



AHPPL/MoEF&CC/2018-19/007

Date: 12/10/2018

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-3, Ravishankar Nagar,
Bhopal - 462016 (Madhya Pradesh)
Tel. No.: 0755- 2465054, 2465496, 2466525
Email: rowz.bpl-mef@nic.in

Dear Sir,

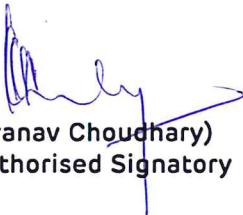
Sub.: Six Monthly Compliance Report of conditions stipulated in Environment and CRZ Clearance for the development of Multi Cargo Port with Supporting Utilities and Infrastructure Facilities at Hazira, Surat, Gujarat for the period: **Apr., 2018 to Sept., 2018.**

Ref.: 1). Environmental and CRZ Clearance issued by MoEF & CC, New Delhi vide letter No.: 11-150/2010-IA.III dated 03rd May, 2013.
2). CRZ Recommendations issued by Forests & Environment Department, Govt. of Gujarat to MoEF & CC, New Delhi vide letter No.: ENV-10-2012-30-E dated 11th May, 2012.

Please find enclosed herewith point wise Compliance Reports (Hard copy as well as in a CD) of conditions stipulated in the above referred letters.

Thank you,

For, **M/s. Adani Hazira Port Private Limited,**



(Pranav Choudhary)
Authorised Signatory

Encl.: As above

Cc to:

1. The Director (Monitoring - IA Division), Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110 003.
2. The Director, Forests & Environment Department, Block - 14, 8th Floor, Sachivalaya, Gandhinagar, Gujarat - 382 010.
3. The Zonal Officer, Central Pollution Control Board, Zonal Office Vadodara, Parivesh Bhawan, Opp. VMC Ward Office No.:10, Subhanpura, Vadodra-390 023.
4. The Chairman, Gujarat Pollution Control Board, Parvayaran Bhawan, Sector - 10A, Gandhinagar-382 010 (Gujarat).
5. The Regional Officer, Gujarat Pollution Control Board, Belgium Square, Ring Road, Surat-395003, (Gujarat).

Adani Hazira Port Pvt Ltd
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Gujarat, India
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LIST OF APPENDIXES

APPENDIX NO.	DETAILS
1.	Compliance To The Conditions Stipulated In CRZ Recommendations Issued By Forests & Environment Department, Government Of Gujarat To MOEF & CC, New Delhi Vide Letter No.: ENV-10-2012-30-E, Dated 11th May, 2012.

LIST OF ANNEXURES

ANNEXURE NO.	DETAILS
1.	Action Plan And Compliance Status On The Issues Raised During The Public Hearing.
2.	Details Of The CSR Activities Along With Budgetary Provisions And Expenditures For The Financial Year: 2018-19.
3.	Compliance Status Of Environmental Management Plan As Per Integrated EIA Report - September, 2012.
4.	Environmental Monitoring / Analysis Results For The Period From Apr., 2018 To Sept., 2018.
5.	Organogram Of AHPPL - Environment Management Cell.
6.	Details Of Environment Management Budget For The Financial Year: 2018-19

SIX MONTHLY COMPLIANCE REPORT

OF

ENVIRONMENT AND CRZ CLEARANCE ISSUED BY MOEF & CC, NEW DELHI

VIDE LETTER NO.: 11-150/2010-IA.III, DATED 03RD MAY, 2013

FOR

THE DEVELOPMENT OF MULTI CARGO PORT WITH SUPPORTING UTILITIES AND

INFRASTRUCTURE FACILITIES AT HAZIRA, SURAT, GUJARAT

BY

M/S. ADANI HAZIRA PORT PVT. LTD.

- A. Six Monthly Compliance Report for Environmental and CRZ Clearance issued by MoEF & CC, New Delhi vide letter No.: **11-150/2010-IA.III dated 03rd May, 2013** for the development of Multi Cargo Port with supporting utilities and infrastructure facilities at Hazira, Surat, Gujarat by M/s. Adani Hazira Port Pvt. Ltd.: -

S. No.	Stipulated Conditions	Compliance Status															
6.	Specific Conditions																
i.	"Consent for Establishment" shall be obtained from State Pollution Control Board under Air & Water Act and a copy shall be submitted to the Ministry before start of any construction work at site.	<p>Complied, AHPPL has obtained Consent to Establish (NOC) from Gujarat Pollution Control Board on 05.10.2012 and same was submitted on 16.05.2012 prior to obtaining the Environment and CRZ clearances. Subsequently there were amendments in the Consent to Establish which were also submitted to the MoEF&CC before start of respective construction as per the details given below: -</p> <table border="1"> <thead> <tr> <th>Consent No.</th><th>Issued On</th><th>Submitted To MoEF & CC On</th></tr> </thead> <tbody> <tr> <td>CTE_49766</td><td>05.10.2012</td><td>Along with Six Monthly Compliance Report dated 19.11.2014 & 19.05.2017.</td></tr> <tr> <td>CTE-64900</td><td>26.09.2014</td><td>Along with Six Monthly Compliance Report dated 12.05.2015 & 19.05.2017.</td></tr> <tr> <td>CTE-74330</td><td>13.01.2016</td><td>Along with Six Monthly Compliance Report dated 23.05.2016 & 19.05.2017.</td></tr> <tr> <td>CTE-77767</td><td>16.04.2016</td><td>Along with Six Monthly Compliance Report dated 21.11.2016 & 19.05.2017.</td></tr> </tbody> </table>	Consent No.	Issued On	Submitted To MoEF & CC On	CTE_49766	05.10.2012	Along with Six Monthly Compliance Report dated 19.11.2014 & 19.05.2017.	CTE-64900	26.09.2014	Along with Six Monthly Compliance Report dated 12.05.2015 & 19.05.2017.	CTE-74330	13.01.2016	Along with Six Monthly Compliance Report dated 23.05.2016 & 19.05.2017.	CTE-77767	16.04.2016	Along with Six Monthly Compliance Report dated 21.11.2016 & 19.05.2017.
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ii.	The action plan on the issues raised during public hearing shall be submitted to the Pollution Control Board. The action plan shall be implemented without fail. Report on compliance shall be submitted to the Regional Office, MOEF along with the six monthly reports.	<p>Complied. Public hearing was conducted on 14.08.2012. All the issues have been addressed adequately and to the satisfaction of the stakeholders. The key points raised during PH were: -</p> <p>1) Preference to be given to the local people for employment and transport & other contracts. M/s. AHPPL is giving preference to the locals for contracts, such as M/s. Hazira Vikas Samiti has been engaged for providing transport facilities for employees. M/s. AHPPL also giving preference for skilled local candidates for employment as per suitable requirements. As on 30th Sep., 2018 total 183 out of 211 on roll employees are from Gujarat.</p> <p>2) Villagers were anxious about their displacement due to port development. M/s. AHPPL is developing port on approx. 873.27 hectares which is uninhabited and there is no acquisition of private property. The details action status of all other issues raised during the public hearing is enclosed as Annexure-1.</p>															
iii.	All the recommendations of SCZMA shall be complied with.	<p>Complying with. All the recommendations of the GCZMA is</p>															

S. No.	Stipulated Conditions	Compliance Status
		being complied. Compliance status of the conditions stipulated in GCZMA recommendations vide letter dated 11/05/2012 bearing No.: ENV-10-2012-30-E is enclosed as Appendix-1 .
iv.	Periodical study on shore line changes shall be conducted and mitigation carried out if necessary. The details shall be submitted along with six monthly monitoring reports.	Complied. Shoreline change study was conducted by NIO, Vizag during the period from November, 2014 to December, 2015. Report of the shoreline change study was submitted along with compliance report dated 21.11.2016. Study confirms that there is no significant change in the nearby shoreline except for the approved layout of the AHPPL. The report did not warrant any mitigation measures. There are no marine construction activities has taken place on shore after from Dec, 2016.
v.	Oil spills if any shall be properly collected and disposed as per Rules. Proper Oil Contingency Management Plan shall be put in the place.	Complied. <ul style="list-style-type: none"> • Till date there is no oil spill occurred. • Oil Spill Contingency Plan has been prepared and the same was approved / vetted by Indian Coast Guard (Letter No.: 7563, dated 09.01.2014). • The same has been implemented at site in order to properly collect and dispose oil spills (if any).
vi.	The detailed plan with budgetary provisions for the CSR shall be submitted to the ministry.	Complied. <ul style="list-style-type: none"> • CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development. • Detail of the CSR activities along with budgetary provisions and progress are regularly submitted to MoEF & CC as part of six monthly compliance reports. • The status of the CSR activities planned during the Financial Year: 2018-19 is enclosed as Annexure-2.
vii.	All the recommendation of the EMP and DMP shall be complied within letter and spirit.	Complied. <ul style="list-style-type: none"> • Recommendation given in EMP is being complied in letter and spirit. Status of the same is enclosed as Annexure-3. • AHPPL is an ISO 14001, ISO 9001 and OHSAS 18001 certified company. • AHPPL has developed and implemented DMP. Regular mock drill to ensure the compliance and preparedness is being done. Last Mock Drill (On Site) was on: 11.09.2018 Last Update of ERP & DMP : 10.05.2018 • Copy of the Schematic of ERP & DMP communication flow is submitted along with the six monthly compliance report dated 19.05.2017.
viii.	Periodical monitoring of the sea water	Complied.

S. No.	Stipulated Conditions	Compliance Status
	quality at the outlet shall be carried out to check the discharge is meeting the standard and not causing any impact to marine life.	<ul style="list-style-type: none"> AHPPL is not discharging any effluent into the sea. There are no standards prescribed for the sea water quality. Only trends can be observed to ensure that quality of sea water is not changing significantly. Marine water quality is being monitored through M/s. Pollucon Laboratories, Surat (a MoEF&CC recognized and NABL accredited laboratory). Monitoring of sea water quality at three locations is being done on monthly basis. Copy of the Sea Water Quality Monitoring /Analysis Reports for the period Apr., 2018 to Sept., 2018 is enclosed as Annexure-4D. From the monitoring report it is evident that there is no significant change in the sea water quality which could have impact on the marine life.
ix.	Transport of cargo shall in closed system and dust control viz. water sprinkler, along conveyor and transfer points shall be provided.	<p>Complied.</p> <p>Following control measures are in place and effectively working at port to control fugitive dust: -</p> <ol style="list-style-type: none"> 1. Transportation of coal from jetty to coal storage yard through 1.7 Km. long conveyor belt with hood. 2. Water sprinklers in to the coal yard, 3. Dust Suppression System / Spray Nozzles in Conveyor System and Discharge Chute, 4. Water spray through Water Browsers, 5. Water Mist Canon / Fog System, 6. Wind Brake Shield of 14 meters high and 1200 meters long, 7. Transportation of cargo from port to hinterland is being done through dumpers / trucks covered with tarpaulin, 8. Regular cleaning the roads through Road Sweeping Machines, and 9. Company has set up dedicated greenbelt area for plantation at periphery / avenue plantation / landscaping etc. Total greenbelt area developed so far is approx. 69.80 ha within the port premises.
x.	Construction activity shall be carried out strictly as per the provisions of CRZ notification 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone.	<p>Complied.</p> <ul style="list-style-type: none"> Construction activities are as per the provisions of CRZ Notification, 2011. No construction work other than those permitted in CRZ Notification has been done. Development of the port and other ancillary facility is being done as per the approval received under CRZ Notification, 2011 and EIA Notification, 2006.
xi.	The project shall be executed in such a manner that there shall not be any	<p>Complied.</p> <ul style="list-style-type: none"> Project execution is being done without any

S. No.	Stipulated Conditions	Compliance Status
	disturbance to the fishing activity.	<p>disturbance to fishing activities.</p> <ul style="list-style-type: none"> Majority of fishing activities are in the river TAPI estuary region which is approx. 3-4 KM away from the project site. There are few "PAGADIA" fishermen doing fishing near the project area. They are continuing with their activities without any disturbance.
xii.	It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.	<p>Complied.</p> <ul style="list-style-type: none"> There is no displacement of people, houses or fishermen as the port is being developed on reclamation land and land allotted by Government as there is no acquisition of private land. Majority of fishing activities are in the river TAPI estuary region which is approx. 3-4 KM away from the project site. There are few "PAGADIA" fishermen doing fishing near the project area. They are continuing with their activities without any disturbance AHPPL is regularly working with fishermen to understand their needs and provide required support.
xiii.	The project proponent shall set up separate Environment Management Cell for effective implementation of the stipulated environmental safe guards under the supervision of a Senior Executive.	<p>Complied.</p> <ul style="list-style-type: none"> Environment Management Cell has been set up with qualified staff to ensure the effective implementation of environmental safe guards. In addition to the site Environment Management Cell a well-established corporate environment cell also ensures effective implementation of the environmental safeguards. Environment Management Cell Organogram is enclosed as Annexure-5.
xiv.	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	<p>Complied.</p> <ul style="list-style-type: none"> Separate budget has been allocated to the HSE Department. Allocated budget for the FY: 2018-19 is INR 418.66/- Lakhs. Detail of the environment budget and expenditure for the FY: 2018-19 is enclosed as Annexure-6. Environment budget is not being diverted to any other purpose.
7.	General Conditions	
i.	Appropriate measures must be taken while undertaking digging activities to avoid any degradation of water quality.	<p>Complied.</p> <ul style="list-style-type: none"> Digging activities are involved in the piling, construction of building and other ancillary facilities. Proper care is being given to ensure that no excavated material mixed with the water. Entire excavated material is being used in leveling and grading of project area.

S. No.	Stipulated Conditions	Compliance Status
		<ul style="list-style-type: none"> Marine, Surface and Ground Water quality is being monitored through M/s. Pollucon Laboratories Pvt. Ltd., Surat (a MoEF & CC and NABL accredited laboratory). Reports show that there are no impacts on the water quality. Copy of the water monitoring reports for the period Apr., 2018 to Sept., 2018 is enclosed as Annexure-4B, 4C, 4D for ground, surface and marine water quality, respectively.
ii.	Full support shall be extended to the officers of this Ministry /Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigation measures and other environmental protection activities.	<p>Complying with.</p> <ul style="list-style-type: none"> AHPPL is regularly submitting six monthly compliance reports which comprise compliance to the conditions stipulated in Environment and CRZ clearance, action taken report of Environment Management Plan, environment monitoring reports etc. Last two reports were submitted vide letter dated 20.11.2017 and 23.05.2018. Whenever any authorities such as MoEF&CC, GPCB and GMB etc. visit the AHPPL full support is extended and AHPPL provides all additional information seek by them during the inspection. Last visit by Addl. PCCF, MoEF & CC - RO, Bhopal was on 02.05.2017. Last visit by VO - GPCB, Surat was on 28.08.2018.
iii.	A six-monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.	<p>Complying with.</p> <p>Six monthly monitoring reports are regularly submitted to the RO - MoEF & CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment & CRZ Clearance. Please refer the Annexure-4 for the monitoring report from Apr., 2018 to Sept., 2018.</p>
iv.	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary subsequently, if deemed necessary for environmental protection, which shall be complied with.	Noted and agreed to comply with additional conditions stipulated or modify the existing ones by MoEF & CC, if any.
v.	The Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Noted and agreed to comply with the directions of the MoEF & CC, if any.
vi.	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to Ministry of Environment and Forests.	Noted. There is no change in project profile or implementation agency.
vii.	The project proponents shall inform the Regional Office as well as the	<p>Closed.</p> <p>Financial Closure date is 29th September, 2011.</p>

S. No.	Stipulated Conditions	Compliance Status
	Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of Land Development Work.	Approval from GMB to commence work was obtained on 09 th April, 2010 vide letter No.: GMB/N/PVT/923(10)/42/458. Copy of the same has been submitted to the MoEF & CC and other concerned authorities along with the six monthly compliance report dated 19.05.2017.
viii.	A copy of the clearance letter shall be marked to concerned Panchayat/ Local NGO, if any from whom any suggestions/ representations has been received while processing the proposal.	Closed. Copy of the clearance letter was sent to the concerned Panchayat and local NGO. Copy of the RPAD receipt were submitted to MoEF&CC along with six monthly compliance report dated 27.11.2013 and again along with the six monthly compliance report dated 19.05.2017.
ix.	State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's Office for 30 days.	This condition does not belong to M/s. AHPPL.
8.	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 1994, including the amendments and rules thereafter.	Noted and Complying with 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 1994, including the amendments. AHPPL has obtained: - <ul style="list-style-type: none"> • Environmental and CRZ Clearance issued by MoEF & CC, New Delhi vide letter No.: 11-150/2010-IA.III dated 03rd May, 2013. • Consolidated Consent and Authorization under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981 vide Consent Order No.: AWH-87176 valid till 14.04.2022. • Public Liability Insurance vide Policy No.: 3133201064763103000 valid up to 31st March, 2019.
9.	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosive, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective competent authorities.	Complied. All applicable clearances from respective authorities have been obtained i.e.: - <ol style="list-style-type: none"> 1. PESO License from Chief Controller of Explosive, Nagpur vides Order No.: P/HQ/GJ/15/5294 (P270337), Renewed on 31.12.2015 valid till 31.12.2018. Copy of the PESO License is submitted to MoEF & CC along with six monthly compliance report dated 23th May, 2016. 2. License to work a Factory Adani Hazira Port Pvt. Ltd. (Liquid Terminal) from Director of Industrial Safety and Health, Govt. of Gujarat their vide Registration No.: 3502 / 51410 / 2013 and License No.: 18757, Renewed on 21-01-2017, valid till 31st

S. No.	Stipulated Conditions	Compliance Status
		<p>December, 2018. Copy of the license to work a factory has been submitted to the MoEF & CC along with the six monthly compliance report dated 19.05.2017.</p> <p>3. Civil Aviation: Not Applicable, 4. Forest Clearance: Shall be obtained. 5. Wildlife Conservation: Not Applicable.</p>
10.	<p>The project proponent shall 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 Environment and CRZ clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen at Website of the Ministry of Environment & Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhopal.</p>	<p>Closed.</p> <ul style="list-style-type: none"> Advertisements were published in Gujarat News Paper "Gujarat Mitra" and English News Paper "The Times of India" on 13/05/2013 (within 10 days of receipt of EC & CRZ clearance). Copy of the advertisement is submitted to MoEF & CC along with the six monthly compliance report dated 27th November, 2013.
11.	<p>This 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.</p>	<p>Noted.</p>
12.	<p>Status of Compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.</p>	<p>Complied.</p> <p>Compliance report of conditions stipulated in Environment and CRZ Clearance is available on the company website i.e.: http://www.adaniports.com/ports-downloads</p>
13.	<p>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.</p>	<p>Noted.</p>
14.	<p>A copy of the clearance letter shall be sent to concerned Panchayat, Zila 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>	<p>Closed,</p> <ul style="list-style-type: none"> Copy of the clearance letter was sent to the concerned Panchayat and local NGO from whom the suggestions/ representations received. Copy of the RPAD receipt is submitted to MoEF & CC along with Six Monthly Compliance Report dated 27.11.2013 and again along with the six monthly compliance report dated 19.05.2017. Clearance letters is available on website at http://www.adaniports.com/ports-downloads
15.	<p>The Proponent shall upload the status</p>	<p>Complied.</p>

S. No.	Stipulated Conditions	Compliance 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.	The six monthly compliance report comprising of the status of compliance of the stipulated EC conditions, including results of monitored data is being uploaded on the company website at http://www.adaniports.com/ports-downloads and submitted to: 1. RO - MoEF & CC, Bhopal, 2. MoEF & CC, New Delhi, 3. DoEF, Gandhinagar, 4. Zonal Office - CPCB, Vadodara, 5. HO - GPCB, Gandhinagar, and 6. RO - GPCB, Surat. Last two reports were submitted vide letter dated 20.11.2017 and 23.05.2018.
16.	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 Environment (Protection) Rules 1986, as amended subsequently, shall also be put on the website of the company along with status of compliance of EC Conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Complied. The Environment Statement in Form-V for the Financial Year: 2017-18 is submitted to GPCB vide letter No.: AHPPL/GPCB/2018-19/ 003 dated 23.05.2018 & also uploaded on company website at http://www.adaniports.com/ports-downloads . Form-V for FY: 2017-18 has also been sent to Regional Office of MoEF & CC by email to rowz.bpl-mef@nic.in on 2 nd June 2018.

