

Letter No. APPPL-EHS/MOEF RO/EC Comp Nov 16

Date: 22/11/2016

The Additional Principal Chief Conservator of Forests (C),
Western Regional Office,
Ministry of Environment, Forest & Climate Change
E-5, Arera colony, Link Road-3,
Ravishankar Nagar, Bhopal-462016 (M.P.)
Email: rowz.bpl-mef@nic.in

Kind Attn: Sh Tejinder Singh (IFS)

Dear Sir,

Sub : Half yearly Compliance report of Environment and CRZ Clearance for the period from **April, 16 to September, 16.**

Ref : 1) Environmental and CRZ clearances granted to M/s Adani Petronet (Dahej) Port Pvt Ltd for Phase I and Phase II vide letters dated 6th July, 2007 and 11th November 2008 bearing F. No. 11-37/2007-IA-III respectively.
2) CRZ clearance/recommendation issued by Department of Environment & Forest, GoG vide letter dated 16th May, 2007 bearing no. ENV-102006-71-P for phase I and letter dated 29th September, 2008 bearing no. ENV-10-2007-2126-E for phase II.

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

Thank you,

Yours Faithfully,

For **M/s Adani Petronet (Dahej) Port Pvt Ltd.**

22.11.16
(Capt. A. K. Singh)

Chief Executive Officer



Copy to:

1. The Director (Monitoring -IA Division), Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003
2. The Director, Forest and Environment Department, Block - 14, 8th Floor, Sachivalaya, Gandhinagar, Gujarat- 382010
3. The Zonal Officer, Central Pollution Control Board, Zonal Office Vadodra, Parivesh Bhawan, Opposite VMC Ward office No. 10, Subhanpura, Vadodra-390023
4. The Chairman, Gujarat Pollution Control Board, Parvayaran Bhawan, Sector 10A, Gandhinagar-382010(Guj.)
5. The Regional Officer, Gujarat Pollution Control Board, Bharuch

Half yearly Compliance report for Environment and CRZ Clearance for the development of Solid Cargo Port Terminal Phase – I and Phase – II.

Sr. No.	Specific Conditions	Compliance
P2(i)	All the conditions stipulated by Ministry of Environment and Forests, Regional Office, Western Region, Bhopal vide their letter No. 6-GJ060/2006-BHO/1508, dtd., 16.6.2008 shall be strictly adhered to	All condition mentioned in the referred letter are for diversion of 38 Ha Forest land. All conditions have been complied with and Forest land is now in possession with APDPPL.
P2(ii)	All the conditions stipulated by Forest and Environment Department, Govt. of Gujarat vide their letter No.-FCA-1006(10-9)SF-76-K, dated., 1.7.2008 dated 16.6.2008 shall be strictly adhered to	All condition mentioned in the referred letter are for diversion of 38 Ha Forest land. All conditions have been complied with and Forest land is now in possession with APDPPL.
P2(iii)	No reclamation will be carried out for the activity	Complied. Project has been developed within existing land without any reclamation.
P2(iv)	All the conditions stipulated by the Gujarat Coastal Zone Management Authority including Ministry of Environment and Forests clearance dated 16.6.2008 under the Forest Conservation Act shall complied.	All condition mentioned in the referred letter are for diversion of 38 Ha Forest land. All conditions have been complied with and Forest land is now in possession with APDPPL.
P2(v) P1(i)	Sewage Treatment Plant should be included in the project	All the domestic effluent is being treated in the Sewage Treatment plant installed at site. Treated water is being used in horticulture purpose..
P2(vi) P1(ii)	Afforestation in 200 ha. with mangroves should be undertaken under the project, as identified by the Gujarat Forest Department	Mangrove afforestation has been carried out in an area of 400 ha . Details are given below. 1. 100 ha near village Dandi, Dist Surat– 2011 2. 50 ha near village Jakhau, Dist Kutch – 2011 3. 50 ha near Padri bit, Dist Bhavnagar – 2011 4. 200 ha near Malpur, Dist Jambusar – 2013-14
P2(vii)	Afforestation @1:3 shall be carried out in case of any trees to be cut.	Complied. Details of afforestation were submitted along with the half-yearly compliance report dated 27 th May, 2014 and there is no further change.
P2(viii) P1(iii)	The recommendations of the Risk Assessment Report should be incorporated	Complied. Risk Assessment Report was submitted along with compliance report dt. 20 th February, 2008. The recommendation of risk assessment are incorporated and followed.

Half yearly Compliance report for Environment and CRZ Clearance for the development of Solid Cargo Port Terminal Phase – I and Phase – II.

Sr. No.	Specific Conditions	Compliance
P2(ix) P1(v)	The materials for the filling and pavement construction should be made available from approved quarries	Complied. Construction of the project was completed in February 2011.
P2(x) P1(vi)	Sufficient fixed and mobile firefighting system should be provided exclusively for the terminal in consultation with the local statutory bodies.	Complied. Details of the fire-fighting system were submitted along with the compliance report dated 27.05.2014 and there is no further change.
P2(xi) P1(x)	All development in the port should be carried out in accordance with the Coastal Regulation Zone Notification, 1991 and approved Coastal Zone Management Plan of Gujarat.	Complied. Construction has been completed in February 2011 and same was carried out in accordance with CRZ Notification 1991.
P2(xii) P1(xi)	There shall be no withdrawal of ground water in CRZ area for this project. The proponent should ensure that as a result of the proposed constructions, ingress of saline water into ground water does not take place. Piezometers shall be installed for regular monitoring for this purpose at appropriate locations on the project site.	Complied. Ground water is not tapped in CRZ area for the project. Two Piezometers has been installed at different locations inside port. Regular monitoring of ground water level & quality is being monitored through accredited laboratory. Copies of reports are enclosed as Annexure 1 .
P2(xiii) P1(xii)	The project shall not be commissioned till the requisite water supply and electricity to the project are provided by the PWD/Electricity Department.	Project is commissioned after obtaining permission from PWD and Electricity Department. 1. GIDC permission dtd 19.02.2013 2. Electricity Department approval dtd 18.02.2011
P2(xiv) P1(xiii)	Specific arrangements for rain water harvesting shall be made in the project design and the rain water so harvested shall be optimally utilized. Details in this regard shall be furnished to this Ministry's Regional Office at Bhopal within 3 months	The feasibility study for rain water harvesting was conducted. Report was submitted along with the half-yearly compliance report dated 22.05.2015.
P2(xv) P1(xv)	No land reclamation should be carried out for this project.	Complied. Project has been developed within existing land without any reclamation.
P2(xvi) P1(xvi)	Green buffer zone should be provided all around the project area in consultation with local forest department and report submitted to this Ministry's Regional Office at Bhopal.	Green belt is being developed on periphery of the project boundary. So far 7.5 ha of Green belt is developed which mainly includes casuarina, wasigtonia palm, cassia samiea, peltorum, delonix regia, ficus sps.
P2(xvii) P1(xiv)	The facilities to be constructed in the CRZ area as part of this project should be	Complied. Construction of the project was completed in February 2011 and

Half yearly Compliance report for Environment and CRZ Clearance for the development of Solid Cargo Port Terminal Phase – I and Phase – II.

Sr. No.	Specific Conditions	Compliance
	strictly in conformity with the provisions of the CRZ Notification, 1991 as amended subsequently.	same is in conformity with the provisions of the CRZ Notification 1991
P2(xviii) P1(xvii)	No product other than those permissible in the Coastal Regulation Zone Notification, 1991 should be stored in the Coastal Regulation Zone area.	Complied. APDPPL is handling dry cargo mainly coal and other bulk cargos at designated storage area as per approval.
P1(iv)	Location of general cargo berth should be taken in to considerations with regard to location of LNG terminal	Complied. Solid Cargo Port Terminal jetty is approx. 500 m away from the LNG jetty of Petronet LNG Ltd.
P1(vii)	The wave tranquility study and the ship maneuvering studies carried out should be taken in to account while operating the Port.	Complied. Ship mooring study and wave tranquility studies were carried out to understand the wind wave and swell wave conditions. The recommendations are being regularly followed.
P1(viii)	The project proponent should ensure that during construction and operation of the port there will be no impact on the livelihood of the fisherman. The fisherman should be provided free access to carry out the fishing activity.	Complied. There is no impact on fishermen livelihood due to project activity and free access to the "Pagadiya" fishermen has been already provided. However, there is no commercial fishing in the area.
P1(ix)	All necessary precaution while undertaking construction and operation of the port should be taken keeping in view the bathymetric changes caused due to cyclones.	Complied. Construction activities are completed in February, 2011. APDPPL has a well-defined DMP and regular mock drills are being conducted. DMP is also reviewed at regular interval.
General Conditions		
P2(i) P1(i)	Construction of proposed structures shall be undertaken meticulously conforming to the existing Central/local rules and regulations including Coastal Regulation Zone Notification 1991 & its amendments. All the construction designs/drawings relating to the proposed construction activities must have approvals of the concerned state Government Departments/Agencies.	Complied. All the development activities are being taken up in accordance with the CRZ notification, 1991 & its subsequent amendments. The approval for the project has been obtained from concern government department that is GMB as per their NOC date 27 Jan 2006. Necessary approval has been obtained from GIDC for the project.
P2(ii) P1(ii)	Adequate provision for infrastructure facilities such as water supply, fuel, sanitation etc. should be ensured for construction workers during the construction phase of the project so as to avoid felling of trees/mangroves and	Complied. Construction of the project was completed on February 2011.

Half yearly Compliance report for Environment and CRZ Clearance for the development of Solid Cargo Port Terminal Phase – I and Phase – II.

Sr. No.	Specific Conditions	Compliance
	pollution of water and the surrounding.	
P2(iii) P1(iii)	The project authorities must make necessary arrangements for disposal of solid waste and for the treatment of effluents by providing a proper wastewater treatment plant outside the CRZ area. The quality of treated effluents, solid wastes and noise level etc. must conform to the standards laid down by the competent authorities including the Central/State Pollution Control Board and the Union Ministry of Environment and Forest under the Environmental (Protection) Act, 1986, whichever are more stringent.	The Project activity is not generating any trade effluent. The monitoring results for the period from April,16 to September, 16 are enclosed as Annexure – 1
P2(iv) P1(iv)	The proponent shall obtain the requisite consents for discharge of effluents and emission under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 from the Gujarat State Pollution Control Board before commissioning of the project and a copy of each of these shall be sent to this Ministry.	Complied. APDPPL has obtained Consolidated Consent & Authorization vide order no. AWH 73359 from GPCB which is valid up to 16/7/2020.
P2(v) P1(v)	The proponent shall provide for a regular monitoring mechanism so as to ensure that the treated effluents conform to the prescribed standards. The record of analysis reports must be properly maintained and made available for inspection to the concerned State/Central officials during their visits.	Complied. Domestic effluent is being treated in STPs. The treated water conforming to the norms is being used for horticulture purpose. The monitoring results of the treated wastewater from STP for the period from April 2016 – September 2016 are enclosed as Annexure – 1
P2(vi) P1(vi)	In order to carry out the environmental monitoring during the operational phase of the project, the project authorities should provide an environmental laboratory well equipped with standard equipment and facilities and qualified manpower to carry out the testing of various environmental parameters.	APDPPL has engaged NABL accredited and MoEF recognised laboratory for environmental monitoring. The monitoring results for the period from April 2016 – September 2016 are enclosed as Annexure – 1
P2(vii) P1(vii)	The sand dunes and mangroves, if any on the site should not be disturbed in any way.	There are no sand dunes on the site. Water flow to the sparse mangroves near the project is being maintained.

Half yearly Compliance report for Environment and CRZ Clearance for the development of Solid Cargo Port Terminal Phase – I and Phase – II.

Sr. No.	Specific Conditions	Compliance
P2(viii) P1(viii)	A copy of the clearance letter will be marked to the concern Panchayat/local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.	Complied.
P2(ix) P1(ix)	The Gujarat State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/Tehsildar's Office for 30 days.	This condition does not belong to the project proponent.
P2(x) P1(x)	The fund earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards should be reported to this Ministry's Regional Office at Bhopal and the State Pollution Control Board.	Complied. Separate budget is allocated for Environmental Management. Key components of environment budget are environmental Monitoring, STP's (Operations and Maintenance), Closed Conveyor System Maintenance and etc. The allocation of revenue budget for Environment Cell for the FY 2016-17 was approx. Rs. 172.77 lacs. Details of the environmental budget and expenditure for the April 2016 to September 2016 is enclosed as Annexure - 2
P2(xi) P1(xi)	Full support should be extended to the officers of this Ministry's Regional Office at Bhopal and the officers of the Central and State Pollution Control Boards by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.	Complied. Full support is always extended to the officers of Ministry/ Regional Office, MoEF as well as officers of Central and State Pollution Control Board.
P2(xii) P1(xii)	In case of deviation or alteration in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection.	Noted and complied with.
P2(xiii) P1(xiii)	This Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the	Noted.

Half yearly Compliance report for Environment and CRZ Clearance for the development of Solid Cargo Port Terminal Phase – I and Phase – II.

Sr. No.	Specific Conditions	Compliance
	satisfaction of the Ministry.	
P2(xiv) P1(xiv)	This Ministry or any other competent authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Noted.
P2(xv) P1(xv)	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental 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 & Forest at http://www.envfornic.in . The advertisement should be made within 7 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.	Complied. Advertisement of phase 1 approval was published in Gujarati language in "Sandesh" newspaper dated 01/09/2007 and in English language in "GUJARAT SAMACHAR" newspaper dated 11.9.2007. Advertisement of phase 2 approval was published in gujarati language in "Divya Bhaskar" newspaper and in English language in "The Times of India" dated 19/11/2008.
P2(xvi) P1(xvi)	The Project proponents should inform the Regional Office at Bhopal as well as the 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.	Financial closure date of Project was 31 st July 2007. Existing Facility – construction started date July 2007. Land development work for phase II started in Jan. 2009. The approval for the project has been obtained from concern government department that is GMB as per their NOC date 27 Jan 2006. Necessary approval has been obtained from GIDC for the project.
P2(xvii)	Any appeal against this environment clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Appellate Act, 1997	Noted.



