21 such health camps during this year.



General Health Camp			
Sr.no.	Month	Villages Name	Total Patients
1	Apr-17	Baroi	192
2	May-17	Mundra	139
3	May-17	Mundra	141
4	Jun-17	Nana Kapaya	51
5	Jun-17	Mundra	48
6	Jun-17	Luni	55
7	Aug-17	Navinal	71
8	Aug-17	Baroi	32
9	Aug-17	Luni	85
10	Aug-17	Mundra	90
11	Aug-17	Dhrub	34
12	Sep-17	Nana Kapaya	1200
13	Sep-17	Nana Kapaya	110
14	Sep-17	Zarpapa	4000
15	Sep-17	Bhadreshwar	410
16	Oct-17	Tharad	155
17	Oct-17	Luni	519
18	Dec-17	Mundra	118
19	Feb-18	Mundra	119
20	Mar-18	Luni	59
21	Mar-18	Bharapar	104
Total..			7732



Community Health

It is not a coincidence that the first four letters of health is "Heal". Instilling health pursuing activities and ensuring availability of quality health care services to the remote areas is the objective of this sector. Committed to "Health for All" the Foundation runs Mobile Health Care Units, Rural Clinics, Special Innovative Projects i.e. Senior Citizens priority card for GKGH, School health and Variety of Health Related Camps.



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JEDLE JO JATAN (WOMAN HEALTH)

Adani Foundation organized one district level workshop for creating awareness for breast cancer and survival cancer and preventive measures. Guidance given by five gynecologists doctors. Total 530 women from various villages of Kutch District took active part in this workshop. They also visited GKGH hospital and got knowledge about mammography and pep test.



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Gujarat Adani Institute of Medical Science is the first Medical College of Kutch region. It started in partnership with Adani Group and Government of Gujarat in the year 2009. This college was affiliated by the Medical council of India in the year 2014 for the MBBS with 150 seats per year. Gujarat Adani Institute of Medical Science is affiliate with the first digital university "Kranti Gurur Shyamji Krishna Verma Kutch University". In GAIMS, currently 750 students are studying. The GAIMS Medical College is situated in heart of Bhuj city on a large plot of 27 acres.

Gujarat Adani Institute of Medical Sciences

- Adani Foundation Team has initiated coordination with GKGH hospital since last year and established a reception area for the smooth patient coordination and preparation for the social networking Programme.
- Adani Foundation organized General Health Camps and Specialty Camps in various interior villages of Kutch in coordination with GKGH which created magical impact and benefitted 3483 patients. Adani Foundation Bhuj Health team has also organized more than ten awareness camps and village level meetings at 293 villages of Kutch regarding services of GKGH.
- Dead body medical van – Dignity to death is one of the noble initiatives taken up by the Adani Foundation. If any death occurs in GKGH, dead bodies are shifted to the native village of the concerned in the Kutch District free of cost. Total 625 dead bodies privileged till now to different locations in Kutch.
- It is not always possible to predict the medical expenses. Moreover, those who are economically not so sound, become indebted for lifetime in case of certain illnesses. Therefore, Adani Foundation provides primary health care and financial assistance for ailments such as kidney related problems, paralysis, cancerous and tumor surgeries, neurological and heart problems, blood pressure, diabetes etc.
- In current year we have Supported 610 People from all over district - Kutch



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અદાણી જી કે જનરલ હોસ્પિટલમાં અદાણી ફાઉન્ડેશનના આર્થિક સહયોગથી ૧૧૦ વર્ષના માજી પર સફળતા પુર્વક સાથળના ભાગના હાડકાનો ગોળો બદલાવું ઓપરેશન હાથ ધર્યું.

શું તમે ક્યારેય વિચાર્યું છે કે ૧૧૦ વર્ષની બુદ્ધિશાળી હાડકાના ઓપરેશન કરાવું હોય અને તે પણ સફળતા પુર્વક સંભવત સામાન્ય માણસ માટે અચરજ પમાડે તેમ અને માર્કિટમાં પણ અચરજ કહી શકાય તેવું ઓપરેશન તાજેતરમાં અદાણી સ્પિર જી કે જનરલ હોસ્પિટલમાં મુજ ગાંધીદર હાથે મોટી હમીયર કુમારેમ આશમના ૧૧૦ વર્ષના હાડકાને મહારંગેવળાઈ પ્રજાપતિ પર સફળતા પુર્વક હાથ ધરવામાં આવ્યું હતું આ આખી ઘટનાની વિગત કાર્ડક અમલી છે. પોતાનું કામ જાતે કરવું એવા સિધ્ધાંતવાદી ૧૧૦ વર્ષના હાડકાને ઘોડાક મહિનાઓના ડિવિસ અસાનક લપાથી પડવા હતા જેને કારણે તેમને થાપના ભાવમાં ચંબીર ઈજાઓ થઈ હતી સ્થાન કુખાવાવા કારણે તેમનાથી સામાન્ય સ્થળ થયેલ થઈ શકતી ન હતી એટલે તેમના ડિકરા કરાશ મહારંગેવ પ્રજાપતિ ત્યાના સ્થાનિક દવાખાનામાં લઈ ગયા પરંતુ આખો કેસ તથા દર્દીની ઉમર જોતા તે હોસ્પિટલના તેમજ શહેરના અન્ય ડોક્ટરોએ તેમની આગવી સારવાર આપવા ઈન્કાર કરી દીધો જો કે અગાઉના સારા અનુભવથી બાદ તેમના ડિકરા વધુ સમય ના બગાડતા માજીને હોસ્પિટલથી સીધા ભુજ સ્થિત અદાણી જી કે જનરલ હોસ્પિટલ સલાહ સારવાર માટે હાડકા વિભાગમાં લઈ આવ્યા.

આ આખા કેસની વાત કરતા હાડકા વિભાગના ડોક્ટર પાસે મોટાવાની ડોક્ટર સંજીન બુદ્ધી એ જણાવ્યું હતું કે આ આખો કેસ બહુ અચરો હતો અલગ ૧૧૦ વર્ષની ઉમર હોય અને એવી તેમના પર હાડકાનું ઓપરેશન હાથ ધરવાનું હોય એટલે બહુ સાવચેતી રાખવી પડે અસહ્ય પીડા સહન કરતા માજીને થાપના ભાગમાં કેમકર વધુ લાંબુ જેના કારણે તેઓ સામાન્ય સ્થળ થયેલ પણ કરી કશા ન હતા સામાન્ય સ્થળ થયેલ થાપને તેમને ખુબ પીડા થતી હતી અલગ ઈમરના હોસ્પિટલ તેમના પર ઓપરેશન હાથ ધરવું જોઈતો હતો જો કે આ છતાં હોસ્પિટલના હાડકા વિભાગના તબીબો ડો. પાસે મોટાવાની ડો. સંજીન બુદ્ધી ડો. ગોરવ કાલેલી ડો. નવીન નાગલ ડો. સત્યજીત પારડા ડો. આનંદ ચિરાણી એ અદાણી ફાઉન્ડેશનના આર્થિક સહયોગથી થાપનાનો ગોળો બદલાવવાનું આખું ઓપરેશન ખુબ સફળતા પુર્વક હાથ ધર્યું.

આ આખા કેસના મોઝ પાસે જાણ તો એ હતી કે ઓપરેશન દરમ્યાન તેમને ન તો હોડી થયેલું પડ્યું કે ન તો તેમને આઈ.સી.યુ મા રાખવા પડ્યા દર્દી નીજા દિવસથી જ પથારીમાં સ્થળ થયેલ કરી શક્યા અને વધુમાં ઈમેરના તેમના ડિકરા એ જણાવ્યું હતું કે મોઝ ભાગના ડોક્ટરોએ ના જ પાડી હતી જો કે અમે લોકો અદાણી ફાઉન્ડેશનના કિશોર ભાઈ ચાવડા સલાહ સુચનથી સમય કુચકતા વાપરીને ભુજ સ્થિત હોસ્પિટલમાં આવી ગયા હતા અને મારી માતાક પેલાની જેમજ સરવથાથી ચાલી શકે છે. ભુજ અદાણી જી કે જનરલ હોસ્પિટલનો આભાર વ્યક્ત કરીએ છીએ.



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૮૦૦ ગ્રામ વજન ધરાવતા નવજાત શિશુનેઅદાણી જી.કે.જનરલ હોસ્પિટલ માં મોતના મુખેથી બચાવાયું.

સામાન્ય રીતે બાળકનું જન્મ થતા તેનું વજન ૨.૫ થી ૩ કી.ગ્રા હોવું જોઈએ તેવા બાળકને શારીરિક રીતે સ્વસ્થ માનવા માં આવે છે. ભુજ ની અદાણી જી.કે.જનરલ હોસ્પિટલ મા માત્ર ૮૦૦ ગ્રામ વજન ધરાવતા બાળકનું બાળ રોગના નિષ્ણાંત ડૉ. હરદાસ ચાવડા અને એન.આઈ.સી.યુ વિભાગના ઈનચાર્જ ડૉ. હસમુખ ચૌહાણ અને સ્ટાફ ખુબ જ કાળજી પુર્વક સારવાર આપવામા આવી હતી જેથી બાળક ગંભીર બીમારીઓથી બહાર આવી ગયું.