APPENDIX-1:

**COMPLIANCE TO THE CONDITIONS STIPULATED IN CRZ RECOMMENDATIONS
ISSUED BY FORESTS & ENVIRONMENT DEPARTMENT,
GOVERNMENT OF GUJARAT TO MOEF & CC, NEW DELHI
VIDE LETTER NO.: ENV-10-2012-30-E, DATED 11TH MAY, 2012
FOR MODIFICATION / EXPANSION OF MULTI - CARGO PORT FACILITY AT HAZIRA, DIST. -
SURAT BY M/S. ADANI HAZIRA PORT PVT. LIMITED**

Appendix -1: Compliance to the conditions stipulated in CRZ recommendation issued by Forests & Environment Department, Government of Gujarat to MoEF & CC, New Delhi vide letter No.: ENV-10-2012-30-E dated 11th May, 2012 for modification / expansion of Multi-Cargo Port Facility at Hazira, Dist. - Surat by M/s. Adani Hazira Port Pvt. Limited: -

S. No.	Conditions	Compliance Status
A.	Specific Condition	
1.	The provision of CRZ Notification 2011 shall be strictly adhered by M/s. AHPPL. No activity in contradiction to the provision of CRZ Notification shall be carried out by M/s. AHPPL.	Complied. <ul style="list-style-type: none"> Construction activities are as per the provisions of CRZ Notification, 2011. No construction work other than those permitted in CRZ Notification has been done. Development of the port and other ancillary facility is being done as per the approval received under CRZ Notification, 2011 and EIA Notification, 2006 and subsequent amendments.
2.1	M/s. AHPPL shall not construct any storage facilities for material / chemicals in the CRZ area except for those permissible as per Annexure - II of CRZ Notification 2011.	Noted. Only permissible activities being carried out in CRZ area.
2.2	Also for other hazardous chemicals, outside CRZ Areas, the AHPPL shall consult SDMA for Disaster Management Plan.	Complied. Disaster Management Plan has been prepared prior to the commissioning of multi cargo port. <ul style="list-style-type: none"> DMP has been submitted to GSDMA vide letter dated 20.10.2012. Comments were received from authority vide letter no. GSDMA /SM / Ind.safety/ 770560 dated 03.12.2012. Suggestions were incorporated and revised plan was submitted to GSDMA on 23.05.2014. Regular mock drill to ensure the compliance and preparedness is being done. <p>Last Mock Drill (On Site) was on : 11.09.2018 Last Update of ERP & DMP : 10.05.2018 Last submission to Directorate Industrial Safety & Health (DISH) on 31.07.2018</p>
3.	All necessary permissions from different Government Departments / agencies shall be obtained by M/s. AHPPL before commencing the activities.	Complied. All the statutory permissions from the concerned statutory authorities are obtained i.e.: - <ol style="list-style-type: none"> Environment and CRZ Clearance from MoEF & CC, GOI vide order No.: F.No.:11-150/2010-IA-III dated 03.05.2013. PESO License from Chief Controller of Explosive, Nagpur vides order No.: P/HQ/GJ/15/5294 (P270337), Renewed on 31.12.2015 valid till 31.12.2018. License to work a Factory Adani Hazira Port Pvt. Ltd. (Liquid Terminal) from Director of

S. No.	Conditions	Compliance Status
		Industrial Safety and Health, Govt. of Gujarat their vide Registration No.: 3502 / 51410 / 2013 and License No.: 18757, Renewed on 21-01-2017, valid till 31 st December, 2018.
4.	The AHPPL shall ensure that there shall be no damage to the existing mangrove patches near the site and also ensure the free flow of water to avoid damage to the mangrove.	Noted and complied with. There are no adverse impacts on mangrove as well as flow of water with respect to development activities.
5.	No dredging, reclamation or any other project related activities shall be carried out in CRZ area categorized as CRZ-I (A) and it shall have to be ensured that the mangrove habitats and other ecologically important and significant areas, if any in the region are not affected due to any of the project activities.	Complied. All activities are being carried out as per Environment and CRZ clearance accorded. No mangrove habitats and other ecologically important and significant areas are present within port limit.
6.	The dredging material shall be disposed of at the location already approved by the Ministry of Environment and Forests, Government of India.	Complied. As per communication from MoEF&CC dated 12 th November, 2003 bearing letter No.: J-16011/ 11/2003-IA-III conditions states "dumping of dredged spoils should be dumped at the sites A & C as per the following coordinates: - (A) 21°03' to 21°05' N & 72°28' to 72°30' E (C) 21°03' to 21°05' N & 72°30' to 72°32' E No disposal has been done till date. All the dredging material is being utilized for level rising, reclamation and apart from the above activity, if any excess material generated will be disposed of at the location already approved by the MoEF&CC.
7.	All the recommendations and suggestions given by M/s. NIO and Chola mandalam MS Risk Services Ltd, Chennai in their EIA reports for conservation / protection and betterment of environment shall be implemented strictly by M/s. AHPPL.	Complied. All the recommendations and suggestions for conservation/protection and betterment of environment are being implemented strictly. Recommendation given in EMP is being complied in letter and spirit. Status of the same is enclosed as <u>Annexure-3</u> .
8.	The construction and operational activities shall be carried out in such a way that there is no negative impact on mangroves, if any and other important coastal / marine / habitats. The construction activities shall be carried out only under the guidance / supervision of reputed institute / organization.	Complied. There are no mangroves and other important coastal / marine / habitats presents within the port area. The Port development work is supervised by Gujarat Maritime Board (GMB).
9.	M/s. AHPPL shall strictly ensure that no creeks or rivers are blocked due to	Complied. All the activities are carried out as per EC &

S. No.	Conditions	Compliance Status
	any activity at Shipyard.	CRZ clearance and no creeks are blocked due to development activities. Shipyard is not envisaged in our proposal.
10.	The construction debris and / or any other type of waste shall not be disposed of into the sea, creek or in CRZ areas. The debris shall be removed from construction site immediately after the construction is over.	Complied with, Construction debris removed from construction site immediately after completion of the construction work.
11.	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by construction labours.	Complied. No labour camps are located in Coastal Regulation Zone area. Labours are managed through contractors and they are from surrounding villages and have been provided residential facilities in the surrounding villages.
12.	M/s. AHPPL shall prepare and regularly update their Local Oil Spill Contingency and Disaster Management Plan in consonance with National Oil Spill and Disaster Contingency Plan and shall submit the same to this department after having it vetted through Indian Coast Guard.	Complied. <ul style="list-style-type: none"> Oil Spill Contingency Plan has been prepared and the same was approved/ vetted by Indian Coast Guard (Letter No.: 7563, dated 09.01.2014). Disaster Management Plan has been prepared prior to the commissioning of multi cargo port. DMP has been submitted to GSDMA vide letter dated 20.10.2012. Comments were received from authority vide letter no. GSDMA /SM / Ind.safety/ 770560 dated 03.12.2012. Suggestions were incorporated and revised plan was submitted to GSDMA on 23.05.2014. Regular mock drill to ensure the compliance and preparedness is being done. <p>Last Mock Drill (On Site) was on : 11.09.2018 Last Update of ERP & DMP : 10.05.2018 Last submission to Directorate Industrial Safety & Health (DISH) on 31.07.2018</p>
13.	M/s. AHPPL shall bear the cost of external agency that may be appointed by this department for supervision / monitoring of proposed activities and the environment impact of the proposed activities.	Noted and agreeing to bear the cost of external agency, if any that may be appointed by this department.
14.	The jetty and most of the approach would be supported on piles allowing adequate flow of water without significant obstruction.	Complied. Jetty approach is supported by piles allowing adequate flow of water.
15.	The ground water shall not be tapped within the CRZ areas by the AHPPL to meet with the water requirements in any case.	Complied with. Ground water is not being used for any purpose in the Port. The drinking water requirement is being met through tanker

S. No.	Conditions	Compliance Status
		water. 2000KI of treated waste water from M/s. KRIBHCO is used for industrial purposes.
16.	M/s. AHPPL shall take up massive greenbelt development activities in consultation with Forest Dept. / GEER Foundation / Gujarat Ecology Commission. A comprehensive plan for this purpose has to be submitted to the Forests and Environment Department.	Complied with. Company has set up dedicated green belt area for plantation at periphery / avenue plantation / landscaping etc. Total greenbelt area developed so far is approx. 69.80 ha within the port premises.
17.	Mangrove plantation in 200 Ha. shall be carried out in consultation with Gujarat Ecology Commission / Forest Dept. by M/s. AHPPL with in a period of two years from the issuance of CRZ clearance by MoEF, Gol and an action plan in this regard shall be submitted to this Department along with satellite images and GPS readings with Latitudes and Longitudes.	Complied with. Company has carried out mangrove afforestation in an area of 200 hectares i.e.: 20 hectares in Kantiyajal and 180 hectares in Village Nada-Devla of District - Bharuch and same is completed. Consolidated report on mangrove plantation on an area of 200 hectares at Village: Kantiyajal, Taluka: Hansot and Village: Nada-Devla, Taluka: Jambusar, District: Bharuch (Gujarat) developed by M/s. SAVE Limited, Ahmedabad. Supporting documents of the same submitted to MoEF & CC and other authorities along with the six monthly compliance report dated 20.11.2017.
18.	The AHPPL shall have to take up bio-shielding development programme as part of CSR in consultation with Forest Department / PCCF and action plan in this regard shall have to be submitted to the MoEF - Gol and this Department.	Complied with. <ul style="list-style-type: none"> Communication has been initiated with PCCF, Forest Dept., GoG vide our letter 29th May, 2012 and District Forest Officer, Surat Forest Range vide our letter dated 05th May, 2014. AHPPL has initiated the development of Bio-Shield Pilot Project at Village - Tankari Bandar, Taluka - Jambusar, District - Bharuch (Gujarat) on an area of 18 hectares with the help of local NGO.
19.	M/s. AHPPL shall have to contribute financially for taking up the socio-economic upliftment activities in this region in consultation with Forest and Environment Dept. and the District Collector / District Development Officer.	Complied with. CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development. Appropriate financial contribution is being made. Schemes promoted by District Authorities and Forest & Environment Department, GoG are also included. Please refer the Annexure-2 for the status of the CSR activities planned during the Financial Year: 2018-19.
20.	A separate budget shall be earmarked for environment management and socio-economic activities including green belt development / mangrove plantation and details thereof shall be furnished to this Department as well as the MoEF, Gol. The details with	Complied with. <ul style="list-style-type: none"> Environmental Management Plan is in place and the funds earmarked are being utilized for effective implementation of environmental safeguards and environment monitoring. Key components are Environment monitoring, Mangrove

S. No.	Conditions	Compliance Status
	respect to the expenditure from this budget head shall also be furnished along with the compliance report.	<p>plantation, environmental studies etc.</p> <ul style="list-style-type: none"> • Please refer the <u>Annexure-6</u> for details of budget for Environment Management for the FY: 2018-19. • CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development. • Please refer the <u>Annexure-2</u> for the status of the CSR activities planned during the Financial Year: 2018-19.
21.	A separate Environment Management Cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	<p>Complied.</p> <ul style="list-style-type: none"> • Environment Management Cell has been set up with qualified staff to ensure the effective implementation of environmental safe guards. • In addition to the site Environment Management Cell a well-established corporate environment cell also ensures effective implementation of the environmental safeguards. • Please refer the <u>Annexure-5</u> for Environment Management Cell Organogram.
22.	Environment Audit Report including the changes, if any, with respect to baseline environmental quality in the coastal and marine environment shall be submitted every year by M/s. AHPPL to this Department as well as MoEF, Gol.	<p>Complied.</p> <ul style="list-style-type: none"> • Regular Environmental Monitoring/ Analysis are being done through M/s. Pollucon Laboratories, Surat (a MoEF&CC and NABL accredited laboratory) and others concerned authorities along with Six Monthly Compliance Report. • No significant changes observed with respect to past monitoring results.
23.	A six monthly report on compliance of the conditions mentioned in this letter shall have to be furnished by M/s. AHPPL on a regular basis to this Department as well as MoEF, Gol.	<p>Noted and complied with.</p> <ul style="list-style-type: none"> • Six monthly compliance reports are being submitted to all the concerned authorities on regular basis. • Last two reports were submitted vide letter dated 20.11.2017 and 23.05.2018
24.	Any other condition that may be stipulated by this Department / MoEF, Gol from time to time for environment protection / management purpose shall have to be complied with by M/s. AHPPL.	<p>Noted and comply with the additional conditions stipulated by the MoEF & CC, if any.</p>



Adani Hazira Port Private Limited

**From : Apr., 2018
To : Sept., 2018**

ANNEXURE-1:

**ACTION PLAN AND COMPLIANCE STATUS ON THE ISSUES RAISED DURING THE PUBLIC
HEARING**

Annexure-1: Action plan and compliance status on the issues raised during the public hearing:

S. No	Name	Details of Representation	Response during PH	Status as on 30.09.2018
1	Rohitbhai Jayantibhai Patel, Sarpanch, Hazira	<p>On behalf of Hazira village, I welcome the expansion project of M/s. Adani Hazira Port Pvt. Ltd. at Hazira. Priority will be given to thousands of people of Hazira and surrounding villages for transport, business and employment opportunities. Company has provided training to the people of Hazira and surrounding villages for crane operation at Mundra and given employment as crane operator at Hazira Port.</p> <p>I believe that company will install latest technology for pollution control. Proposed project will surely care for human life. Due to proposed port Hazira people will surely get water, health and education facilities. I request that company would take required precautions for accident prevention and safety. Adani Foundation has provided required support as and when needed by Hazira village. I request that fishermen's concerns be taken care.</p> <p>I welcome this port as we are getting transport related business opportunities and we hope that same would be continued in future.</p> <p>Please clarify how much priority will be given to people from Hazira and surrounding areas for employment.</p> <p>Forest land is also requested for development of port at Hazira. So kindly clarify for compensation/afforestation.</p> <p>Please clarify what arrangements have been made by company if calamities like Tsunami, Earthquake or Flood arise after implementation of the proposed</p>	<ul style="list-style-type: none"> • Rohitbhai, we are happy to note that on behalf of Hazira gram panchayat you have given warm welcome for this project. We whole heartedly thank you for this gesture. We assure you that our Conduct and Approach in managing activities would be in reciprocation to your welcome. • National Highway -6 is being widened. On completion the constriction and congestion that we see today will be behind us. As mentioned in the EIA in the first 5 years of the multi cargo port maximum number of 1200 trucks is expected to ply in the national highway connecting the port. After the railway line is developed and the trains start plying 60% of the transportation load will be conveyed through rail transport only 40% will come on 	<ul style="list-style-type: none"> • Closed. Point is about welcoming the project and does not warrant any further action. • Widening of the National Highway - 6 is completed. Currently there is no traffic congestion on National Highway - 6. Railway line for transport of cargo is yet to be developed.

		project.	the national highway. That is a moderate load.	
2.	Dharmendra bhai Bhikhubhai Patel, Ex-deputy Sarpanch, Hazira	<p>We welcome this public hearing. It is good that you are giving preference to local affected people and hearing them during public hearing. We don't have any objection against the development of Adani Group along with other industrial development in Hazira leading to development of Gujarat and the Nation. Adani company is complying with the environmental laws promulgated by the State and Union Government. In fact, it is duty of Adani Port to do so. Under their CSR activities Adani Group should provide support for development of Hazira village and employment to unemployed people. All transport businesses should be given to small & big local transporters of Hazira only. Youth from families of affected fishermen should be provided required training and employment. New transport route should be proposed as the present route to take containers is very narrow.</p> <p>We thank Adani Group for giving support for the construction of classrooms for standard 11 & 12 in Navchetan school.</p> <p>I thank you for making me successful in providing compensation to the affected fishermen.</p> <p>I request for employment to locals people and transport contract to local transporters only. We support the development of Adani Port in our area. We don't have any objection to the project in this public hearing.</p>	<p>• This port will have focus on container cargo. Container cargo comes in boxes and is clean by nature. So the question of fugitive dust emission on the road is not expected to be severe for this port.</p> <p>• The coal handling will be done taking care that all the trucks are properly covered so that there is no dust emitted on the road. As you know practically all our transporters are from this area. It is their responsibility to take care of overloading. If transporters do</p>	<p>• Closed. Major cargo handled at the port is container and liquid which do not increase the fugitive dust. AHPPL is monitoring ambient air quality at five locations in and around project through a NABL accredited and MoEF recognized laboratory M/s Pollucon laboratories, Surat. Report confirms that ambient air quality is well within the NAAQS. Copy of the reports are enclosed as Annexure – 4A</p> <p>• Complying with.</p> <p>All the trucks carrying coal and other dusty cargo are being covered through tarpaulin. AHPPL also ensures that no truck goes out of the port with overload.</p>
3	Bhagubhai Maniram	As this is biggest port in the South Gujarat and as there is no		

	<p>Patel, Sarpanch, Junagam</p>	<p>government land left, we wish that there will not be resettlement of the Junagam village due to this proposed expansion project of Adani Port.</p> <p>There is a fear in the people of the village that they will have to vacate the village in future. So we request collector to give us guarantee in writing that we will be able to live with peace where we are today.</p> <p>Berths will be developed through dredging up to -15 meters. We are getting ground water from the depth of 20 to 65 ft in some of the areas, which we are using for drinking purpose. What will be the impact on the ground water due to dredging upto -15 meters?</p> <p>After construction of liquid berth No.3 which will handle & store 1.95 Million Tones by 2017-18, what emergency steps would be required to save the human life incase just like Bhopal if there will be gas leakage due to Tsunami, Earthquake or terrorist activities.</p> <p>We welcome Adani Port & they require land for the container and coal storage. However, all industries located in the Hazira area have acquired government land and another 2000 acre land is allotted to tourism department. Sir therefore, I request you to declare remaining land of Junagam, Suvali, Damka & Bhatlai as residential area or agricultural zone. This is to ensure that in future we will not be displaced. As the port is to be constructed at the coast line, there are chances of spillage of liquid into sea and impact of solid hazardous waste. In this condition explain plan to mitigate impact on fisher man community.</p>	<p>not overload, there would not be any spillage on the roads. It is not only responsibility of GPCB or the company but we all have to collectively work together for spillage free coal transportation.</p> <ul style="list-style-type: none"> • Junagam sarpanchshri expressed apprehension that we will take away government land and lands belonging to farmers in Junagam village. We want to assure you that we do not intend to take any private land of farmers or any house site land. If you carefully see the development plan we have just presented, the map will alleviate your uncalled fears. There would not be any question of rehabilitation of any village. Moreover, we will take care that your property. Your assets and convenience are not jeopardized by our action. • You talked about vultures; I would like to point out that there is no sanctuary or national park near 	<ul style="list-style-type: none"> • Closed. <p>There is no displacement of people, houses or fishermen as the port is being developed on reclamation land and land allotted by Government as there is no acquisition of private land.</p> <ul style="list-style-type: none"> • Closed. <p>There is no sanctuary or national park near by the</p>
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4	Alpeshkumar Thakor – Fisherman, Hazira.	<p>Plantation of the mangroves has been carried out between well numbers 4 to 7. This plantation has been destroyed by dredging and area is filled up.</p> <p>In this area fisherman used to catch prawns, crabs and sustain their livelihood. Through dredging company has destroyed Mangroves. There are approximately 2500 fishermen, belonging to Halpathi and Koli Patel communities living in the village. These people will be unemployed as fishing activity will be stopped due to dredging up to 20 meter by the company. Is it development or destruction?</p> <p>If fishermen get sand from the river by the boat in the Magdalla area, they have to pay royalty for the same. But why companies are given permission for dredging without royalty? What about approximately 2500 fishermen?</p>		
5	Babubhai Aahir (Sarpanch,	<p>As our friends have already given suggestion for safety and employment, it is not required to repeat the same. Foundation</p>	<ul style="list-style-type: none"> • In the context of natural calamities, 	<ul style="list-style-type: none"> • Complied. Regional DMP

	Suvali)	<p>should provide employment opportunity to the land looser, fisherman, individual engaged in animal husbandry who are above 50 years and uneducated.</p> <p>Unemployed youth of this area should be provided training and given opportunity for the employment. Company should control the pollution arising due to transportation of chemical or coal. Earlier "Shell" company used to avoid overloading. So Adani Port should also not do the overloading to prevent the accidents. There is no medical facility available for treatment in case of emergency. As there is drought this year, company should consider providing drinking water in surrounding area.</p>	<p>we have done modeling studies to understand the risk of oil spillage. We have also prepared Disaster Management Plan. This plan is being presented to the District Collector. After his approval it will go to State Disaster Management Authority at Gandhinagar for necessary approval and guidance. During natural calamities all local industrial units and government organizations work together to mitigate impacts of natural calamities. In that situation we would work under the guidance of District Collector and police authorities to do the needful. Disaster Management Plan is structured in such a way.</p>	<p>for the Hazira Peninsula, covering all major industries and the port has been prepared in consultation with District Authorities and same is being implemented.</p> <p>Oil Spill Contingency Plan has been prepared and the same was approved/ vetted by Indian Coast Guard (Letter No.: 7563, dated 09.01.2014).</p> <p>In addition, AHPPL has developed and implemented ER & DMP. Regular mock drill to ensure the compliance and preparedness is being done.</p> <p>Last Mock Drill (On Site) was on : 11.09.2018 Last Update of ERP & DMP : 10.05.2018 Last submission to Directorate Industrial Safety & Health (DISH) on 31.07.2018</p>
6	Divyeshbhai, Hazira	<p><i>(During the representation of the Shri. Divyeshbhai</i></p> <p><i>there was a aggressive representation of Shri. Jayesh Patel resident of village Dihe, that he wants to present his questions.</i></p> <p><i>Honourable Collector replied that resident or stakeholders from affected villages should represent first. During this time Shri. Jayesh Patel and other people created disturbance which was controlled by Panel and then representation from Mr. Divyeshbhai continued.)</i></p> <p>Why this public hearing is kept at Junagam even it is of Hazira Village? Now we will talk about the pollution. Lots of dust is observed in the houses of the hazira village during the night hours. As per information particles of dust have been found in the lungs of the woman. If this information proves to be true we will file a pitition in the High Court. During the widening of the National Highway No. 6 land in the surroundings villages will be taken. As National Highway is not passing through</p>	<p>• In regard to impact on fisherman, I want to point out the real situation that we are not in the river mouth, but just outside of it. The port development is only in a stretch of</p>	

		<p>Hazira, the villagers need to travel 8 Kilometres extra. Why it is not extended straight? Fishermen are being told that there is no fish in the sea but slags are cast in the corners of the sea due to which some fish die. Dolphin is also found at present in the Hazira area. We welcome the project if the port company is ready to give written assurance regarding employment.</p>	<p>4 km of coast line. We have not displaced any fisherman. The surrounding areas are open for fishing, nevertheless we have compensated fisherman who were identified by the Grampanchayat to be active in the areas where we are now operating. As Susmaben mentioned we will support fisherman by giving them tools, nets etc. and be helpful to them.</p>	
7	<p>Jayeshbhai Patel, Resident of Dihen village and President, Gujarat State Farmers Samaj</p>	<p>I raise my objections against proposed expansion project of AHPPL for which public hearing is organized and I request that my objections should be included.</p> <p>M/s. Shell India has got environmental clearance in 2003 in which clearance was given for development of three berths. These berths are constructed at places other than shown earlier. So I request collector to remove these three berths.</p> <p>Out of proposed 7 berths for container and 4 for bulk terminal, 3 have been already constructed and port is functional. In this situation, I request to include in this public hearing what actions have been taken by collector against Adani for functioning of port & disposal of coal in Hazira and what actions have been taken by GPCB against company for disposal of coal in open.</p> <p>This project is being developed on the mouth of river Tapi therefore it is my feeling and request that it should not be given Environmental Clearance.</p> <p>EIA study does not include the objections of the report of Sugnyaben Bhatt Commission which was set up by Gujarat Government in 2006 in the</p>	<p>(At this stage Shri Sheikh and Shri Jayeshbhai started shouting & disturbing the clarification of the project proponent. The chairperson told them repeatedly not to disturb the proceedings)</p> <ul style="list-style-type: none"> • We would help sons and daughters of fisherman to educate them and trained. We would do everything practicable to achieve this end. 	<ul style="list-style-type: none"> • Closed. <p>CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development.</p> <p>Appropriate financial contribution is</p>