**Adani Petronet (Dahej) Port Private
Limited**

**From : April,16
To : September,16**

**Compliance to the conditions stipulated in
CRZ clearance/ recommendation for
proposed cargo port terminal phase I (dated
29.05.2007)and II at Dahej (dated
29.09.2008)**

Half yearly Compliance report for CRZ Clearance/recommendation for development of Solid Cargo Port Terminal Phase - I and Phase - II

Sr. no.	Conditions	Status/Action taken
P2(1), P1(1)	The provisions of the CRZ notification of 1991 and subsequent amendments issued from time to time shall be strictly adhered to by the APPL. No activity in contradiction to the provisions of the CRZ Notification shall be carried out by the APPL.	Complied. All the activities are being complying with the provisions of the CRZ notification and subsequent amendments.
P2(2), P1(2)	All necessary permissions from different Government Departments / agencies shall be obtained by the APPL before commencing the expansion activities.	Complied. All the necessary permissions have been obtained by M/s. APDPPL.
P2(3), P1(5)	The APPL shall carry out the construction activities either in the CRZ area or into the sea / estuary only after having the detailed study with respect to chances of erosion / accretion due to the proposed activities conducted through the NIO and vetted through the CWPRS and shall implement all necessary steps / actions as may be suggested by these institutes for mitigating the potential negative impacts including the checking of erosion and/or accretion in the region. Further, the company shall have to have the construction drawings approved for this purpose through a competent agency before undertaking any construction and/or enabling activities at the site	Complied. Construction of the port was completed in February 2011. All the recommendations of the EIA for construction phase were implemented.
P2(4), P1(7)	The APPL shall have to face the consequences whatsoever due to implementation of the Kalpsar Project proposed by the Government of Gujarat and shall have to take all necessary actions as may be desired by the Government, from time to time.	Noted

Half yearly Compliance report for CRZ Clearance/recommendation for development of Solid Cargo Port Terminal Phase – I and Phase – II

Sr. no.	Conditions	Status/Action taken
P2(5), P1(10)	No dredging and/or reclamation activity shall be carried out in the CRZ area categorized as CRZ I (i) and it shall have to be ensured that the mangrove habitats and other ecologically important and significant areas are not affected due to any of the project activities.	No dredging/reclamation have been done in CRZ I (i). There is no notified ecologically important and significant area present in the project vicinity.
P2(6), P1(11)	No effluent or sewage shall be discharged into the sea / creek or in the CRZ area and shall be treated to conform to the norms prescribed by the Gujarat Pollution Control Board and would be reused / recycled within the plant premises to the extent possible.	Complied. No effluent is being discharged into the sea/creek. Domestic effluent is being treated in STPs. The treated water conforming to the norms is being used for horticulture purpose.
P2(7), P1(12)	All the recommendations and suggestions given by the NIO in the Comprehensive Environment Impact Assessment report for conservation / protection and betterment of environment shall be implemented strictly by the APPL.	All the recommendations and suggestions given by NIO are being complied.
P2(8), P1(13)	The construction and operational activities shall be carried out in such a way that there is no negative impact on mangroves and other coastal/marine habitat. The construction activities shall be carried out only under the constant supervision of the NIO.	Complied. Construction of the project was completed on February 2011.
P2(9), P1(14)	The APPL shall strictly ensure that no creeks are blocked due to any activity at port and the mangroves habitat are neither disturbed nor destroyed due to any activity.	Complied. No creeks are blocked due to port activity.
P2(10), P1(15)	The APPL shall participate financially for any common facility that may be established or any common study that may be carried out for the Gulf of Khambhat region for environmental protection and/or management purpose.	Noted. APDPPL is committed for the environment protection.

Half yearly Compliance report for CRZ Clearance/recommendation for development of Solid Cargo Port Terminal Phase – I and Phase – II

Sr. no.	Conditions	Status/Action taken
P2(11), P1(16)	The construction debris and/or any other type of waste shall not be disposed into the sea, creek or in the CRZ areas. The debris shall be removed from the construction site immediately after the construction is over.	Complied. Construction of the project was completed on February 2011. All the debris has been removed.
P2(12), P1(17)	The construction camps shall be located outside the CRZ area and the construction labour shall be provided the necessary amenities, including sanitation, water supply and fuel and it shall be ensure that the environmental conditions are not deteriorated by the construction labours.	Complied. Construction of the project was completed on February 2011.
P2(13), P1(18)	The APPL shall prepare and regularly update their Local Oil Spill Contingency and Disaster Management Plan in consonance with the National Oil Spill and Disaster Contingency plan and shall submit the same to this Department after having it vetted through the India Coast Guard.	Noted and complied Oil Spill Contingency Plan is submitted to Coast Guard, Gandhinagar for verification vide letter dated. 10/10/2012.
P2(14), P1(19)	The APPL shall bear the cost of the external agency that may be appointed by this Department for supervision/monitoring of proposed activities and the environmental impacts of the proposed activities.	Noted
P2 (15)	The mangrove plantation in 50 ha. of area on Gujarat cost line shall be carried out by the applicant in a phased manner in five years	Complied. Mangrove afforestation has been carried out in an area of 400 ha. Details are given below. 1. 100 ha near village Dandi, Dist Surat– 2011 2. 50 ha near village Jakhau, Dist Kutch – 2011 3. 50 ha near Padri bit, Dist Bhavnagar – 2011 4. 200 ha near Malpur, Dist Jambusar – 2013-14
P2 (16)	The construction activities in the Forest land and the Gauchar land shall be carried out as per the permission accorded by the concerned Authority for the said purpose	Complied. Construction of the project was completed on February 2011.

Half yearly Compliance report for CRZ Clearance/recommendation for development of Solid Cargo Port Terminal Phase – I and Phase – II

Sr. no.	Conditions	Status/Action taken
P1(3)	The APPL shall take up massive mangrove plantation in 200 ha of area in and around the project site or at an alternative site to be selected in consultation with this Department.	Complied. Mangrove afforestation has been carried out in an area of 400 ha. Details are given below. 1. 100 ha near village Dandi, Dist Surat– 2011 2. 50 ha near village Jakhau, Dist Kutch – 2011 3. 50 ha near Padri bit, Dist Bhavnagar – 2011 4. 200 ha near Malpur, Dist Jambusar – 2013-14
P1(4)	The approach road and trestle passing through the forestland shall be constructed only after obtaining necessary permissions under the relevant forest laws including the forest (Conservation) Act. further, no activity shall be carried out in the forestland or in the area having natural plantation / forest till all mandatory clearances under various Forest Acts including the Forests Conservation Act obtained.	All the activities on forest land have been started only after obtaining forest land clearance.
P1(6)	The project proponent shall have to make a separate application and shall have to obtain prior clearance under the CRZ Notification for any activities other than those proposed and got approved as part of this phase I activities.	Complied. APDPPL had obtained Environmental & CRZ Clearance on Nov 11, 2008 for phase 2.
P1(8)	The project proponents shall ensure that the local people shall be provided with an alternative access to the sea in case the existing access to Rock-Bund could not be made available to them.	Alternative access to the sea is available adjoining to the project site.
P1(9)	The project proponents shall ensure that the construction period shall be reduced by proper planning and executing the construction program in time-bound manner to avoid any time over-run.	Complied. Construction of the project was completed in February 2011.

Half yearly Compliance report for CRZ Clearance/recommendation for development of Solid Cargo Port Terminal Phase – I and Phase – II

Sr. no.	Conditions	Status/Action taken
P1(20)	The jetty and most of the approach would be supported on piles allowing adequate flow of water without significant obstruction.	Complied. The jetty and most of the approach of 1270 meter is supported on piles allowing adequate flow of water without significant obstruction.
General Conditions		
P2(17), P1(21)	The groundwater shall not be tapped by the APDPPL to meet with the water requirements in any case.	Complied. No ground water is being tapped by APDPPL and water demand is met through GIDC
P2(18), P1(22)	The APPL shall take up massive green belt development activities in consultation with the Gujarat Institute of Desert Ecology/Forest Department. A comprehensive plan for this purpose has to be submitted to the Forests and Environment Department.	Complied. Green belt is being developed in an area of 7.5_ha including periphery of the project boundary.
P2(19), P1(23)	The APPL shall have to be contributing financially for taking up the socio-economic up-liftment activities in this region in consultation with the Forests and Environment Department and the District Collector/District Development Officer.	Complied. The CSR activities are executed at group level by Adani Foundation. Adani Foundation is taking care of Social-economic establishment activities and details of the same for the period of April 2016–September 2016 is attached as Annexure – 3
P2(20), P1(24)	A separate budget shall be earmarked for environmental management and socio – economic activities and details thereof shall be furnished to this department as well as the MoEF, GOI. The details with respect to the expenditure from this budget head shall also be furnished.	Complied. Separate budget is allocated for Environmental Management and Socio Economic activities. <ul style="list-style-type: none"> • Key components of environment budget are environmental Monitoring, STP's (Operations and Maintenance), Closed Conveyor System Maintenance and etc. The allocation of revenue budget for Environment Cell for the FY 2016-17 was approx. Rs. 172.77 lacs. Details of the environmental budget and expenditure for the April 2016 to September 2016 is enclosed as Annexure – 2 • For Socio Economic activities funds are being utilized in Education, Community Health and Sustainable livelihood development, Rural Infrastructure development etc. Details with expenditure is enclosed as Annexure – 3

Half yearly Compliance report for CRZ Clearance/recommendation for development of Solid Cargo Port Terminal Phase – I and Phase – II

Sr. no.	Conditions	Status/Action taken
P2(21), P1(25)	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	Complied. APDPPL has a well structured Environment Management Cell, staffed with qualified manpower for implementation of the Environment Management Plan. Detail of the Environment cell is enclosed as Annexure 4
P2(22), P1(26)	Environmental Audit report indicating the changes, if any, with respect to the baseline environmental quality in the coastal and marine environment shall be submitted every year by the APPL to this Department as well as to the MoEF, GOI.	Sea water and sediment is being monitored through NABL accredited agency. Monitoring Report for the period April'16 to September '16 is enclosed in Annexure 1
P2(23), P1(28)	A six monthly report on compliance of the condition mentioned in this letter shall have to be furnished by the APPL on regular basis to this Department.	Noted and Complied
P2(24), P1(29)	Any other condition that may be stipulated by this Department from time to time for environmental protection/management purpose shall also have to be complied with by the APPL.	Noted.
P1(27)	The APPL shall have to contribute financially to support the National Green Corps scheme being implemented in Gujarat by GEER Foundation, Gandhinagar, in consultation with Forests and Environment Department.	Complied. A request in this regard for asking for the terms of Financial Contribution submitted to the GEER Foundation vide letter dated 17th April, 2009.

Annexure – 1 (Environment Monitoring Report)