આજથી ૨૭ દિવસ પહેલા મિરઝાપરના નર્સ બહેન જયશ્રીબેન ચાવડા દ્વારાનોરમલ પ્રસુતિ કરવામા આવી હતી આ સમય દરમિયાનજન્મેલ નવજાત બેબી નુ વજન માત્ર ૮૦૦ ગ્રામ હોતા નવજાત શિશુનો જીવજોખમમા હતુ આથી ગભરાયેલામાતા-પિતા ગીતાબેન અરવિંદ કોલી નવજાત શિશુની સારવાર માટેભુજ ની અદાણી જી.કે.જનરલ હોસ્પિટલ મા લઈ આવ્યાજયા તેમને લાખા સમય સુધી વેન્ટીલેટર મશીન પર રાખવામાં આવ્યુ હતુ ત્યારબાદ તેમની તબિયતમાં સુધારો થતા તેમને સી પેપ પર રાખવામાં આવ્યુ ઘીરે ઘીરે તેમની તબિયતમાં સુધારો થતા લાગ્યો આ બાળકની જીદગી ડોક્ટર અને નર્સિંગ સ્ટાફના અદ્યગ પ્રયત્નથી નવજાત શિશુનો જીવ બચાવામા આવ્યો.



૧૪/૦૪/૧૭ ના હોસ્પિટલમા આવેલા નવજાત શિશુને ૧૦/૦૫/૧૭ ના રોજ રજા આપવામા આવી ત્યારેનવજાત શિશુનું વજન ૮૦૦ ગ્રામ થી વધીને ૧કિલો ને ૩૫ ગ્રામ થયુ મહત્વની બાબતતો એ ગણવામાં આવે છે કે આટલા લાખા સમય સુધી તેમના માતા પિતાએ ઘીરજ રાખી તેમને ડોક્ટર અને સ્ટાફ ની સારવાર ઉપર વિશ્વાસ હતો આ હોસ્પિટલના મેડીકલ ડાયરેક્ટર ડૉ. જ્ઞાનેશ્વર રાવ સાહેબે જણાવ્યું હતું આટલા દિવસ સારી સારવાર કરાવી અને કરી એ બદલ બાળકના વાલીઓ અને હોસ્પિટલના સ્ટાફ અભિનંદને પાત્ર ગણાવ્યા હતા અને આ ઉપરાંત અદાણી જી.કે.જનરલ હોસ્પિટલમાં વધારે સારી સારવાર મળી રહેશે એવુ જણાવ્યુ હતું. અદાણી ફાઉન્ડેશનના સહયોગથી ડૉ. હરદાસ ચાવડા, ડૉ. હસમુખ ચૌહાણ અને કિશોર ચાવડા ના હસ્તે શુભેચ્છારૂપે નવજાત શિશુને બેબી હેલ્થ કીટ આપવામાં આવી હતી.



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Community health : Bhuj

Fisherman : Education Initiatives

Education is a strong building block in building a stronger and healthier community. Adani Foundation, through its surveys and assessments with fishermen community came to know that only education can make change in the status of fishermen community so we have started education intervention work from pre primary to college level under various project which are as below

Fisherman Vidya deep Yojana

Adani foundation has been working restless to strengthen to pre-primary level education as "BALWADI" and to achieve this goal foundation has constructed four balwadi center at different fishermen helmet for 2.5 to 5 years group children. This Programme focuses on the development of basic age-appropriate learning concepts, discipline, regularity, awareness about health, hygiene, cleanliness and also provides nutritious food. Total beneficiaries of Vidya deep Yojana are 138 of four fisherman vasahat

Fisherman Vidya Sahay Yojana

Adani foundation implement various program to improve higher education level of fishermen children through various support. Scholarship Support (80%) to 50 students studying in 10th standard in SMJ High School, Luni. Book Support : Total 57 students benefitted by book support for standard 9th to 12th. Ramotsav organized at five fisher folk settlement to motivate young children for developing sportsman spirit



Sustainable Livelihood Development



In the villages at Mundra Taluka, several communities are economically side-lined and weaker that depend on a sole income source or are unemployed. Sustainable livelihood projects have been launched to cater financial independence through building local partnerships, providing diverse livelihood avenues, inculcate the attitude to establish savings, equipping to earn and updating local skills by making use of existing resources to encourage self-reliant lifestyles. Participation is encouraged by launching specific projects for fishermen communities, farmers and cattle owners, youth and women.



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Dares to dream of a bright future

The otherwise hopeless eyes of Isak Bhai are today filled with great hopes of prosperity and wellness. Sitting near his wretched house in the Luni fisher folk hamlet, this poor fisherman dares to dream of a bright future for his family surrounding his minor son Samir.

A school-goer of Balwadi run by Adani Foundation, Samir has undergone a varied transformation which has brought in the belief in Isak Bhai that "Future Good" is waiting to happen with his family. The small boy who couldn't even utter his name properly, today speaks clear English lines with much confidence.

Thanks to the Balwadi teaching process, Samir knows lot about basic hygiene, public speaking, table manners and what all. The change in Samir has highly impressed the parents and showed them a ray of hope for better tomorrow.

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A Story of Transformation of Life

A woman is called a divinity of power and lame at the same time. She is called a deity of power because there are many conflicts in life and she fights back to any circumstances and survives. And she is called lame because though society trumpets about the rights and respects for the women but still she suffers and society, may be unintentionally, do not care about her problems.

Even today in remote areas she is stopped from going to school as soon as she becomes literate enough to read and write. Unless this thinking will not change we have no rights to worship the deity of power. It is not responsibility of government only to change the mind-set. Contribution from each one of us can only bring the change and will get good results.

This is a story of such inimitable change. The story of Muslim daughter Husena! Husena is a brilliant girl who was studying in class 7th in Bavadi Vasahat in Bhadreswar Village in Adani Vidyā Mandir Bhadreswar. Suddenly she stopped going school. Teachers visited her home and tried a lot to convince her parents but they did not agree to give permission. Next day Ishwar Bhai reached to her house. Her father Isak Bhai opposed him in the beginning but after some time his anger calm down with ending the conversation Isak Bhai just spoke, "if Husena want to study she can go to school".



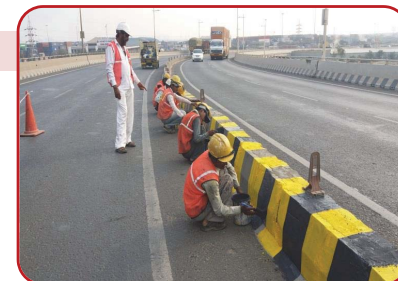
Machhimar Ajivika Uparjan Yojana

The 'Ajivika Uparjan Yojana' was implemented to promote and support alternative livelihoods among the Fisher folk communities during the non-fishing months. The Foundation introduced 'Mangrove Nursery Development and Plantation' in the area as an alternate income generating activity for the people of the region. Both men and women received training on Mangrove plantation, moss cleaning, etc. as per requirements. The Foundation provided them with employment equivalent to 4526 man-days. In addition to this, employment worth of 29526 man-days has been provided till date. The Foundation has also supported Pagadiya fishermen as painting labourers by providing them with employment and job in various field.



Alternate Livelihood for Fisherman

Fishing is only source to earn livelihood. There is uncertainty in fishing business so Adani foundation support them to provide alternate livelihood like contract work and painting work in Adani. due to this intervention we awarded painting job in port as well as colonies and SEZ. In addition, After successful completion of technical training by Adani skill development center, provided job to 19 fishermen and contract work to 28 fishermen.



Fisherman : Health Initiatives

A person of perfect health does not shirk his duties. He can work properly and leaves nothing undone. As a student, he shines in his examinations though the important mobile dispensary has been started by Adani foundation at different vasahat since 2009 to provide medical facilities and primary treatment of diseases, this year its reached to patients At different vasahat.

1. Due lack of health awareness in fishermen community there are some dominant diseases found hence apart dispensary facility we also organized health awareness camps, women meeting at frequent intervals.
2. Medical Financial Support –Adani Foundation has extended financial assistance to more than 1519 financially challenged patients from the Fisher Folk Community in case of medical urgency during this year.
3. Health Card for Senior Citizen Project – This is one of the major and prominent and the most innovative project of the Adani Foundation. Under this scheme Health Cards were given to the to Senior Poverty Stricken Citizens to provide them financial support to combat with their health related needs. The project for the senior citizens is popularly known as Vadil Swasthya Yojana and till date 219 senior citizens from fisher folk community are enrolled in the scheme. They are getting cash less medical services upto Rs. 30,000 for three years. Besides this, follow up with the card holders is a regular activity. It has been observed that card holders treat the card as an important document. Most of them keep these cards in their wallets with other important documents and cards.



Machhimar Kausalya Vardhan Yojana

Skill building is a powerful tool to empower individuals and improve their social acceptance hence skill development program has been started by Adani foundation as per fishermen youth need assessment to create employability by ASDC at Mundra and from this year we have started Dori work and sewing training program for fisherwomen at their vasahat to make them self reliant.