		<p>aftermath of Surat flood. So it is my request that this public hearing and Environmental Clearance should be cancelled.</p> <p>Hazira is located on the mouth of Mindhola & Tapi river. As per ICMAM report of Tapi river, erosion effect had spread up to Dumas because of filling of Tapi river due to Industrialization in this area. Erosion of shore is up to 2500 meter towards Dumas.</p> <p>ICMAM report is not studied. There is no clarity on what steps are required to control the erosion of shore near Dumas, so it is my request that it should not be given Environment Clearance.</p> <p>This area is declared reserved for vultures. As per survey there are about 150 vultures in the forest area. This report does not include what would happen to vultures, where they would go and what would be impact on Environment. So it is my request that it should not be given Environmental Clearance.</p> <p>There are approximately 2500-3000 fishermen families. There will be crisis for their livelihood.</p> <p>There is no clarity for rehabilitation and resettlement from Adani. So it is my feeling and request that it should not be given Environmental Clearance.</p> <p>Routes to sea are almost closed specifically for "Pagadia fishermen", who do fishing on foot. There is a big problem of their livelihood. Due to loss of fishing activities now they will not get thousands of crores of rupees which they were supposed to get due to fishing activities. Rs. 15 lacs is not sufficient compensation for that.</p> <p>This area comes under CRZ-IA. Specific fish called "Levta" grows in the mudflat and fishermen catch that fish in this mud and earn their livelihood. Due to excavation and</p>	<p>being made. Schemes promoted by District Authorities and Forest & Environment Department, GoG are also included. Please refer the <u>Annexure-2</u> for the status of the CSR activities planned during the Financial Year: 2018-19.</p> <ul style="list-style-type: none"> • We are developing the port by reclamation. This cannot any way cause salinity ingress in the ground water. We are going to investigate the quality of ground water every year • Complied Proper care is being taken during construction activity to avoid salinity ingress and any degradation of water quality. M/s. AHPPL is monitoring the Ground Water Quality at one location on monthly basis. Results show no significant change in the quality. Ground water quality is being monitored through M/s. Pollucon Laboratories, Surat (a MoEF&CC recognized and NABL accredited laboratory). <p>Please refer the <u>Annexure-4B</u> for the Environmental</p>
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		<p>reclamation there will be damage to biological mud and destruction of marine ecology. EIA report does not have clarity on what actions are required. So it is my feeling and request that it should be clarified in EIA report or not be given Environmental Clearance.</p> <p>Before Adani came there was mangrove forest in the area of 40 ha. As per survey today mangroves survive in the area of 15 ha only. Due to destruction of mangrove there will be damage to environment and coastal erosion. This study is not covered in EIA so it is my feeling and request that it should not be given Environmental Clearance.</p> <p>Five ports from 15 different companies and two big ports within 5 Km are coming in this area. The cumulative impact on road & rail transport due to operation of both ports Adani & Essar is not studied while preparing the impacts on land environment. Six-lane-road is also not going to be sufficient for this. So I request that Environment clearance should be given only after doing cumulative study.</p> <p>As reported, level of Suspended Solids & Petroleum Hydrocarbon is high as compared to desired levels in water. Level of pollution in the areas of water, air and land is already high as compared to other locations in the country. EIA report does not have clarity on what steps will be taken to bring down the pollution. So it is my feeling and request that it should not be given Environmental Clearance.</p> <p><i>(It is to be noted that Mr. Jayeshbhai Patel belongs to "Diheh village" which is approximately 18 Km away from the port site)</i></p>	<ul style="list-style-type: none"> Our EIA has been done by M/s. Cholamandlam MS Risk Service Limited and M/s. National Institute of Oceanography. These are well respected and neutral expert organizations a head quartered outside Gujarat. Their studies have been accepted by Gujarat Coastal Zone Management Authority. Thus we want to work with you and be helpful to you. <p><i>(At this stage some of the individuals asked clarification for employment in the company. Collector Shri directed the company representative to answer it, and advised audience to listen to the representative peacefully.)</i></p> <ul style="list-style-type: none"> The port has opportunities for both technical and non-technical employment. Moreover indirect employment in transport and other services will also be there. All 	<p>Monitoring / Analysis Reports for the period Apr., 18 to Sept., 18.</p> <ul style="list-style-type: none"> Complied. <p>CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development. Please refer the <u>Annexure-2</u> for the status of the CSR activities planned during the Financial Year: 2018-19.</p> <ul style="list-style-type: none"> Closed <p>Point does not warrant any further action.</p> <ul style="list-style-type: none"> Complied. <p>AHPPL has always given employment priority to local qualified persons and in future the same will be continued. As on As on 30th</p>
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8	Dhansukhbhai Patel, President Hazira Coastal Area	<p>Employment is given to 30-35 people in the form of contract but we insist that it should be permanent in nature.</p> <p>For this liquid cargo transport, it will be storage of chemicals or processing of chemicals? If it is chemical processing then hazard will increase, so I request to provide information on what measures Adani will take for health and safety?</p> <p>Please provide information if this project has got any clearance from Central Government like what they have got from State Government.</p> <p>Adani has declared only 4-5 villages as affected. Will there not be any impact on Mora, Kawas or Interior of Ichhapur while trucks pass through them?</p> <p>There are 10-12 big companies in this area and they have developed residential township with all facilities for their employees. Is it not possible that each company will take one village from 10-12 villages and also provide them same facilities?</p> <p>For this, MOU is necessary and matters related to self-employment & development of village should be mentioned. We will be benefited in future; only if there will be MOU.</p> <p><i>(It is to be noted that Mr. Dhansukhbhai Patel belongs to Kawas village which does not fall within 10 Km radius of the study area)</i></p>	<p>these opportunities may be taken by local residents. To facilitate them to take this opportunity we will provide necessary training to enhance their competence, so that they may not only get employment in Adani port but else were also.</p> <p><i>(At this stage Jayeshbhai and other peoples repeatedly disturbed the hearing and stopped the company representative to elaborate further. Collector repeatedly asked all concerned to maintain calm and listen to the company representative. All major points being over collector concluded the public hearing.)</i></p>	<p>Sep., 2018 total 183 out of 211 On roll employees are from Gujarat.</p>
9	Kamlaben Rohitbhai Patel, Choryasi Taluka Panchayat, Leader of opposition party	<p>I welcome the expansion project of Adani company. Due to proposed port priority would be given to Hazira and surrounding area for employment and business. I request that fishermen's concerned would be taken care by this project. Adani Foundation of Adani Company has given commitment for the</p>		

		<p>various activities for the development of village. So I welcome the project and declare my support for the Port of Adani Company at Hazira.</p>		
10	<p>Mohanbhai Ambubhai Patel,</p> <p>Village: Vaswa</p>	<p><i>(Collector informed Mohanbhai to raise those issues only, which were not raised earlier)</i></p> <p>Adani Company has told that 700 people will be employed. Please clarify whether it will be permanent or contractual basis? Thousands of people are working on contractual basis in the surrounding companies but nobody gets permanent employment.</p> <p><i>(Then Regional Officer, GPCB again informed the concerned persons to raise other issues if any. The employment issue will be addressed by the company.)</i></p> <p>As per survey carried out by NIO out of 1600 km of Gujarat coast nearly 25% is already filled due to construction of ports at other places. As a consequence of this, there will be huge damage to agriculture in the surrounding area and there would also be ingress of sea water in the area.</p> <p>Adani Company has decided to pay compensation of Rs. 15 lacs to 40 fishermen but what arrangement company will make for the 4000 fishermen in the surrounding villages?</p> <p>Adani Company is developing their project on 31428 ha of land. Is this land private or government? If it is on private land then whole Junagam village would be vacated. Survey numbers are also not shown for this land.</p> <p><i>(It is to be noted that Mr. Mohanbhai Patel belongs to Vanswa village which does not fall within 10 Km radius of the study area)</i></p>		

11	Jayantibhai Khalasi President, Fish Progress Union, Hazira	<p>You all will go away after this public hearing but whom should we contact regarding pollution in our area?</p> <p><i>(Then Collector informed him that regarding pollution he may contact GPCB.</i></p> <p><i>Regional Officer, GPCB also informed him that regarding pollution he can submit in writing.)</i></p>		
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Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-2:

DETAILS OF THE CSR ACTIVITIES CARRIED OUT DURING THE FINANCIAL YEAR: 2018-19

**DETAILS OF THE CSR ACTIVITIES CARRIED OUT DURING THE FINANCIAL YEAR:
2018-19**

Annexure-2: Details of CSR Activities Carried Out By Adani Foundation, Hazira (CSR Wing) for M/s. Adani Hazira Port Pvt. Ltd. During Financial Year: 2018-19 (till Sept 30, 2018)

Adani Foundation is an intrinsic part of Adani Group's efforts towards Corporate Social Responsibility. Since its inception in 1996, the Foundation has been working in four core areas of Education, Community Health, Sustainable Livelihood Development and Rural Infrastructure Development to empower communities. Working closely with the communities, we have been able to assume the role of a facilitator by creating an enabling environment for numerous families. Adani Foundation is currently operational in 13 states, at 20 locations, 1470 villages and towns touching lives of more than 5 lakhs families by empowering our communities towards nurturing the dreams of a New India.

Adani Hazira Port Pvt. Ltd. through Adani Foundation has undertaken below CSR activities in 2018-19 (Till Sept 2018)

❖ **Education:**

Adani Foundation believes that Education is the stepping stone to improve the quality of life, especially for the needy and the most vulnerable. The main objective behind the educational initiatives is to provide 'quality' education with a unique learning experience to young minds. With an objective to provide the quality education to the children and youth of the region, the company has contributed substantial amount of resources in its education programs. Adani Foundation is doing following activities in Hazira region in the field of education.

1. VaGaLe Utsav:

With the objective of increasing enrollment and retention of the students, bridging the gaps in the existing education system and promoting girl child education Adani Foundation designed and launched "VaGaLe Utsav" program. The aim of the program is to enable children strengthen their basic skill of learning – Reading, basic Mathematics and Writing by following the Praygna approach of teaching. The program was launched in the lower primary schools in the Hazira region of Gujarat and more than 1350 students of 10 schools from 8 villages are benefitting from this. The foundation achieved this by encouraging community participation, increasing teachers' effectiveness and improving the school environment.

2. Support to Govt. schools:

"Praveshotsav" program is conducted with the sole objective to encourage parents to enroll their children in schools and to promote girl child education. Under the program the foundation provided 400 school bags equipped with all the basic stationary material. These education kits were distributed to all the newly enrolled students in 21 schools from 15 villages of Choryasi taluka of Hazira.

3. **Navchetan Vidyalaya:**

The aim of the Navchetan Vidyalaya (situated at Junagam in Hazira – Gujarat) is to provide subsidized high-quality education to the children from nearby rural areas. To promote education amongst the regional populace, the school provides free food and academic material support such as uniforms, notebooks, workbooks, textbooks and stationery to the students. The school is well-equipped with smart classrooms and laboratories and houses all facilities required for holistic development of its students. The school offers activity based education from class 3rd to 8th and has a total strength of 381 students in 2018-19, out of which more than 50% are girls.

4. **Project UDAAN:**

Project Udaan, an inspirational exposure tour has benefitted 2202 students in current FY and teachers from 44 schools and colleges from the nearby area this year. The company supported project Udaan at Hazira location. These visits help students to understand the functioning of these businesses and specifically the role of ports in trade and economic growth of the country. The visits are aimed to facilitate young minds to get inspired so that they could become entrepreneurs, innovators and achievers of tomorrow. From inception till date, more than 2.5 lakh students have visited our business locations across India.

5. **Remedial coaching classes for the needy students:** We are also started remedial coaching classes for tribal areas students from this year. This activity is benefiting to more than 250 students of tribal communities.

❖ **Community Health:**

The Company firmly believe that improving the health of its citizens can directly result in economic growth of the nation. Healthy people can utilise growth opportunities made available to them in a better way. Adani Foundation have committed itself to raising the standards of and strengthening healthcare systems in and around our operational locations in India to ensure healthy lives and promote well-being at all ages in alignment with Sustainable Development Goals of the UN. In Hazira region, we are doing following activities in the areas of Community Health.

1. **De-addiction Programme:**

Taking the need into consideration, Adani Hazira Port Pvt. Ltd. supported a de-addiction campaign, which was organized for the people of the surrounding villages of Hazira - Gujarat. This programme started with general awareness campaigns about the life hazards of any kind of addictions. Posters with very strong appeal and messages were displayed in schools, colleges and community places. As a result of this campaign, a lot of people suffering from addictions came forward for their treatment and rehabilitation. Such cases were referred to the partner healthcare centre and the entire treatment cost is being bear by company. We have supported for 11 cases during FY18-19 and total more than 50 cases till date in the region.

2. Health Camps:

Adani Foundation regularly conducts various general and specialised medical camps for the benefit of local communities in and around its operational locations. Health camps were organized in villages of Hazira where services of gynaecologists, orthopaedic surgeons, heart specialists, skin specialists, paediatricians, ophthalmologist, ENT surgeons were provided to the community members at no cost. Till Sept-2018 we have arranged 6 health camps and 522 villagers from the nearby villages attended and received treatment in these camps. Free of cost follow-up services were also made available and referrals were provided in cases requiring surgery.

3. Project SuPoshan:

SuPoshan is being implemented in the region for curbing malnutrition and anaemia, a common issue amongst children, adolescent girls and women of our country. SuPoshan Sanganis, village level health workers, take lead for implementing community based life cycle approach with a focus on behavioural change communication. Apart from spreading awareness regarding malnutrition amongst children, adolescent girls and women in Hazira – Gujarat, our SuPoshan Sanginis conducted more than 1500 Anthropometric Measurements and more than 1600 HB screenings. Also conducted more than 700 focus group discussions and conducted 6 village level events. During the period 2 cases have converted from SAM and MAM and 4 cases from MAM to Healthy. Also 10 cases have come out from anaemia mild to no anaemia category.

❖ Sustainable Livelihood Development:

Empowering people through sustainable livelihoods helps them to transform their lives and contribute to the growth of the nation. Adani Foundation aims at holistic growth and development of the marginalized sections of the society by providing necessary skill development training and alternative livelihood opportunities, hence reducing poverty and inequality.

1. Animal Husbandry & other allied activities:

Cattles are an important source of income for the community members in rural villages. Most of the families in the villages in and around Hazira keep cows and buffaloes for milk as well as for manure. Majority of the animals in the area had low productivity due to non-descript maintenance and upkeep. Animal Husbandry project was started with an objective of improving the breed of these animals through Artificial Insemination. A special cattle development center was introduced for a cluster of about 17 villages falling within a radius of 25 kms. This center provides services of Artificial Insemination (breeding) at the door steps of cattle owners. During the current FY18-19, more than 450 families have got benefits of our various activities under Animal Husbandry project.

2. Women Self Help Groups:

The foundation has been striving to revive and nurture women self-help groups (SHGs) in villages in and around Hazira - Gujarat. These groups are voluntarily formed basis their areas of common interests. These SHGs function on the basis of

co-operative principles and provide a forum for members to extend their support to each other for a common cause of self-empowerment. Total 14 SHGs have been formed in the region and it includes 124 members. We are conducting various game events to motivate and to engage them in such kind of activities. These groups have started savings from their expenditure for running household.

Six widows from Junagam under the aegis of Jan Sahyog Sakhi Mandal took initiative to run "Upahar"- a meal service for truck drivers at AHPPL. This SHG later expanded to run a canteen at Adani House catering to our workers. These women were provided training and hand holding by the foundation, for planning, budgeting and risk management just like any other profitable enterprise. The SHG is now catering to more than 100 truckers on a daily basis. This experiment has created a win-win situation for all, as truckers get home cooked nutritious food and each associated women earn around Rs. 6500 per month.

❖ **Rural Infrastructure Development:**

Quality rural infrastructure bears a direct influence on living standard and the development of the rural population. Lack of it may push the rural populace towards poverty and deprivation. At Adani Foundation, we have committed ourselves to building sustainable rural infrastructure to overcome developmental challenges at the rural area keeping national goals in view. We are committed to making a long-term investment in rural infrastructure development as it will connect its dream with the progress of the nation. With the support of Adani Hazira Port Pvt. Ltd, Adani Foundation has worked towards improving the need-based Infrastructure in the Rural Areas for betterment of the under-privileged people of Hazira, Gujarat.

In the year 2018-19 till Sept 2018, Adani Foundation started construction of Girls Hostel at Mandvi in Surat District, providing paver block around community hall in village – Junagam, providing fencing around common areas of village – Junagam, providing LED lights in village Damka and initiated preliminary activities for construction of other planned projects during FY 2018-19.

❖ **Project Swachhagrah:**

We have recently launched project "Swachhagrah – Swachhta ka Satyagrah" in entire Choryashi Taluka of Surat District to create a culture of cleanliness in the society. We have covered more than 120 Govt. and Private schools under this programme.

ANNEXURE-3:

**COMPLIANCE STATUS OF ENVIRONMENTAL MANAGEMENT PLAN AS PER INTEGRATED EIA
REPORT, SEPTEMBER, 2012**

Annexure-3: Compliance Status of EMP as mentioned in the Integrated EIA Report, Sep., 2012:

S. No.	EMP Conditions	Compliance Status
I.	AS PER TERRESTRIAL ENVIRONMENTAL IMPACT ASSESSMENT REPORT: -	
A	CONSTRUCTION PHASE:-	
1.	Dredged Soils Management Plan: AHPPL has been permitted to dredge about 37 million cubic meter of soil, which shall be reused for backfilling in the project site. The dredged soil samples will be collected and analysed periodically for designated pollutants as per the recommendations of statutory authorities.	Complied. No disposal has been done till date. All the dredging material is being utilized for level raising, reclamation. Complied with. If any excess material generated will be disposed of at the location already approved by the MoEF&CC.
2.	Air Quality Management: Fugitive dust will be generated during construction phase of the project due to handling of wet dredged and excavated soils. Dust control program will be implemented to reduce the dust generation during construction at project site. Water sprinkling will be adopted on haulage roads and construction site.	Complying with. Water sprinkling is being done on haulage roads and construction site on regular basis.
3.	Noise Control Programs: 1. Onsite fabrication activities should be undertaken at a designated location, which should be located away from the office buildings and any other working areas. 2. In case noise emissions from the fabrication activities exceed a level of 85 dB (A) at the fence-line of the fabrication yard, temporary noise barrier can be installed. 3. Portable diesel engine generators and diesel engine driven compressors, if any, should be covered with noise enclosures.	Comply with. Fabrication activities have been done at a designated location away from the office buildings and working areas. Complied with. Noise level was below 85 dB(A) during the fabrication. Currently no fabrication activities are going on. Complied. In-built noise enclosures are available in portable diesel engine generators and diesel engine driven compressors to reduce the noise level.
4.	Sewage Management Program: Sewage generated from the construction site will be treated in modular STP and shall be used for green belt development / landscaping after achieving prescribed standards by GPCB.	Complied with. Sewage generated from the construction site is being treated in STP and treated water is being used for greenbelt development.
5.	Solid and Hazardous Waste Management Program: The solid waste generated should be segregated and categorized under various rules such as HWM 2008, SWM 2000, the Batteries Rules 2001 including processing of used oil by authorized recyclers should be carried out by the rules and procedures prescribed by CPCB and also meet the requirements of GPCB.	Complied with. All the wastes are being segregate at source and handled as per applicable rules/ guidelines and disposed off through GPCB approved agency.
6.	Construction Phase Storm Water Runoff: It has been recommended to adopt soil stabilization plans and storm water sedimentation basins to control the silt before	Complied with. Separate storm water channels have been developed to discharge the storm water.

	discharging the storm water into sea.	
7. Sanitation:	The facilities presently available with the nearby villages will continued to be used during construction activities and no major sanitation problem is expected during construction period. The workers at the project site will be provided with proper sanitation arrangement.	Complied with. Proper sanitation arrangements are available for workers at project site.
B. OPERATION PHASE: -		
1. Air Quality Management:		
i. Cargo-Handling Equipment:	1. Retrofitting the old equipment to meet the vehicular emission standards. 2. All the vehicles and equipment will be certified with PUC norms shall be deployed.	Complied with. All the deployed vehicles and equipment are PUC certified.
ii. Standby Diesel Generators:	DG Sets will be operated on clean diesel fuel with sulphur content less than 0.5%. Minimum stack height of 30m will be provided to disperse the gases into the atmosphere as per the guidelines suggested by Central Pollution Control Board.	Complied with. DG Sets are being operated on clean diesel fuel with sulphur content less than 0.5% and provided the adequate stack height are being provided as per CPCB/GPCB norms to disperse the gases into the atmosphere.
iii. Fugitive Coal Dust Control Program:	The management of AHPPL has proposed to adopt the following fugitive coal dust control measures: - a. Dry Fog System - A new, proven and cost effective technique to control dust is "Dry Fog" system to suppress the dust from the air. The name fog is just what it implies small droplets of water injected into the air. Fogging works by releasing very small droplets of water into the air. Airborne dust particles adhere to the water droplet and agglomerate. If the fog is generated in the right way, by using pressurized water, the energy required can be very low between 2 to 3 kW for a system requiring hundreds of nozzles, e.g.: A large stockpile tripper conveyor - giving considerable operating cost savings when compared to other techniques, The sprinkler droplet sizes should be maintained less than 100 microns. b. Sprinklers: Once stockpiled, water can be sprayed on the stockpiles to keep them damped down. Swivelling sprinklers should be used along the lengths of the stockpile with caution, however, as the volume of water required can be significant, causing drainage and run-off treatment problems.	Complied. Following control measures are in place and effectively working at port to control fugitive dust: - 1. Transportation of coal from jetty to coal storage yard through 1.7 Km. long conveyor belt with hood. 2. Water sprinklers in to the coal yard, 3. Dust Suppression System / Spray Nozzles in Conveyor System and Discharge Chute, 4. Water spray through Water Browsers, 5. Water Mist Canon / Fog System, 6. Wind Brake Shield of 14 meters high and 1200 meters long, 7. Transportation of cargo from port to hinterland is being done through dumpers / trucks covered with tarpaulin, 8. Regular cleaning the roads through Road Sweeping Machines, and 9. Company has set up dedicated greenbelt area for plantation at periphery / avenue plantation / landscaping etc. Total greenbelt area developed so far is approx. 65.15 ha within the port premises.
2. Noise Control Program:	The following source noise control plans have been suggested: - ➤ Covering of sound intensive components	Complied. • All the sound intensive components (DG Set and