A. Ambient Air Quality Monitoring Report:

Location 1: NEAR MARINE BUILDING

Date of Sampling	LOCATION 1 : NEAR MARINE BUILDING											
	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Pb µg/m ³	BaP ng/m ³	As ng/m ³	Ni ng/m ³	CO mg/m ³	C ₆ H ₆ µg/m ³	NH ₃ µg/m ³	SO ₂ µg/m ³	NOx µg/m ³	O ₃ µg/m ³
04/04/2016	84.21	39.72	0.54	BDL*	BDL*	10.38	1.25	BDL*	55.62	12.73	30.37	19.20
05/04/2016	77.62	42.23	BDL*	BDL*	BDL*	BDL*	0.84	BDL*	66.80	23.48	21.22	21.67
11/04/2016	94.40	49.34	0.64	BDL*	2.38	10.88	1.04	BDL*	35.73	27.39	38.67	23.41
12/04/2016	89.28	44.74	0.75	BDL*	2.16	BDL*	0.87	BDL*	45.67	22.51	29.43	28.23
18/04/2016	60.70	28.55	BDL*	BDL*	BDL*	BDL*	1.48	BDL*	20.51	18.58	33.61	20.99
19/04/2016	82.28	45.58	BDL*	BDL*	BDL*	BDL*	1.69	BDL*	50.64	24.59	41.18	22.22
25/04/2016	95.41	48.50	0.62	BDL*	2.46	10.62	0.96	BDL*	38.53	17.78	32.28	29.54
26/04/2016	69.28	38.46	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	26.41	19.31	25.61	27.38
02/05/2016	92.37	55.60	BDL*	BDL*	2.24	10.42	1.19	BDL*	29.50	18.50	39.52	30.57
03/05/2016	83.39	48.49	BDL*	BDL*	BDL*	BDL*	0.52	BDL*	44.40	21.47	35.35	25.35
09/05/2016	95.81	53.51	0.56	BDL*	2.36	10.82	1.13	BDL*	37.26	25.62	32.51	20.52
10/05/2016	80.20	43.48	BDL*	BDL*	BDL*	BDL*	1.18	BDL*	31.36	17.66	36.60	27.40
16/05/2016	73.48	35.68	BDL*	0.50	BDL*	BDL*	0.96	BDL*	42.23	20.39	41.35	23.45
17/05/2016	90.22	52.67	0.58	BDL*	BDL*	BDL*	1.09	BDL*	52.47	23.50	25.58	18.57
23/05/2016	71.60	32.61	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	22.98	19.42	38.53	28.21
24/05/2016	95.53	41.39	0.66	BDL*	2.39	10.50	1.35	BDL*	49.06	14.47	42.63	22.71
30/05/2016	76.72	38.46	0.55	BDL*	BDL*	BDL*	0.77	BDL*	21.11	11.32	28.75	26.33
31/05/2016	81.50	46.40	BDL*	BDL*	BDL*	BDL*	1.33	BDL*	54.34	22.68	40.27	29.31
06/06/2016	67.58	42.64	BDL*	BDL*	BDL*	BDL*	0.86	BDL*	26.40	20.51	34.47	25.60
07/06/2016	90.43	51.42	0.65	BDL*	2.73	10.53	1.63	BDL*	55.70	13.44	38.25	30.09
13/06/2016	71.58	40.55	BDL*	BDL*	BDL*	BDL*	1.11	BDL*	24.47	23.67	24.30	24.67
14/06/2016	84.70	45.57	BDL*	BDL*	2.24	10.62	1.42	BDL*	38.32	16.35	32.28	26.58
20/06/2016	76.80	34.42	BDL*	BDL*	BDL*	BDL*	0.73	BDL*	48.62	19.73	35.36	19.59
21/06/2016	87.61	39.71	0.62	0.53	2.14	BDL*	1.00	BDL*	35.42	17.61	37.61	29.31
27/06/2016	73.69	31.35	BDL*	BDL*	BDL*	BDL*	0.82	BDL*	31.55	15.40	29.61	23.51
28/06/2016	81.60	35.53	BDL*	BDL*	BDL*	10.22	1.05	BDL*	37.67	12.78	33.54	21.16
04/07/2016	61.35	19.65	BDL*	BDL*	BDL*	BDL*	0.82	BDL*	25.64	18.87	38.95	26.87
05/07/2016	87.41	35.12	0.78	BDL*	BDL*	12.34	2.89	BDL*	31.07	16.49	30.29	28.68
11/07/2016	67.84	26.76	BDL*	BDL*	BDL*	BDL*	1.12	BDL*	23.53	14.02	21.85	23.26
12/07/2016	57.34	21.32	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	34.08	18.26	36.13	27.28
18/07/2016	74.87	31.24	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	42.23	21.51	32.24	20.17
19/07/2016	69.24	23.75	0.63	BDL*	BDL*	BDL*	1.37	BDL*	47.96	30.30	29.86	18.87
25/07/2016	81.46	36.24	BDL*	BDL*	BDL*	BDL*	0.94	BDL*	27.15	9.07	34.73	22.36
26/07/2016	94.22	49.99	BDL*	BDL*	BDL*	11.41	2.52	BDL*	36.50	27.81	42.52	16.14
02/08/2016	96.34	59.37	BDL*	BDL*	BDL*	BDL*	0.88	BDL*	18.07	19.07	35.26	26.59
05/08/2016	62.11	27.18	BDL*	BDL*	BDL*	BDL*	1.26	BDL*	31.10	10.04	32.53	21.45
09/08/2016	42.62	20.07	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	21.33	20.07	41.26	27.38
12/08/2016	80.21	42.65	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	26.96	8.78	25.11	20.53
16/08/2016	67.48	33.74	BDL*	BDL*	BDL*	BDL*	0.78	BDL*	23.40	14.22	28.38	18.25
19/08/2016	73.21	36.66	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	31.40	13.38	40.28	19.62
23/08/2016	60.30	26.24	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	28.44	15.47	29.14	23.73
26/08/2016	55.36	21.25	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	34.66	7.53	48.68	23.50
02/09/2016	94.52	55.61	BDL*	BDL*	BDL*	BDL*	1.16	BDL*	45.32	28.60	42.36	21.24
06/09/2016	89.35	34.70	BDL*	BDL*	BDL*	BDL*	1.63	BDL*	31.40	15.47	30.12	22.06
09/09/2016	73.22	25.92	BDL*	BDL*	BDL*	BDL*	0.86	BDL*	20.44	25.51	39.43	31.24
13/09/2016	96.35	41.39	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	25.48	9.62	21.56	17.46
16/09/2016	60.21	36.66	BDL*	BDL*	BDL*	BDL*	1.05	BDL*	34.07	26.76	32.39	15.16
20/09/2016	75.63	34.16	BDL*	BDL*	BDL*	BDL*	1.03	BDL*	32.29	13.80	44.85	24.35
23/09/2016	90.11	42.49	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	41.18	7.11	35.10	26.65
27/09/2016	81.52	37.91	BDL*	BDL*	BDL*	BDL*	0.83	BDL*	37.62	10.04	28.92	22.06

Location 2: NEAR PMC CANTEEN BUILDING

Date of Sampling	LOCATION 2 : NEAR PMC CANTEEN BUILDING											
	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Pb µg/m ³	BaP ng/m ³	As ng/m ³	Ni ng/m ³	CO mg/m ³	C ₆ H ₆ µg/m ³	NH ₃ µg/m ³	SO ₂ µg/m ³	NO _x µg/m ³	O ₃ µg/m ³
04/04/2016	59.32	20.38	BDL*	BDL*	BDL*	BDL*	1.40	BDL*	36.75	17.54	24.26	27.44
05/04/2016	63.71	32.27	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	54.34	14.61	35.41	25.61
11/04/2016	58.20	27.60	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	41.47	23.74	26.33	26.54
12/04/2016	68.61	34.39	BDL*	BDL*	BDL*	BDL*	0.79	BDL*	26.07	16.69	22.61	20.18
18/04/2016	76.29	47.56	BDL*	BDL*	BDL*	BDL*	1.26	BDL*	32.36	10.72	29.50	24.59
19/04/2016	61.57	35.67	BDL*	BDL*	BDL*	BDL*	0.97	BDL*	19.16	12.63	38.18	29.19
25/04/2016	57.60	21.66	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	56.86	9.56	28.37	19.50
26/04/2016	64.50	33.54	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	33.30	13.50	21.42	22.68
02/05/2016	63.61	35.53	BDL*	BDL*	BDL*	BDL*	1.07	BDL*	30.23	11.44	30.58	25.71
03/05/2016	52.38	22.57	BDL*	BDL*	BDL*	BDL*	0.69	BDL*	23.69	17.68	21.34	27.28
09/05/2016	64.58	30.52	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	45.50	19.54	18.27	16.64
10/05/2016	75.69	39.71	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	37.40	15.60	32.18	19.13
16/05/2016	67.57	32.61	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	16.21	9.68	28.64	26.42
17/05/2016	53.63	19.65	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	39.27	18.48	23.35	28.37
23/05/2016	78.89	36.37	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	10.28	12.46	16.54	20.60
24/05/2016	57.59	23.41	BDL*	BDL*	BDL*	BDL*	0.90	BDL*	21.19	5.40	25.29	30.46
30/05/2016	62.59	34.70	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	14.34	10.03	31.26	17.75
31/05/2016	73.58	29.68	BDL*	BDL*	BDL*	BDL*	0.79	BDL*	26.80	16.72	34.48	24.31
06/06/2016	72.28	38.46	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	11.96	12.74	15.57	18.19
07/06/2016	56.68	27.59	BDL*	BDL*	BDL*	BDL*	1.29	BDL*	24.24	5.76	31.60	26.64
13/06/2016	65.60	37.62	BDL*	BDL*	BDL*	BDL*	0.89	BDL*	16.16	15.42	27.82	30.39
14/06/2016	58.82	22.57	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	29.09	10.53	29.20	16.70
20/06/2016	71.62	29.26	BDL*	BDL*	BDL*	BDL*	0.97	BDL*	26.18	16.69	18.55	20.60
21/06/2016	62.43	32.61	BDL*	BDL*	BDL*	BDL*	0.64	BDL*	31.35	8.35	24.19	27.49
27/06/2016	80.39	35.53	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	18.10	13.64	26.45	21.13
28/06/2016	54.60	24.66	BDL*	BDL*	BDL*	BDL*	0.77	BDL*	26.50	9.54	14.21	23.45
04/07/2016	38.11	21.66	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	17.43	21.37	42.36	24.08
05/07/2016	79.24	48.83	BDL*	BDL*	BDL*	BDL*	1.37	BDL*	29.75	7.01	32.55	19.64
11/07/2016	58.41	34.82	BDL*	BDL*	BDL*	BDL*	1.12	BDL*	18.93	9.48	25.01	31.39
12/07/2016	49.28	18.68	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	25.85	12.37	19.19	23.03
18/07/2016	54.12	29.16	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	23.14	14.79	22.96	13.28
19/07/2016	73.52	38.33	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	19.53	18.49	34.28	20.26
25/07/2016	62.45	24.58	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	21.04	24.65	31.15	25.21
26/07/2016	85.63	44.16	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	29.45	10.27	12.29	14.63
02/08/2016	81.52	35.24	BDL*	BDL*	BDL*	BDL*	0.97	BDL*	34.24	19.04	29.26	12.20
05/08/2016	78.92	39.06	BDL*	BDL*	BDL*	BDL*	1.37	BDL*	28.63	21.11	38.94	28.68
09/08/2016	62.74	23.35	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	17.71	23.59	32.19	18.52
12/08/2016	51.22	20.38	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	31.58	19.04	35.46	23.49
16/08/2016	82.51	43.74	BDL*	BDL*	BDL*	BDL*	0.64	BDL*	44.28	13.24	21.10	20.78
19/08/2016	67.41	31.66	BDL*	BDL*	BDL*	BDL*	0.85	BDL*	19.48	16.14	25.67	28.46
23/08/2016	86.35	51.66	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	22.43	11.17	23.17	9.26
26/08/2016	78.63	49.57	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	16.23	9.52	20.77	21.46
02/09/2016	86.95	42.04	BDL*	BDL*	BDL*	BDL*	1.28	BDL*	41.03	24.01	34.76	15.01
06/09/2016	69.58	21.66	BDL*	BDL*	BDL*	BDL*	1.80	BDL*	26.27	19.45	25.69	12.73
09/09/2016	85.36	44.58	BDL*	BDL*	BDL*	BDL*	0.98	BDL*	22.43	26.90	37.56	19.56
13/09/2016	71.25	37.79	BDL*	BDL*	BDL*	BDL*	1.01	BDL*	27.45	14.49	29.36	21.83
16/09/2016	64.28	31.66	BDL*	BDL*	BDL*	BDL*	0.84	BDL*	38.67	11.17	21.16	17.28
20/09/2016	80.52	45.41	BDL*	BDL*	BDL*	BDL*	1.11	BDL*	23.61	20.69	34.43	19.56
23/09/2016	91.24	37.08	BDL*	BDL*	BDL*	BDL*	0.81	BDL*	19.78	28.56	36.27	15.01
27/09/2016	87.41	49.57	BDL*	BDL*	BDL*	BDL*	0.95	BDL*	24.50	8.28	33.79	24.11

Location 3: SUB STATION 7B BUILDING

Date of Sampling	LOCATION 3 : SUB STATION 7B BUILDING											
	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Pb µg/m ³	BaP ng/m ³	As ng/m ³	Ni ng/m ³	CO mg/m ³	C ₆ H ₆ µg/m ³	NH ₃ µg/m ³	SO ₂ µg/m ³	NOx µg/m ³	O ₃ µg/m ³
04/04/2016	67.42	29.54	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	30.36	20.71	33.66	29.29
05/04/2016	71.29	38.58	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	38.58	17.36	29.26	26.49
11/04/2016	53.62	22.54	BDL*	BDL*	BDL*	BDL*	0.24	BDL*	52.18	25.35	30.14	24.21
12/04/2016	60.27	28.41	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	34.47	18.70	20.32	30.36
18/04/2016	81.61	37.60	0.61	BDL*	2.26	BDL*	0.86	BDL*	25.62	12.75	38.39	17.29
19/04/2016	68.19	27.40	BDL*	BDL*	BDL*	BDL*	0.69	BDL*	15.81	15.49	25.43	27.21
25/04/2016	85.42	46.38	BDL*	BDL*	BDL*	BDL*	0.49	BDL*	22.45	24.56	36.35	22.28
26/04/2016	50.17	20.37	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	18.34	16.74	28.16	23.18
02/05/2016	51.27	24.49	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	16.16	14.55	17.52	18.38
03/05/2016	65.63	36.54	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	33.57	8.44	30.40	20.32
09/05/2016	75.69	39.59	BDL*	BDL*	BDL*	BDL*	0.30	BDL*	10.26	10.50	25.55	28.33
10/05/2016	61.21	30.61	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	25.49	13.44	18.54	22.71
16/05/2016	56.61	18.45	BDL*	BDL*	BDL*	BDL*	0.82	BDL*	21.44	15.45	32.43	21.16
17/05/2016	66.56	42.54	BDL*	BDL*	BDL*	BDL*	0.40	BDL*	29.53	12.55	28.67	26.27
23/05/2016	53.41	25.67	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	15.54	7.48	19.57	24.73
24/05/2016	90.51	38.72	0.59	BDL*	BDL*	10.37	0.95	BDL*	11.19	19.63	31.40	25.75
30/05/2016	82.63	53.71	0.52	BDL*	BDL*	BDL*	0.24	BDL*	27.66	5.45	22.53	23.43
31/05/2016	64.28	31.76	BDL*	BDL*	BDL*	BDL*	0.87	BDL*	42.58	11.75	27.59	19.52
06/06/2016	50.49	27.50	BDL*	BDL*	BDL*	BDL*	1.02	BDL*	17.73	6.55	22.61	30.37
07/06/2016	84.48	40.46	0.51	BDL*	2.46	10.15	1.44	BDL*	12.25	16.36	26.38	19.52
13/06/2016	58.42	32.63	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	32.55	19.45	19.36	21.45
14/06/2016	62.39	25.58	BDL*	BDL*	BDL*	BDL*	0.79	BDL*	18.69	12.58	23.36	25.64
20/06/2016	82.39	45.70	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	38.35	7.57	27.47	27.42
21/06/2016	71.63	35.66	BDL*	0.52	BDL*	BDL*	0.87	BDL*	11.60	13.62	29.46	24.25
27/06/2016	56.29	21.75	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	24.50	11.42	15.76	18.67
28/06/2016	63.41	26.54	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	30.30	5.72	18.38	26.48
04/07/2016	51.22	28.29	BDL*	BDL*	BDL*	BDL*	0.88	BDL*	30.69	7.09	32.37	14.84
05/07/2016	65.78	31.20	BDL*	BDL*	BDL*	BDL*	1.72	BDL*	23.70	20.36	28.55	22.53
11/07/2016	42.33	22.47	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	36.46	24.10	17.87	15.70
12/07/2016	36.41	17.47	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	29.47	16.31	24.74	28.86
18/07/2016	60.47	24.58	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	32.21	7.92	36.62	17.81
19/07/2016	41.24	20.41	BDL*	BDL*	BDL*	BDL*	0.78	BDL*	14.28	23.84	30.08	26.34
25/07/2016	71.63	29.58	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	26.43	7.95	12.32	10.77
26/07/2016	78.66	32.08	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	20.66	14.17	18.96	21.46
02/08/2016	90.52	48.26	0.85	BDL*	BDL*	BDL*	0.74	BDL*	26.26	14.37	31.23	15.91
05/08/2016	73.22	36.61	0.62	BDL*	BDL*	BDL*	1.02	BDL*	41.18	18.60	28.59	22.37
09/08/2016	58.41	22.47	BDL*	BDL*	BDL*	BDL*	1.26	BDL*	28.35	15.21	34.75	13.15
12/08/2016	87.14	51.59	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	33.13	21.13	40.25	24.68
16/08/2016	50.22	29.58	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	51.33	20.29	37.39	17.30
19/08/2016	89.63	49.16	BDL*	BDL*	BDL*	10.16	1.26	BDL*	38.50	24.51	35.63	28.60
23/08/2016	79.28	34.16	BDL*	BDL*	BDL*	BDL*	0.86	BDL*	29.54	17.75	41.57	20.99
26/08/2016	61.21	37.91	BDL*	BDL*	BDL*	BDL*	2.06	BDL*	44.47	23.67	51.46	13.38
02/09/2016	88.25	42.02	BDL*	BDL*	BDL*	BDL*	0.93	BDL*	24.47	19.02	35.36	10.68
06/09/2016	87.99	30.79	BDL*	BDL*	BDL*	BDL*	1.34	BDL*	39.69	22.82	38.41	15.33
09/09/2016	93.66	42.44	BDL*	BDL*	BDL*	BDL*	1.43	BDL*	26.56	13.10	30.56	17.65
13/09/2016	64.78	28.29	BDL*	BDL*	BDL*	BDL*	0.73	BDL*	32.53	23.24	42.34	26.94
16/09/2016	72.44	39.58	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	30.74	18.60	24.45	13.00
20/09/2016	91.45	49.16	BDL*	BDL*	BDL*	BDL*	1.53	BDL*	42.67	29.58	38.74	24.61
23/09/2016	79.87	25.83	BDL*	BDL*	BDL*	BDL*	1.13	BDL*	32.53	16.90	28.70	17.65
27/09/2016	98.44	42.49	BDL*	BDL*	BDL*	BDL*	2.70	BDL*	23.28	19.44	30.23	15.33