Year	2017-18
IT Basic Computer	20
Tailoring Training	20
RTG Crane Operator	2
Dori Work Training	60
Total	102

Machhimar Shudhh Jal Yojana

Pure water play important role for good health hence reduce water scarcity and ultimately reduce load over women, potable water was provided to the fishermen communities at different vasahat through water tanker. A total of (1,18,000 Litre/Day) liters of water was supplied to 983 households from different settlements on a daily basis.

Potable Water to Fisher Folk at vasahat-2017-18			
Sr.	Vasahat	family	Requirement Per day
1	Luni Bandar	110	15000
2	Bavdi Bandar	88	15000
3	Kutdi Bandar	140	15000
4	Virabandar	80	10000
5	Randh Bandar	250	23000
6	Ghavarvar Banadar	60	10000
7	Junabandar	165	30000
8	Zarapa Vasahat	35	
9	Chhachh vadi Zarapa	55	
	Total	983	118000

As per requirement

Fisherman Cricket League

Adani Foundation, Mundra organized Cricket Tournament, "Adani Premiere League" among fishermen community to promote healthy sportsmanship and harmonically transparent community relationship among fisher folk of Mundra and Anjar Taluka. The Adani Premiere League by Adani Foundation started on 13.07.2016 at Shantivan Colony Cricket Ground. Total 58 Teams of 15 villages and 696 Fisherman participated. Teams from Villages Zarpara, Navinal, Shekhadiya, Modhava, Salaya, Mundra, Tragadi, Luni, Sanghad, Gundiya, Bhadreshwar, Vandi (Tuna), Layja and Kathada participated with great enthusiasm. We took 786Rs registration fees from all participated teams.



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Cage Culture

Fishing occupation and Port business coexists. When we started port operations, condition of Fisherfolk community was deprived. After inception of CSR arm of Adani Group – Adani Foundation in 1996, strategy was planned based on priorities for socio-economic development of Fisher folk community. The fishers of the Shekhadiya fishing village (Juna Bandar) are one of the stakeholders of the Adani Port Ltd., Mundra.

Cage culture mean The production method for raising aquatic species using enclosures made of wire or netting around rigid frames which are placed in water. Technology change is an important instrument in the continuous process of socio-economic development toward this path Adani foundation has started cage culture project with two beneficiary with consultancy of CMFRI for technical guide line. In this culture system 619 tiny lobster were stocked in to two 6x6 meter square cage. the growth and health of lobster were being monitored after seven month culture period 125 kg lobster and 80 kg native fish were harvested which create 1.10 lakh Rs income over fishermen. we organized grand harvesting inauguration and cage culture awareness program in presence of Mrs. Emlada Joseph (principal scientist of CMFRI) and 6 fishermen were facilitated by CMFRI training certificate.

It was reported that about big numbers of fisher folks are willing to change their occupation; therefore, Cage culture aimed to provide alternative employment and encouraging them to shift from full-time to part-time fishing.



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Journey for career building and shaping a golden future !!

A journey for career building and shaping a golden future in the game of cricket has begun for Fakir Ahmed. An extraordinary talent with astonishing batting and bowling skills, the 21-year old from Luni fishermen community has taken his road to stardom at the right time and age.

Due to the sincere efforts of Adani Foundation, Fakir has been enrolled into the prestigious Yusuf Bamanji Academy, Rajkot for able mentoring and high standards of coaching. Like few other maestros emerging from the Academy to play for India in the national team, Fakir may become a shining star of Indian cricket tomorrow, bringing laurels to his community and the nation as a whole.

Born to economically poor parents of the fishing community in Kathda village of Mandvi Taluka, the cricket talent of Fakir and his passion for game was well noticed by his father even when the boy was at the tender of 9 years only. With his limited ability and resources, the father would encourage Fakir to take part in village and district level tournaments and appreciate his series of wins and victories.

Till November 2017, Fakir was just another face in the crowd when he had come to Mundra to play among 696 youths of his fishermen community representing 58 different teams for a mega cricket tournament organised by Adani Foundation. Throughout the tournament his consistent performance and unique style of playing was vividly noticed by the audience as well as the organisers.

However, Fakir's one-man show and struggle to save his team from a miserable defeat in the final match was worth viewing. In his sincere efforts for victory he was shining like a lone star in the dark sky. Heart beats fastened and the curiosity kept on rising with Fakir intelligently facing each ball of the deciding match with utmost calmness. With his awesome playing, Fakir literally made all the audience and the organisers his fans and became the star attraction of the entire tournament.

Subsequently, with the intervention and counselling of AF, Fakir has got into the Yusuf Bamanji Academy where he will have One year of rigorous training in the game. Realising the fact very well that Fakir was an active member of the family and the residential cricket coaching would cease that running income, AF has facilitated a stipend of Rs. 10,000/- a month to the budding cricketer which would prevent his family from financial crunch.

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Poly Culture

Polyculture is the practice of culturing more than one species of aquatic organisms in the same unit area (marine, pond and rivers). The principle of Polyculture is that production of more organisms in the particular unit area having different food habits in one unit.

The main objectives for promotion of alternative livelihood to raise the economic standard of fisher folk, second is to reduce the pressure on fishing effort. AF has started poly culture project with consultancy of GUIDE. In this system we stocked 6000 fingerlings fishes of 3gm weight in six different cages. There was 80% survival with 100 to 150 gm each weight after 5 month culture period.

The activities involved i.e. capacity building, expert inputs, machineries, seeds of fish and fish food. We have identified feasible sites for the Polyculture and implement the activities with participation of fisher folk committees who has taken whole responsibilities. These Polyculture will add value to the fishing occupation of the local fisher folk community.



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Thanks AF for Guiding me to Success !!

It's a complete paradigm shift for Altaf Jakub Manjaliya. From a small fisherman to a salaried employee in Airlines company, the college-educated fisher youth has made a noteworthy journey in life.

Altaf Bhai of Luni village was compelled to get into the traditional fishing profession of the family after employment seemed a distant dream for his 12th pass qualification. Frustration had loomed large and he had no hope of ever getting into a salaried profession as had dreamt during studies.

However, Adani Foundation lend him a helping hand and made the dream come true. With necessary guidance and coaching by Adani Foundation, Altaf had appeared an interview in Odisha Airlines against a vacancy in Mundra location. Luck shined, he got selected for the position, and today earns a monthly salary of Rs 8500/- leading a contented life.

Expressing his heartfelt gratitude to Adani Foundation, Altaf reacts, "Now I have got a status in the society and could help my family financially. Today I realized the value of education and sincerely thank Adani Foundation for guiding me to success."



SLD Fodder Cultivation NB21

The organization provides fodder during the time of scarcity and the last 3 months of summer every year. During this period, fodder is regularly sent to every village with the help of the local people. This has given stability to the families who earn their livelihood through animal husbandry. In order to meet the demand of fodder, the Adani Foundation purchases it from the regional farmers. This gives them fair rates in return.

This year we have given 60,000 man fodder worth Rs. 170.00 Lacs approximately.

Additionally, to bring sustainable approach in fodder cultivation – two strategies have been worked out.

Participatory approach

1. Fodder cultivation in common land provided by Gram Panchayat

Kutch is famous for animal husbandry business specially for banni buffaloes. As Kutch is a dry and scanty rainfall region, so scarcity of fodder is always a major issue in Kutch and Mundra region. Though to solve this challenge and make village fodder sustainable, Adani Foundation has begun from FGD approach in different villages to run this program in a participatory manner. Mr. Kalyanji from Bareja village had taken lead to start sorghum fodder development in 25 acre land. The security and fodder cutting responsibility had been done by villagers and after the one cycle of crop, total 90 tons of fodder was harvested even after low rainfall. The villagers are ready to go with 100 acre land in next year for fodder development.

2. Individual Farmer fodder cultivation NB21

We have promoted cultivation of green fodder in the operational four villages (Siracha, Zarpara) under public-private partnership mode. Our endeavor is also to improve the production of milk in this area. **Green fodder has its own nutritional values as it helps in the growth of cattle and increases the quality and quantity of milk.** We are promoting green fodder cultivation with the help of Krishi Vigyan Kendra. Beneficiaries: 105 farmers and quantity of 3 Lac Kgs will be cultivated. Up to next year we are planning to increase our outreach up to 200 farmers by participatory approach. AF will provide cuttings of NB21 and KVK will provide their expertise.

SLD Agriculture initiatives

Adani Foundation puts efforts in Mundra block for consistent betterment in livelihood sector. The organization has carried out remarkable activities in the agricultural and animal husbandry sectors.

Drive for Technology to use in agriculture

We have initiated a programme for awareness of farmers in collaboration with KVK. The outreach is approximately 105 farmers of 5 villages. The purpose of this project is to initiate village-wise integrated agricultural & allied development for sustaining agriculture and socio-economic situation of farming community of Mundra block.

This year's main focused activities

- Biogas Support to 10 Nos of farmers (AF, Beneficiaries and Govt support)
- Participatory Fodder Development Programme Individual 105 Farmer 45 Acres 5 Villages
- Participatory Fodder Development Programme Group wise 1 Village
- Organic Farming 7 Farmers Wheat and Bajara
- Soil Health cards analysis : 27 individual farmers
- Organic farming Related 15 Demonstration for "Jivamrut" at Zarpara
- Marketing Linkages Work : Dates



Sustainability is not only about making projects self-reliant, but also about adding value to existing projects or activities for its long-term viability. The story of Kamalaben Sheda's encounter with Adani Foundation is something of this sort. The village woman was running a small dairy farm with 11 cows and earned from selling milk in the local market. And, whatever she earned from selling milk, about 40 percent of the amount she had to spend on procuring cattle feed which squeezed the income margin.