	<p>with insulation.</p> <ul style="list-style-type: none"> ➤ Using noise absorbing building materials if required for housing compressors and diesel generators etc. as per the guidelines suggested by Central Pollution Control Board. ➤ Adopting low noise driving (Eco-driving) ➤ Using silent exhaust pipes for major diesel engine vehicles and heavy trucks operated inside the port. ➤ Planting trees which act as barrier to arrest dispersion of noise levels. ➤ Using electricity powered equipment inside the port instead of diesel powered ones will be explored to the extent possible. 	<p>Compressor) are with acoustic enclosures.</p> <ul style="list-style-type: none"> • Green belt development is in progress. • All RTGs and Quay Cranes are electricity operated.
3.	<p>Waste Water Management:</p> <p>Port handling operations would generate wastewater from the following sources: -</p> <ol style="list-style-type: none"> 1. Ship ballast water, 2. Ship deck wastewater including sewage, 3. Rejects from desalination plant, 4. Workshop and vehicle maintenance shop wastewater, <ol style="list-style-type: none"> 1. Leachate from coal stock yard, 6. Floor cleaning and tank cleaning wastewater from the liquid tank farm, 7. Sewage from port facilities. The proposed wastewater treatment and reuse program has been presented hereunder: - <p>A variety of vessels use the waters within the port, including bulk coal ships, tugs and line boats. Discharges from bulk ships are not expected to occur within the port because these large ships normally have on-board storage and sewage treatment plants, allowing discharge of treated effluent at sea as per the provision of MARPOL.</p> <ul style="list-style-type: none"> ➤ Except monsoon, leachate from coal stock yard is not envisaged. However small quantities, if any, will be treated in the effluent treatment plant. Wastewater from vehicle work-shops will also be treated in the proposed onsite effluent treatment plant. ➤ As far as possible all chemical spills at liquid handling facilities will be treated with dry spill absorbing material and water will not be used. Spillage if any occurs will be treated in a dedicated onsite wastewater treatment plant, which consists of an oil removal unit, primary chemical treatment unit and biological treatment units followed by 	<p>Complied with.</p> <ul style="list-style-type: none"> - AHPPL is not accepting Ballast/ Sewage water from Ships. - Desalination plant not yet installed. - There is no effluent generation from workshop. Vehicle maintenance has not done in port premises. - There is no leachate from dump pond. - Tank cleaning wastewater is being treated into ETP. - Domestic waste water is being treated in the STP and then used for horticulture purpose within the port premises. <p>Complied. Dedicated coal dump pond is being provided to collect the runoff (if any) from coal yard and it is further reused for dust suppression purpose into coal yard.</p> <p>Complied with. Till date there is no spill occurred. If, spills occurred, spilled material/chemical will be treated into ETP and treated waste water will be reused in greenbelt development / plantation purpose.</p>

	<p>activated carbon unit. Biologically treated wastewater will be further treated in the central sewage treatment plant. Treated wastewater will be used for dust suppression and horticulture applications at the facility. No treated wastewater will be discharged outside the port facilities.</p>	
4.	<p>Storm Water Management Plan:</p> <ul style="list-style-type: none"> ➤ Storm water from the coal stockpile area will be passed through a series of sediment traps to remove the majority of the coal sediment before discharging into the natural drains. It has been proposed to construct a garland drain for all bulk storage facilities to avoid silting into the marine eco-system. ➤ All liquid storage tanks will be provided with dykes to avoid any cross contamination of storm water from chemical spills. Storm water drains shall be designed in order to avoid any flooding of the coal stock yard and liquid chemical tank farm areas. 	<p>Complied. Garland drain for all bulk storage facilities are provided to avoid silting into the marine eco-system. Storm water from the coal stockpile area is collected into dump ponds to remove the coal sediment.</p> <p>Complied. All liquid storage tanks are provided with dykes to avoid any cross contamination of storm water from chemical spills. Storm water drains are separate drains and effluents drains are separate.</p>
5.	<p>Solid and Hazardous Waste Management:</p> <ul style="list-style-type: none"> ➤ Solid wastes generated from the port handling facilities consist of packaging waste such as wood, paper/carton, steel scrap etc. ➤ All the hazardous wastes and solid wastes such as Oil containing cargo residue, Chemical containing cargo residue and sludge, contaminated cotton waste, spent exchange resin and ETP Sludge, etc. shall be segregated at source and stored at the earmarked area. ➤ Recyclable wastes will be collected and disposed to waste recycling vendors through certified recyclers wherever applicable. ➤ Hazardous wastes include contaminated chemical spills, spent dry adsorbing spill absorbing material used for large marine and onshore chemical spills, used lubricating oils and greases. The chemicals spill inventories and spent dry absorbing material will be stored in a dedicated onsite tank and will be disposed to authorized hazardous waste 	<p>Complied.</p> <ul style="list-style-type: none"> - Solid wastes generated during port development i.e.: construction & demolition wastes are reused for level rising of low lying area within the port premises. Kitchen/ Food, Horticulture/Garden wastes are being sent to Organic Waste Converter (OWC) to convert it into compost and reused as manure in greenbelt/plantation. - Packaging materials generated from the cargo handling i.e.: Wood, Paper/Carton, Steel Scrap, Plastic/Tarpaulin etc. are collected and sold out to recyclers. <p>Complied.</p> <p>All the wastes are segregated at source and stored at a dedicated Hazardous Waste storage shed/yard.</p> <p>Complied. Recyclable wastes is being collected and disposed of through CPCB/GPCB registered recyclers.</p> <p>Complied. Till date there is no spill occurred.</p>

	<p>incinerators.</p> <ul style="list-style-type: none"> ➤ Spent lube oils and greases will be disposed to authorized used oil recycling vendors. ➤ A dedicated and completely enclosed shed will be identified to store the hazardous wastes in order to avoid any cross contamination from storm water. ➤ All the waste should be segregated, collected, categorized as per the HWM Rules 2008, SWM Rules 2000 and Batteries Rules 2001 prescribed by CPCB under Environmental Protection Act, 1986. 	<p>Complied. Recyclable wastes is being collected and disposed of through CPCB/GPCB registered recyclers.</p> <p>Complied. All the wastes are stored at a dedicated hazardous waste storage shed/yard.</p> <p>Complied with. All the wastes are being segregate at source and handled as per applicable rules/guidelines.</p>
6.	<p>Greenbelt and Plantation:</p> <ul style="list-style-type: none"> ➤ AHPPL will develop thick green belt plantation in and around the proposed project facility covering 81.27 Ha. Efforts will be taken to increase the green cover in and around the project boundary using local species with a view to ameliorating project related disturbances and enhancing the ecological value of the area. Greenbelt would be developed as per the CPCB guidelines. ➤ A capital cost of Rs. 1.62 Crore and an annual recurring budget of Rs. 0.65 Crore will be earmarked for this purpose. 	<p>Complying with.</p> <p>Company has set up dedicated greenbelt area for plantation at periphery / avenue plantation / landscaping etc. Total greenbelt area developed so far is approx. 69.80 ha till Sept., 2018.</p> <p>Horticulture budget for FY 2018-19 is Rs. 139.65 Lakhs.</p>
7.	<p>Community Development Plan:</p> <p>AHPPL has identified focused areas for community development and implement developmental program. The identified activities under CSR program are as follows: -</p> <ol style="list-style-type: none"> 1. Infrastructure development for educational facilities like building of schools, computer rooms, multipurpose activity halls 2. Supporting education through distribution of stationary, scholarships, science kits, bicycles to children, conducting education camps, competitions. 3. Strengthening the community health by arranging health camps, AID awareness camps, providing financial support to senior citizens and poor people, building dispensaries and mobile dispensaries. 4. Improvement of rural sanitation by conducting mass awareness campaign, helping villagers for constructing and maintaining household toilets, school toilets. 5. Improvement in animal husbandry and agriculture by arranging camps for farmers and cattle owners, conducting programs to use new irrigation technologies, organic farming, and free fodder supply. 6. Organizing need based skill development program to women and youth for their empowerment. 7. Rural infrastructure development by 	<p>Complied.</p> <ul style="list-style-type: none"> • CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development. • Detail of the CSR activities along with budgetary provisions and progress are regularly submitted to MoEF & CC as part of six monthly compliance reports. • Please refer the Annexure-2 for the status of the CSR activities planned during the Financial Year: 2018-19.

	<p>construction of rainwater harvesting ponds, check dams, roads, bus stops, drainage systems, fish landing shed, solar street lamps.</p> <p>AHPPL has committed to spend about Rs. 8.21 Crore in the first five years of the operation towards various rural upliftment and community development programs and tentative budget has been presented in the below table - Budgeted Expenditure for CSR and Community Development Activities:-</p> <table border="1"> <thead> <tr> <th>S. No.</th><th>Descriptions</th><th>Budgeted Amount For 1st 5 year Period (Amount rupees in Crore)</th></tr> </thead> <tbody> <tr> <td>1</td><td>Education</td><td>2.29</td></tr> <tr> <td>2</td><td>Community Health</td><td>1.18</td></tr> <tr> <td>3</td><td>Sustainable Livelihood Activities</td><td>1.43</td></tr> <tr> <td>4</td><td>Rural Infrastructure Development</td><td>2.04</td></tr> <tr> <td>5</td><td>Entry Point Activities</td><td>1.27</td></tr> <tr> <td colspan="2">Total</td><td>8.21</td></tr> </tbody> </table>	S. No.	Descriptions	Budgeted Amount For 1 st 5 year Period (Amount rupees in Crore)	1	Education	2.29	2	Community Health	1.18	3	Sustainable Livelihood Activities	1.43	4	Rural Infrastructure Development	2.04	5	Entry Point Activities	1.27	Total		8.21	
S. No.	Descriptions	Budgeted Amount For 1 st 5 year Period (Amount rupees in Crore)																					
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3	Sustainable Livelihood Activities	1.43																					
4	Rural Infrastructure Development	2.04																					
5	Entry Point Activities	1.27																					
Total		8.21																					
II.	MARINE ENVIRONMENT MANAGEMENT PLAN:																						
A.	<p>CONSTRUCTION PHASE: -</p> <ul style="list-style-type: none"> ➤ The dredge spoil generated during capital dredging will be used for land reclamation for the port development and associated utilities. ➤ Unused dredged material will be disposed off at approved dump sites to the north of port area including dredged soil generated through maintenance dredging. ➤ Appropriate dredging methodology shall be adopted to control the generation of high levels of suspended solids. If the suspended solids concentration increases, the dredging operation should be stopped till the normal conditions are achieved. ➤ General clean up along the corridor used for construction related activities, adjacent intertidal areas, creeks etc. should be undertaken and all the discarded materials must be removed from the site and aesthetic quality of the surroundings to be restored, once the construction activities are completed. 	<p>Complied. No disposal has been done till date. All the dredging material is being utilized for level raising, reclamation.</p> <p>Complied with. If any excess material generated will be disposed of at the location already approved by the MoEF&CC.</p> <p>Noted & complying with. Monitoring of turbidity level in the sea water is being done and there is no abnormal increase observed.</p> <p>Noted & complied with. Cleanup of the area is regularly being done.</p>																					
B.	<p>OPERATION PHASE: -</p> <p>The following mitigation measures are recommended during port operation: -</p> <ul style="list-style-type: none"> ➤ Sewage generated from the port operations will be treated in sewage treatment plant and treated water shall be used for horticulture and green belt development. ➤ All the solid waste generated from the port will be properly segregated, stored and disposed as per the applicable statutory 	<p>Complied. Sewage generated from the port operations is being treated in STP and treated water is being used for horticulture and green belt development.</p> <p>Complied. All the solid waste generated from the port is properly segregated, stored and disposed as</p>																					

	<p>requirement.</p> <ul style="list-style-type: none"> ➤ All the structures shall be designed in such a way that it should not restrict the prevailing tidal ingress in the creek and mangrove habitats in the vicinity to ensure good health condition. ➤ Coastline between Suwali Point and Tapti Estuary mouth and around the port area will be periodically surveyed to assess erosion and accretion. Should the need arises the corrective action in terms of shore stabilization shall be undertaken. ➤ All the minor and major spillages of chemicals will be effectively controlled with appropriate tools and equipments. ➤ An oil/chemical spill management plan shall be evolved and be in place for tier-1 (100t) and tier-2 (700t) spills in consultation with Gujarat Maritime Board/Coast Guard. ➤ All the marine outfall shall meet the Gujarat Pollution Control Board Effluent Discharge Criteria for Seawater Disposal Standards. ➤ Monitoring of water area of the port and effluent disposal sited shall be studied for pH and Corg, Suspended Solids, DO, BOD in order to identify for deviations if any from the baseline environmental quality. ➤ The mitigation measures suggested for effluent release and maintaining of effluent disposal sites should also be adopted for effluent release by NIKO should be implemented. 	<p>per the applicable rules. Complied with. Free flow to the mangrove is not restricted by any of our activity.</p> <p>Complied. Shoreline change study was conducted by NIO, Vizag during the period from November, 2014 to December, 2015. Study confirms that there is no significant change in the nearby shoreline except for the approved layout of the AHPPL. The report did not warrant any mitigation measures.</p> <p>Noted and complied with. There is no oil spill till date.</p> <p>Complied. Oil Spill Contingency Plan has been prepared and the same was approved/vetted by Indian Coast Guard (Letter No.: 7563, dated 09.01.2014).</p> <p>Noted and complied with. No effluent is being discharged.</p> <p>Complied. Please refer the <u>Annexure-4D</u> for the Sea Water Quality Monitoring / Analysis Reports for the period Apr., 2018 to Sept., 2018.</p> <p>Noted, AHPPL is not discharging any effluent outside the port premises.</p>
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Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-4:

**ENVIRONMENTAL MONITORING / ANALYSIS RESULTS FOR THE
PERIOD: Apr., 2018 TO Sept., 2018**



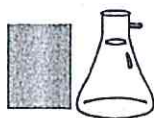
Adani Hazira Port Private Limited

**From : Apr., 2018
To : Sept., 2018**

ANNEXURE-4A:

AMBIENT AIR QUALITY MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018



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4A. AMBIENT AIR QUALITY MONITORING: -

Table-1.1: Ambient Air Quality Monitoring Results At Near Port Gate No.: 2

Sr. No.	Date of Sampling	Location-1: Near Port Gate No.: 2 (N 21° 05.426'E 72° 37.739')											
		PM ₁₀	PM _{2.5}	Pb	BaP	As	Ni	CO	C ₆ H ₆	NH ₃	SO ₂	NO _x	O ₃
		µg/m ³	µg/m ³	µg/m ³	ng/m ³	ng/m ³	ng/m ³	mg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
1	02/04/2018	76.42	30.14	BDL*	BDL*	BDL*	BDL*	0.79	BDL*	46.60	16.73	39.37	20.38
2	05/04/2018	65.41	38.42	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	20.24	19.56	25.18	29.38
3	09/04/2018	79.32	33.40	BDL*	BDL*	BDL*	BDL*	0.15	BDL*	42.31	14.54	29.87	19.55
4	12/04/2018	68.67	28.43	BDL*	BDL*	BDL*	BDL*	0.73	BDL*	38.63	9.57	23.46	27.50
5	16/04/2018	88.32	42.78	BDL*	BDL*	2.34	10.37	0.93	BDL*	52.43	20.45	33.34	22.21
6	19/04/2018	62.61	35.74	0.70	BDL*	BDL*	BDL*	0.62	BDL*	22.07	18.44	37.77	28.40
7	23/04/2018	93.39	45.36	BDL*	BDL*	2.48	10.13	0.77	BDL*	26.67	23.73	27.81	25.65
8	26/04/2018	66.20	31.44	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	37.71	15.44	32.39	23.85
9	30/04/2018	87.62	48.37	0.68	BDL*	2.26	10.58	0.49	BDL*	34.34	17.62	30.32	18.57
10	03/05/2018	73.61	45.40	BDL*	BDL*	BDL*	BDL*	0.69	BDL*	31.65	22.50	31.64	15.69
11	07/05/2018	81.26	42.43	0.58	BDL*	BDL*	BDL*	0.22	BDL*	46.93	16.30	28.32	19.42
12	10/05/2018	94.24	53.38	0.72	BDL*	2.52	10.76	0.41	BDL*	28.56	18.61	25.78	24.61
13	14/05/2018	59.63	25.50	BDL*	BDL*	BDL*	BDL*	0.80	BDL*	22.37	21.62	39.71	29.45
14	17/05/2018	70.41	44.29	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	39.43	19.45	35.42	17.41
15	21/05/2018	86.64	36.58	0.63	BDL*	2.34	10.54	0.96	BDL*	10.26	23.42	29.47	30.39
16	24/05/2018	92.46	49.37	0.75	BDL*	2.78	10.65	0.39	BDL*	41.34	17.48	26.49	20.67
17	28/05/2018	80.27	32.69	BDL*	BDL*	BDL*	BDL*	0.49	BDL*	51.22	14.36	30.73	18.75
18	31/05/2018	71.26	43.64	BDL*	BDL*	BDL*	BDL*	0.85	BDL*	19.38	13.41	41.79	22.35
19	04/06/2018	62.33	31.62	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	49.65	17.24	38.65	26.31
20	07/06/2018	83.66	46.31	0.56	BDL*	2.22	10.22	0.41	BDL*	22.69	21.61	41.23	28.51
21	11/06/2018	60.38	34.64	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	45.78	19.31	35.75	17.61
22	14/06/2018	73.33	30.74	0.64	BDL*	2.36	10.34	0.90	BDL*	30.27	15.23	26.11	19.43
23	18/06/2018	86.37	51.84	0.82	BDL*	2.16	10.58	0.64	BDL*	55.79	26.29	44.34	29.43
24	21/06/2018	79.67	27.19	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	42.67	8.71	22.58	21.66
25	25/06/2018	89.69	41.33	BDL*	BDL*	BDL*	BDL*	0.87	BDL*	51.23	24.25	37.56	23.67

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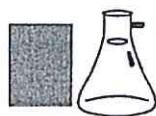
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26	28/06/2018	56.35	22.76	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	34.39	11.64	34.54	25.60
27	02/07/2018	53.35	23.59	BDL*	BDL*	BDL*	BDL*	0.30	BDL*	20.37	12.55	30.26	24.24
28	05/07/2018	78.68	44.84	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	29.34	14.25	23.74	27.57
29	09/07/2018	86.48	48.31	0.64	BDL*	2.18	10.51	0.87	BDL*	40.31	17.15	38.47	29.46
30	12/07/2018	65.74	40.62	BDL*	BDL*	BDL*	BDL*	0.61	BDL*	36.82	7.85	20.42	20.36
31	16/07/2018	73.42	35.54	BDL*	BDL*	BDL*	BDL*	0.94	BDL*	26.37	13.41	25.61	18.53
32	19/07/2018	54.30	22.46	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	52.62	15.83	35.69	25.37
33	23/07/2018	87.64	46.31	0.62	BDL*	2.42	10.73	0.52	BDL*	47.27	20.44	39.44	28.36
34	26/07/2018	92.68	49.48	0.58	BDL*	2.54	10.84	0.72	BDL*	42.72	22.43	33.55	22.62
35	30/07/2018	69.73	33.76	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	21.30	16.34	37.50	26.39
36	02/08/2018	80.42	44.88	0.76	BDL*	2.18	10.34	0.48	BDL*	41.22	23.81	40.10	23.77
37	06/08/2018	61.43	28.36	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	32.32	19.33	19.32	30.29
38	09/08/2018	87.50	50.32	0.64	BDL*	2.48	10.65	0.94	BDL*	37.23	12.36	30.53	18.66
39	13/08/2018	67.26	27.82	BDL*	BDL*	BDL*	BDL*	0.87	BDL*	22.44	18.59	24.34	25.65
40	16/08/2018	77.53	41.29	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	33.48	15.17	34.19	22.39
41	20/08/2018	53.64	29.53	BDL*	BDL*	BDL*	BDL*	0.17	BDL*	20.64	11.21	28.28	19.60
42	23/08/2018	81.62	36.85	0.58	BDL*	2.64	10.51	0.90	BDL*	35.62	22.57	36.23	24.66
43	27/08/2018	50.71	24.51	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	44.31	13.51	21.23	15.71
44	30/08/2018	66.56	40.20	BDL*	BDL*	BDL*	BDL*	0.40	BDL*	25.36	20.68	31.44	20.69
45	03/09/2018	54.80	25.64	BDL*	BDL*	BDL*	BDL*	0.17	BDL*	24.58	13.59	23.99	21.30
46	06/09/2018	90.37	47.27	0.74	BDL*	2.32	10.14	0.98	BDL*	46.35	23.66	35.61	19.51
47	10/09/2018	75.31	42.54	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	16.27	16.28	28.50	28.49
48	13/09/2018	86.37	46.22	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	29.55	12.60	34.31	24.34
49	17/09/2018	71.99	38.27	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	20.48	18.23	37.37	20.57
50	20/09/2018	89.49	51.24	0.54	BDL*	2.56	10.46	0.61	BDL*	32.66	25.60	40.27	30.41
51	24/09/2018	62.65	29.28	BDL*	BDL*	BDL*	BDL*	0.78	BDL*	38.42	10.68	29.40	18.23
52	27/09/2018	80.28	44.63	0.66	BDL*	2.44	10.65	0.36	BDL*	50.32	20.34	44.56	26.30

Observation: Above given Result are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-I dt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