Location 4: GCPTL Gate

Date of Sampling	LOCATION 4 : GCPTL Gate											
	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Pb µg/m ³	BaP ng/m ³	As ng/m ³	Ni ng/m ³	CO mg/m ³	C ₆ H ₆ µg/m ³	NH ₃ µg/m ³	SO ₂ µg/m ³	NOx µg/m ³	O ₃ µg/m ³
04/04/2016	59.60	28.48	BDL*	BDL*	BDL*	BDL*	1.07	BDL*	20.49	14.56	23.39	20.77
05/04/2016	67.55	29.44	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	45.72	9.67	18.64	23.58
11/04/2016	72.73	38.53	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	25.54	18.73	29.75	18.49
12/04/2016	55.58	21.78	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	19.55	11.69	25.55	24.65
18/04/2016	87.57	42.72	BDL*	BDL*	BDL*	BDL*	0.73	BDL*	34.05	8.73	21.61	21.38
19/04/2016	76.68	48.59	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	48.56	17.69	34.15	25.46
25/04/2016	68.40	37.43	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	40.04	19.56	30.33	27.81
26/04/2016	57.41	25.55	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	37.52	7.51	15.57	19.56
02/05/2016	55.49	23.25	BDL*	BDL*	BDL*	BDL*	0.68	BDL*	33.67	6.69	20.54	27.51
03/05/2016	74.18	45.45	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	29.62	12.42	19.74	26.89
09/05/2016	68.56	34.47	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	40.53	14.62	34.58	22.35
10/05/2016	52.54	25.75	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	21.51	19.59	26.60	25.26
16/05/2016	62.40	28.65	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	26.19	11.75	18.60	17.58
17/05/2016	78.48	22.42	BDL*	BDL*	BDL*	BDL*	0.98	BDL*	16.83	5.34	32.33	19.62
23/05/2016	65.48	29.61	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	28.68	15.46	23.57	21.66
24/05/2016	50.31	19.52	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	18.39	13.35	35.68	18.44
30/05/2016	69.27	30.31	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	10.29	9.69	27.25	24.25
31/05/2016	79.32	43.37	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	12.47	7.59	22.38	28.45
06/06/2016	58.60	29.48	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	26.51	15.53	19.47	23.50
07/06/2016	68.71	30.44	BDL*	BDL*	BDL*	BDL*	0.81	BDL*	20.69	10.42	29.73	29.39
13/06/2016	77.52	49.42	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	11.64	8.45	20.84	26.73
14/06/2016	51.59	31.56	BDL*	BDL*	BDL*	BDL*	0.98	BDL*	36.53	5.40	17.47	30.50
20/06/2016	65.17	41.53	BDL*	BDL*	BDL*	BDL*	0.61	BDL*	31.36	9.77	15.23	22.78
21/06/2016	82.38	46.51	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	46.56	6.65	21.27	21.55
27/06/2016	50.80	19.60	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	29.42	17.60	18.34	28.08
28/06/2016	42.61	16.61	BDL*	BDL*	BDL*	BDL*	0.27	BDL*	25.54	14.53	23.65	20.55
04/07/2016	42.24	24.29	BDL*	BDL*	BDL*	BDL*	0.40	BDL*	27.53	12.63	20.96	21.45
05/07/2016	70.63	39.79	BDL*	BDL*	BDL*	BDL*	0.78	BDL*	18.66	16.31	31.60	24.51
11/07/2016	39.77	29.74	BDL*	BDL*	BDL*	BDL*	0.87	BDL*	12.24	5.44	14.70	20.16
12/07/2016	61.77	31.83	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	37.63	8.78	16.57	17.87
18/07/2016	48.74	17.91	BDL*	BDL*	BDL*	BDL*	0.85	BDL*	29.67	12.63	23.59	23.29
19/07/2016	62.18	27.91	BDL*	BDL*	BDL*	BDL*	0.71	BDL*	32.73	10.07	28.97	19.77
25/07/2016	58.52	32.49	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	35.79	14.69	19.97	17.01
26/07/2016	69.78	25.00	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	26.31	21.05	24.25	18.45
02/08/2016	62.87	19.27	BDL*	BDL*	BDL*	BDL*	1.00	BDL*	38.46	11.49	38.64	17.41
05/08/2016	59.11	20.52	BDL*	BDL*	BDL*	BDL*	0.71	BDL*	30.34	13.53	26.57	9.23
09/08/2016	48.27	15.50	BDL*	BDL*	BDL*	BDL*	1.37	BDL*	32.45	22.40	35.76	30.22
12/08/2016	67.80	22.62	0.57	BDL*	BDL*	BDL*	0.71	BDL*	21.03	24.94	31.11	21.68
16/08/2016	51.25	26.66	BDL*	BDL*	BDL*	BDL*	1.26	BDL*	35.15	12.34	40.08	23.22
19/08/2016	62.35	28.74	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	16.22	9.75	30.22	17.82
23/08/2016	67.14	21.66	BDL*	BDL*	BDL*	BDL*	1.12	BDL*	20.73	12.72	48.60	26.38
26/08/2016	84.22	51.24	BDL*	BDL*	BDL*	BDL*	0.89	BDL*	21.33	18.30	28.67	12.31
02/09/2016	80.12	37.28	BDL*	BDL*	BDL*	BDL*	1.31	BDL*	27.64	21.27	46.37	15.43
06/09/2016	75.52	24.71	BDL*	BDL*	BDL*	BDL*	0.92	BDL*	44.47	28.74	41.53	8.36
09/09/2016	82.14	35.60	BDL*	BDL*	BDL*	BDL*	1.37	BDL*	39.96	18.60	34.50	15.33
13/09/2016	90.11	43.56	BDL*	BDL*	BDL*	BDL*	0.93	BDL*	20.43	31.28	49.77	24.62
16/09/2016	51.69	21.66	BDL*	BDL*	BDL*	BDL*	1.56	BDL*	32.45	20.42	36.70	17.77
20/09/2016	94.18	40.41	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	19.23	9.75	26.37	10.72
23/09/2016	88.37	45.82	BDL*	BDL*	BDL*	BDL*	1.47	BDL*	29.74	14.42	43.62	22.37
27/09/2016	92.36	34.16	BDL*	BDL*	BDL*	BDL*	1.17	BDL*	35.75	31.49	38.78	20.11

Location 5: NEAR SILO POTA CABIN

Date of Sampling	LOCATION 5 : NEAR SILO POTA CABIN											
	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Pb µg/m ³	BaP ng/m ³	As ng/m ³	Ni ng/m ³	CO mg/m ³	C ₆ H ₆ µg/m ³	NH ₃ µg/m ³	SO ₂ µg/m ³	NOx µg/m ³	O ₃ µg/m ³
04/04/2016	50.61	17.45	BDL*	BDL*	BDL*	BDL*	0.78	BDL*	17.58	9.55	19.55	17.54
05/04/2016	85.62	47.68	BDL*	BDL*	BDL*	10.17	0.66	BDL*	30.77	12.59	24.25	28.60
11/04/2016	67.58	33.20	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	19.78	16.57	21.67	20.28
12/04/2016	73.61	37.46	BDL*	BDL*	BDL*	BDL*	0.27	BDL*	16.33	20.58	18.35	22.38
18/04/2016	66.38	30.65	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	29.20	5.41	26.10	27.50
19/04/2016	58.31	25.54	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	33.28	10.45	29.60	18.57
25/04/2016	62.62	31.50	BDL*	BDL*	BDL*	BDL*	0.11	BDL*	48.67	13.56	34.51	21.32
26/04/2016	70.63	28.52	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	20.41	11.36	25.59	25.40
02/05/2016	71.77	46.59	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	21.43	16.66	23.70	19.57
03/05/2016	58.60	27.70	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	13.35	14.68	37.59	23.67
09/05/2016	81.63	48.68	BDL*	BDL*	BDL*	BDL*	0.11	BDL*	24.53	7.44	29.45	25.08
10/05/2016	69.32	34.41	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	15.22	10.64	20.57	18.32
16/05/2016	50.62	21.40	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	11.49	13.72	25.74	22.43
17/05/2016	62.70	37.35	BDL*	BDL*	BDL*	BDL*	0.78	BDL*	31.37	9.68	38.65	30.30
23/05/2016	86.68	45.75	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	19.56	12.48	33.39	20.08
24/05/2016	65.62	26.44	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	23.29	6.64	18.53	24.40
30/05/2016	70.43	44.49	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	20.19	18.59	42.33	29.26
31/05/2016	89.49	49.52	BDL*	BDL*	BDL*	BDL*	1.05	BDL*	26.09	20.75	36.27	26.51
06/06/2016	81.72	45.75	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	29.63	5.71	28.07	26.67
07/06/2016	62.41	26.44	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	32.53	18.57	15.29	18.54
13/06/2016	88.61	56.66	BDL*	BDL*	2.14	10.12	0.94	BDL*	23.51	11.71	37.50	28.49
14/06/2016	68.70	38.61	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	20.29	19.52	21.51	19.36
20/06/2016	53.58	22.66	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	15.46	14.61	32.64	24.55
21/06/2016	77.57	27.70	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	28.98	6.68	35.56	17.27
27/06/2016	63.42	29.38	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	13.53	9.55	21.72	27.58
28/06/2016	49.71	21.40	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	17.39	7.52	30.48	23.59
04/07/2016	33.65	16.18	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	31.20	9.54	23.30	30.05
05/07/2016	59.14	28.95	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	24.09	11.68	21.44	15.30
11/07/2016	63.21	48.53	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	20.43	13.34	30.08	28.78
12/07/2016	74.51	51.93	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	32.63	15.95	42.12	11.50
18/07/2016	67.11	23.75	BDL*	BDL*	BDL*	BDL*	0.27	BDL*	17.38	5.44	34.13	20.16
19/07/2016	79.81	34.58	BDL*	BDL*	BDL*	BDL*	0.60	BDL*	41.78	18.89	39.60	25.52
25/07/2016	44.78	26.24	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	30.80	6.25	24.72	23.52
26/07/2016	50.27	20.00	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	14.33	18.05	31.07	26.44
02/08/2016	78.41	31.08	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	32.65	9.77	34.22	21.37
05/08/2016	68.35	25.54	BDL*	BDL*	BDL*	BDL*	0.50	BDL*	20.37	6.43	24.72	19.17
09/08/2016	74.51	36.18	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	26.36	16.71	30.13	26.41
12/08/2016	61.24	30.65	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	29.95	10.28	25.83	12.39
16/08/2016	77.24	37.08	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	27.56	5.57	23.73	15.66
19/08/2016	51.24	17.50	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	45.83	17.14	38.19	30.86
23/08/2016	52.63	24.16	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	24.86	16.28	30.24	21.51
26/08/2016	71.52	39.99	BDL*	BDL*	BDL*	10.71	0.32	BDL*	19.17	9.00	32.45	10.52
02/09/2016	79.41	34.06	BDL*	BDL*	BDL*	BDL*	1.02	BDL*	26.96	19.53	39.65	21.52
06/09/2016	90.21	48.53	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	35.94	12.85	27.93	17.89
09/09/2016	90.17	46.83	BDL*	BDL*	BDL*	BDL*	0.98	BDL*	32.65	31.27	42.61	22.60
13/09/2016	58.41	29.80	BDL*	BDL*	BDL*	BDL*	0.82	BDL*	30.55	14.57	26.84	10.83
16/09/2016	69.74	27.91	BDL*	BDL*	BDL*	BDL*	0.89	BDL*	25.46	6.85	23.66	15.53
20/09/2016	85.74	35.83	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	36.84	21.42	34.50	22.60
23/09/2016	74.44	38.74	BDL*	BDL*	BDL*	BDL*	0.85	BDL*	21.27	18.85	29.79	15.53
27/09/2016	64.27	27.91	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	27.86	16.28	34.07	13.18