AF in coordination with Krishi Vigyan Kendra has been doing demonstration farming of NB-21 fodder with an idea of minimizing the cost of cattle feed for milk producers in Kutch district. The linkage of AF helped Kamalaben immensely and her adoption of NB-21 farming technique drastically reduced the fodder expenses. As a result, she has today higher profit margin and a better scope of her business sustainability. She demonstrated the technique in 0.75 acres of land and the harvesting of first year stood above 8000 kgs. While doing a considerable cost-saving on her cattle feed procurement, the association of Kamalaben also made AF proud as she was the first lady farmer to adopt NB-21 technique and succeed.



Kutch is a dry and arid region and there is always a shortage of fodder in Kutch as well as in Mundra region. Abdul Latif Suleman is from Dhrub village; however, he is mainly dependent on dates farming but due to expanding dairy industry he is also engaging in animal husbandry business. Whenever we met him, he always discussed and worried about the fodder as the main part of animal husbandry business and requested to find out the technology to solve the fodder scarcity, so we organized an exposure tour for NB20 as well as meetings with parishad and KVK to make them familiar about NB20. After all this Mr. Abdul Bhai inspired and has started NB 20 farming in his 0.5 acre land with AF financial and technical support. The total production was 4000kg after first cutting and consequently it will be harvested as its multi-crop nature.

Abdul Bhai says that he has total 7 animals and now he doesn't need to purchase fodder. It is also nutritive fodder for cattle which makes milk more nutritive; hence ultimately saves his money and increases his income. He also adds that NB21 grows up to 12 to 13 feet and as its multi-crop effect, farmers can reach their fodder requirement even in small area land; hence they can use more land in other crops.

SLD Bio gas

Biogas is a clean, non-polluting and low cost fuel. It contains about 55 to 75 percent methane, which is inflammable. Bio gas can be produced from cattle dung, human waste and other organic matter by a process called "Anaerobic digestion" which takes place in a biogas plant. The digested effluent, which comes out of the plant, is enriched manure.

The Multiple benefits of the biogas have changed many lives in rural areas. During the last year 11 plants have been constructed and process for 10 more plants is going on. We are providing support addition to Government support to the beneficiary. (Under bio-gas scheme of government, the total cost is Rs.33, 500 out of which Rs.15, 000 will be granted by the government and out of the pending amount of Rs.18, 500 sum of Rs.10, 000 will be contributed by the Adani Foundation. The beneficiary will have to pay only Rs. 8, 500). Beneficiary women use the time, saved from cooking and fuelwood collection, to take up an additional economic activities.



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SLD – Women empowerment

Encouraging women, to take control of their lives and building their confidence whether they are single, married or a widow; is one of the initiatives under the sustainable livelihood development program.

- Considering this situation, We have started our training programme with two major women's group of Villages near Adani Power and Adani Ports. Both the groups of women (90 women in total) successfully completed their training for preparing washing powder, phenyl, liquid for cleaning utensils and hand wash etc.
- We have selected 6 women groups having 15 members each, as per their ability for different work i.e. accounting, banking, leadership, marketing, administration etc.
- Before two years we have started shop "Saheli Mahila Gruh Udyog" at Shantivan Colony and started coordinating with various companies for orders of perishable as well as non perishable items.
- "Saheli Mahila Gruh Udyog" has annual turn over of **Rs.8.00Lacs**.



SLD – Beti Vadhavo

Beti Vadhavo Programme was organized in 32 Villages in the presence of Village Sarpanch and other leaders. We explained people about the various topics i.e. importance of girl child, Sex Ratio, Gender 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)



Self Dependency brings confidence !!

A lady Narmadaben 38 year old from Shekhadiya village. She has started her journey though joining in Sonal Krupa Mandal in which they save Rs.100 per month.

As a part of women empowerment we always remain in touch with all SHG Groups even provide various training for saving, Account and entrepreneurship.

Narmadaben has business oriented mind and she always think about to start business. Though as her strong desire she started to washing powder preparation Gruh Udyog with Saheli Gruh Udyog support. Now a day she and their group Members earns minimum 2000Rs per month as optional livelihood with AF market linkage support.

She says: I get status in my society and I am able to support my Family and I realize that women can do anything. This all come true due to AF support and motivational. she become inspirable for other women .



A lady Dhanbai Ravji chuiya 28 year old from Baroi village. Her husband has been working in private company. Her empowering journey is started from joining in Adhar Saheli Mandal which is our initiative for women empowerment. Each women saved Rs.100 per month in this saving group than We had organized training program to create entrepreneurship and motivation among them though as a result of it she started khakhara Udyog on small scale with support of Saheli Gruh Udyog (Supported by Adani Foundation) for training and marketing meanwhile we also organized some training as per their need like account and Rasoi, Papad at VRTI and other center. After all they earn well to meet their day end but Dhanbai has burning desire to start her own business hence she has started to sell dresses, cutlery items and sewing work in their rental shop at Mundra. now she earn more than 4000Rs/month. Additionally, She appeared for HSC board examination and could able to clear 12th standard with support and motivation of Adani Foundation team.

She says: I get status in my society and support my husband to earn this all happened due to AF strong effort



Messages of Women's Day !!

International Women's Day has been celebrated by the Adani Foundation, Mundra with Integrated Child Development Scheme. On this momentous occasion the supervisors of ICDS were felicitated and honoured for their noble work including the five women entrepreneurs who were supported by the Adani Foundation, Mundra for income generation. The Head of Sarswatam trust was also honoured for his/her remarkable contribution in the upliftment of women. The Staff of AF, Mundra was also facilitated by the ICDS for their remarkable work in field of women empowerment. The SDM, Mamalatdar and the TDO remained present on the occasion. Total 250 women attended the programme followed with a lunch which was prepared by Saheli Mahila Gruh Udyog.



Coordination with Government for Widow and Senior Citizen Scheme

- We are playing the role of facilitator in case of tie up with Government Scheme for Widows, Senior Citizens and Handicapped people.
- The identity cards are issued to two persons for the handicapped in coordination with Bhuj Samaj Suraksha Khata for regular visit and follow up.
- Last year, 71 widows and 47 Senior citizens and 733 handicapped - total 853 members got benefitted** from the approval of pension certificate. The financial benefit of the senior citizen Yojana is Rs. 400 per month and the widow scheme is of Rs. 900 per month.

No	Linkages Detail	Beneficiaries	Source
1	Handicap medical certificate	180	Under medical camp and G.k -Bhuj
2	Handicap Buss pass and I card	196	Samaj surxa khata at Bhuj
3	Sadhan sahay munent	47	By Jilla samaj surxa khatu at : Bhuj
4	Physiotherapy – students	30	Coordination with B.R.C and Adani hospital
5	I.G sadhan sahay	51	Sewing machine, hand cart, computer kit 1
	I.G sadhan sahay and widow	48	By adani foundation
6	Sadhan sahay	38	By adani foundation- tricycle, wheelchair..
7	Handicap pension	3	Sant surdas Yojana – samaj suraxa - Bhuj
8	Widows pension	71	Mamlatdar Office Mundra
9	Snr Citizens pension	47	Mamlatdar Office Mundra
10	Central govat shadhan shay	142	With Taluka health programs
	Total benefits	853	



Pond Deepening work : Vadala

Sans irrigation facilities and the drastic fall in water level in dug wells as well as bore wells in the non-monsoon seasons, several big farmers of Vadala village in Mundra locality were deprived of a second crop, thereby keeping their large patches of cultivable land barren post the Ravi crop harvest. Apart from ceasing good income possibility, the water-scarcity scenario had frustrated the farmers who remained helpless and hopeless of getting any solution to the crisis.

This was a situation during 2014-15, when Vadala village had irrigation facility for hardly 30 percent of the agricultural land and the rest patches of land were depending on water availability from dug wells and bore wells surrounding the age-old Radhan Peer Pond located on the northern side of the village. But, the poor storage level accompanied by seepage at many points of the pond resulted negligible ground water recharge in the locality.

The then Sarpanch of Vadala gram panchayat, Manjibhai Paradhi, who requested Adani Foundation, Mundra for a permanent solution to the issue, informed that during monsoon season not more than **3 mcft of water could be stored in the pond**, which used to vanish and totally wasted within days due to the prominent seepages. The village with a population of 2871 had around 718 households and majority of them were earning livelihood from cultivation of bajra and castor and animal husbandry. Hence, the poor ground water recharge and faulty pond storage had impacted heavily on the economic condition of the villagers.