BDL*: - Below Detection Limit: Ozone as O_3 ($\mu g/m^3$): 10
BDL*: - Below Detection Limit - Lead as Pb ($\mu g/m^3$): 0.5
BDL*: - Below Detection Limit - Carbon Monoxide as CO (mg/m^3): 0.01
BDL*: - Below Detection Limit - Ammonia NH_3 ($\mu g/m^3$): 10
BDL*: - Below Detection Limit - Benzene as C_6H_6 ($\mu g/m^3$): 2
BDL*: - Below Detection Limit - Benzo (a) Pyrene (BaP) - Particulate Phase only (ng/m^3): 0.5
BDL*: - Below Detection Limit - Arsenic as As (ng/m^3): 2
BDL*: - Below Detection Limit - Nickel as Ni (ng/m^3): 10

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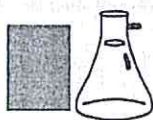
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Table-1.2: Ambient Air Quality Monitoring Results At HSE Building Terrace

Sr. No.	Date of Sampling	Location-2: HSE Building Terrace (N 21° 05.043' E 72° 38.491')											
		PM ₁₀	PM _{2.5}	Pb	BaP	As	Ni	CO	C ₆ H ₆	NH ₃	SO ₂	NO _x	O ₃
		µg/m ³	µg/m ³	µg/m ³	ng/m ³	ng/m ³	ng/m ³	mg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
1	02/04/2018	45.82	18.91	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	17.76	5.39	19.42	19.52
2	05/04/2018	55.68	23.83	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	10.71	8.36	15.31	25.53
3	09/04/2018	68.93	28.55	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	16.53	12.82	30.63	15.49
4	12/04/2018	58.58	34.35	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	22.65	16.67	40.29	24.28
5	16/04/2018	73.40	31.56	BDL*	BDL*	BDL*	BDL*	0.13	BDL*	28.47	18.70	21.48	17.23
6	19/04/2018	65.79	24.67	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	19.29	10.37	25.37	20.45
7	23/04/2018	76.80	35.10	BDL*	BDL*	BDL*	BDL*	0.52	BDL*	35.51	7.48	34.62	26.62
8	26/04/2018	61.39	19.83	BDL*	BDL*	BDL*	BDL*	0.17	BDL*	23.27	9.73	24.13	16.66
9	30/04/2018	86.28	39.57	BDL*	BDL*	BDL*	BDL*	0.68	BDL*	26.94	14.54	27.38	22.69
10	03/05/2018	50.26	28.72	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	28.40	17.35	22.73	17.30
11	07/05/2018	69.37	33.44	BDL*	BDL*	BDL*	BDL*	0.40	BDL*	17.45	12.41	37.14	15.71
12	10/05/2018	82.39	44.66	0.64	BDL*	BDL*	BDL*	0.48	BDL*	31.28	14.69	29.31	20.31
13	14/05/2018	52.43	19.45	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	25.41	10.17	33.45	18.37
14	17/05/2018	46.34	29.47	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	19.23	6.43	23.59	21.26
15	21/05/2018	60.26	26.38	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	13.45	9.32	20.33	28.83
16	24/05/2018	59.31	37.65	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	20.50	15.65	24.34	30.27
17	28/05/2018	77.48	34.73	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	26.36	8.65	38.44	23.35
18	31/05/2018	64.68	31.22	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	15.77	19.35	30.98	19.45
19	04/06/2018	57.63	37.42	BDL*	BDL*	BDL*	BDL*	0.77	BDL*	19.59	19.58	30.48	20.64
20	07/06/2018	66.46	32.41	BDL*	BDL*	BDL*	BDL*	0.30	BDL*	26.35	15.40	24.57	24.25
21	11/06/2018	51.00	24.59	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	29.47	13.28	38.47	19.86
22	14/06/2018	68.51	27.61	BDL*	BDL*	BDL*	BDL*	0.80	BDL*	23.40	5.42	17.57	23.25
23	18/06/2018	74.70	39.37	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	14.25	8.52	22.71	15.78
24	21/06/2018	52.28	25.66	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	34.50	12.69	31.30	26.41
25	25/06/2018	63.49	34.52	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	18.46	17.32	40.25	28.65
26	28/06/2018	47.50	17.59	BDL*	BDL*	BDL*	BDL*	0.11	BDL*	28.21	6.56	20.69	18.33

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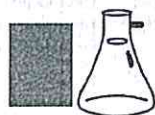
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27	02/07/2018	46.42	19.70	BDL*	BDL*	BDL*	BDL*	0.13	BDL*	18.51	5.55	18.67	19.56
28	05/07/2018	62.68	34.27	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	24.53	8.44	21.22	21.45
29	09/07/2018	77.43	41.60	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	34.42	11.50	34.26	17.87
30	12/07/2018	60.59	36.84	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	29.44	14.52	29.12	25.50
31	16/07/2018	52.64	24.30	BDL*	BDL*	BDL*	BDL*	0.64	BDL*	43.63	7.50	15.56	20.57
32	19/07/2018	42.97	16.31	BDL*	BDL*	BDL*	BDL*	0.17	BDL*	38.47	10.65	27.59	16.56
33	23/07/2018	79.42	39.57	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	12.30	18.28	20.78	18.74
34	26/07/2018	63.73	26.37	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	17.58	15.52	36.18	27.47
35	30/07/2018	59.58	30.26	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	25.61	13.44	22.46	22.45
36	02/08/2018	72.59	38.50	BDL*	BDL*	BDL*	BDL*	0.52	BDL*	10.69	20.39	26.40	15.64
37	06/08/2018	55.64	23.39	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	27.58	16.55	23.41	20.63
38	09/08/2018	62.30	29.39	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	15.66	18.30	33.48	22.81
39	13/08/2018	50.33	20.32	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	40.22	10.40	21.32	18.72
40	16/08/2018	68.43	37.59	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	23.49	12.25	20.13	26.77
41	20/08/2018	44.62	22.39	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	17.30	5.71	15.47	25.20
42	23/08/2018	73.57	33.24	BDL*	BDL*	BDL*	BDL*	0.49	BDL*	30.10	13.66	28.40	21.26
43	27/08/2018	40.25	15.27	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	36.83	9.55	18.69	23.48
44	30/08/2018	52.33	32.33	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	21.54	14.64	24.22	17.53
45	03/09/2018	44.60	16.31	BDL*	BDL*	BDL*	BDL*	0.24	BDL*	13.65	8.67	20.32	16.50
46	06/09/2018	58.45	29.43	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	41.20	18.58	37.25	25.33
47	10/09/2018	65.70	32.33	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	35.60	12.53	25.61	21.52
48	13/09/2018	78.61	33.49	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	21.67	6.76	27.53	28.31
49	17/09/2018	59.30	25.33	BDL*	BDL*	BDL*	BDL*	0.30	BDL*	17.58	10.57	17.54	29.35
50	20/09/2018	82.28	42.68	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	26.29	16.58	31.62	24.56
51	24/09/2018	54.68	27.65	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	32.58	11.22	21.50	27.59
52	27/9/2018	72.64	35.39	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	40.38	24.37	29.62	17.59

Observation: Above given Result are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-I dt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

BDL*: - Below Detection Limit - Ozone as O_3 ($\mu g/m^3$): 10
BDL*: - Below Detection Limit - Lead as Pb ($\mu g/m^3$): 0.5
BDL*: - Below Detection Limit - Carbon Monoxide as CO (mg/m^3): 0.01
BDL*: - Below Detection Limit - Ammonia NH_3 ($\mu g/m^3$): 10
BDL*: - Below Detection Limit - Benzene as C_6H_6 ($\mu g/m^3$): 2
BDL*: - Below Detection Limit - Benzo (a) Pyrene (BaP) - Particulate Phase only (ng/m^3): 0.5
BDL*: - Below Detection Limit - Arsenic as As (ng/m^3): 2
BDL*: - Below Detection Limit - Nickel as Ni (ng/m^3): 10

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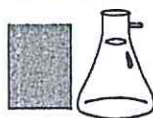
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Table-1.3: Ambient Air Quality Monitoring Results At Central Water Pump House

Sr. No.	Date of Sampling	Location-3: Central Water Pump House (N 21° 04.697'E 72° 38.420')											
		PM ₁₀	PM _{2.5}	Pb	BaP	As	Ni	CO	C ₆ H ₆	NH ₃	SO ₂	NO _x	O ₃
		µg/m ³	µg/m ³	µg/m ³	ng/m ³	ng/m ³	ng/m ³	mg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
1	02/04/2018	59.21	24.37	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	12.29	10.67	31.55	22.65
2	05/04/2018	78.38	35.76	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	26.12	16.68	32.69	19.39
3	09/04/2018	63.40	20.48	BDL*	BDL*	BDL*	BDL*	0.11	BDL*	22.43	8.76	21.55	21.50
4	12/04/2018	50.33	30.46	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	29.50	18.38	27.65	17.32
5	16/04/2018	62.42	27.54	BDL*	BDL*	BDL*	BDL*	0.61	BDL*	16.59	11.70	16.35	25.28
6	19/04/2018	54.32	31.30	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	17.52	6.70	30.76	30.49
7	23/04/2018	69.33	28.66	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	13.52	15.48	23.25	15.73
8	26/04/2018	57.18	25.76	BDL*	BDL*	BDL*	BDL*	0.40	BDL*	20.28	5.73	18.04	20.60
9	30/04/2018	65.30	23.77	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	18.44	12.63	26.27	26.42
10	03/05/2018	82.46	48.53	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	15.57	13.86	29.54	20.55
11	07/05/2018	75.34	26.54	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	23.85	10.30	21.49	22.84
12	10/05/2018	56.52	34.55	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	44.55	12.67	32.30	16.54
13	14/05/2018	69.46	28.84	BDL*	BDL*	BDL*	BDL*	0.64	BDL*	30.38	7.63	38.70	24.33
14	17/05/2018	79.34	46.28	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	25.64	9.50	40.29	26.80
15	21/05/2018	50.57	23.86	BDL*	BDL*	BDL*	BDL*	0.87	BDL*	18.69	18.81	36.47	25.35
16	24/05/2018	66.41	43.25	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	27.20	14.31	20.54	18.48
17	28/05/2018	56.32	24.55	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	42.77	16.21	26.15	27.86
18	31/05/2018	80.33	40.32	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	10.67	11.53	34.39	17.29
19	04/06/2018	69.29	35.59	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	24.52	6.81	34.80	30.32
20	07/06/2018	50.38	23.65	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	17.89	17.63	30.32	17.23
21	11/06/2018	76.40	41.52	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	35.70	11.34	26.55	27.35
22	14/06/2018	60.27	25.75	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	38.40	13.60	33.51	25.52
23	18/06/2018	52.66	32.61	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	29.29	10.53	28.61	23.46
24	21/06/2018	72.63	37.25	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	26.25	5.64	18.66	28.70
25	25/06/2018	82.42	44.37	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	40.53	19.48	31.64	26.74
26	28/06/2018	42.61	15.75	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	18.15	15.43	37.33	22.38
27	02/07/2018	41.64	17.56	BDL*	BDL*	BDL*	BDL*	0.24	BDL*	12.58	10.59	33.71	21.20
28	05/07/2018	55.45	30.60	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	19.34	5.80	18.50	18.53
29	09/07/2018	65.53	35.65	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	30.47	9.51	22.86	25.65

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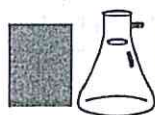
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30	12/07/2018	53.64	22.63	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	23.60	11.61	16.87	15.69
31	16/07/2018	76.39	38.64	BDL*	BDL*	BDL*	BDL*	0.71	BDL*	33.53	15.39	35.79	24.37
32	19/07/2018	49.61	19.31	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	20.54	6.55	31.24	26.42
33	23/07/2018	71.54	34.65	BDL*	BDL*	BDL*	BDL*	0.40	BDL*	26.46	12.44	25.34	20.64
34	26/07/2018	69.62	31.55	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	35.72	17.31	19.35	28.41
35	30/07/2018	52.86	25.40	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	16.35	19.48	29.24	16.44
36	02/08/2018	60.63	30.43	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	22.82	14.49	22.62	17.21
37	06/08/2018	51.26	20.59	BDL*	BDL*	BDL*	BDL*	0.24	BDL*	21.63	10.72	15.33	21.15
38	09/08/2018	68.72	36.51	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	31.24	20.49	19.63	28.31
39	13/08/2018	58.36	23.59	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	29.35	17.52	32.63	20.41
40	16/08/2018	62.61	31.57	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	14.54	9.68	26.38	29.57
41	20/08/2018	38.53	17.56	BDL*	BDL*	BDL*	BDL*	0.14	BDL*	10.20	8.50	33.80	22.36
42	23/08/2018	61.60	27.58	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	24.30	11.43	20.71	25.49
43	27/08/2018	46.55	18.56	BDL*	BDL*	BDL*	BDL*	0.30	BDL*	20.81	7.52	23.37	19.29
44	30/08/2018	59.37	29.28	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	17.67	18.76	27.83	15.55
45	03/09/2018	50.27	22.42	BDL*	BDL*	BDL*	BDL*	0.14	BDL*	10.52	6.57	15.60	14.27
46	06/09/2018	68.68	32.80	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	26.25	13.55	21.61	30.27
47	10/09/2018	52.78	20.50	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	23.55	14.30	35.43	24.62
48	13/09/2018	70.88	28.37	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	15.67	8.40	31.27	26.74
49	17/09/2018	68.24	33.61	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	12.59	16.45	28.44	16.27
50	20/09/2018	78.31	38.32	BDL*	BDL*	BDL*	BDL*	0.49	BDL*	21.79	9.65	22.73	18.63
51	24/09/2018	83.39	40.31	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	18.81	7.54	19.33	29.26
52	27/09/2018	62.55	26.28	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	28.51	12.21	24.92	21.44

Observation: Above given Result are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-I dt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

BDL*: - Below Detection Limit: Ozone as O₃ (µg/m³): 10
BDL*: - Below Detection Limit - Lead as Pb (µg/m³): 0.5
BDL*: - Below Detection Limit - Carbon Monoxide as CO (mg/m³): 0.01
BDL*: - Below Detection Limit - Ammonia NH₃ (µg/m³): 10
BDL*: - Below Detection Limit - Benzene as C₆H₆ (µg/m³): 2
BDL*: - Below Detection Limit - Benzo (a) Pyrene (BaP) - Particulate Phase only (ng/m³): 0.5
BDL*: - Below Detection Limit - Arsenic as As (ng/m³): 2
BDL*: - Below Detection Limit - Nickel as Ni (ng/m³): 10

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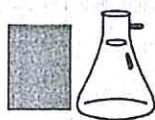
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Table-1.4: Ambient Air Quality Monitoring Results At Container Terminal

Sr. No.	Date of Sampling	Location-4: Container Terminal (N 21° 05.187'E 72° 37.774)											
		PM ₁₀	PM _{2.5}	Pb	BaP	As	Ni	CO	C ₆ H ₆	NH ₃	SO ₂	NO _x	O ₃
		µg/m ³	µg/m ³	µg/m ³	ng/m ³	ng/m ³	ng/m ³	mg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
1	02/04/2018	52.60	22.42	BDL*	BDL*	BDL*	BDL*	0.71	BDL*	30.65	8.37	26.78	28.54
2	05/04/2018	72.32	32.48	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	40.46	10.51	19.45	24.40
3	09/04/2018	84.37	40.54	0.58	BDL*	2.18	10.21	0.44	BDL*	33.41	5.42	27.35	26.42
4	12/04/2018	65.41	37.19	BDL*	BDL*	BDL*	BDL*	0.13	BDL*	10.42	9.72	15.70	15.48
5	16/04/2018	54.59	20.64	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	36.17	6.70	23.55	20.64
6	19/04/2018	76.29	41.32	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	15.33	14.63	33.76	17.33
7	23/04/2018	61.28	24.42	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	29.43	13.41	30.67	19.48
8	26/04/2018	73.62	33.63	BDL*	BDL*	BDL*	BDL*	0.27	BDL*	24.83	7.55	21.74	25.38
9	30/04/2018	58.73	18.53	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	20.54	11.69	18.48	16.61
10	03/05/2018	65.39	36.44	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	22.62	11.20	35.33	22.42
11	07/05/2018	86.35	38.67	0.54	BDL*	BDL*	BDL*	0.53	BDL*	36.34	18.22	31.25	30.67
12	10/05/2018	79.19	26.76	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	11.69	10.59	20.61	18.63
13	14/05/2018	64.25	30.57	BDL*	BDL*	BDL*	BDL*	0.78	BDL*	18.43	16.53	27.49	16.32
14	17/05/2018	55.45	35.45	BDL*	BDL*	BDL*	BDL*	0.89	BDL*	31.48	12.39	30.61	23.21
15	21/05/2018	78.45	32.43	BDL*	BDL*	2.18	BDL*	0.66	BDL*	16.65	13.71	24.26	21.68
16	24/05/2018	53.20	25.80	BDL*	BDL*	BDL*	BDL*	0.52	BDL*	24.21	7.47	18.63	26.36
17	28/05/2018	68.46	21.59	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	37.30	21.29	33.64	20.83
18	31/05/2018	79.39	28.62	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	13.34	17.70	22.56	15.66
19	04/06/2018	51.63	19.72	BDL*	BDL*	BDL*	BDL*	0.52	BDL*	28.59	15.61	24.37	18.53
20	07/06/2018	60.28	26.75	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	10.91	11.27	27.51	29.71
21	11/06/2018	57.53	39.64	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	40.22	17.59	31.21	21.20
22	14/06/2018	78.65	33.52	0.52	BDL*	2.56	BDL*	0.44	BDL*	12.68	8.62	22.49	17.58
23	18/06/2018	64.89	36.52	BDL*	BDL*	2.38	BDL*	0.31	BDL*	33.65	18.63	35.64	19.76
24	21/06/2018	83.60	42.48	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	30.36	16.30	38.58	25.37
25	25/06/2018	59.66	29.43	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	23.62	14.32	21.58	20.57
26	28/06/2018	69.33	25.60	BDL*	BDL*	BDL*	BDL*	0.14	BDL*	14.55	9.81	26.78	15.61
27	02/07/2018	57.52	25.64	BDL*	BDL*	BDL*	BDL*	0.27	BDL*	16.47	8.53	28.72	15.67
28	05/07/2018	68.70	41.82	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	13.51	10.15	15.71	23.46
29	09/07/2018	73.61	32.47	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	37.53	15.65	27.77	20.63

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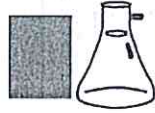
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30	12/07/2018	49.88	29.56	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	27.56	6.64	33.40	19.52
31	16/07/2018	83.54	42.65	0.52	BDL*	BDL*	BDL*	0.22	BDL*	23.43	9.65	19.53	16.25
32	19/07/2018	59.46	26.72	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	29.23	20.52	21.63	22.51
33	23/07/2018	82.29	49.27	BDL*	BDL*	2.10	10.40	0.45	BDL*	18.70	5.56	30.48	24.53
34	26/07/2018	75.35	37.56	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	21.56	12.65	18.45	18.37
35	30/07/2018	63.38	27.81	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	10.28	11.23	23.52	28.03
36	02/08/2018	67.35	34.35	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	13.53	10.69	29.42	21.61
37	06/08/2018	76.80	38.18	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	24.51	12.67	31.20	24.60
38	09/08/2018	82.62	43.56	BDL*	BDL*	BDL*	BDL*	0.61	BDL*	19.13	14.39	35.48	16.81
39	13/08/2018	73.22	32.85	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	31.59	15.38	18.83	28.41
40	16/08/2018	56.85	28.60	BDL*	BDL*	BDL*	BDL*	0.64	BDL*	36.40	6.54	21.70	18.33
41	20/08/2018	48.54	25.60	BDL*	BDL*	BDL*	BDL*	0.11	BDL*	14.39	9.43	26.49	20.23
42	23/08/2018	66.80	30.56	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	33.52	17.34	32.44	29.66
43	27/08/2018	52.75	21.39	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	25.42	13.25	15.74	17.56
44	30/08/2018	72.30	37.19	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	12.36	8.66	19.44	22.46
45	03/09/2018	60.27	29.56	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	18.63	11.10	19.52	19.37
46	06/09/2018	70.62	26.33	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	19.51	19.21	30.28	18.38
47	10/09/2018	81.52	46.40	0.56	BDL*	BDL*	BDL*	0.26	BDL*	26.59	6.36	22.30	30.49
48	13/09/2018	61.29	23.43	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	34.50	10.31	21.34	20.23
49	17/09/2018	86.22	49.23	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	10.25	12.38	25.36	23.53
50	20/09/2018	69.21	27.51	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	28.62	14.27	27.79	21.73
51	24/09/2018	59.30	32.44	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	21.57	16.17	36.57	16.47
52	27/09/2018	78.35	39.27	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	35.42	8.99	32.85	24.71

Observation: Above given Result are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-I dt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

BDL*: - Below Detection Limit: Ozone as O_3 ($\mu g/m^3$): 10
BDL*: - Below Detection Limit - Lead as Pb ($\mu g/m^3$): 0.5
BDL*: - Below Detection Limit - Carbon Monoxide as CO (mg/m^3): 0.01
BDL*: - Below Detection Limit - Ammonia NH_3 ($\mu g/m^3$): 10
BDL*: - Below Detection Limit - Benzene as C_6H_6 ($\mu g/m^3$): 2
BDL*: - Below Detection Limit - Benzo (a) Pyrene (BaP) - Particulate Phase only (ng/m^3): 0.5
BDL*: - Below Detection Limit - Arsenic as As (ng/m^3): 2
BDL*: - Below Detection Limit - Nickel as Ni (ng/m^3): 10

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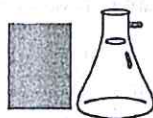
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Table-1.5: Ambient Air Quality Monitoring Results At Hazira Village