Location 6: S & S ENTRY GATE

Date of Sampling	LOCATION 6 : S & S ENTRY GATE											
	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Pb µg/m ³	BaP ng/m ³	As ng/m ³	Ni ng/m ³	CO mg/m ³	C ₆ H ₆ µg/m ³	NH ₃ µg/m ³	SO ₂ µg/m ³	NOx µg/m ³	O ₃ µg/m ³
04/04/2016	78.71	35.55	BDL*	BDL*	BDL*	BDL*	1.61	BDL*	26.50	26.48	36.23	25.39
05/04/2016	92.41	56.46	0.68	BDL*	2.24	10.27	1.31	BDL*	49.58	19.57	41.33	30.18
11/04/2016	77.51	43.50	BDL*	BDL*	BDL*	BDL*	0.98	BDL*	30.25	12.45	33.20	21.11
12/04/2016	80.32	47.68	BDL*	BDL*	BDL*	BDL*	0.71	BDL*	55.62	13.63	35.79	26.24
18/04/2016	91.50	52.70	0.70	BDL*	2.40	10.69	1.10	BDL*	48.05	21.69	42.41	23.58
19/04/2016	70.92	41.41	BDL*	BDL*	BDL*	BDL*	1.51	BDL*	42.41	20.62	29.31	18.46
25/04/2016	89.28	54.37	0.76	BDL*	2.42	11.25	0.90	BDL*	15.28	25.47	39.27	24.41
26/04/2016	79.50	45.59	BDL*	BDL*	BDL*	BDL*	1.01	BDL*	40.22	9.60	31.24	29.53
02/05/2016	76.61	50.73	BDL*	BDL*	BDL*	BDL*	1.42	BDL*	23.91	25.51	35.59	23.59
03/05/2016	90.52	54.53	0.59	BDL*	2.24	10.21	0.76	BDL*	49.38	19.48	38.54	29.28
09/05/2016	86.69	46.50	BDL*	BDL*	BDL*	BDL*	0.84	BDL*	58.38	21.70	31.15	27.57
10/05/2016	94.28	26.63	0.64	BDL*	2.46	10.39	0.73	BDL*	46.55	23.71	40.25	30.39
16/05/2016	79.31	40.58	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	32.45	17.48	37.40	28.47
17/05/2016	88.62	45.65	BDL*	BDL*	BDL*	BDL*	1.40	BDL*	22.36	15.52	44.27	25.41
23/05/2016	93.38	51.57	0.72	BDL*	2.18	10.42	0.85	BDL*	35.40	9.64	36.51	26.80
24/05/2016	72.48	32.55	BDL*	BDL*	BDL*	BDL*	1.08	BDL*	45.34	12.58	26.82	19.02
30/05/2016	87.81	48.61	BDL*	BDL*	2.26	BDL*	1.21	BDL*	38.51	14.61	39.56	20.15
31/05/2016	95.58	53.68	0.60	BDL*	BDL*	10.75	1.44	BDL*	47.51	24.54	30.58	22.70
06/06/2016	87.61	49.46	0.62	BDL*	BDL*	10.59	1.08	BDL*	38.97	8.73	31.60	27.22
07/06/2016	78.58	34.66	BDL*	BDL*	2.26	BDL*	1.51	BDL*	62.48	11.42	36.74	24.24
13/06/2016	82.71	45.65	BDL*	BDL*	2.40	BDL*	0.96	BDL*	43.48	16.54	40.53	23.60
14/06/2016	73.63	41.43	BDL*	BDL*	BDL*	10.36	1.33	BDL*	26.86	21.55	30.35	21.52
20/06/2016	88.67	37.62	0.52	BDL*	2.36	BDL*	1.09	BDL*	57.79	18.45	29.32	26.87
21/06/2016	94.20	42.69	0.66	BDL*	2.56	10.42	0.80	BDL*	40.58	14.56	39.36	22.65
27/06/2016	85.59	38.47	BDL*	BDL*	BDL*	BDL*	0.95	BDL*	33.17	19.51	34.34	25.69
28/06/2016	69.71	31.28	BDL*	BDL*	BDL*	BDL*	1.21	BDL*	42.19	10.50	27.61	28.49
04/07/2016	48.52	20.49	BDL*	BDL*	BDL*	BDL*	1.13	BDL*	35.53	9.50	34.53	17.30
05/07/2016	40.32	17.57	BDL*	BDL*	BDL*	BDL*	0.97	BDL*	28.24	25.33	28.54	21.61
11/07/2016	34.77	14.22	BDL*	2.20	BDL*	BDL*	1.26	BDL*	41.30	21.18	37.47	34.11
12/07/2016	68.51	26.35	BDL*	BDL*	BDL*	BDL*	0.85	BDL*	23.38	12.54	25.05	19.46
18/07/2016	42.39	19.16	0.66	BDL*	BDL*	BDL*	1.12	BDL*	34.62	16.25	30.17	24.42
19/07/2016	58.10	27.91	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	27.94	9.61	17.86	14.88
25/07/2016	39.43	21.66	BDL*	BDL*	BDL*	BDL*	1.01	BDL*	34.32	27.82	37.04	28.20
26/07/2016	43.44	18.33	BDL*	BDL*	BDL*	BDL*	0.89	BDL*	27.64	24.66	27.56	16.25
02/08/2016	70.24	28.86	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	15.51	9.63	24.29	23.46
05/08/2016	82.65	43.50	BDL*	BDL*	BDL*	BDL*	1.10	BDL*	19.39	8.03	19.23	26.28
09/08/2016	69.41	31.37	BDL*	BDL*	BDL*	BDL*	0.87	BDL*	34.60	9.72	16.38	24.66
12/08/2016	72.58	35.97	BDL*	BDL*	BDL*	BDL*	0.49	BDL*	21.18	5.49	24.84	19.13
16/08/2016	62.58	22.08	BDL*	BDL*	BDL*	BDL*	0.72	BDL*	35.79	15.21	26.27	30.66
19/08/2016	80.63	25.00	BDL*	BDL*	BDL*	11.57	0.66	BDL*	40.57	10.14	29.13	26.74
23/08/2016	75.62	33.33	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	27.74	13.09	36.82	16.37
26/08/2016	49.11	20.41	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	25.35	21.12	34.62	17.98
02/09/2016	66.34	29.28	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	27.74	9.63	29.01	16.67
06/09/2016	87.24	36.39	BDL*	BDL*	BDL*	BDL*	1.44	BDL*	24.16	18.59	31.52	24.60
09/09/2016	74.52	38.90	BDL*	BDL*	BDL*	BDL*	1.14	BDL*	41.16	20.70	34.80	19.96
13/09/2016	82.63	33.46	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	29.83	24.50	36.54	15.32
16/09/2016	78.87	44.57	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	43.25	9.29	48.54	26.92
20/09/2016	71.21	31.66	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	31.62	15.63	40.25	22.28
23/09/2016	91.21	40.41	BDL*	BDL*	BDL*	BDL*	0.75	BDL*	45.34	21.54	32.07	24.60
27/09/2016	97.77	49.16	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	22.07	29.15	41.12	15.32

B. Sea Water Quality Monitoring Report:

Location 1: SEA WATER SOUTH SIDE

Date of Sampling			26/04/2016		23/05/2016		30/06/2016		27/07/2016		03/08/2016		16/09/2016	
SR. NO.	TEST PARAMETERS	UNIT	RESULT											
			SURFACE	BOTTOM										
1	pH	--	8.13	8.23	8.20	8.32	8.25	8.30	8.10	8.20	8.04	8.27	8.23	8.38
2	Temperature	°C	30	31	30	29	30	29	30	29	29	28	29	30
3	Total Suspended Solids	mg/L	388	412	386	446	290	380	400	428	310	406	282	378
4	BOD (3 Days @ 27 °C)	mg/L	BDL*	BDL*										
5	Dissolved Oxygen	mg/L	5.06	4.66	5.6	4.8	5.6	4.8	5.4	4.6	5.4	4.6	5.4	4.6
6	Salinity	ppt	38.71	39.26	39.10	39.82	39.2	40.3	39.8	40.63	39.8	40.9	39.4	40.6
7	Oil & Grease	mg/L	BDL*	BDL*										
8	Nitrate as NO ₃	mg/L	0.542	0.603	0.466	0.527	0.34	0.45	0.574	0.60	0.275	0.336	0.336	0.397
9	Nitrite as NO ₂	mg/L	0.036	0.019	0.019	0.032	0.021	0.014	0.038	0.056	0.032	0.020	0.020	0.015
10	Ammonical Nitrogen as NH ₃	mg/L	0.504	0.583	0.463	0.578	0.38	0.51	0.298	0.61	0.505	0.654	0.392	0.467
11	Phosphates as PO ₄	mg/L	0.027	0.054	0.050	0.041	0.031	0.045	0.026	0.053	0.057	0.057	0.049	0.062
12	Total Nitrogen	mg/L	1.082	1.205	0.948	1.137	0.741	0.974	0.910	1.266	0.812	1.01	0.748	0.879
13	Petroleum Hydrocarbon	µg/L	2	BDL*	10.80	BDL*	12	BDL*	10.22	BDL*	11	BDL*	10	BDL*
14	Total Dissolved Solids	mg/L	44080	44620	46030	46910	45910	46240	46980	47010	46110	46840	46080	46620
15	COD	mg/L	24	19	22	17	18	16	20	10	16	15	14	12
16	Oxidisable Particular Organic Carbon	%	0.46	0.33	0.38	0.10	0.28	0.14	0.30	0.20	0.22	0.10	0.22	0.15
A	Flora and Fauna													
17.1	Primary	mgC/	2.7	0.45	2.36	0.338	1.46	0.270	2.363	0.945	1.71	0.338	1.35	0.225

	Productivity	L/day												
B	Phytoplankton													
18.1	Chlorophyll	mg/m ³	3.52	0.881	2.72	0.561	2.59	0.454	3.12	0.427	2.51	0.32	2.243	0.614
18.2	Phaeophytin	mg/m ³	BDL*	1.17	BDL*	1.51	BDL*	1.38	BDL*	1.40	BDL*	1.51	BDL*	1.22
18.3	Cell Count	Unit x 10 ³ /L	251	46	242	52	182	44	91	22	136	44	180	40
--	Name of Group Number and name of group species of each group	--	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Nitzschia sp.	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae
		Nitzschia sp.	Fragillaria sp.	Asterionella sp.	Navicula sp.	Nitzschia sp.	Navicula sp.	Navicula sp.	Navicula sp.	Fragillaria sp.	Navicula sp.	Achnanthes sp.	Asterionella sp.	Fragillaria sp.
		Synedra sp.	Navicula sp.	Biddulphia sp.	Nitzschia sp.	Synedra sp.	Fragillaria sp.	Fragillaria sp.	Nitzschia sp.	Synedra sp.	Rhizosolenia sp.	Skeletonema sp.	Pinnularia sp.	
		Navicula sp.	Cocconeis sp.	Cocconeis sp.	Fragillaria sp.	Navicula sp.	Coscinodiscus sp.	Rhizosolenia sp.	Surirella sp.	Rhizosolenia sp.	Navicula sp.	Rhizosolenia sp.	Navicula sp.	
		Cymbella sp.	Gyrosigma sp.	Navicula sp.	Desmids	Cymbella sp.	Nitzschia sp.	Coscinodiscus sp.	Tabellaria sp.	Skeletonema sp.	Nitzschia sp.	Cymbella sp.	Synedra sp.	
		Biddulphia sp.	Asterionella sp.	Nitzschia sp.	Cosmarium sp.	Biddulphia sp.	Pinnularia sp.	Cheateoceros sp.	Navicula sp.	Melosira sp.	Tabellaria sp.	Pinnularia sp.	--	
		Coscinodiscus sp.	Cyanophyceae	Tabellaria sp.	Green Algae	Fragillaria sp.	--	Thalassiosira sp.	--	Biddulphia sp.	Fragillaria sp.	Navicula sp.	--	
		Fragillaria sp.	Oscillatoria sp.	Cymbella sp.	Chlorella sp.	Surirella sp.	--	Cymbella sp.	--	Cheateoceros sp.	--	Nitzschia sp.	--	
		Surirella sp.	Green Algae	Cyanophyceae	Volvox sp.	Pinnularia sp.	--	Cyanophyceae	--	Asterionella sp.	--	Cyanophyceae	--	
		Asterionella sp.	Chlorella sp.	Microcystis sp.	--	Cyanophyceae	--	Oscillatoria sp.	--	Cyanophyceae	--	Microcystis sp.	--	
		Pinnularia sp.	--	Oscillatoria sp.	--	Oscillatoria sp.	--	Nostoc sp.	--	Ankistrodesmus sp.	--	Oscillatoria sp.	--	
		Cyanophyceae	--	Green Algae	--	Green Algae	--	Green Algae	--	Hydrodictyon sp.	--	Green Algae	--	
		Spirulina sp.	--	Ankistrodesmus sp.	--	Pediastrum sp.	--	Chlorella sp.	--	Ulothrix sp.	--	Pandorina sp.	--	
		Oscillatoria sp.	--	Chlorella sp.	--	Pandorina sp.	--	Ankistrodesmus sp.	--	Oedogonium sp.	--	Chlorella sp.	--	
		Green Algae	--	Ulothrix sp.	--	--	--	--	--	Desmids	--	Volvox sp.	--	
		Hydrodictyon sp.	--	--	--	--	--	--	--	Closterium sp.	--	--	--	
	Pandorina sp.	--	--	--	--	--	--	--	--	--	--	--		