Before

Village Name	:Vadala
Village Population	: 2871
Village HH	: 718
Pond Storage	: 3 Mcft
Study area	: 15 acre – 6 farmers
Crop	: Bajra
	: Castor

After

Pond Storage	: 3.25 Mcft
Study area	: 15 acre – 6 farmers
Total earning	: 2.25 Lacs
Crop	: Bajra
	: Castor
	: Cotton
	: Wheat

Depends on irrigation facility two times summer and winter

Impact

Annual increase of Rs.15,000 per Acre after Pond Deepening

Rural Infrastructure Development

Global Problem-Local Solution

Water Conservation Work : Impact Study

At the turn of millennium, the state watched with growing alarm the steady depletion of its ground water and launched massive drive to achieve water security in Mundra region. A large number of water harvesting structure (18 Nos. of check dams in coordination with salinity department) and ground recharge activities (pond deepening work for more than 15 ponds) were built leading to a significant increase in water table and higher returns to the farmers.

Many of these check dams are now in need of repair. Problems such as silting, damaged gates or broken structures have to be attended to for optimal water harvesting.

Adani Foundation has studied impact of Check Dam Strengthening carried out in two villages before two years period.

- Pond Deepening work at Vadala
- Pond Deepening work at Mota Bhadiya

In Both the villages post survey has been carried out and impact on surrounding agriculture is measured.

After carrying out a preliminary survey of the area and identification of the issues, the RID team of AF, Mundra had taken up a project to deepen the pond through silt excavation and close the seepages by erecting RCC protection wall. With a rich experience of working on water recharge in Mundra locality for over a decade benefitting large number of farmers, AF had undertaken the project at Vadala in the year 2015-16 at an expenditure of Rs 8 lakh, and handed over the same to village panchayat for community ownership.

On the very year of project completion itself, good results spoke about the quality of work. While the pond storage level had gone up to 3.25 mcft, the total check in seepage caused water to remain in store for months together allowing the natural recharging of ground water. Again to the excitement of the surrounding farmers, all the dug wells and bore wells remained water-filled for several months facilitating a winter crop to six major farmers in an approximate farming land of 15 acres.

Manjibhai, who is the ex-sarpanch today says, "per acre a farmer makes an additional earning of Rs 15,000/- which comes to a total rise in earning of Rs 2.25 lakh for 15 acres of land belonging to the six major farmers." Apart from improving the socio-economic status of the agricultural farmers, the RID initiative of AF has also benefited large number of other villagers practising animal husbandry due to round-the-year availability of ground water in the locality, added further a local farmer Parbatbhai Vasubhai.



Pond Deepening work : Mota Bhadiya

Sigh of relief has come to the large number farmers and residents of Mota Bhadiya village in Mundra taluka who were struggling with perennial woes of water crisis. Adani Foundation acted as a change-agent to facilitate better storage of rain water, further recharge of ground water and rise in water table of the locality.

Even though a check dam existed in the village, yet the storage of water during monsoon was very negligible due to faulty upstream level and excess deposition of silt on the water storage area. After doing a field survey, Adani Foundation had taken up the project of excavation of silt on the upstream of the check dam about two years back. While in 2016-17 financial year around 8535 CMT of sand was excavated, another about 13278 CMT sand was excavated during 2017-18, which deepened the storage space increasing its capacity substantially.

And the result, water recharging takes place automatically improving the ground water condition and maintain a healthy water table. Above 100 acres of agricultural land today give better yield due to water availability and the quality of drinking water from nearly 12 tube wells sunk in the area for public use has improved considerably. The efforts have resulted in ending up a long-standing worry to the farmers.



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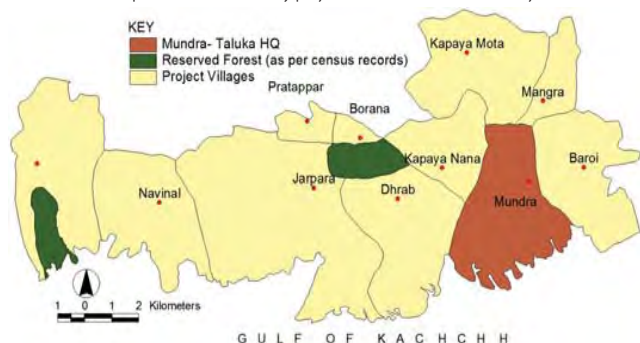
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Participatory Ground Water Management

In Region Kutchh, in many cases, groundwater or surface water may be unavailable for drinking water. The objective of the project was to reduce the salinity ingress in and around the coastal regions of Mundra, Kutchh and mitigate the ill-effects of this manmade problem to improve the livelihoods of the rural people. The Project will help to get water table high, also it will help in agricultural activities.

MAIN AIM OF THE PROJECT: Participatory groundwater management of Kankavati sandstone aquifer to create water secure future. Due to problem of Salinity ingress, we received many issues regarding water scarcity during our village meetings, Public hearings and GRI related meetings.

Expected outcome : If we will start this initiative the issue can be sorted out upto some extent. This is not a corporate requirement but environment compliances – Eco friendly project for the business. This Project will also help agricultural activities also



- Aquifer level Institution working on resource management
- Multi Stakeholder Engagement for sharing and learning of groundwater management at cluster / block level
- Pilots to demonstrate Participatory Ground Water Management Framework for Use



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Demonstration of Conversion of Non used bore well into Artificial Recharge Bore well

Program: Participatory Groundwater Management on Kankavati Sandstone Aquifer
Project Area: Adani Foundation CSR Villages of Mundra Taluka

Coastal region of Kutchh has potential aquifer known as Kankavati sandstone speeded over 04 coastal talukas. The aquifer is backbone for entire region and groundwater extracted for this aquifer is being used for various purposes like drinking, domestic use, irrigation and others. The groundwater resource is under threat of water table depletion and quality deterioration. Therefore, it is required to manage the resource for long term sustainability with approach of Participatory Groundwater Management (PGWM). PGWM program is being implemented on Kankavati sandstone aquifer by Arid Communities and Technologies (ACT) with multi partners. With the support of Adani Foundation, the program is being implemented in 10 villages of Mundra Taluka jointly by ACT, Geo Science Services (GSS) and PARAB water management.

It is aim to maintain balance between demand and

supply based on groundwater resource characteristics. For supply side management, various techniques designed for groundwater recharge augmentation. As a part of this, demonstration has been designed to convert non used bore well into artificial recharge bore well. This demonstration activity has been implemented at farm level with 06 farmers of Jharpara village.

To set demonstration, series of discussion have been made with farmers, village Sarpanch and PGWM committee. At primary state, 06 farmers have been selected having different farmland situations. Each farm has one none use bore well and another in use for irrigation. By diverting rainwater and recharging aquifer through non used bore well, groundwater condition will get improve and that will increase and secure crop production and successively farmer's economy



A very positive and active farmer Muljibhai says-'in Jharpara village, there are 2 to 3 bore wells in each farm. If we convert one bore well in recharge bore well, groundwater condition will improve and lush green past of the village can be seen again. This is direct benefit to farmer with low expenditure. I am sure that each farmer will adopt this technology with your guidance and support.'



Farmer Karsanbhai says-'Through diversion of rainwater in this non use bore well, groundwater condition will improve in bore well which is in use for irrigation. Overall groundwater quality is poor but through this activity I can secure my one season crop with good production'

Recharge plan and estimates have been prepared for each farm. Depth of bore well ranges from 380 to 450 feet. While groundwater table stands at 280 feet. Catchment area has been calculated for each bore well to estimate rainwater. Catchment area may be upstream farm land, own farm land or small tributary. Rainwater will get accumulated in low laying area and then diverted through underground pipeline to the bore well. Recharge chamber has been constructed around bore well by arranging filter media to prevent blockage. Through filter chamber, rain water will directly replenish groundwater resource. In this demonstration, farmers have contributed through labor work required at farm level.

Estimated rainwater for each bore well is more than irrigation requirement for one season crop in respective farm. Through this demonstration, balance could be set between recharge and discharge. Such demonstration can be replicate in entire region and that will improve groundwater condition in term of salinity dilution, water quality improvement and increase in water storage.

Basic details of the demonstration activity						
Sr. No.	Farmer's Name	Location	Farm area	Depth of Nonuse bore well Feet	Catchment Area	Received Rainfall Cum
1	Karsanbhai Lakhamanbhai Gagiya	N 22° 50' 20.73" E 69° 36' 36.47"	4	380	10 acre	17,600
2	Muljibhai Visrambhai Gelva	N 22° 50' 25.3" E 69° 36' 31.1"	8	450	8 acre	14,080
3	Lakhamanbhai Manshibhai Gagiya	N 22° 50' 13.2" E 69° 36' 42.7"	4	400	8 acre	14,080
4	Joshi Ashariyabhai Ranshibhai	N 22° 50' 37.3" E 69° 36' 35.74"	5	450	4 sqkm	17,60,000
5	Kalyanbhai Karsanbhai Sheda	N 22° 51' 4.6" E 69° 37' 3.2"	18	415	24 acre	42,240
6	Bharubhai Dada Lakhani	N 22° 50' 20.73" E 69° 36' 36.47"	7	460	4 sqkm	17,60,000

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Workshop : Participatory Ground Water Management

Every stage of implementation is initiated by advocacy workshop at block level to share experiences of various partners including farmers, village committees, CSR foundations, researchers, Bhujal Jankars and local experts. One such workshop has been organized on 22 March 2018 by Adani Foundation, (AF) Arid Communities and Technologies, (ACT) Geo Sciences Services (GSS) and Parab Water Management Pvt Ltd. at Mundra. The aim of workshop is to inform about PGWM project planned jointly by AF and ACT and to create awareness among various stakeholders about PGWM activities on other part of kankavati Sandstone area by different CSR and community interventions. One of the objectives of the workshop is to sensitize stakeholders about groundwater use by users and educate about kankavati sandstone issues and potential. Considering aim and objectives workshop sessions were planned for sharing of learning and characteristics of Kankavati sandstone by experts of ACT and GSS., experiences sharing by CSR foundations, AF, CGPL and IL&FS, regarding their interventions on PGWM and activities and impact of different activities. In this workshop special focus has given to role of Media on raising awareness and how they can be helpful developing sensitization towards water management with special focus on groundwater management within and outside the project areas.