Sr. No.	Date of Sampling	Location-5: Hazira Village (N 21° 05.44' E 72° 38.44')											
		PM ₁₀	PM _{2.5}	Pb	BaP	As	Ni	CO	C ₆ H ₆	NH ₃	SO ₂	NO _x	O ₃
		µg/m ³	µg/m ³	µg/m ³	ng/m ³	ng/m ³	ng/m ³	mg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
1	02/04/2018	69.11	27.61	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	25.89	19.59	23.44	21.27
2	05/04/2018	85.69	40.34	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	49.63	13.76	31.58	27.56
3	09/04/2018	90.41	47.46	0.64	BDL*	2.46	10.47	0.48	BDL*	37.91	17.66	36.48	17.43
4	12/04/2018	75.59	45.37	BDL*	BDL*	BDL*	BDL*	0.30	BDL*	33.60	12.39	33.52	30.29
5	16/04/2018	83.62	35.36	BDL*	BDL*	2.24	10.26	0.66	BDL*	43.46	23.62	28.54	28.60
6	19/04/2018	70.61	32.59	0.78	BDL*	2.68	10.70	0.74	BDL*	29.28	20.60	42.27	19.32
7	23/04/2018	89.30	48.34	BDL*	BDL*	BDL*	10.52	0.96	BDL*	38.84	18.44	37.17	29.35
8	26/04/2018	79.43	38.37	BDL*	BDL*	BDL*	BDL*	0.69	BDL*	52.71	10.44	27.45	18.49
9	30/04/2018	82.32	33.47	0.76	BDL*	2.75	10.36	0.82	BDL*	46.24	14.65	24.41	26.62
10	03/05/2018	86.45	51.28	BDL*	BDL*	BDL*	BDL*	0.88	BDL*	11.88	15.43	26.37	26.23
11	07/05/2018	63.28	30.41	BDL*	BDL*	BDL*	BDL*	0.71	BDL*	41.27	20.65	40.66	28.68
12	10/05/2018	88.41	49.22	0.56	BDL*	2.34	10.63	0.55	BDL*	52.42	16.62	35.27	21.71
13	14/05/2018	79.62	44.32	BDL*	BDL*	BDL*	BDL*	0.92	BDL*	38.46	22.78	30.40	27.20
14	17/05/2018	64.55	38.50	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	45.46	17.70	27.25	29.26
15	21/05/2018	93.41	47.63	0.84	BDL*	2.64	10.98	0.63	BDL*	21.28	21.44	33.73	20.17
16	24/05/2018	74.47	32.51	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	18.30	11.72	29.68	23.39
17	28/05/2018	94.28	50.40	0.65	BDL*	2.46	10.30	0.79	BDL*	47.28	19.01	41.26	30.32
18	31/05/2018	85.69	46.63	BDL*	BDL*	BDL*	BDL*	0.94	BDL*	22.75	9.84	38.36	24.62
19	04/06/2018	82.62	46.83	BDL*	BDL*	BDL*	BDL*	0.71	BDL*	41.64	22.42	43.60	24.61
20	07/06/2018	90.23	49.25	0.68	BDL*	2.18	10.30	0.50	BDL*	30.50	19.26	37.40	22.79
21	11/06/2018	85.73	44.54	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	55.62	24.66	42.60	28.83
22	14/06/2018	92.31	54.21	0.76	BDL*	2.75	10.61	0.54	BDL*	19.40	20.50	29.36	20.35
23	18/06/2018	78.99	42.71	0.58	BDL*	2.55	10.91	0.24	BDL*	47.49	16.39	39.42	25.27
24	21/06/2018	88.30	50.33	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	38.57	18.59	41.89	30.24
25	25/06/2018	76.67	36.63	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	45.52	26.43	34.76	21.79
26	28/06/2018	63.94	30.83	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	22.43	17.79	23.57	27.52
27	02/07/2018	62.52	28.58	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	24.71	14.49	20.51	28.94
28	05/07/2018	84.66	47.50	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	32.40	18.65	28.23	17.58
29	09/07/2018	92.77	53.25	0.70	BDL*	2.48	10.71	0.73	BDL*	27.48	21.52	41.27	27.61

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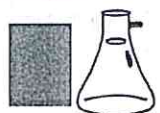
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30	12/07/2018	72.47	32.58	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	46.75	9.64	36.87	30.42
31	16/07/2018	88.79	46.54	0.65	BDL*	BDL*	BDL*	0.98	BDL*	39.43	11.32	29.45	22.88
32	19/07/2018	65.33	30.46	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	42.60	22.87	38.38	29.49
33	23/07/2018	93.44	51.75	0.84	BDL*	2.56	10.81	0.19	BDL*	55.60	16.49	33.88	26.51
34	26/07/2018	86.04	40.58	0.75	BDL*	2.32	10.40	0.60	BDL*	30.03	25.51	30.10	20.40
35	30/07/2018	77.73	34.33	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	28.65	20.60	40.27	21.82
36	02/08/2018	88.67	48.50	0.84	BDL*	2.34	10.54	0.69	BDL*	50.31	18.65	36.33	26.89
37	06/08/2018	68.29	31.25	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	42.58	21.61	33.59	28.66
38	09/08/2018	75.35	39.38	0.75	BDL*	2.18	10.36	0.56	BDL*	35.76	25.55	39.26	24.31
39	13/08/2018	81.25	36.38	BDL*	BDL*	BDL*	BDL*	0.92	BDL*	36.20	19.22	27.52	22.63
40	16/08/2018	73.70	44.25	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	29.19	23.62	37.08	20.38
41	20/08/2018	58.72	33.42	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	23.62	13.45	17.56	27.30
42	23/08/2018	87.53	40.29	0.63	BDL*	2.46	10.80	0.68	BDL*	44.52	24.49	40.24	30.51
43	27/08/2018	60.44	28.50	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	39.26	16.20	26.60	25.34
44	30/08/2018	79.36	46.25	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	18.61	22.87	34.22	19.45
45	03/09/2018	67.65	33.46	BDL*	BDL*	BDL*	BDL*	0.40	BDL*	21.87	15.61	26.41	23.29
46	06/09/2018	79.36	43.25	0.65	BDL*	2.16	10.40	0.63	BDL*	29.50	25.71	38.30	27.35
47	10/09/2018	88.64	49.29	0.84	BDL*	2.38	10.51	0.94	BDL*	30.53	18.55	30.70	30.04
48	13/09/2018	95.68	39.08	BDL*	BDL*	BDL*	BDL*	0.79	BDL*	42.64	16.76	37.59	20.03
49	17/09/2018	79.70	35.29	BDL*	BDL*	BDL*	BDL*	0.64	BDL*	23.40	20.42	42.35	18.95
50	20/09/2018	94.36	52.42	0.76	BDL*	2.88	10.80	0.55	BDL*	37.60	23.32	44.29	28.59
51	24/09/2018	76.34	38.54	BDL*	BDL*	BDL*	BDL*	0.87	BDL*	26.72	19.33	32.39	22.60
52	27/09/2018	87.57	47.42	0.60	BDL*	2.54	10.71	0.68	BDL*	55.78	17.20	39.14	29.52

Observation: Above given Result are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-I dt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values,

BDL*: - Below Detection Limit: Ozone as O_3 ($\mu g/m^3$): 10

BDL*: - Below Detection Limit - Lead as Pb ($\mu g/m^3$): 0.5

BDL*: - Below Detection Limit - Carbon Monoxide as CO (mg/m^3): 0.01

BDL*: - Below Detection Limit - Ammonia NH_3 ($\mu g/m^3$): 10

BDL*: - Below Detection Limit - Benzene as C_6H_6 ($\mu g/m^3$): 2

BDL*: - Below Detection Limit - Benzo (a) Pyrene (BaP) - Particulate Phase only (ng/m^3): 0.5

BDL*: - Below Detection Limit - Arsenic as As (ng/m^3): 2

BDL*: - Below Detection Limit - Nickel as Ni (ng/m^3): 10

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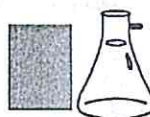
Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-4B:

GROUND WATER QUALITY MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018



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4B. GROUND WATER QUALITY MONITORING: -

Table-1.6: Ground Water Quality Results for the period: April, 2018 to Sep., 2018

Sr. NO.	TEST PARAMETERS	UNIT	GROUND WATER OPEN WELL					
			APRIL-18	MAY-18	JUNE-18	JULY-18	AUG-18	SEP-18
			26/04/2018	22/05/2018	22/06/2018	30/07/2018	13/08/2018	22/09/2018
1	Colour	Hazen	3	4	3	2	3	2
2	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	0.74	0.58	0.32	0.24	1.64	1.2
5	pH Value	--	7.17	7.94	7.4	7.3	7.68	7.54
6	Total Hardness as CaCO ₃	mg/L	476	390	436	412	344	338
7	Iron as Fe	mg/L	0.011	0.044	0.028	0.032	0.052	0.04
8	Chloride as Cl	mg/L	92	88.97	100	98.2	62	74
9	Residual Free Chlorine	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.2
10	Fluoride as F	mg/L	0.5	0.2	0.12	0.26	0.4	0.5
11	Total Dissolved Solids	mg/L	840	756	814	835	578	602
12	Calcium as Ca	mg/L	124	86.4	88	96	70.4	71
13	Magnesium as Mg	mg/L	39.84	41.76	51.84	41.28	40.32	38
14	Copper as Cu	mg/L	BDL*	0.036	0.02	0.022	0.013	0.015
15	Manganese as Mn	mg/L	BDL*	0.021	0.012	0.017	0.024	0.032
16	Sulphate as SO ₄	mg/L	70.2	48.4	56.2	48.2	39.4	46.2
17	Nitrate Nitrogen as NO ₃	mg/L	0.34	0.74	0.32	0.34	0.94	1.1
18	Phenolic compounds as C ₆ H ₅ OH	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
19	Mercury as Hg	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
20	Cadmium as Cd	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
21	Selenium as Se	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
22	Arsenic as As	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
23	Cyanide as CN	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
24	Lead as Pb	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
25	Zinc as Zn	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
26	Anionic Detergents as MBAS	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
27	Chromlumas Cr ⁺⁶	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
28	Mineral Oil	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
29	Alkalinity	mg/L	214	432	484	462	400	382
30	Aluminum as Al	mg/L	BDL*	0.011	0.008	0.012	0.015	0.021
31	Boron as B	mg/L	BDL*	0.06	0.02	0.026	0.019	0.016
32	Pesticides							
32.1	Alachor	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.2	Atrazine	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.3	Aldrin/Dieldrine	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.4	Alpha HCH	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.5	Beta HCH	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.6	Butachlor	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.7	Chlorpyrifos	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*

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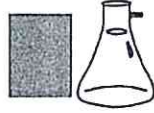
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			APRIL-18	MAY-18	JUNE-18	JULY-18	AUG-18	SEP-18
			26/04/2018	22/05/2018	22/06/2018	30/07/2018	13/08/2018	22/09/2018
32.8	Delta HCH	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.9	2,4-Dichlorophenoxy acetic acid	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.10	DDT (o,p & p,p-Isomers of DDT, DDE & DDD)	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.11	Endosulfan (alpha, beta, and sulphate)	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.12	Ethion	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.13	Gamma - HCH (Lindane)	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.14	Isoproturon	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.15	Malathion	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.16	Methyl Parathion	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.17	Monocrotophos	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
32.18	Phorate	µg/l	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
33	Coliform	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent
34	E-Coli	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent

*Below detection limit.

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Ground Water.

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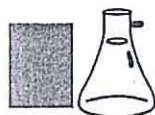
Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-4C:

SURFACE WATER QUALITY MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018

**POLLUCON** LABORATORIES PVT. LTD.**4C. SURFACE WATER QUALITY MONITORING: -****Table-1.7: Surface Water (Pond) Quality Results for the period: April, 2018 to Sep., 2018**

Sr. No.	Parameters	Unit	At Mora Village (Surface Water – Pond)					
			APRIL-18	MAY-18	JUNE-18	JULY-18	AUG-18	SEP-18
			26/04/18	22/05/18	22/06/18	30/07/18	13/08/18	22/09/18
1	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
2	Colour	Hazen	3	3	4	6	8	10
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	pH Value	--	7.78	7.37	7.1	8.73	8.31	8.14
5	Turbidity	NTU	1.9	1.4	2.6	1.88	6.2	4.8
6	Total Dissolved Solids	mg/L	692	980	1040	1408	408	478
7	Total Hardness as CaCO ₃	mg/L	140	398	510	632	135	140
8	Chloride as Cl	mg/L	146	110	129	148	72	82
9	Fluoride as F	mg/L	0.6	0.3	0.45	0.32	0.75	0.8
10	Iron as Fe	mg/L	0.18	0.18	0.21	0.16	0.24	0.28
11	Coliform	/100 ml	Present	Present	Present	Present	Present	Present
12	E-Coli	/100 ml	Absent	Absent	Present	Absent	Absent	Absent

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Surface Water.

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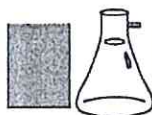
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	Adani Hazira Port Private Limited	From : Apr., 2018 To : Sept., 2018
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ANNEXURE-4D:

SEA WATER QUALITY MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018



POLLUCON LABORATORIES PVT. LTD.

4D. SEA WATER QUALITY MONITORING: -

Table-1.8: Sea Water Quality Analysis Results of CB2 South End towards Landside from the Sea Basin for the period: April, 2018 to Sep., 2018

S. NO.	TEST PARAMETERS	UNIT	RESULTS OF SEA WATER QUALITY ANALYSIS											
			CB2 SOUTH END TOWARDS LANDSIDE FROM SEA BASIN (N 21° 5'1.92", E 72°37'56.58")											
			APRIL-18		MAY-18		JUNE-18		JULY-18		AUGUST-18		SEPTEMBER-18	
			Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom
1	pH	—	8.15	8.21	8.18	8.12	8.17	8.15	8.25	8.16	8.1	8.01	8.08	8
2	Temperature	°C	30.8	30	31.4	31.1	31.6	31.2	30.8	30.6	30.9	30.7	31	30.8
3	Total Suspended Solids	mg/L	340	290	390	272	367	312	412	390	386	322	351	296
4	BOD (3 Days @ 27 °C)	mg/L	5	4	4.2	3.2	3	4	4	3	3.6	2.8	4	3
5	Dissolved Oxygen	mg/L	6.4	6.1	6.2	5.8	6.3	5.9	6.8	6.5	5.8	5.2	6.2	5.8
6	Salinity	ppt	30.1	29.9	31.2	29.6	31	30	29.2	28.4	29.4	28.6	29.8	29.2
7	Oil & Grease	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
8	Nitrate as NO ₃	μmol/L	17.8	15.2	13.2	10.8	14.6	12	17.8	12.6	20.2	13.1	15.4	10.1
9	Nitrite as NO ₂	μmol/L	2.1	1.7	2.4	2	1.6	1.2	1.6	1.2	2.4	1.6	1.3	1
10	Ammonical Nitrogen as NH ₃	μmol/L	2.4	2.2	2.8	2.6	2.3	1.9	3.5	2.6	3.1	2.4	1.9	1.5
11	Phosphates as PO ₄	μmol/L	2.1	1.8	2.25	1.9	2.49	1.91	2.5	2.11	3.8	2.1	2.4	2.4
12	Total Nitrogen	μmol/L	12.4	9.8	10.8	8.2	17.1	14.2	22.9	16.4	25.7	17.1	18.6	12.6
13	Petroleum Hydrocarbon	μg/L	15	12	22	12	18	13	23	18	20	15	20	12
14	Total Dissolved Solids	mg/L	34322	34018	34982	34380	34740	33912	33710	32980	33210	33090	33912	33204
15	COD	mg/L	18	16	14	12	12	10	15	10	16	10	12	8
A Flora and Fauna														
16.1	Primary Productivity	mgC/L/day	2.2	0.65	1.8	0.94	2.48	1.3	3.06	2.25	3.29	2.13	3.1	1.9
B Phytoplankton														
17.1	Chlorophyll	mg/m ³	2.7	0.44	2.5	1.2	3.43	2.63	3.92	2.92	3.56	2.21	3.3	2.8
17.2	Phaeophytin	mg/m ³	0.8	0.65	1.2	0.8	2.58	2.4	2.23	1.47	2.85	1.51	1.9	1.3
17.3	Cell Count	No. x 10 ³ /L	140	95	170	110	110	63	164	98	172	80	150	60
17.4	Name of Group Number and name of group species of each group	—	Anabaena sp. Ankistrodesmus sp. Navicula sp. Scenedesmus sp. Pediastrum sp.	Fragilaria sp. Nitzschia sp. Thalassiosira sp. — —	Navicula sp. Oscillatoria sp. Thalassiosira sp. Closterium sp. Nitzschia sp.	Navicula sp. Fragilaria sp. Melosira sp. — —	Navicula sp. Nitzschia sp. Leptocylinthus sp. Thalassiosira sp.	Melosira sp. Nitzschia sp. Navicula sp. — —	Melosira sp. Closterium sp. Pediastrum sp. Nitzschia sp. Thalassiosira sp. Navicula sp.	Navicula sp. Nitzschia sp. Bacteriastrea sp. Melosira sp. — —	Navicula sp. Nitzschia sp. Thalassiosira sp. Melosira sp. — —	Nitzschia sp. Fragilaria sp. Bacteriastrea sp. — — —	Navicula sp. Nitzschia sp. Thalassiosira sp. Melosira sp. Biddulphia sp.	Nitzschia sp. Fragilaria sp. Melosira sp. — — —
C Zooplanktons														
18.1	Abundance (Population)	Nox10 ³ /100 m ³	18	45	45	60	64	85						
18.2	Name of Group Number and name of group species of each group	—	Copepods Amphipods Ctenophores Lamellibranches	Copepods Decapods Amphipods	Copepods Gastropods Ostracods	Amphipods Copepods Ostracods Decapods	Copepods Isopods Gastropods Ostracods	Copepods Isopods Gastropods Ostracods						
18.3	Total Biomass	mg/100 m ³	6.2	4.5	3.76	5.8	8.5	8.25						

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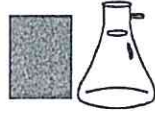
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D	Microbiological Parameters							
19.1	Total Bacterial Count	CFU/ml	1780	1990	1860	2040	1950	1980
19.2	Total Coliform	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.3	E.coli	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.4	Enterococcus species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.5	Salmonella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.6	Shigella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.7	Vibrio species	/ml	Absent	Absent	Absent	Absent	Absent	Absent

BDL* - Below Detection Limit

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Sea Water.

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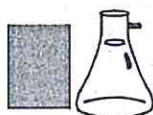
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Table-1.9: Sea Water Quality Analysis Results of MP1 West End towards Channel from the Sea Basin for the period: April, 2018 to Sep., 2018

S. NO.	TEST PARAMETERS	UNIT	RESULTS OF SEA WATER QUALITY ANALYSIS											
			MP1 WEST END TOWARDS CHANNEL FROM SEA BASIN(N 21° 5'9.78", E 72°37'24.48")											
			APRIL-18		MAY-18		JUNE-18		JULY-18		AUGUST-18		SEPTEMBER-18	
			Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom
1	pH	--	8.02	8.15	8.07	8.02	8.12	8.05	8.12	8.05	8.13	8.03	8.16	8.03
2	Temperature	°C	31.2	30.6	31.2	30.9	31.5	31.3	30.2	30	30.8	30.1	30.5	30.3
3	Total Suspended Solids	mg/L	440	380	460	428	403	278	450	372	416	390	312	274
4	BOD (3 Days @ 27 °C)	mg/L	6	4	4	3	3	2	3	1	2	BDL*	3	BDL*
5	Dissolved Oxygen	mg/L	6.2	5.8	6.4	6	6	5.8	6.6	6	6.6	5.4	6.4	6
6	Salinity	ppt	29.8	29.4	31	29.8	32	31	30.1	29.6	30.4	30.1	30.2	30
7	Oil & Grease	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
8	Nitrate as NO ₃	µmo/L	20.2	18.1	16.4	12.2	17.6	15.4	13.8	10.2	7.4	3.4	11.6	5.4
9	Nitrite as NO ₂	µmo/L	2.4	1.8	2	1.6	1.8	1.2	2.8	2.4	2.1	1.8	1.5	0.88
10	Ammonical Nitrogen as NH ₃	µmo/L	2.9	2.5	3.1	2.8	2.6	2.2	3	2.3	4.4	3	1.8	1.2
11	Phosphates as PO ₄	µmo/L	1.78	1.6	2.15	1.96	3.05	2.87	2.8	2.6	2.9	2.7	2.6	2.4
12	Total Nitrogen	µmo/L	15.4	13.8	11.8	9.8	12.4	10.2	19.6	14.9	13.9	8.2	14.9	7.48
13	Petroleum Hydrocarbon	µg/L	18	10	10	6	14	8	14	8	15	10	10	8
14	Total Dissolved Solids	mg/L	34210	33940	35460	35210	35790	35332	34112	33872	33902	33640	33756	33582
15	COD	mg/L	20	18	14	12	10	8	12	5	10	5	8	BDL*
A Flora and Fauna														
16.1	Primary Productivity	mgC/L/day	2.1	0.7	2.8	1.1	1.9	1.3	4.8	3.1	3.69	1.75	2.54	1.08
B Phytoplankton														
17.1	Chlorophyll	mg/m ³	2.8	0.5	2.4	1.5	3.19	2.37	3.8	2.1	3.33	2.11	3.33	2.5
17.2	Phaeophytin	mg/m ³	1.1	0.9	1.6	1.3	2.67	1.24	3.8	1.6	2.31	1.6	2.58	1.24
17.3	Cell Count	No. x 10 ⁶ /L	124	95	110	86	127	72	240	180	198	92	204	80
17.4	Name of Group Number and name of group species of each group	--	Ankistr odesm us sp. Navicul a sp. Pedlast rum sp. Nitzschl a sp.	Melosir a sp. Nitzschl a sp. Fragill a sp. --	Pedlast rum sp. Navicul a sp. Skeleto nema sp. Oscillat oria sp. Biddulp hia sp.	Navicul a sp. Nitzschl a sp. Melosir a sp. --	Thallasi osira Navicul a Nitzschl a Skeleto nema	Synedr a Navicu la --	Pediast rum Nitzschl a Navicul a Biddulp hia Thallasi osira	Navicul a Nitzschl a Pedlast rum	Pediast rum Closterl um Navicul a Thallasi osira	Navicul a Nitzschl a Bacteri astrum --	Pediast rum Nitzschl a Navicul a Thallasi osira	Navicul a Melosir a Bacteri astrum --
C Zooplanktons														
18.1	Abundance (Population)	Nox10 ³ /100 m ³	18	30	38	55	57	77						
18.2	Name of Group Number and name of group species of each group	--	Copepods Isopods Amphipods	Mysids Polychaetes Copepods Gastropods	Copepods Decapods Polychaetes	Copepods Gastropods Ostracods	Polychaetes Gastropods Ostracodsv	Polychaetes Gastropods Ostracods						
19.3	Total Biomass	mg/100 m ³	6.4	5.2	30.5	4.8	5.5	6.4						

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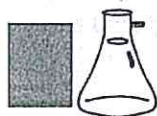
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D	Microbiological Parameters							
19.1	Total Bacterial Count	CFU/ml	1650	1850	1780	2310	2250	2290
19.2	Total Coliform	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.3	E.coli	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.4	Enterococcus species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.5	Salmonella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.6	Shigella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.7	Vibrio species	/ml	Absent	Absent	Absent	Absent	Absent	Absent

BDL* - Below Detection Limit

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Sea Water.