			Pediastrum dp.	--	--	--	--							
19.1	Abundance (Population)	no/m ²	267	33	240	20	220	40	267	100	180	60	220	80
19.2	Name of Group Number and name of group species of each group species of each group	--	Copepods	Polychaete worms	Copepods	Echinoderms	Isopods	Nematodes			Decapods	Echinoderms	Copepods	Gastropods
			Mysids		Echinoderms		Mysids		Polychaetes Worms	Decapods	Polychaetes Worms	Bivalves	Ostracods	Nematodes
			Nematodes		Nematodes		Gastropods		Crustaceans	Gastropods	Gastropods	--	Gastropods	--
			Gastropods		Gastropods		Polychaete worms		Copepods	--	Echinoderms	--	Mysids	--
			--	--	Snails						Nematodes	--	Snail	--
										Bivalves	--	Bivalves	--	
19.3	Total Biomass	ml/100 m ³	163	13.24	110	2.14	96.87	1.98	106	2.14	123	5.41	152	12.01
D Microbiological Parameters														
20.1	Total Bacterial Count	CFU/ml	1450	1260	1810	1520	1750	1560	1770	1480	1810	1590	1720	1280
20.2	Total Coliform	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
20.3	E.coli	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
20.4	Enterococcus species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
20.5	Salmonella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
20.6	Shigella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
20.7	Vibrio species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Location 2: SEA WATER NORTH SIDE

Date of sampling			26/04/2016		23/05/2016		30/06/2016		27/07/2016		03/08/2016		16/09/2016	
SR. NO.	TEST PARAMETERS	UNIT	RESULT											
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	pH	--	8.06	8.22	8.38	8.47	8.17	8.25	8.11	8.30	8.23	8.31	7.87	8.13
2	Temperature	°C	30	31	30	29	31	30	29	28	30	29	29	30
3	Total Suspended Solids	mg/L	310	360	280	308	278	392	300	320	326	416	366	418
4	BOD (3 Days @ 27 oC)	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Dissolved Oxygen	mg/L	5.6	5.0	5.8	4.6	5.8	5.2	5.4	4.8	5.6	5.0	5.4	4.8
6	Salinity	ppt	37.44	38.20	37.58	38.44	38.6	39.1	38.06	39.10	39.2	39.9	36.10	37.50
7	Oil & Grease	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
8	Nitrate as NO3	mg/L	0.497	0.572	0.040	0.632	0.41	0.52	0.48	0.544	0.427	0.55	0.535	0.733
9	Nitrite as NO2	mg/L	0.032	0.014	0.481	0.019	0.026	0.038	0.034	0.016	0.032	0.039	0.035	0.024
10	Ammonical Nitrogen as NH3	mg/L	0.448	0.560	0.555	0.671	0.467	0.60	0.522	0.559	0.598	0.710	0.411	0.467
11	Phosphates as PO4	mg/L	0.610	0.368	0.050	0.045	0.089	0.117	0.484	0.290	0.071	0.093	0.316	0.329
12	Total Nitrogen	mg/L	0.977	1.146	1.076	1.322	0.917	1.15	1.036	1.119	1.057	1.299	0.981	1.224
13	Petroleum Hydrocarbon	µg/L	1.0	BDL*	10.4	BDL*	12.2	BDL*	10.2	BDL*	10.8	BDL*	11	BDL*
14	Total Dissolved Solids	mg/L	42520	43990	44440	44730	43690	44210	44100	44660	44330	45140	36920	38020
15	COD	mg/L	28	24	19	13	26	24	18	12	18	16	22	16
16	Oxidisable Particular Organic Carbon	%	0.518	0.268	0.50	0.17	0.32	0.18	0.42	0.13	0.26	0.16	0.48	0.20
A			Flora and Fauna											
17.1	Primary Productivity	mgC/L/day	1.80	0.675	2.58	0.78	1.17	0.56	1.62	0.788	1.395	0.360	1.62	0.45

B		Phytoplankton												
18.1	Chlorophyll	mg/ m ³	3.257	1.068	2.99	0.401	2.96	0.534	3.071	0.374	2.64	0.534	2.96	0.748
18.2	Phaeophytin	mg/ m ³	BDL*	1.21	BDL*	1.26	BDL*	1.41	BDL*	1.57	BDL*	1.41	BDL*	1.20
18.3	Cell Count	Unit x 10 ³ /L	235	55	182	44	212	52	106	26	184	48	204	56
--	Name of Group Number and name of group species of each group	--	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae	Bacillariophyceae
			<i>Navicula sp.</i>	<i>Nitzschia sp.</i>	<i>Asterionella sp.</i>	<i>Fragillaria sp.</i>	<i>Navicula sp.</i>	<i>Nitzschia sp.</i>	<i>Navicula sp.</i>	<i>Achnanthes sp.</i>	<i>Navicula sp.</i>	<i>Nitzschia sp.</i>	<i>Achnanthes sp.</i>	<i>Navicula sp.</i>
			<i>Synedra sp.</i>	<i>Fragillaria sp.</i>	<i>Fragillaria sp.</i>	<i>Gyrosigma sp.</i>	<i>Synedra sp.</i>	<i>Fragillaria sp.</i>	<i>Fragillaria sp.</i>	<i>Biddulphia sp.</i>	<i>Synedra sp.</i>	<i>Fragillaria sp.</i>	<i>Navicula sp.</i>	<i>Fragillaria sp.</i>
			<i>Nitzschia sp.</i>	<i>Asterionella sp.</i>	<i>Thalassionema sp.</i>	<i>Nitzschia sp.</i>	<i>Nitzschia sp.</i>	<i>Coscinodiscus sp.</i>	<i>Nitzschia sp.</i>	<i>Navicula sp.</i>	<i>Nitzschia sp.</i>	<i>Pinnularia sp.</i>	<i>Gyrosigma sp.</i>	<i>Nitzschia sp.</i>
			<i>Melosira sp.</i>	<i>Rhizosolenia sp.</i>	<i>Pinnularia sp.</i>	Green Algae	<i>Pinnularia sp.</i>	<i>Skeletonema sp.</i>	<i>Pleurosigma sp.</i>	<i>Rhizosolenia sp.</i>	<i>Coscinodiscus sp.</i>	<i>Thalassionema sp.</i>	<i>Cymbella sp.</i>	<i>Tabellaria sp.</i>
			<i>Pinnularia sp.</i>	<i>Gomphonema sp.</i>	<i>Biddulphia sp.</i>	<i>Chlorella sp.</i>	<i>Skeletonema sp.</i>	<i>Synedra sp.</i>	<i>Gomphonema sp.</i>	<i>Pinnularia sp.</i>	<i>Rhizosolenia sp.</i>	<i>Amphora sp.</i>	<i>Rhizosolenia sp.</i>	<i>Achnanthes sp.</i>
			<i>Coscinodiscus sp.</i>	<i>Pleurosigma sp.</i>	<i>Navicula sp.</i>	<i>Ulothrix sp.</i>	<i>Gomphonema sp.</i>	--	<i>Rhizosolenia sp.</i>	--	<i>Skeletonema sp.</i>	--	<i>Biddulphia sp.</i>	--
			<i>Skeletonema sp.</i>	Cyanophyceae	Green Algae	Cyanophyceae	<i>Asterionella sp.</i>	--	<i>Thalassiosira sp.</i>	--	<i>Gyrosigma sp.</i>	--	<i>Cocconeis sp.</i>	--
			<i>Asterionella sp.</i>	<i>Anabaena sp.</i>	<i>Ankistrodesmus sp.</i>	<i>Oscillatoria sp.</i>	Cyanophyceae	--	Cyanophyceae	--	<i>Pleurosigma sp.</i>	--	<i>Nitzschia sp.</i>	--
			<i>Cymbella sp.</i>	<i>Microcystis sp.</i>	<i>Chlorella sp.</i>	--	<i>Oscillatoria sp.</i>	--	<i>Anabaena sp.</i>	--	<i>Cyclotella sp.</i>	--	Cyanophyceae	--
			<i>Gomphonema sp.</i>	Green Algae	Cyanophyceae	--	<i>Nostoc sp.</i>	--	<i>Oscillatoria sp.</i>	--	Cyanophyceae	--	<i>Nostoc sp.</i>	--
			Cyanophyceae	<i>Chlorella sp.</i>	<i>Oscillatoria sp.</i>	--	Green Algae	--	Green Algae	--	<i>Microcystis sp.</i>	--	<i>Spirulina sp.</i>	--
			<i>Oscillatoria sp.</i>	<i>Hydrodictyon sp.</i>			<i>Ankistrodesmus sp.</i>	--	<i>Chlorella sp.</i>	--	<i>Oscillatoria sp.</i>	--	Green Algae	--
			<i>Spirulina sp.</i>	--			<i>Hydrodictyon sp.</i>	--	<i>Pandorina sp.</i>	--	Green Algae	--	<i>Ulothrix sp.</i>	--
			Green Algae	--					<i>Pediastrum sp.</i>	--	<i>Ankistrodesmus sp.</i>	--	<i>Scenedesmus sp.</i>	--
			<i>Ankistrodesmus sp.</i>								<i>Chlorella sp.</i>	--	<i>Oedogonium sp.</i>	--
			<i>Chlorella sp.</i>								<i>Volvox sp.</i>	--		
			<i>Pandorina sp.</i>											



19.1	Abundance (Population)	no/m ²	367	100	220	40	180	20	300	33	120	40	240	60	
19.2	Name of Group Number and name of group species of each group	--	Copepods	Polychaete worms	Nematodes	Echinoderms	Ctenophores	Gastropods	Copepods	Gastropods	Echinoderms	Polychaetes Worms	Nauplius larvae	Copepods	
			Polychaete worms	Gastropods	Ostracods	--	Ostracods	--	Polychaetes Worms	--	Copepods	Gastropods	Nematodes	Nematodes	
			Krill	--	Echinoderms	--	Decapods	--	Gastropods	--	Nematodes	--	Gastropods	--	--
			Snails	--	Foraminiferans	--	Gastropods	--	Echinoderms	--	Gastropods	--	Ostracods	--	--
			Molluscs	--	Snails	--					Isopods	--	Polychaete worms	--	--
			Gastropods	--									Snail		
19.3	Total Biomass	ml/100 m ³	146	11.2	135	2.58	92.5	1.75	109	2.58	123	3.544	143	14.56	
D	Microbiological Parameters														
20.1	Total Bacterial Count	CFU/ml	1420	1210	1550	1450	1690	1540	1580	1350	1740	1550	1730	1420	
20.2	Total Coliform	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	
20.3	E.coli	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	
20.4	Enterococcus species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	
20.5	Salmonella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	
20.6	Shigella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	
20.7	Vibrio species	/ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	

C. Sea Sediment Quality Monitoring Report:

Location 1: SEA SEDIMENT SOUTH SIDE

SR. NO.	TEST PARAMETERS	UNIT	26/04/2016	23/05/2016	30/06/2016	27/07/2016	03/08/2016	16/09/2016
			SEA SEDIMENT SOUTH SIDE					
1	Organic Matter	%	0.57	0.759	0.45	0.51	0.545	0.661
2	Phosphorus as P	mg/kg	197	192	152	178	127	202
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	mg/kg	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Heavy Metals							
5.1	Aluminum as Al	%	5.32	5.41	5.24	4.97	5.07	5.26
5.2	Total Chromium as Cr ⁺³	mg/kg	93.99	101	111	122	120	106
5.3	Manganese as Mn	mg/kg	701	673	839	588	840	759
5.4	Iron as Fe	%	1.95	1.91	2.09	2.06	2.53	2.41
5.5	Nickel as Ni	mg/kg	58.88	46.82	42.6	49.63	40.08	60.41
5.6	Copper as Cu	mg/kg	50.10	46.07	55.4	40.96	58.56	50.01
5.7	Zinc as Zn	mg/kg	188	155	240	170	219	168
5.8	Lead as Pb	mg/kg	1.43	2.02	1.52	1.57	1.37	1.56
5.9	Mercury as Hg	mg/kg	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	Isopods	Mysids	Polychaete worms	Bivalves	Polychaete worms
			Echinoderms	Decapods	Decapods	Isopods	Echinoderms	Bivalves
			Crabs	Mysids	Echinoderms	Decapods	Isopods	Echinoderms
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Nematodes	Foraminiferans	Foraminiferans	Copepods	Nematodes	Bryozoans
			Copepods	--	--	--	--	Hydrozoa
			Ciliates					
6.3	Population	no/m ²	529	252	440	33.7	385	317

Location 2: SEA SEDIMENT NORTH SIDE

SR. NO.	TEST PARAMETERS	UNIT	26/04/2016	23/05/2016	30/06/2016	27/07/2016	03/08/2016	16/09/2016
			SEA SEDIMENT NORTH SIDE					
1	Organic Matter	%	0.710	0.705	0.66	0.588	0.623	0.799
2	Phosphorus as P	mg/kg	187	196	172	208	147	187
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	mg/kg	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Heavy Metals							
5.1	Aluminum as Al	%	5.45	5.37	5.3	5.14	5.11	5.54
5.2	Total Chromium as Cr ⁺³	mg/kg	100	107	128	98.24	139	107
5.3	Manganese as Mn	mg/kg	673	623	720	712	689	688
5.4	Iron as Fe	%	2.11	2.43	2.3	2.08	2.15	2.48
5.5	Nickel as Ni	mg/kg	49.62	46.47	31.4	57.39	30.75	55.78
5.6	Copper as Cu	mg/kg	45.34	42.34	65.6	50.46	52.38	42.67
5.7	Zinc as Zn	mg/kg	160	150	212	158	209	165
5.8	Lead as Pb	mg/kg	1.98	1.82	1.78	1.73	1.64	1.79
5.9	Mercury as Hg	mg/kg	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	Polychaete worms	Decapods	Bivalves	Echinoderms	Echinoderms
			Echinoderms	Mysids	Isopods	Echinoderms	Gastropods	Isopods
			Crabs	Isopods	Echinoderms	Decapods	Decapods	
				Echinoderms				
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Nematodes	Nematodes	Nematodes	Hydrozoa	Ciliates	Foraminiferans
			Ciliates				Copepods	Copepods
								Bryozoans
6.3	Population	no/m ²	385	377	377	288	433	357