The workshop has also planned to develop platform for discussions, suggestions by farmers, village committees and Bhujal jankars and to discuss what should be done at village level, cluster level and aquifer levels for developing protocols for demand side and supply management.

The workshop has been attended by 107 participants from 29 villages including 10 village partners of AF project areas, three CSR foundations, KVK, five organizations, four main media i.e. Kachchh Mitra, Divya Bhaskar, Maa News, all India radio and immanent citizens of Mundra town.

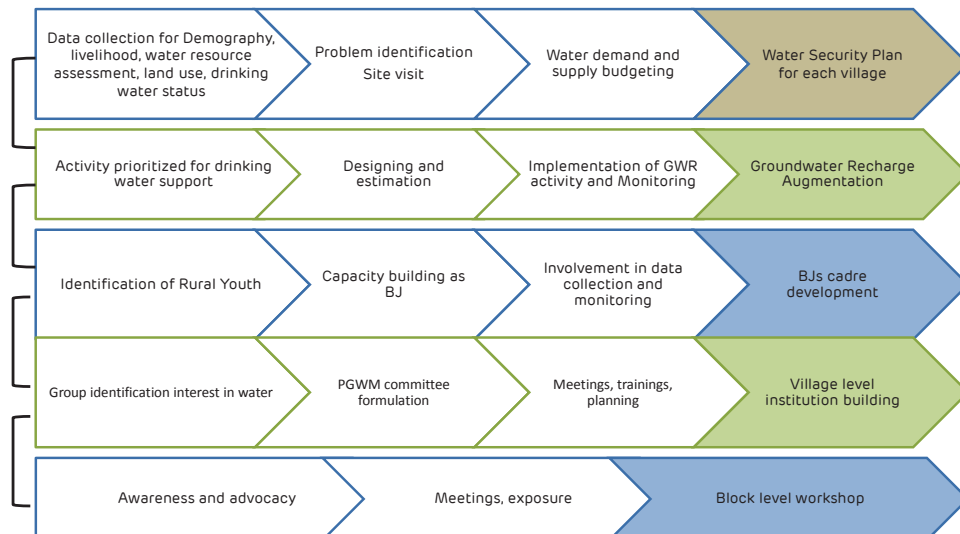
The workshop way forward

09 village water security plan have given to respective villages

- Village community people have highly appreciated Adani foundations attempts on PGWM and promise to cooperate for PGWM activities and agreed to develop protocols based on PGWM principle.
- KVK should be involved in monitoring of PGWM activities carried out in villages and document changes in agriculture and water conservations due to change in water quality and quality

Participatory Ground Water Management

PGWM Activity ongoing....



Rural Infrastructure Development



Water Conservation Projects: Scarcity of potable water in Kutch has led to acute problems in its coastal region. In Mundra, people mostly use ground water for drinking. Unfortunately this water has a high level of TDS which causes bone and kidney diseases. To alleviate this situation, the Adani Foundation has taken initiatives for water conservation including construction of check dams and pond deepening

This year Adani foundation carried out pond deepening in Bhujpur and Mota Bhadiya Village and Canal Repairing work across the river at Zarpara village. Also repaired check dam at kandagara to rejuvenate the same.



Education Related Projects: Education is the most powerful weapon which you can use to change the world." To improve the quality of education and to improve school environment, the Adani Foundation supports for infrastructure development on request basis. Adani Foundation carries out the construction of assembly hall, classrooms, computer labs, space for midday meal, playground, school walls, washrooms etc. as per the needs and preferences of the school. It is aimed at providing facilities in education sector to the present generation.

We have constructed Prayer Shed at Govt Primary School at Ragha and Bhadreshwar. Also grill work done in Kumar Shala Zarpara.

Rural Infrastructure Development

Drinking Water Related Projects: Potable drinking water is basic requirement of any village. For better health and hygiene of village drinking water should be clean and pure. So, this project will create positive and effective social impact. **Adani Foundation has installed RO Plant at Samaghogha and Siracha village. Also RO installation at Vallabh Vidyalaya at Mundra**



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RID – Dignity of Workforce

Present condition of migrated labour community of Adani port, power and Wilmar is really matter of concern. They are living in pathetic condition. It is true that we cannot achieve our goal of development unless and until we support to bring up the lives of this community. Basic needs of this labour force need to be addressed. In labour Vasahats they were not getting even the facility of pure drinking water, proper living condition, sanitation or in one go we can say "NO" proper living conditions.

With the objective to build up trust and transparency in labour community, union Labours and Smooth business operations, **Adani foundation has constructed and provided basic sanitation facility (18 Nos), Balvadi, medical center and retiring places at labour settlements near Adani Wilmar Ltd.** The provided facilities may lead them to live happy, healthy, secure and hygienic conditions and will definitely make them happy and will boost the efficiency and commitment of the people.



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- **Health Related Projects:** The proposed work was related to our major core area – health. Adani Foundation has constructed toilet block at Sadau Primary school. Also two toilets constructed at Tuna Village of Anjar Taluka
- **Other Projects:** Some Projects we took up to fulfill the demands of communities. We have completed road repair work at Shekhadia, fodder shed at Tuna, water pipeline work at Wand, garden development at kandagara etc,
- **Other Projects:** Some Projects we took up to fulfill the demands of communities. We have completed road repair work at Shekhadia, fodder shed at Tuna, water pipeline work at Wand, garden development at kandagara etc,

A step towards Swachh Bharat : School Sanitation

Adani Foundation has brought smiles to large number of girl students of Sadau primary school in Mundra locality, who were otherwise unhappy with the poor toilet and sanitation facilities available in their premises. The construction of three new urinals, two toilet blocks and one wash basin exclusively for girls has largely changed the scenario and created much impact on the hygiene conditions as well as psychology of the female students. Even the parents and guardians are a relaxed lot with the improved facility and privacy for toilet use to their children.

Earlier, there were only two toilets each for boys and girls which was insufficient considering the large number of about 243 girl students. Besides, the boys and girls toilets were adjoined, thereby causing psychological impact on the users.

Citing lack of fund, the school authorities had requested Adani Foundation to support the construction of exclusive toilet facilities for girls. As per prescribed designed of government, the toilets, urinals and wash basin for girl students were constructed.

Apart from playing a key role in Swachh Bharat Abhiyan, this RID project of Adani Foundation also contributed towards Girl Child Education.



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RID – Dignity of Drivers

It is very difficult to achieve a healthy lifestyle for truck drivers. It's no secret that truck drivers are strapped to their seats for long periods of time. Poor sleep and busy life style leads to many diseases i.e. blood pressure, diabetic, obesity and this leads to heart attack sometimes. With reference to the above stated issue Adani Foundation decided to provide resting shed with water and sanitation facility for truckers near SEZ parking areas. We can reach upto truckers and help them to be comfortable after long tiring journey, Which will useful to create trust among vendors and union Labours.

With objective to build up trust and transparency in Truckers community and Smooth business operations. In long term it will help us in trust building for the group and necessary for the business relations with stakeholders.

Size of shed is 24.10 Mtr x 12.40 Mtr and total 50 platform is constructed for resting. Other facilities are drinking water, sanitation, LCD for recreation purpose and canteen facility nearby



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Education

Education is a strong building block in building a stronger and healthier community. Adani Foundation, through its surveys and assessments with fishermen community came to know that only education can make change in the status of fishermen community so we have started education intervention work from pre primary to college level under various project which are as below



Summary of School Visits at Shanti Vihar from December-2010 to March-2018

Financial Year	No Of Schools / Institutes	No Of Visitors
FY 2010-11 (December 2010 to March 2011)	99	4145
FY 2011-12	318	22652
FY 2012-13	364	27704
FY 2013-14	375	36744
FY 2014-15	423	28310
FY 2015-16	343	27926
FY 2016-17	327	23804
FY 2017-18	487	32024
Total	2736	203309

More than 2 million young minds has visited !!

Project UDAAN

Udaan is a learning based initiative focused on the youth coming from various schools across the state of Gujarat. Under this project, a two day free of cost exposure tour is organized wherein students are given a chance to visit the Adani Port, Adani Power & Adani Wilmar facilities to get an insight upon the large scale business activity carried out at each of them.

Specifically students from high school (9th to 11th grade) are encouraged to take part in the exposure tours. It is believed that students of this age would be able to absorb the learning in a better way which could help them shape their lives by aspiring for big. The spread of the schools extends to various districts in Gujarat. There is a specific effort to reach out to schools in the rural areas. Other than schools even colleges where the exposure visit seems to be helping the curriculum are encouraged.