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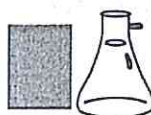
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Table-1.10: Sea Water Quality Analysis Results of CB1 End towards Channel from the Sea Basin for the period: April, 2018 to Sep., 2018

S. NO.	TEST PARAMETERS	UNIT	RESULTS OF SEA WATER QUALITY ANALYSIS CB1 END TOWARDS CHANNEL FROM SEA BASIN (N 21° 5'14.67" , E 72°37'40.14")											
			APRIL-18		MAY-18		JUNE-18		JULY-18		AUGUST-18		SEPTEMBER-18	
			Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom
1	pH	--	8.17	8.12	8.25	8.17	8.13	8.09	8.32	8.25	8.19	8.12	8.24	8.16
2	Temperature	°C	30.8	30.5	31.4	30.9	31.2	30	30.4	30.1	30	30	20.8	20.4
3	Total Suspended Solids	mg/L	440	390	380	342	410	372	388	362	440	410	356	310
4	BOD (3 Days @ 27 °C)	mg/L	4	2	3	2	5	4	5	2	2	1	2	BDL*
5	Dissolved Oxygen	mg/L	6	5.6	6.2	5.8	6.4	6.2	6.3	5.8	6.6	6.2	6.4	6
6	Salinity	ppt	30.2	29.8	30.8	30.5	31	30	30.3	29.8	30.6	29.6	30.8	30.1
7	Oil & Grease	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
8	Nitrate as NO ₃	µmo/L	17.2	13.8	14.8	11.2	19.6	13.2	20.6	15.2	19.4	11.2	14	10
9	Nitrite as NO ₂	µmo/L	2.2	1.8	1.6	1.1	2.4	1.6	2	1.7	3.6	2	2.4	1.6
10	Ammonical Nitrogen as NH ₃	µmo/L	3	2.7	4.4	3.1	2.8	2.2	3.3	2.7	1.8	1.2	1.2	1
11	Phosphates as PO ₄	µmo/L	2.1	1.8	1.84	1.65	2.98	2.15	2.12	1.9	2.35	2.1	2.1	1.80
12	Total Nitrogen	µmo/L	15.8	12.2	9.6	7.8	14.6	10.2	25.9	19.6	24.8	14.4	17.6	12.6
13	Petroleum Hydrocarbon	µg/L	14	8	18	16	20	14	29	6	14.6	10	18	8
14	Total Dissolved Solids	mg/L	33710	33430	34840	34362	35116	34992	34526	34090	33960	33210	34216	33974
15	COD	mg/L	18	8	11	10	18	16	18	7	14	10	10	BDL*
A Flora and Fauna														
16.1	Primary Productivity	mgC/L/day	1.2	0.75	1.44	0.85	1.8	0.95	2.74	2.07	3.15	2.7	2.61	1.57
B Phytoplankton														
17.1	Chlorophyll	mg/m ³	2.6	0.4	2.9	1.5	3.31	2.7	3.28	2.28	3.8	2.38	3.76	2.28
17.2	Phaeophytin	mg/m ³	1.5	0.5	1.1	0.8	1.51	1.06	2.13	1.33	2.18	1.86	2.04	1.94
17.3	Cell Count	No.x 10 ³ /L	95	80	120	90	121	69	180	88	156	76	166	82
17.4	Name of Group Number and name of group species of each group	--	Pedlast rum sp. Closteri um sp. Thallasi osira sp. Navicul a sp.	Nitzschl a sp. Navicul a sp. Meloslr a sp. --	Pedlast rum sp. Navicul a sp. Closteri um sp. Oscillat oria sp. Biddulph hla sp.	Navicul a sp. Skeleto nema sp. Bacillari a sp. --	Leptocy lindrus Navicul a Nitzsch la Syndra	Navicul a Meloslr a --	Navicul a Meloslr a Nitasch la Closteri um Biddulph hla Syndr a	Navicul a Thallasi osira Nitasch la --	Navicul a Meloslr a Nitasch la Closteri um Thallasi osira Syndr a	Navicul a Fraglazl a Nitasch la --	Meloslr a Rhizoso leria Nitasch la Syndr a Fragilla ria	Synedr a Fraglazl a Navicul a --
C Zooplanktons														
18.1	Abundance (Population)	Nox10 ³ /100 m ³	24		22		51		54		59		79	
18.2	Name of Group Number and name of group species of each group	--	Ostracods Copepods Foraminiferans		Foraminiferans Nematodes Copepods Decapods		Copepods Decapods Gastropods Polychaetes		Copepods Gastropods Ostracods Decapods		Copepods Gastropods Decapods		Copepods Gastropods Decapods	
18.3	Total Biomass	ml/100 m ³	8.2		7.5		4.02		5.8		4.9		6	
D Microbiological Parameters														

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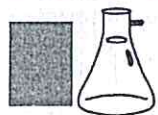
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19.1	Total Bacterial Count	CFU/ml	1710	1990	1640	1980	2100	1940
19.2	Total Coliform	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.3	E.coli	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.4	Enterococcus species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.5	Salmonella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.6	Shigella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
19.7	Vibrio species	/ml	Absent	Absent	Absent	Absent	Absent	Absent

BDL* - Below Detection Limit,

Minimum Detection Limit, BOD: 3.0 mg/L, Oil & Grease: 1.0mg/L, Petroleum Hydrocarbon: 10µg/L, Nitrite as NO₂: 0.002 mg/L, Pheophytin: 0.1 mg/m³

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Sea Water.

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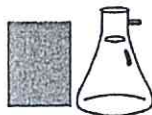
Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-4E:

DUMP POND DISCHARGE WATER QUALITY MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018

**POLLUCON** LABORATORIES PVT. LTD.**4E. DUMP POND DISCHARGE WATER QUALITY MONITORING: -****Table-1.11: Dump Pond Water Quality Analysis Results for the Period: April, 2018 to Sep., 2018**

Sr. No.	Parameters	Unit	28/05/2018	16/08/2018	16/08/2018	16/08/2018
			OLD COAL YARD	NEAR PUMP HOUSE COAL YARD	OLD COAL YARD	PET COCK
1	pH	--	8.98	8.01	7.76	7.92
2	Total Dissolved Solids	mg/L	2210	1046	168	162
3	Total Suspended Solids	mg/L	65	72	170	156
4	Turbidity	NTU	102	136	14.2	10.2
5	BOD (3 Days @ 27 °C)	mg/L	24	30	8.2	8.6
6	Dissolved Oxygen	mg/L	6.2	6.1	6.6	5.2
7	COD	mg/L	90	158	42	40
8	Salinity	ppt	0.92	1.4	0.055	0.068
9	Oil & Grease	mg/L	2.1	1.8	BDL*	BDL*
10	Total Hardness as CaCO ₃	mg/L	110	92	76	46
11	Fluoride as F	mg/L	1.1	0.64	0.32	0.28
12	Chloride as Cl	mg/L	508	780	30	38
13	Zinc as Zn	mg/L	0.035	0.064	0.01	0.012
14	Cadmium as Cd	mg/L	BDL*	BDL*	BDL*	BDL*
15	Lead as Pb	mg/L	BDL*	BDL*	BDL*	BDL*
16	Mercury as Hg	mg/L	BDL*	BDL*	BDL*	BDL*

BDL*: Below Detection Limit, Minimum Detection Limit, Mercury as Hg: 0.00025 mg/L, Oil & Grease: 1.0 mg/L, Cadmium as Cd: 0.001 mg/L, Lead as Pb: 0.005 mg/L, Fluoride: 0.01 mg/L.

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Dump Pond Discharge Water.

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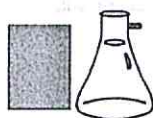
Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-4F:

AMBIENT NOISE LEVEL MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018



POLLUCON LABORATORIES PVT. LTD.

4F. AMBIENT NOISE LEVEL MONITORING: -

Table-1.12: Ambient Noise Level Monitoring Results during the Day Time In Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Near Port Gate No.: 2

Sampling Location	1 - Near Port Gate No.: 2					
Longitude Latitude	N 21° 05.426'E 72°37.739'					
Date of Monitoring	02/04/2018	03/05/2018	04/06/2018	02/07/2018	02/08/2018	03/09/2018
6:00-7:00	56.8	63.0	55.2	68.2	69.6	70.2
7:00-8:00	53.6	60.3	54.2	59.1	61.7	67.2
8:00-9:00	58.5	67.9	63.2	73.5	70.3	65.3
9:00-10:00	67.0	62.2	72.0	72.6	65.2	70.4
10:00-11:00	64.8	73.2	67.0	69.0	68.2	66.8
11:00-12:00	66.6	68.8	62.5	71.0	71.4	68.7
12:00-13:00	69.9	64.3	70.8	57.9	62.3	60.3
13:00-14:00	71.1	70.2	73.5	74.9	64.2	55.3
14:00-15:00	52.6	55.7	56.3	61.7	63.6	68.2
15:00-16:00	72.0	69.9	73.8	50.3	60.4	56.0
16:00-17:00	65.1	71.1	69.3	67.2	56.3	61.2
17:00-18:00	63.6	61.2	64.2	62.2	66.2	69.2
18:00-19:00	73.6	66.8	68.7	58.6	55.9	62.3
19:00-20:00	70.9	74.2	61.1	66.4	72.6	53.9
20:00-21:00	68.1	72.3	71.1	70.5	69.6	54.3
21:00-22:00	62.7	65.2	59.9	63.9	71.2	63.5

#dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Table-1.13: Noise Level Monitoring Results during the Night Time In Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Near Port Gate No.: 2

Sampling Location	1 - Near Port Gate No.: 2					
Longitude Latitude	N 21° 05.426'E 72°37.739'					
Date of Monitoring	02/04/2018 & 03/04/2018	03/05/2018 & 04/05/2018	04/06/2018 & 05/06/2018	02/07/2018 & 03/07/2018	02/08/2018 & 03/08/2018	03/09/2018 & 04/09/2018
22:00-23:00	65.1	66.0	61.9	60.0	59.2	55.2
23:00-00:00	58.7	61.2	63.2	64.4	56.2	62.1
00:00-01:00	66.2	67.4	58.9	59.0	62.8	61.2
01:00-02:00	61.5	65.4	68.2	53.9	61.6	51.2
02:00-03:00	57.6	59.2	62.4	63.9	57.3	59.5
03:00-04:00	55.2	54.8	60.2	58.8	55.2	64.7
04:00-05:00	60.3	62.3	59.2	65.6	57.2	58.3
05:00-06:00	43.8	46.9	50.9	56.8	55.2	59.9

#dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Observation: Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.

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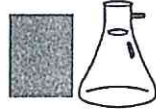
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Table-1.14: Ambient Noise Level Monitoring Results during the Day Time In Leq. dB(A) for the period: April, 2018 to Sep., 2018 At HSE Building Terrace

Sampling Location	2 - HSE Building Terrace					
Longitude Latitude	N 21° 05.043' E 72° 38.491'					
Date of Monitoring	05/04/2018	07/05/2018	07/06/2018	05/07/2018	24/08/2018	13/09/2018
6:00-7:00	63.2	70.0	62.2	72.3	68.3	69.3
7:00-8:00	49.2	50.3	56.2	61.9	62.5	65.0
8:00-9:00	59.3	68.2	71.2	66.0	69.2	72.3
9:00-10:00	65.3	58.2	67.6	57.2	59.3	52.0
10:00-11:00	66.2	67.2	65.7	52.2	65.2	62.5
11:00-12:00	57.8	66.9	69.2	56.6	67.9	54.3
12:00-13:00	70.8	71.2	63.6	55.3	68.1	64.3
13:00-14:00	68.1	60.2	61.2	59.9	50.7	66.1
14:00-15:00	61.5	63.7	52.3	60.2	65.2	55.3
15:00-16:00	69.8	72.0	71.0	54.4	64.5	58.2
16:00-17:00	64.9	59.2	60.1	68.8	62.9	63.2
17:00-18:00	67.0	73.2	55.7	53.6	56.2	60.3
18:00-19:00	72.9	69.6	57.7	58.0	60.8	56.3
19:00-20:00	60.5	62.9	68.0	71.4	53.6	61.0
20:00-21:00	71.4	65.5	64.5	51.1	61.2	67.2
21:00-22:00	55.2	61.1	59.0	67.0	66.6	72.9

*dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Table-1.15: Noise Level Monitoring Results during the Night Time In Leq. dB(A) for the period: April, 2018 to Sep., 2018 At HSE Building Terrace

Sampling Location	2 - HSE Building Terrace					
Longitude Latitude	N 21° 05.043' E 72° 38.491'					
Date of Monitoring	05/04/2018 & 06/04/2018	07/05/2018 & 08/05/2018	07/06/2018 & 08/06/2018	05/07/2018 & 06/07/2018	24/08/2018 & 25/08/2018	13/09/2018 & 14/09/2018
22:00-23:00	62.3	64.8	56.8	60.6	65.1	63.2
23:00-00:00	64.6	63.2	60.1	61.2	60.6	56.3
00:00-01:00	66.5	58.2	61.1	63.6	61.2	57.9
01:00-02:00	55.2	57.0	51.2	64.3	63.6	65.9
02:00-03:00	57.8	62.2	65.4	66.0	58.2	53.6
03:00-04:00	58.5	66.0	63.4	69.2	59.3	60.2
04:00-05:00	54.1	59.9	66.4	65.3	64.2	51.3
05:00-06:00	50.4	56.9	52.3	62.0	60.1	64.1

*dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Observation: Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.

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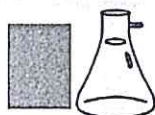
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Table-1.16: Ambient Noise Level Monitoring Results during the Day Time in Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Central Water Pump House

Sampling Location	3 - Central Water Pump House					
Longitude Latitude	N 21° 04.697' E 72° 38.420'					
Date of Monitoring	09/04/2018	10/05/2018	11/06/2018	09/07/2018	09/08/2018	18/09/2018
6:00-7:00	55.3	57.8	54.0	64.8	70.9	65.4
7:00-8:00	69.0	67.1	58.8	65.0	68.2	62.0
8:00-9:00	62.4	71.9	64.0	73.0	60.2	65.3
9:00-10:00	59.9	66.0	72.0	68.1	71.1	63.2
10:00-11:00	71.0	61.1	67.2	55.2	64.5	59.3
11:00-12:00	54.4	60.3	61.5	72.0	69.6	68.3
12:00-13:00	70.3	70.2	69.0	58.9	62.3	52.3
13:00-14:00	72.7	69.0	70.0	54.9	59.3	55.9
14:00-15:00	60.3	65.5	53.7	56.3	65.5	64.3
15:00-16:00	65.9	59.6	60.9	61.1	69.7	53.2
16:00-17:00	67.0	71.8	59.2	66.3	57.2	51.6
17:00-18:00	68.8	70.9	72.1	62.3	63.6	66.3
18:00-19:00	57.7	63.3	65.8	51.2	52.3	54.3
19:00-20:00	56.6	64.1	70.3	57.0	50.2	58.3
20:00-21:00	64.2	70.3	68.8	63.7	58.8	60.3
21:00-22:00	66.6	62.7	63.2	69.9	53.2	71.5

#dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Table-1.17: Noise Level Monitoring Results during the Night Time in Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Central Water Pump House

Sampling Location	3 - Central Water Pump House					
Longitude Latitude	N 21° 04.697' E 72° 38.420'					
Date of Monitoring	09/04/2018 & 10/04/2018	10/05/2018 & 11/05/2018	11/06/2018 & 12/06/2018	09/07/2018 & 10/07/2018	09/08/2018 & 10/08/2018	18/09/2018 & 19/09/2018
22:00-23:00	63.0	53.6	52.7	56.7	60.6	61.2
23:00-00:00	65.8	57.4	59.4	55.6	63.6	56.2
00:00-01:00	67.3	65.3	64.2	53.8	63.5	49.3
01:00-02:00	49.5	53.7	61.3	56.6	60.6	62.5
02:00-03:00	56.9	60.8	62.3	64.9	61.7	58.3
03:00-04:00	55.7	62.0	64.1	65.1	56.7	63.9
04:00-05:00	58.6	62.1	59.7	68.4	59.3	56.3
05:00-06:00	64.8	65.3	67.1	69.9	61.6	59.2

#dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Observation: Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.

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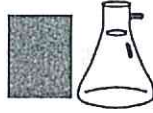
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Table-1.18: Ambient Noise Level Monitoring Results during the Day Time in Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Container Terminal

Sampling Location	4 - Container Terminal					
Longitude Latitude	N 21° 05.187' E 72° 37.774'					
Date of Monitoring	12/04/2018	14/05/2018	14/06/2018	12/07/2018	13/08/2018	21/09/2018
6:00-7:00	62.6	56.9	61.1	67.8	64.3	69.7
7:00-8:00	58.8	57.2	63.7	56.3	68.1	73.0
8:00-9:00	54.9	58.3	53.2	65.5	63.3	70.9
9:00-10:00	65.5	64.3	71.2	72.2	66.3	68.3
10:00-11:00	61.5	62.2	67.4	51.6	59.5	66.2
11:00-12:00	69.8	69.4	59.2	57.7	60.7	54.3
12:00-13:00	64.1	65.3	54.3	74.0	58.3	59.3
13:00-14:00	66.0	60.5	57.9	59.3	66.5	67.2
14:00-15:00	63.6	66.1	70.0	71.0	68.3	55.3
15:00-16:00	74.4	55.3	62.5	68.7	57.4	63.3
16:00-17:00	71.0	64.5	74.1	58.2	54.9	64.3
17:00-18:00	73.9	69.8	72.0	61.2	62.4	58.2
18:00-19:00	67.3	68.1	73.3	55.9	66.6	61.3
19:00-20:00	68.9	69.5	55.2	52.3	62.7	56.3
20:00-21:00	70.3	59.0	65.8	63.2	61.8	71.9
21:00-22:00	60.9	63.1	68.6	64.8	65.1	57.8

*dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time, shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Table-1.19: Noise Level Monitoring Results during the Night Time in Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Container Terminal

Sampling Location	4 - Container Terminal					
Longitude Latitude	N 21° 05.187' E 72° 37.774'					
Date of Monitoring	12/04/2018 & 13/04/2018	14/05/2018 & 15/05/2018	14/06/2018 & 15/06/2018	12/07/2018 & 13/07/2018	13/08/2018 & 14/08/2018	21/09/2018 & 22/09/2018
22:00-23:00	68.1	51.3	55.3	58.1	59.5	52.3
23:00-00:00	52.1	55.0	56.7	60.2	63.2	65.7
00:00-01:00	57.2	60.7	63.6	65.3	61.3	58.2
01:00-02:00	64.4	62.3	65.8	57.8	60.9	54.3
02:00-03:00	54.9	57.9	58.5	61.6	64.3	66.4
03:00-04:00	53.4	54.4	52.2	59.8	62.5	63.5
04:00-05:00	60.2	63.0	66.2	67.2	55.3	59.3
05:00-06:00	56.7	61.8	62.7	66.3	54.9	59.9

*dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Observation: Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.

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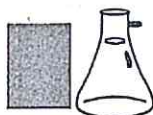
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Table-1.20: Ambient Noise Level Monitoring Results during the Day Time In Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Hazira Village

Sampling Location	5 - Hazira Village					
Longitude Latitude	N 21° 05.44' E 72° 38.44'					
Date of Monitoring	16/04/2018	17/05/2018	18/06/2018	16/07/2018	16/08/2018	22/09/2018
6:00-7:00	55.7	54.2	63.5	69.3	60.3	66.6
7:00-8:00	59.4	70.2	70.8	64.8	68.5	56.2
8:00-9:00	63.5	53.3	68.3	55.7	69.3	62.3
9:00-10:00	54.8	62.3	65.8	58.3	61.4	55.8
10:00-11:00	68.1	70.3	61.3	65.4	62.3	64.8
11:00-12:00	58.0	63.0	69.8	53.2	70.3	68.5
12:00-13:00	64.4	60.3	67.3	57.8	68.2	66.3
13:00-14:00	67.3	71.2	68.5	61.3	58.3	59.6
14:00-15:00	53.1	69.4	69.9	52.9	64.8	68.2
15:00-16:00	62.3	68.8	70.6	59.8	54.4	52.1
16:00-17:00	56.5	67.3	64.4	63.2	57.9	60.7
17:00-18:00	69.7	72.3	62.7	56.2	55.5	65.3
18:00-19:00	60.9	55.3	58.3	68.2	65.4	68.3
19:00-20:00	52.9	58.3	54.5	62.0	62.2	69.2
20:00-21:00	66.0	65.6	57.1	67.3	66.8	53.6
21:00-22:00	61.8	64.5	60.9	72.6	68.1	57.4

*dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Table-1.21: Noise Level Monitoring Results during the Night Time In Leq. dB(A) for the period: April, 2018 to Sep., 2018 At Hazira Village

Sampling Location	5 - Hazira Village					
Longitude Latitude	N 21° 05.44' E 72° 38.44'					
Date of Monitoring	16/04/2018 & 17/04/2018	17/05/2018 & 18/05/2018	18/06/2018 & 19/06/2018	16/07/2018 & 17/07/2018	16/08/2018 & 17/08/2018	22/09/2018 & 23/09/2018
22:00-23:00	62.4	61.3	65.6	64.5	61.8	60.1
23:00-00:00	51.6	48.8	53.6	57.8	55.6	58.2
00:00-01:00	55.3	59.9	60.9	58.3	61.0	57.4
01:00-02:00	50.3	54.3	55.3	63.3	52.3	62.5
02:00-03:00	46.4	51.3	50.2	55.8	59.5	58.6
03:00-04:00	52.2	58.6	59.6	62.3	56.6	56.7
04:00-05:00	57.5	60.3	62.3	65.8	61.5	59.5
05:00-06:00	54.0	53.9	58.1	56.2	60.7	48.4

*dB(A) Leq. denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

Day Time shall mean from 6:00 am to 10:00 pm and Night Time shall mean from 10:00 pm to 06:00 am.