D. STP Water Quality Report:

Location: STP INLET WATER QUALITY

TEST PARAMETER	UNIT	RESULTS					
Date of Sampling		30/04/2016	23/05/2016	30/06/2016	27/07/2016	03/08/2016	16/09/2016
Sample Source		INLET					
pH	--	6.56	6.47	6.83	6.88	7.03	7.32
Total Suspended Solids	mg/L	180	168	196	264	194	188
BOD (3 Days @ 27 oC)	mg/L	106	118	122	516	76	92
Residual Free Chlorine	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Location: STP OUTLET WATER QUALITY

TEST PARAMETER	UNIT	RESULTS					
Date of Sampling		30/04/2016	23/05/2016	30/06/2016	27/07/2016	03/08/2016	16/09/2016
Sample Source		OUTLET					
pH	--	7.28	7.19	7.47	7.07	7.29	7.61
Total Suspended Solids	mg/L	24	22	26	28	26	22
BOD (3 Days @ 27 °C)	mg/L	16	18	19	19.5	19.5	18
Residual Free Chlorine	mg/L	0.8	0.6	0.5	0.5	0.5	0.7

E. Piezometer Water Quality Report:

Location 1: NEAR SUB STATION 7B

TEST PARAMETER	UNIT	RESULTS					
		Date of Sampling	26/04/2016	23/05/2016	30/06/2016	27/07/2016	03/08/2016
Sample Source		NEAR SUB STATION 7B					
Temperature	oC	29	29	29	29	30	29
pH	--	8.24	8.36	8.76	8.78	8.71	8.82
Total Dissolved Solids	mg/L	1100	1061	1053	1070	1165	1390
Salinity	ppt	0.22	0.29	0.26	0.28	0.26	0.25
Chloride as Cl	mg/L	125	164	145	154	143	139
Depth of Water Level from Ground Level	meter	4	2.3	2.5	2	3	3
Status of Tide**	--	Low Tide	High Tide	High Tide	High Tide	High Tide	Low Tide

Location 2: NEAR QHSE OFFICE

TEST PARAMETER	UNIT	RESULTS					
		Date of Sampling	26/04/2016	23/05/2016	30/06/2016	27/07/2016	03/08/2016
Sample Source		NEAR QHSE OFFICE					
Temperature	oC	29	30	30	29	29	30
pH	--	8.44	8.65	7.99	8.66	8.53	8.52
Total Dissolved Solids	mg/L	1270	1166	1154	1166	1206	1103
Salinity	ppt	0.62	0.64	0.029	0.56	0.56	0.45
Chloride as Cl	mg/L	247	354	15.99	309	309	251
Depth of Water Level from Ground Level	meter	3	2.7	1.5	1.5	2.5	2.5
Status of Tide**	--	Low Tide	High Tide	High Tide	High Tide	High Tide	Low Tide

F. Noise Level Report:

Location 1: BEHIND QHSE OFFICE

Date of Monitoring	01/04/2016	02/05/2016	01/06/2016	01/07/2016	01/08/2016	01/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	41.00	40.20	42.30	40.20	43.20	43.40
7:00-8:00	41.30	42.80	44.80	41.30	40.00	40.10
8:00-9:00	47.40	44.80	46.90	42.50	41.20	41.00
9:00-10:00	55.40	46.80	50.80	46.60	49.60	47.10
10:00-11:00	53.90	49.50	56.90	50.60	54.60	50.20
11:00-12:00	59.90	51.30	59.80	46.90	42.50	41.70
12:00-13:00	64.00	53.70	62.30	47.90	47.80	45.00
13:00-14:00	67.90	55.90	64.80	49.80	49.30	44.50
14:00-15:00	66.70	59.00	66.70	50.20	50.50	45.80
15:00-16:00	70.70	61.20	68.30	51.30	54.20	52.20
16:00-17:00	70.10	62.40	66.90	49.30	47.70	43.10
17:00-18:00	72.20	60.30	64.60	48.70	46.20	49.60
18:00-19:00	66.70	59.40	62.30	52.30	56.10	58.70
19:00-20:00	63.40	58.30	60.90	45.30	41.20	40.90
20:00-21:00	58.30	56.40	59.70	44.20	45.20	47.10
21:00-22:00	61.70	55.60	57.40	44.10	45.50	44.60
Night Time Noise Level dB(A) Leq						
22:00-23:00	61.80	53.20	56.30	43.20	46.50	47.10
23:00-00:00	59.20	50.90	54.10	42.10	40.90	46.70
00:00-01:00	56.90	48.30	51.80	41.90	45.30	44.90
01:00-02:00	55.30	46.50	50.20	40.80	39.50	39.90
02:00-03:00	54.20	44.30	48.60	40.70	42.80	45.50
03:00-04:00	52.80	42.70	46.20	41.70	40.20	41.40
04:00-05:00	51.60	41.70	45.30	39.80	39.90	42.40
05:00-06:00	50.30	40.80	44.80	43.70	47.00	49.30

Location 2: PMC OFFICE BACK SIDE

Date of Monitoring	02/04/2016	03/05/2016	02/06/2016	02/07/2016	02/08/2016	02/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	38.70	41.30	43.80	41.30	44.20	47.20
7:00-8:00	44.60	46.50	43.90	42.30	42.20	41.90
8:00-9:00	47.80	48.20	48.70	43.60	44.00	42.30
9:00-10:00	50.80	50.80	51.90	44.50	47.80	46.00
10:00-11:00	51.10	51.30	54.80	51.60	51.50	46.60
11:00-12:00	62.70	52.80	58.70	49.40	45.00	45.20
12:00-13:00	63.60	54.70	63.10	48.90	49.30	47.80
13:00-14:00	67.50	58.20	65.90	46.60	49.70	46.10
14:00-15:00	67.90	60.10	64.20	49.10	50.00	48.50
15:00-16:00	67.10	62.40	62.90	50.20	46.70	46.50
16:00-17:00	72.60	64.30	60.00	52.90	48.90	44.90
17:00-18:00	70.50	63.10	58.40	49.20	44.90	48.70
18:00-19:00	64.40	62.80	57.90	54.40	51.60	52.20
19:00-20:00	68.70	61.50	56.00	51.30	50.90	46.90
20:00-21:00	63.40	60.10	54.70	49.50	47.70	46.30
21:00-22:00	62.60	59.80	53.10	44.70	46.30	44.50
Night Time Noise Level dB(A) Leq						
22:00-23:00	58.00	56.30	51.30	44.20	41.10	42.80
23:00-00:00	61.10	53.20	50.40	43.10	42.50	41.90
00:00-01:00	60.70	50.80	45.80	40.80	42.00	41.50
01:00-02:00	57.00	48.70	43.20	42.00	42.50	40.10
02:00-03:00	53.10	46.90	42.60	41.90	41.90	41.30
03:00-04:00	53.20	45.30	41.70	42.70	41.80	43.30
04:00-05:00	48.40	43.20	41.50	42.90	39.90	42.40
05:00-06:00	46.50	41.90	40.30	46.20	47.80	43.50

Location 3: SUB STATION - 6 BACK SIDE

Date of Monitoring	04/04/2016	04/05/2016	03/06/2016	04/07/2016	03/08/2016	03/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	40.70	41.10	44.30	45.50	45.40	43.90
7:00-8:00	42.50	42.30	46.50	44.80	42.30	42.30
8:00-9:00	48.00	44.40	47.90	46.20	49.80	50.30
9:00-10:00	49.10	46.90	50.20	45.60	47.70	48.20
10:00-11:00	52.40	50.00	53.60	46.80	44.70	43.00
11:00-12:00	59.20	51.20	57.80	48.20	51.10	52.10
12:00-13:00	59.90	53.50	61.90	50.20	46.40	47.00
13:00-14:00	63.10	55.70	63.50	47.80	43.80	45.00
14:00-15:00	63.20	57.00	65.90	48.40	49.20	52.20
15:00-16:00	69.40	59.80	64.70	51.70	54.80	50.40
16:00-17:00	67.00	61.30	62.30	54.40	52.00	50.00
17:00-18:00	70.60	63.00	59.80	52.80	52.80	52.20
18:00-19:00	65.60	63.80	57.60	50.10	46.10	45.50
19:00-20:00	68.10	65.20	55.90	47.50	50.40	49.30
20:00-21:00	66.50	64.40	54.30	46.30	46.40	50.30
21:00-22:00	62.80	62.30	53.00	45.80	49.00	47.10
Night Time Noise Level dB(A) Leq						
22:00-23:00	63.30	60.20	52.40	45.30	41.00	42.80
23:00-00:00	60.90	58.30	51.30	43.70	40.40	41.90
00:00-01:00	61.20	56.40	50.80	42.80	42.80	43.40
01:00-02:00	62.10	53.20	49.60	41.90	41.20	42.80
02:00-03:00	53.80	50.80	48.50	40.00	37.40	39.60
03:00-04:00	51.60	48.90	46.20	38.80	42.10	43.80
04:00-05:00	50.00	46.50	45.30	42.30	43.50	41.80
05:00-06:00	49.90	44.70	44.20	43.90	45.60	42.50



Location 4: SUB STATION - 8 (MARINE BUILDING)

Date of Monitoring	05/04/2016	05/05/2016	04/06/2016	05/07/2016	04/08/2016	05/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	43.70	45.20	41.90	44.20	47.60	48.70
7:00-8:00	47.20	45.70	43.40	42.60	44.60	42.00
8:00-9:00	47.40	47.90	45.80	43.50	46.80	44.30
9:00-10:00	49.90	51.10	48.90	42.10	40.40	46.50
10:00-11:00	51.70	52.90	50.20	52.60	56.40	59.80
11:00-12:00	58.10	54.60	54.80	54.30	56.20	58.90
12:00-13:00	55.00	56.70	58.90	48.20	44.20	45.30
13:00-14:00	58.10	59.80	59.20	45.80	47.10	46.90
14:00-15:00	67.40	62.00	61.30	46.60	45.80	45.60
15:00-16:00	70.50	63.50	63.50	55.40	50.90	48.70
16:00-17:00	71.50	65.10	62.10	50.80	53.20	55.40
17:00-18:00	71.00	66.00	60.90	51.30	52.20	49.80
18:00-19:00	63.90	66.60	59.30	47.80	49.80	48.80
19:00-20:00	64.30	67.80	58.40	48.60	52.00	54.80
20:00-21:00	64.10	68.40	57.00	45.20	47.50	42.90
21:00-22:00	59.00	67.60	56.50	43.10	42.80	48.20
Night Time Noise Level dB(A) Leq						
22:00-23:00	62.30	63.40	55.20	45.60	41.50	40.00
23:00-00:00	59.50	62.10	53.10	42.80	41.40	40.70
00:00-01:00	55.80	60.80	52.60	44.10	47.00	45.40
01:00-02:00	57.10	57.30	51.60	42.80	39.80	43.50
02:00-03:00	54.50	55.60	49.30	41.60	40.60	38.60
03:00-04:00	49.90	53.20	47.20	40.30	40.40	42.00
04:00-05:00	49.90	50.40	45.00	39.50	36.90	43.00
05:00-06:00	46.30	49.50	43.60	42.40	42.70	46.50



Location 5: NEAR SUB STATION - 7B

Date of Monitoring	06/04/2016	06/05/2016	06/06/2016	06/07/2016	05/08/2016	06/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	41.20	44.70	42.80	40.10	41.10	43.20
7:00-8:00	48.30	46.60	44.90	41.80	40.80	45.30
8:00-9:00	46.10	50.00	46.40	42.60	44.40	47.00
9:00-10:00	49.30	52.10	49.30	44.80	46.80	50.30
10:00-11:00	49.60	55.10	51.40	54.60	56.80	55.80
11:00-12:00	51.10	56.70	54.80	52.60	48.40	47.30
12:00-13:00	57.40	58.60	57.30	49.40	45.50	44.80
13:00-14:00	62.00	60.80	59.40	46.40	44.10	41.50
14:00-15:00	63.80	62.10	60.30	45.80	49.60	44.70
15:00-16:00	66.10	63.70	62.40	52.60	48.50	44.90
16:00-17:00	69.60	66.40	64.50	49.80	45.30	40.90
17:00-18:00	67.10	68.60	63.20	55.40	53.10	53.60
18:00-19:00	65.90	70.10	62.90	51.60	49.00	47.80
19:00-20:00	62.90	68.10	61.80	50.40	50.60	49.20
20:00-21:00	59.50	67.00	60.90	51.40	48.40	47.00
21:00-22:00	62.20	66.60	59.30	48.70	45.90	43.90
Night Time Noise Level dB(A) Leq						
22:00-23:00	62.80	62.20	57.10	46.60	44.60	45.50
23:00-00:00	59.10	61.90	55.20	45.20	44.20	43.80
00:00-01:00	58.80	60.30	54.30	45.80	44.40	39.50
01:00-02:00	56.10	58.50	53.10	44.20	44.30	47.80
02:00-03:00	54.00	55.30	51.90	43.10	43.90	47.80
03:00-04:00	48.50	54.20	49.40	42.00	42.60	37.60
04:00-05:00	48.10	53.50	47.60	40.80	39.20	41.70
05:00-06:00	43.20	51.90	45.30	41.50	41.90	37.90