Till Date Total 2736 Schools and 203309 students have been part of project UDAAN

Adani Vidya Mandir

About School :-

Adani Vidya mandir (AVM-B), a GSEB affiliated school is the first of its kind initiative, under the support of Adani Foundation.

Mission :- To fulfill the quality base education for economically poor family & Fisherman Students, so that no children can drop primary education.

School Provides "cost-free" education to meritorious students coming from challenging economic background,

who have priceless treasures but have been under achievers due to situation.

The school was established to realize the dreams of those parents who owing to financial constraints are not in a position to provide quality education. School also provides them free uniform, textbooks, Notebooks, Breakfast, Lunch and refreshments.

Students strength Year wise (2013-18)						
Class	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
1 st	53	40	45	41	38	40
2 nd	26	68	46	41	39	37
3 rd	27	40	73	45	37	39
4 th	-	39	48	70	44	36
5 th	-	-	37	46	58	39
6 th	-	-	37	36	46	58
7 th	-	-	34	37	35	44
8 th	-	-	39	34	36	34
9 th	-	-	-	38	38	30
10 th	-	-	-	-	23	27
Total	106	187	359	387	394	384



Key Activities:

1. Science Fair – Block level
2. Drawing Competition under the P.C.R.A. National level competition
3. Assembly on every Saturday.
4. International Yoga Day Celebration
5. Guru Purnima celebration
6. 71st Independence Day Celebration
7. Teacher's day Celebration
8. Children's Day Celebration
9. Educational Tour for each standard
10. Festival Celebration
11. Awareness Street Play organized at various villages

ADANI VIDYA MANDIR, BHADRESHWAR									
ANALYZED GRADE OF THE STUDENTS									
CLASS	A1 90% ABOVE	A 80%-89	B 65%-79%	C 50%-64%	D 33%-49%	E	ABSENT	TOTAL	
1	7	13	9	11	0	0	0	40	
2	2	10	14	8	3	0	0	37	
3	3	11	7	9	9	0	0	39	
4	1	13	10	3	9	0	0	36	
5	0	6	14	13	7	0	1	41	
6A	0	1	8	12	8	0	0	29	
6B	0	2	4	17	6	0	0	29	
7	0	1	8	17	19	0	0	45	
8	0	1	8	12	12	0	1	34	
9	0	0	3	22	0	5	0	30	
10	0	0	4	12	0	11	0	27	
TOTAL	13	58	89	136	73	16	2	387	



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Shala Praveshotsav

To motivated children for schooling by providing the welcome kit / education kit and to create conducive children for "joyful learning" Environment for children for Learning during shala Praveshotsav Govt. has wide spread network of 111 Govt. primary schools in total 62 villages of Mundra Taluka, 3 villages of in Anjar taluka and two villages of Mandvi Taluka every year on an average 2550 to 2700 children gets enrolled in 1st std in Taluka For 2017-2018 total 2500 children got enrolled & Adani foundation provided the "Enrollment kit" to all new enrollee in Taluka

Adani Education Development Center

Kutchh District is very poor in case of Primary Education. Educational Standards of Govt. School is considerably deprived. It continuously destroying our young generation in absence of proper direction and base. Keeping this situation in view, We have initiated Coaching center at Zarpura and Sharda Mandir, Mundra. More than 85 students has benefitted by coaching center. (22 students were in D Grade who secured C Grade and rest 63 students were in C Grade among them secured 21 students got B Grade this year.

Key Focus of center:

- Efforts to Improve Quality of Education
- Child Education & Nurturing
- Propagate Child Friendly Environment at schools
- Community Participation
- Maximum [100%] enrollment and retention in Schools



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Vatvruksha : Come, Let Us Walk Together on the Path of Development'



Education has the power to transform the social landscape. With its progressive approach and ideas, the Foundation has been carrying out innovative activities to improve the scenario of primary education in the Mundra taluka for many years. Its unique initiatives are aimed at making education more effective and interesting for the children to ensure that no child remains bereft of primary education. These initiatives target children, teachers as well as schools. With these objectives, education camps are organized regularly.

'Come, Let Us Walk Together on the Path of Development' – With this idea, the Foundation organized a teacher's camp named 'Vatvruksha'. Hon'ble Collector Shri Remya Mohanji, DEO Shri Vaghela, DPEO Shri Suvarnakar, Adani Foundation Advisors Shri Vasant Gadhvi, Shri Rakshit Shah and Shri Mukesh Saxena, TDO Shri Mamlatdar, DPEO Shri Haresh bhai, Mundra Taluka CRC as well as invited teachers attended the camp.

Mohan Vaghela, Nisha Trivedi, Viraj Vohra, Alka Chavda, Sanjay Mehta, Rashida Hussain and other experts also participated. Important topics like teaching methods and evaluation, classroom arrangements, life skills, positive attitude, lesson planning and personality development were covered in the camp.



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Material Support

Adani foundation is supporting for improving quality of education under the teaching learning material schools for teachers and students. Role on infrastructure is must to achieve quality of education. Many studies highlight that lack of infrastructure is also affected the school dropout ratio. Good and proper infrastructure attracting children for school. Adani foundation is also trying to full fill need of infrastructure in schools. Where there is no provision of Govt. grant & school's required support AF is there. During this period AF provided green board support at Tuna, Taluka shala Mundra, Lalji Sumar Mundra, Teacher's table support to Mota bhadia vadi school number 2 & 3, fan at Shekhadiya, science equipment at Luni high school, Girls sanitation at Sadau primary school, water tank renovation at Shekhadiya and Mahesh nagar school.



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Adani Foundation Launches 'Swachhagraha' to create a culture of cleanliness

Swachhagraha, a Behavior Change Education Programme, is an initiative of the Adani Foundation. 'Swachhagraha' draws inspiration from 'Satyagraha' led by Mahatma Gandhi during the freedom struggle movement, which catalyzed action through tremendous patience and perseverance, instilling in the Indian mind, dignity and self-respect. It aims at engaging people and bringing about a change, similar in scale to India's freedom movement, where people get involved to take action for 'Creating a culture of Cleanliness'.

The programme was launched in Mundra, Bhuj District, Gujarat with participation of over 32 schools in Swachhagraha Prerak's training with support of District Education Officer, Bhuj & Taluka Primary Education Officer, Mundra. The programme was launched by Shri Bhupendra Singh Vaghela, DEO, Bhuj, Shri Hareesh bhai Patel, TPEO, Mundra and Jignesh R. Vibhandik, Project Coordinator, Adani Foundation, on 20th January at Adani House, Mundra Port Road, Mundra with full day Swachhagraha training workshop of principals & teachers. Mrs. Pankti Shah, Unit head CSR, Adani Foundation, said, "The Swachhagraha project is perfectly aligned with the 'Swachh Bharat Abhiyan'. At the heart of this project is the idea of 'creating a culture of cleanliness' in the upcoming generations of India."



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Adani Skill Development Center

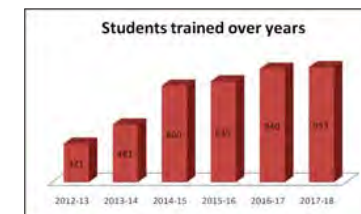
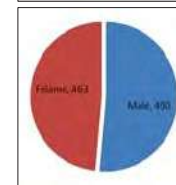
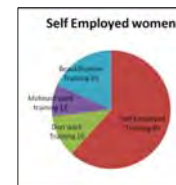
- ASDC's approach to skill development is holistic and aimed at making each candidate a well-developed individual hence, the team goes to each and every area for making the initiative, a success.
- ASDC reaches out to various communities by leaflet and other advertisements.
- The team holds various meetings with women and youth of the villages to explain them the objective of ASDC.
- ASDC maintains all the records, follow-up with candidates meticulously during the entire training period.

OUR IMPACT

Success of a project is defined by the fulfillment of its objectives. And ASDC's succeeds when the trainees get suitable employment.

A total of 378 trained students from ASDC has been suitably placed with an average income minimum of Rs.9000pm

ASDC has proven to be a major catalyst in igniting the fire of self-employment and entrepreneurship amongst women. A total of 138 women are now earning at home after getting trained at ASDC in various exclusive courses.



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SAKSHAM

Adani Skill Development Centre

Adani Skill Development Centre (ASDC) is playing a pivotal role in implementing sustainable development in the state.

Adani Skill Development Centre has initialized in the Mundra block so that the needs of these industries are fulfilled, the local youth is enrolled in various training/ skill courses and the distance between both is minimized.