Observation: Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000

Note: The Noise Level of Hazira Village is compare with the Industrial area Norms as Hazira Village is Surround By Numbers of Industries.

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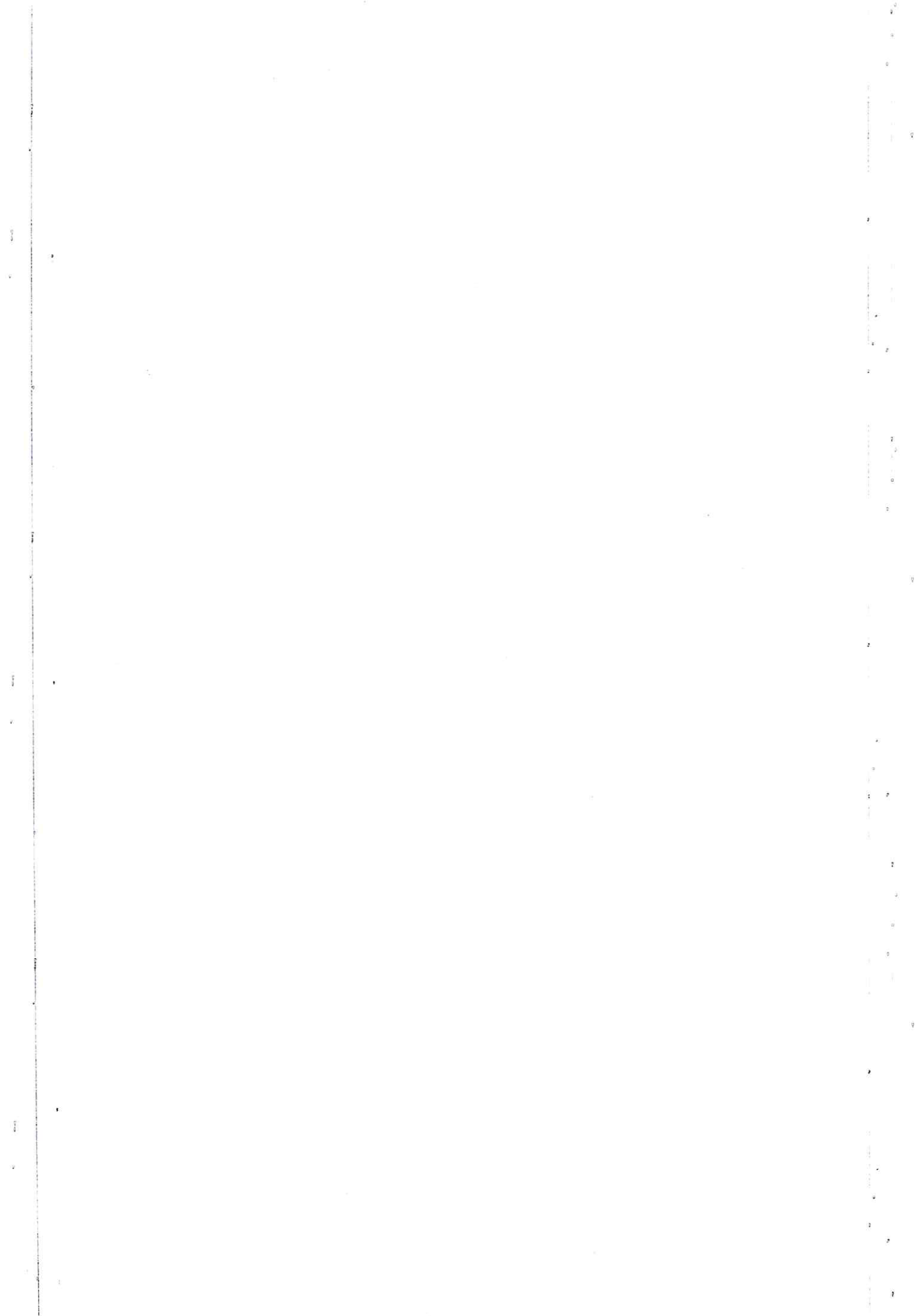
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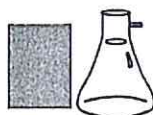
Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-4G:

DG SETS & STACK EMISSION AND NOISE LEVEL MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018

**POLLUCON** LABORATORIES PVT. LTD.**4G. DG SETS STACK EMISSION AND NOISE LEVEL MONITORING: -****Table-1.22: DG Sets Stack Monitoring Results for the period: April, 2018 to Sep., 2018**

Sr. No.	Parameters	Unit	DG SET TOYO DENKI -1		DG SET TOYO DENKI -2		DG SET TOYO DENKI -3	
			MAY-18	AUG-18	MAY-18	AUG-18	MAY-18	AUG-18
1	Particulate Matter	mg/Nm ³	15.5	19.84	11.74	13.41	12.83	15.63
2	Sulphur Dioxide	ppm	6.61	7.91	5.37	7.51	4.34	6.27
3	Oxide of Nitrogen	ppm	39.23	32.67	36.95	25.77	32.89	28.77
4	Carbon Monoxide (CO)	mg/m ³	5.73	10.1	7.43	6.44	3.93	7.63
5	Non Methyl Hydro Carbon (NMHC)	mg/m ³	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*

Table-1.23: DG Sets Noise Level Monitoring Results for the period: April, 2018 to Sep., 2018

Sr. No.	DG Set Average Noise Level In Leq. dB(A)		
	Sampling Location	At 1 M Distance From The Enclosure	
	Sampling Date	MAY-18	AUG-18
1.	DG SET TOYO DENKI -1	71.2	72.7
2.	DG SET TOYO DENKI -2	73.5	70.5
3.	DG SET TOYO DENKI -3	72.4	71.8

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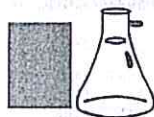
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To : Sept., 2018

ANNEXURE-4H:

SEA SEDIMENT QUALITY MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018



POLLUCON LABORATORIES PVT. LTD.

4H. SEA SEDIMENT QUALITY MONITORING: -

Table-1.25: Sea Sediment Quality Results of CB2 South End towards Landside for the period: April, 2018 to Sep., 2018

S. NO.	PARAMETERS	UNIT	CB2 SOUTH END TOWARDS LANDSIDE FROM SEA BASIN (N 21° 5'1.92", E 72°37'56.58")					
			APRIL-18	MAY-18	JUNE-18	JULY-18	AUG-18	SEP-18
1	Organic Matter	%	0.36	0.54	0.48	0.65	0.55	0.65
2	Phosphorus as P	µg/g	810	920	680	620	740	920
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	µg/g	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Heavy Metals							
5.1	Aluminum as Al	%	4.8	5.1	4.9	5.3	5.3	5.5
5.2	Total Chromium as Cr ⁺³	µg/g	140	112	132	112	130	156
5.3	Manganese as Mn	µg/g	1540	1710	1680	1780	1810	1922
5.4	Iron as Fe	%	4.6	4.9	4.9	5.1	4.7	4.9
5.5	Nickel as Ni	µg/g	42	56	36	42	40	32
5.6	Copper as Cu	µg/g	38.2	32	29	30	31	40
5.7	Zinc as Zn	µg/g	172	210	170	210	156	260
5.8	Lead as Pb	µg/g	12.6	8.4	10.8	7.5	7.4	3.2
5.9	Mercury as Hg	µg/g	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
6	Benthic Organisms							
6.1	Macrobenthos (No and name of groups present, No and name of species of each group present)	--	Polychaetes Bivalves	Polychaete worms Brachyurans	Polychaetes Bivalves	Bivalves Polychaetes Decapods	Bivalves Polychaetes	Bivalves Polychaetes
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Copepods	Foraminifer ans Bryozoans	Copepods	Copepods	Bryozoans Ostracodes	Copepods Ostracodes
6.3	Population	No./m ²	480	210	380	471	324	412

BDL* - Below Detection Limit

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Sea Sediment.

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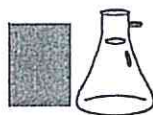
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Table-1.26: Sea Sediment Quality Results of MP1 West End towards Channel of Sea Basin for the period: April, 2018 to Sep., 2018

S. NO.	PARAMETERS	UNIT	MP1 WEST END TOWARDS CHANNEL OF SEA BASIN (N 21° 5'9.78", E 72°37'24.48")					
			APRIL-18	MAY-18	JUNE-18	JULY-18	AUG-18	SEP-18
1	Organic Matter	%	0.28	0.44	0.52	0.45	0.38	0.54
2	Phosphorus as P	µg/g	740	610	940	810	930	810
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	µg/g	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Heavy Metals							
5.1	Aluminum as Al	%	5.1	5.6	5.25	5.1	5.4	5.3
5.2	Total Chromium as Cr ⁺³	µg/g	108	98	110	142	170	110
5.3	Manganese as Mn	µg/g	1680	1820	1570	1840	1620	1788
5.4	Iron as Fe	%	4.9	4.7	5.1	5.05	4.9	4.8
5.5	Nickel as Ni	µg/g	58	38	58	36	48	44
5.6	Copper as Cu	µg/g	23.4	29	36	38	24	28
5.7	Zinc as Zn	µg/g	188	270	212	232	214	234
5.8	Lead as Pb	µg/g	10.2	7.2	8.6	6.2	5.1	2.6
5.9	Mercury as Hg	µg/g	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
6	Benthic Organisms							
6.1	Macrobenthos (No and name of groups present, No and name of species of each group present)	--	Polychaete worms	Bivalves Polychaete	Polychaetes Isopods	Polychaetes Decapods Isopods	Polychaetes Decapods	Polychaetes Chaetognaths
6.2	Melobenthos (No and name of groups present, No and name of species of each group present)	--	Nematodes Copepods	Nematodes Bryozoans	Bryozoans	Ostracodes	Bryozoans	Copepods
6.3	Population	No./m ²	590	180	176	412	235	324

BDL* - Below Detection Limit

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Sea Sediment.

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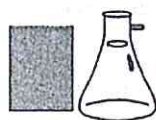
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Table-1.27: Sea Sediment Quality Results of CB1 End towards Channel for the period: April, 2018 to Sep., 2018

S. NO.	PARAMETERS	UNIT	CB1 WEST END TOWARDS CHANNEL OF SEA BASIN (N 21° 5'14.67", E 72°37'40.14")					
			APRIL-18	MAY-18	JUNE-18	JULY-18	AUG-18	SEP-18
1	Organic Matter	%	0.6	0.75	0.64	0.72	0.62	0.6
2	Phosphorus as P	µg/g	770	840	770	890	810	980
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	µg/g	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Heavy Metals							
5.1	Aluminum as Al	%	5.3	5.45	5.05	5.5	4.9	5.2
5.2	Total Chromium as Cr ⁺³	µg/g	152	172	127	130	152	172
5.3	Manganese as Mn	µg/g	1710	1960	1810	1580	1570	1490
5.4	Iron as Fe	%	5.1	5.3	4.8	5.2	5.2	4.75
5.5	Nickel as Ni	µg/g	35	65	42	58	56	52
5.6	Copper as Cu	µg/g	44.6	36	24	44	18	23
5.7	Zinc as Zn	µg/g	156	198	150	263	196	218
5.8	Lead as Pb	µg/g	14.8	9.9	13.2	5.5	2.8	3.8
5.9	Mercury as Hg	µg/g	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
6	Benthic Organisms							
6.1	Macrobenthos (No and name of groups present, No and name of species of each group present)	--	Polychaete worms Decapods	Polychaete worms Bivalves	Polychaete s Gastropod s	Polychaete s Bivalves	Polychaete s Bivalves	Polychaete s Decapods
6.2	Melobenthos (No and name of groups present, No and name of species of each group present)	--	Nematode s	Bryozoans Nematods	Bryozoans	Copepods Ostracodes	Copepods	Copepods
6.3	Population	No./m ²	450	240	265	529	206	206

BDL* - Below Detection Limit

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Sea Sediment.

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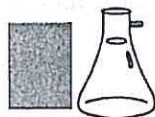
Adani Hazira Port Private Limited

From : Apr., 2018
To : Sept., 2018

ANNEXURE-4I:

SOIL QUALITY MONITORING RESULTS

PERIOD: Apr., 2018 TO Sept., 2018

**POLLUCON LABORATORIES PVT. LTD.****4I. SOIL QUALITY MONITROING: -****Table-1.28A : Soil Quality Testing Results for the period: April, 2018 to Sep., 2018**

SR. NO.	PARAMETERS	UNIT	NEAR LT CANTEEN PARKING	NEAR PORT GATE NO. 2
			30/04/2018	30/04/2018
1	Type	--	Clay	Clay
Grain Size Analysis				
2	Gravel	%	3.9	2.8
3	Coarse Sand	%	6	3.9
4	Medium Sand	%	10.2	13.2
5	Fine Sand	%	57.9	56.1
6	Total Sand	%	22	24
7	Silt + Clay	%	78	76
8	pH (1:5)	--	9.3	9.05
9	Electricity Conductivity	µmho/cm	1860	1960
10	Alkali matter	mg/kg	590	760
11	Cation Exchange Capacity	meq/100 gm	60	52
12	Sodium Absorption Ratio	--	12	13.2
13	Organic Matter	mg/kg	0.8	0.56
14	Available Nitrogen	meq/100 gm	0.24	0.32
15	Available Potassium	mg/kg	2.6	4.1
16	Available Phosphorus	mg/kg	0.34	0.36
17	Available Sodium	mg/kg	0.65	1.1
18	Permeability	cm/sec	4.2×10^{-5}	4.2×10^{-5}

Observation: From the above results it is concluded that there is No Significant Changes In the Quality of Soil Quality.

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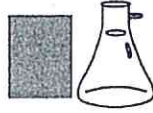
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**POLLUCON** LABORATORIES PVT. LTD.**Table-1.28A : Soil Quality Testing Results for the period: April, 2018 to Sep., 2018**

SR. NO.	PARAMETERS	UNIT	NEAR LT CANTEEN PARKING	NEAR PORT GATE NO. 2
			28/06/2018	28/06/2018
1	Type	--	Clay	Clay
Grain Size Analysis				
2	Gravel	%	2.4	2.1
3	Coarse Sand	%	8.2	6.2
4	Medium Sand	%	12.6	15.4
5	Fine Sand	%	53.8	58
6	Total Sand	%	23	22
7	Silt + Clay	%	77	78
8	pH (1:5)	--	8.95	8.95
9	Electricity Conductivity	µmho/cm	1920	2010
10	Alkali matter	mg/kg	610	702
11	Cation Exchange Capacity	meq/100 gm	55	58
12	Sodium Absorption Ratio	--	14	15
13	Organic Matter	mg/kg	0.72	0.45
14	Available Nitrogen	meq/100 gm	0.18	0.24
15	Available Potassium	mg/kg	3	3.5
16	Available Phosphorus	mg/kg	0.25	0.4
17	Available Sodium	mg/kg	0.75	0.9
18	Permeability	cm/sec	3.8×10^{-5}	3.9×10^{-5}

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Soil Quality.

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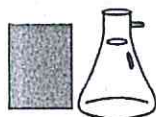
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**POLLUCON** LABORATORIES PVT. LTD.**Table-1.28A : Soil Quality Testing Results for the period: April, 2018 to Sep., 2018**

SR. NO.	PARAMETERS	UNIT	NEAR LT CANTEEN PARKING	NEAR PORT GATE NO. 2
			27/09/2018	27/09/2018
1	Type	--	Clay	Clay
Grain Size Analysis				
2	Gravel	%	1.2	1.1
3	Coarse Sand	%	7.4	5.8
4	Medium Sand	%	14.4	13.4
5	Fine Sand	%	30	24.2
6	Total Sand	%	53	44.5
7	Silt + Clay	%	47	55.5
8	pH (1:5)	--	8.65	8.89
9	Electricity Conductivity	µmho/cm	1720	1778
10	Alkali matter	mg/kg	590	690
11	Cation Exchange Capacity	meq/100 gm	48	50
12	Sodium Absorption Ratio	--	12	13
13	Organic Matter	mg/kg	0.58	0.35
14	Available Nitrogen	meq/100 gm	0.21	0.18
15	Available Potassium	mg/kg	4	4
16	Available Phosphorus	mg/kg	0.32	4.2
17	Available Sodium	mg/kg	1.1	0.95
18	Permeability	cm/sec	3.6×10^{-5}	3.8×10^{-5}

Observation: From the above results it is concluded that there is No Significant Changes in the Quality of Soil Quality.

Authorized Signatory

● FSSAI Approved Lab

● Recognised by MoEF, New Delhi Under
Sec. 12 of Environmental (Protection) Act-1986

● GPCB approved
schedule II auditor

● ISO 14001

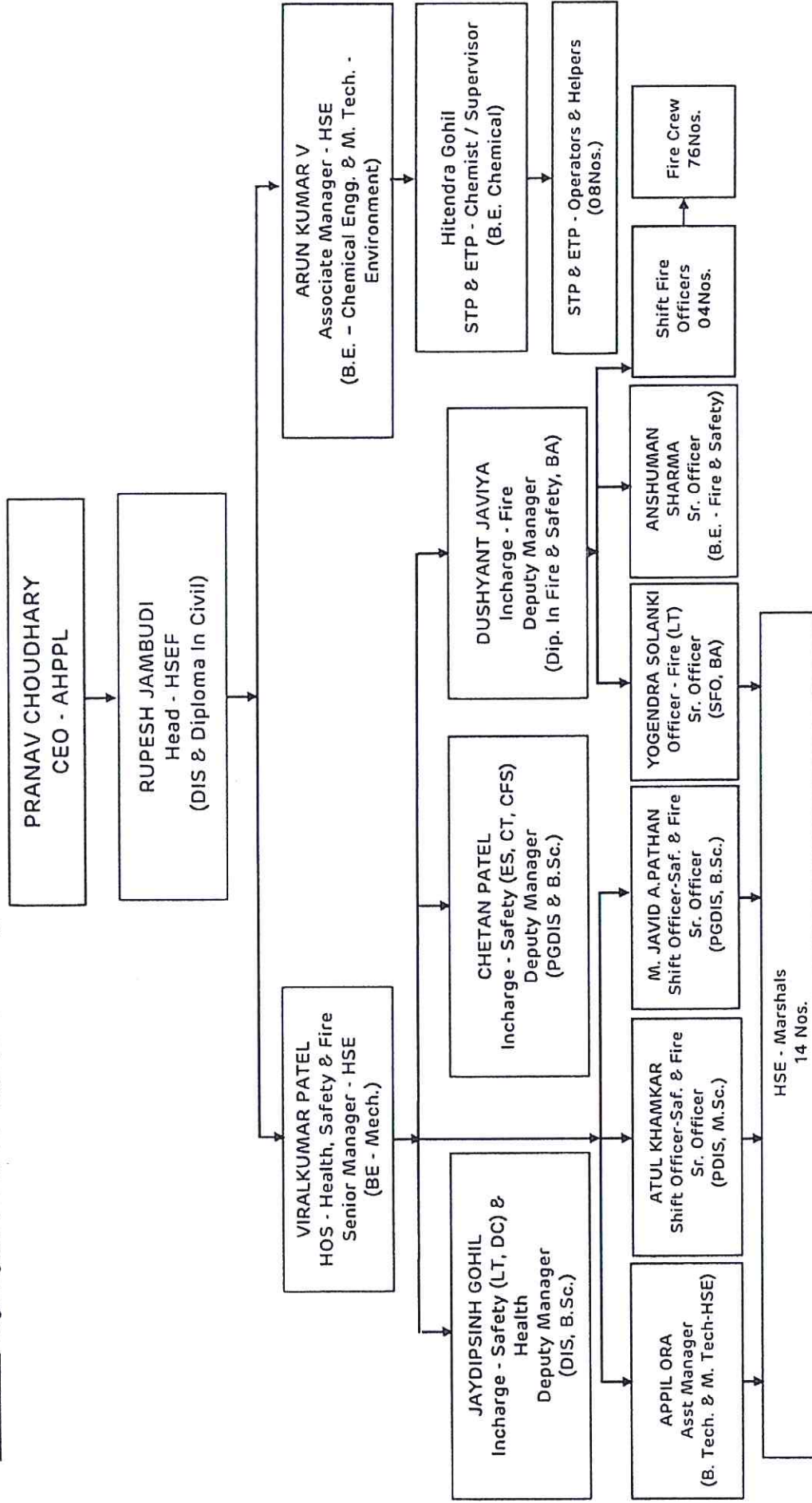
● OHSAS 18001

● ISO 9001

"Pollucon House", Plot No. 5 & 6, Opp. Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,
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Annexure-5: Organogram Of AHPPL - Environment Management Cell: -



ANNEXURE-6:
DETAILS OF ENVIRONMENT MANAGEMENT BUDGET
FOR THE FINANCIAL YEAR: 2018-19

**Adani Hazira Port Private Limited**From : Apr., 2018
To : Sept., 2018**Annexure-6: Details of Environment Management Budget For The Financial Year: 2018-19**

S. No.	Activities	Budget Amount (In Lacs)	Expenditure (INR In Lacs till 30 th Sept, 18)
1	Salary of Environmental Professionals	15.00	2.38
2	Environmental Study / Audit and Consultancy Services	21.81	0.00
3	Legal & Statutory Expenses	3.00	0.01
4	Environmental Monitoring Services	15.37	8.36
5	Mangrove Afforestation/Plantation & Bio-Shielding Pilot Project	12.78	4.83
6	Hazardous Waste Management & Disposal	12.76	1.56
7	Horticulture Development - Greenery and Plantation	139.65	48.20
8	O&M of Sewage Treatment Plants and Effluent Treatment Plant	41.75	6.97
9	Environment Day Celebration	2.00	2.00
10	Treatment and Disposal of Bio-Medical Waste	1.07	0.03
11	Environmental Initiatives & Others Miscellaneous	5.50	82.52
Total Amount (INR In Lacs)		270.69	156.86