- The objective of this center is to impart different kinds of training to the students of 10th, 12th, college or ITI from surrounding areas. Thus, various employment-oriented trainings are organized to optimize the skills, art and knowledge through proper guidance and direction.
- Due to social and cultural traditions, various training Programme are organized at school OR village level for youth and women so that they can gain its benefits in the future as well.
- In the year 2017-18, ASDC trained 953 candidates at Mundra.
- Soft skills training was imparted to 675 students in total, while technical training have been given to 278 students



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Jaruv Devabhai Arjanbhai, an RTG crane operator at GTI Port, Maharashtra is a classic case study of skill development training ensuing employability. Just couple of years back a much stressed Jaruv bhai had approached Adani Skill Development Centre (ASDC) Mundra to undertake checker-cum-RTG crane operator training with a hope of getting some employment somewhere to support his economically poor family. After passing ITI post his 12th qualification, Jaruv bhai was rendered

unemployed like hundreds and thousands of youths of his age and locality. While undergoing the ASDC training he would have never imagined that this additional knowledge and skill upgradation would bring him a bright future and good days for his family in Vaghura village of Mundra. Soon after completion of his 3 months duration course, Jaruv bhai got a job in AK Enterprises company doing cargo handling operations at GTI Port, Maharashtra. His current earning per month is Rs 43,000/- with company accommodation.

He is now a big support for his father, who is a local farmer and his two brothers and sisters, who are continuing their studies to follow the steps of Jaruv bhai for employability through knowledge and skill development.

Bhand Navin Devjibhai is very fond of financial autonomy and self-sufficiency, a principle of life which he has got by virtue of his skill development training at Adani Skill Development Centre (ASDC), Mundra. A Commerce graduate from Mundra village, in the year 2017 Navin had enrolled himself at



ASDC for the IT-Basic Computer training. He was unemployed and lacked the minimum confidence of facing any job interview as per his qualification.

As part of the well-designed training curriculum at ASDC, the 21-year old youth learnt skills of public speaking, professional manners, facing interviews etc. along with core subject of IT basic computer. The training helped him immensely and fetched him a company job with lucrative Rs. 10,000/- per month salary. Happy with his financial autonomy, he is now in a comfortable position to support his parents and three brothers.



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Namda on revival path : Adani Skill Development Centre launches artisan training

Even as a breakthrough is waiting to happen, five trainees were enrolled in Dec 17 by Adani Skill Development Centre (ASDC) for the age-old Namda craft, a dying art form of Kutchh district in Gujarat. First initiative of its kind, the skill development training on Namda is aimed at preparing a future generation of artisans for the historic art form.

Adani Foundation, the CSR wing of Adani Group had vowed to save Namda from extinction and bring back its past glory. Originally innovated by an artisan of Mughal Era in the 11th Century India, Namda craft was primarily practiced by the Pinjara and Mansuri communities and Sama Muslims native to Kutchh. Sans proper encouragement, marketing avenues and promotion, the art suffered a major setback with artisans gradually switching over to other professions for livelihood earning.

Till recently, when the Adani Foundation, Mundra team members approached Mansuri Karimbhai Umarbhai, perhaps the sole survivor of the craft in Kutchh, Namda was dying a natural death. As a good corporate citizen, the Adani Group initiated a move to protect the art form, as well to make it popular and sustainable.

The first step towards the enormous goal of reviving Namda, the training programme kicked started with lots of positivity and enthusiasm among the trainees, who are committed to put best efforts for bringing back the past glory for this craft. And the best part of the initiative is that, the Namda survivor himself would train the future-artisans.

The trainees comprised of two male and three female artisans, who would be given stipend by Adani Foundation during the three-month training duration.

And what sounds quite favourable about the revival-attempt for Namda is that many important people from the related fields of art promotion and marketing attended the inaugural function of the training programme to witness and support the big effort by Adani Foundation.

The assistant director, Handicrafts Marketing and Service Extension Centre, Development Commissioner Handicrafts, Shri Archit Sahare, Manager, Gujarat State Handloom and Handicraft Corporation Shri MK Parmar, Guide and Retired Profession of NID Shri Vinay Kumar, Director of VRTI Shri Mavjibhai Baraiya, Director of Qasab Shri Pankaj Soni and the local marketing head of Amazon Shri Viraj Thaker were among the key persons present on the occasion to support and encourage the initiative.

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Employee Volunteering Programme

Always spreading the warmth of concern and care for members of its community in and around Mundra through its sustainable CSR projects, we made yet another endeavor by taking the warmth to labour habitants in the APSEZ Mundra periphery. As the part of "Employees Volunteering Programme "JOY OF GIVING WEEK" Warm cloth distribution was arranged at all three residential colonies of Adani group.

As part of the 2nd phase of Dignity of Labour drive by Adani Group, nearly 350 Labour families were distributed warm clothes by AF, Mundra on Monday. Nearly 150 blankets, 100 sweaters and jackets along with winter caps and shocks were given away to Labour families in view of the already prevalent winter. The warm clothes were donated by employee families, company associates and residents of Mundra under a drive initiated by the company

Swachhata Abhiyan - Village cleaning campaign was organized by Adani ports and SEZ Limited (Baroi, Luni and Sadau), Adani Power Limited (Siracha), Adani Wilmar Limited (Dhrub) and Mundra Solar Private Limited (Tunda Wandh)



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"AWAZ DE : Voice for the Community"



Making Community Partners

We do not treat community as a receipt of charity. In fact, people are active partners in development process. The community participates in the work and people own the programs. "Ownership helps make the change Sustainable." It also gives birth to social leaders within the community.

Small farmers and Fisherfolk remain vulnerable to weather conditions and lack of access to necessary knowledge that enables better decision making related to livelihood activities, health and disaster preparedness.

Adani Foundation reaches out to the farming and fishing community of Mundra through multiple knowledge dissemination - AWAZ DE (Voice messages) which provides reliable information at the right time from the right source.

Note : "AWAZ DE" is the software by which AF reaches out to the various target groups by voice messages. AF Mundra is using this software since five years and got a very good result to communicate the same message to more than 5000 people.



Recognition



The Gujrat CSR Authority launched the CSR Awards'18 with an aim to recognize exemplary work in integrating and internalizing CSR. We are honored to receive the "Sustainable and Impactful CSR Project" Award in the presence of Shri O.P.Kohli. Such recognitions inspire us to continue on our journey. Award received by Shri Mukesh Saxena (COO, SEZ) and Pankti Shah (CSR Head, Adani Foundation)

Glad to announce our latest accolade-the Eminent Award 2017 presented at the Ek Kaam Desh Ke Naam award ceremony on 15th January, 2018 at New Delhi. The Award was bestowed upon Adani Ports and SEZ Ltd, Mundra, for outstanding achievement in CSR, specifically for "Sustainable Livelihood for Fisherman Community". Award was presented by Thavar Chand Gehlot, Hon'ble ,minister of social justice and empowerment, GOI and received by shri TT Mehta and Vijay Gosai of CSR Mundra Team.



Pleased to announce a milestone for APSEZ Mundra, as it receives the "CII ITC Excellence in sustainable business" commendation award - CSR for the year 2017. The award was presented by Shri C K Mishra, Secretary Ministry of Environment and Climate to "Capt. Unmesh Abhyankar, Jt. President - APSEZ" and Ms. Pankti Shah, Mundra CSR Head, Adani Foundation. Our endeavor towards sustainability strengthens with every achievement unlocked



Adani Foundation, CSR Budget - Mundra Budget Utilization F.Y. 2017-18			
Rs. In lacs			
Sr. No.	Program	Budget 2017-18 Rs.	Budget Utilization Rs.
A.	Admin Expense	152.05	128.06
B.	Education		
(i)	Education Initiative	59.70	50.51
(ii)	Adani Vidya Mandir- Bhadreswar	142.08	125.35
(iii)	Project Udaan- Mundra	332.33	298.93
	Sub Total	534.11	474.79
C.	Community Health	214.49	187.26
D.	Sustainable Livelihood Development	289.20	285.00
E.	Rural Infrastructure Development	374.70	323.40
GRAND TOTAL		1564.55	1398.51



Annexure – 11

Cost of Environmental Protection Measures

Sr. No.	Activity	Cost incurred (INR in Lacs)			Budgeted Cost (INR in Lacs)
		2015 – 16	2016 – 17	2017 – 18	2017 – 18
1.	Environmental Study / Audit and Consultancy	45.45	36.78	9.0	21.00
2.	Legal & Statutory Expenses	3.30	4.76	5.07	16.00
3.	Environmental Monitoring Services	26.80	27.95	27.02	36.00
4.	Hazardous / Non Hazardous Waste Management & Disposal	34.56	12.52	65.62	90.84
5.	Environment Day Celebration	7.18	6.71	2.85	10.00
6.	Treatment and Disposal of Bio-Medical Waste	1.22	1.27	1.13	1.44
7.	Mangrove Plantation, Monitoring & Conservation	73.64	72.38	60.0	60.0
8.	Other Horticulture Expenses	434.72	555.00	547.0	547.0
9.	O&M of Sewage Treatment Plant and Effluent Treatment Plant (including STP, ETP of Port & SEZ & Common Effluent Treatment Plant)	18.18	61.50	70.02	69.35
10.	Expenditure of Environment Dept. (Apart from above head)	135.90	131.83	102.15	104.91
Total		837.73	910.70	889.86	956.54

Further year wise breakup of the cost is mentioned in table below:

Year	Environment	Horticulture	Total
2013-2014	250.00	433.75	683.75
2014-2015	462.87	380.27	843.14
2015-2016	346.23	434.72	780.95
2016-2017	355.70	555.00	910.7
2017-2018	342.86	547.00	889.86
Total	1757.66	2350.74	4108.4