Location 6: JS -1 (NEAR LAKHIGAM)

Date of Monitoring	07/04/2016	07/05/2016	07/06/2016	07/07/2016	06/08/2016	07/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	45.20	40.90	41.50	42.30	40.50	47.40
7:00-8:00	44.20	42.80	42.30	44.50	42.20	44.90
8:00-9:00	49.90	43.70	43.50	45.90	48.20	47.80
9:00-10:00	47.00	47.90	48.70	50.30	52.90	48.40
10:00-11:00	49.80	49.30	49.30	53.60	54.40	51.00
11:00-12:00	56.40	52.30	53.20	57.40	59.70	62.50
12:00-13:00	57.20	54.70	59.80	52.90	52.70	54.90
13:00-14:00	59.90	58.30	60.10	48.80	52.30	47.40
14:00-15:00	60.40	67.60	62.30	50.30	54.30	50.60
15:00-16:00	69.90	68.10	64.50	51.40	47.00	46.00
16:00-17:00	66.20	66.30	66.90	52.30	52.30	53.30
17:00-18:00	69.90	62.40	65.10	49.40	49.30	49.60
18:00-19:00	70.70	61.50	64.80	51.20	51.40	47.10
19:00-20:00	67.60	60.90	63.20	48.60	44.80	48.40
20:00-21:00	62.30	59.30	61.90	46.30	43.30	40.60
21:00-22:00	61.00	58.30	60.30	45.40	44.60	45.40
Night Time Noise Level dB(A) Leq						
22:00-23:00	61.60	57.30	59.30	44.30	46.90	49.40
23:00-00:00	62.90	55.60	57.40	43.90	43.20	44.50
00:00-01:00	59.10	53.20	55.20	41.60	38.50	39.80
01:00-02:00	54.40	50.80	53.10	42.50	42.50	42.60
02:00-03:00	56.80	48.60	50.60	40.70	38.20	42.20
03:00-04:00	51.80	45.30	47.90	41.50	37.60	41.30
04:00-05:00	53.20	43.90	45.60	42.30	40.70	44.10
05:00-06:00	49.60	42.70	43.10	43.10	43.60	46.60



Location 7: BEHIND S.S. - 11 (SILO)

Date of Monitoring	08/04/2016	09/05/2016	08/06/2016	08/07/2016	08/08/2016	08/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	39.80	41.30	40.90	44.60	44.90	45.20
7:00-8:00	44.10	44.50	42.50	45.60	44.30	43.60
8:00-9:00	47.80	46.90	44.60	48.50	46.70	47.10
9:00-10:00	47.80	48.70	48.90	51.20	50.10	49.20
10:00-11:00	53.80	50.10	50.30	52.60	50.10	53.20
11:00-12:00	52.50	52.40	54.80	58.40	59.80	59.70
12:00-13:00	55.60	56.90	58.70	55.90	58.90	59.70
13:00-14:00	62.20	58.90	61.20	51.60	54.80	56.10
14:00-15:00	64.50	62.40	63.90	56.10	51.80	54.20
15:00-16:00	66.70	64.50	65.90	54.80	54.20	55.70
16:00-17:00	65.80	68.90	64.30	55.90	57.30	57.60
17:00-18:00	63.60	66.70	63.00	53.60	54.60	58.50
18:00-19:00	66.80	65.30	62.70	54.30	54.50	57.80
19:00-20:00	61.10	64.40	61.50	50.40	50.40	49.10
20:00-21:00	64.60	62.10	60.70	49.30	48.90	50.90
21:00-22:00	60.10	60.90	59.40	48.20	50.70	50.90
Night Time Noise Level dB(A) Leq						
22:00-23:00	61.10	59.20	58.20	45.20	45.30	42.10
23:00-00:00	57.00	57.30	56.30	42.10	43.10	43.00
00:00-01:00	55.10	55.40	55.20	43.20	42.40	40.60
01:00-02:00	58.20	53.20	54.00	44.20	48.20	49.10
02:00-03:00	53.30	50.60	53.90	41.30	37.00	42.60
03:00-04:00	49.90	47.90	51.90	40.60	44.30	45.00
04:00-05:00	48.70	45.60	50.80	41.70	42.50	43.70
05:00-06:00	43.10	43.20	48.30	42.50	42.70	44.90



Location 8: NEAR S & S ENTRY GATE (DAHEJ ROAD)

Date of Monitoring	09/04/2016	10/05/2016	09/06/2016	09/07/2016	09/08/2016	09/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	48.60	42.70	40.50	43.50	46.70	41.80
7:00-8:00	48.50	43.90	41.90	42.80	44.30	40.80
8:00-9:00	49.20	47.80	44.00	45.20	42.20	41.20
9:00-10:00	49.70	51.30	46.90	43.50	43.50	47.30
10:00-11:00	55.80	55.60	48.70	56.40	53.80	52.80
11:00-12:00	57.10	58.70	51.60	54.20	50.80	54.10
12:00-13:00	51.70	60.20	56.90	52.90	48.70	50.30
13:00-14:00	60.20	62.40	58.20	48.20	50.50	50.40
14:00-15:00	62.10	64.30	59.10	49.60	46.70	45.10
15:00-16:00	62.60	68.50	60.20	50.20	54.10	54.80
16:00-17:00	67.70	66.60	61.40	51.40	52.90	55.70
17:00-18:00	67.00	64.30	59.20	55.90	51.60	50.40
18:00-19:00	68.10	63.10	58.30	53.20	54.90	50.10
19:00-20:00	66.20	62.40	57.40	51.60	55.10	58.20
20:00-21:00	61.50	60.10	55.30	48.30	51.40	51.40
21:00-22:00	63.90	59.80	54.20	44.60	45.50	47.30
Night Time Noise Level dB(A) Leq						
22:00-23:00	62.80	58.70	53.70	46.80	42.80	39.70
23:00-00:00	63.50	57.90	52.20	43.20	46.00	41.90
00:00-01:00	59.90	55.90	51.60	40.50	41.20	40.20
01:00-02:00	55.40	52.70	50.80	42.30	41.60	43.90
02:00-03:00	53.00	50.10	48.30	40.30	42.50	42.30
03:00-04:00	49.00	48.90	46.30	39.60	35.70	42.30
04:00-05:00	46.90	46.70	45.40	42.80	38.70	39.70
05:00-06:00	46.30	44.30	43.60	44.40	46.70	44.30



Location 9: GCPTL GATE

Date of Monitoring	11/04/2016	11/05/2016	10/06/2016	11/07/2016	10/08/2016	10/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	47.90	43.70	42.80	40.30	40.40	46.40
7:00-8:00	46.30	45.70	44.50	41.80	45.70	49.70
8:00-9:00	48.30	47.90	47.30	42.50	42.20	42.70
9:00-10:00	50.00	49.80	49.50	45.60	44.30	47.60
10:00-11:00	53.40	52.30	53.90	44.70	48.40	45.70
11:00-12:00	53.60	55.80	56.70	45.30	46.60	47.30
12:00-13:00	54.40	58.30	59.00	46.70	48.60	43.70
13:00-14:00	60.80	64.70	60.30	47.80	48.40	44.20
14:00-15:00	61.10	66.90	62.40	48.20	50.70	46.60
15:00-16:00	67.40	68.20	64.50	49.30	52.40	52.10
16:00-17:00	68.80	67.40	63.30	47.40	44.90	47.00
17:00-18:00	71.10	65.30	62.10	50.30	51.30	49.10
18:00-19:00	65.50	64.20	61.30	49.80	47.60	51.50
19:00-20:00	66.50	62.80	60.80	48.50	49.80	49.10
20:00-21:00	60.20	61.30	59.70	47.60	50.90	54.80
21:00-22:00	65.70	60.50	58.20	46.50	49.20	51.30
Night Time Noise Level dB(A) Leq						
22:00-23:00	63.90	58.20	57.40	41.20	41.50	38.70
23:00-00:00	61.30	56.30	55.80	44.30	45.00	46.10
00:00-01:00	55.50	55.70	54.20	43.10	41.40	41.50
01:00-02:00	57.70	53.20	52.80	45.90	46.50	42.00
02:00-03:00	50.50	50.60	51.90	41.80	37.50	39.00
03:00-04:00	51.10	47.70	50.60	40.90	42.00	43.70
04:00-05:00	50.30	45.60	47.50	41.70	40.50	45.50
05:00-06:00	43.40	42.70	45.30	42.80	41.90	44.80



Location 10: LAKHI VILLAGE (PRIMARY SCHOOL)

Date of Monitoring	12/04/2016	12/05/2016	11/06/2016	12/07/2016	11/08/2016	12/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	43.40	42.50	41.60	41.60	40.80	46.10
7:00-8:00	46.00	43.90	42.70	44.30	47.40	50.70
8:00-9:00	45.60	45.70	44.90	46.40	49.40	52.60
9:00-10:00	49.20	46.60	48.30	59.20	54.80	55.10
10:00-11:00	50.80	50.90	52.90	55.60	58.10	59.50
11:00-12:00	51.00	51.30	54.70	56.90	58.20	56.60
12:00-13:00	58.50	54.70	57.90	60.70	59.70	55.60
13:00-14:00	59.10	56.80	59.30	55.60	55.00	58.90
14:00-15:00	67.80	59.30	59.80	50.30	50.20	50.90
15:00-16:00	67.90	62.20	58.20	56.30	53.60	53.20
16:00-17:00	64.40	64.40	57.30	52.70	49.20	50.50
17:00-18:00	71.30	65.80	56.80	58.80	54.60	50.20
18:00-19:00	70.40	66.90	55.30	61.50	64.50	60.90
19:00-20:00	69.80	68.50	54.20	57.30	60.00	58.40
20:00-21:00	66.10	67.10	53.40	52.50	55.40	59.30
21:00-22:00	64.10	66.20	52.80	48.80	51.40	47.70
Night Time Noise Level dB(A) Leq						
22:00-23:00	63.40	63.20	58.30	46.20	42.00	40.20
23:00-00:00	61.60	60.10	56.20	44.60	42.80	42.20
00:00-01:00	60.40	58.30	55.40	41.70	37.70	40.90
01:00-02:00	57.70	55.40	53.20	40.60	37.20	40.10
02:00-03:00	52.90	53.20	52.70	42.30	41.80	43.20
03:00-04:00	53.40	50.80	50.40	42.40	40.60	39.10
04:00-05:00	49.10	48.60	48.30	43.50	43.00	40.50
05:00-06:00	42.90	46.50	46.60	45.20	47.20	45.30



Location 11: ERMS WORKSHOP

Date of Monitoring	13/04/2016	13/05/2016	13/06/2016	13/07/2016	12/08/2016	13/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	40.50	42.10	41.30	42.60	43.30	44.40
7:00-8:00	44.30	43.50	42.60	44.50	40.80	42.50
8:00-9:00	45.60	45.30	44.80	45.00	44.00	44.10
9:00-10:00	50.50	46.20	49.30	50.60	48.10	48.90
10:00-11:00	53.70	50.50	52.80	48.10	46.50	44.80
11:00-12:00	58.30	50.90	54.90	46.90	45.50	46.90
12:00-13:00	60.00	54.30	57.80	47.70	43.70	44.10
13:00-14:00	65.00	56.40	59.40	48.90	51.00	48.40
14:00-15:00	70.30	58.90	60.30	44.50	46.30	42.40
15:00-16:00	67.50	61.80	61.70	51.50	48.90	50.30
16:00-17:00	72.10	64.00	63.60	50.70	47.90	42.90
17:00-18:00	70.00	65.40	64.90	49.30	47.00	43.00
18:00-19:00	66.50	66.50	63.80	47.20	47.20	45.40
19:00-20:00	67.50	68.10	62.70	46.20	43.00	48.10
20:00-21:00	64.00	66.70	61.20	45.60	49.50	50.20
21:00-22:00	61.50	65.80	59.50	44.30	45.20	42.40
Night Time Noise Level dB(A) Leq						
22:00-23:00	61.40	63.20	58.20	43.70	42.80	45.40
23:00-00:00	62.90	60.10	56.10	42.50	43.60	46.00
00:00-01:00	59.10	58.30	55.30	41.30	44.10	44.40
01:00-02:00	59.70	55.40	53.40	40.50	36.40	41.60
02:00-03:00	56.60	53.20	51.60	41.60	40.80	41.60
03:00-04:00	50.80	50.80	50.30	42.40	44.90	43.40
04:00-05:00	47.20	48.60	48.20	43.50	40.20	41.70
05:00-06:00	44.80	46.50	46.10	44.60	40.70	40.60

Location 12: BEHIND PUMP HOUSE

Date of Monitoring	14/04/2016	14/05/2016	14/06/2016	14/07/2016	12/08/2016	14/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	42.40	43.70	42.50	40.10	41.70	42.40
7:00-8:00	47.40	45.60	44.70	41.20	42.50	46.40
8:00-9:00	45.70	47.90	47.60	44.30	44.80	42.80
9:00-10:00	51.20	49.80	49.70	47.80	45.00	44.60
10:00-11:00	50.60	52.30	53.60	45.60	47.30	43.10
11:00-12:00	53.60	55.80	56.90	52.60	51.40	55.20
12:00-13:00	57.70	58.30	59.80	48.40	51.60	54.60
13:00-14:00	58.20	64.70	60.20	47.30	49.70	50.40
14:00-15:00	64.60	66.90	62.50	48.60	46.50	48.40
15:00-16:00	66.40	68.20	65.30	49.80	49.60	50.70
16:00-17:00	70.80	67.40	64.20	54.60	53.10	54.90
17:00-18:00	68.30	65.30	62.10	56.00	58.30	55.50
18:00-19:00	67.80	64.20	61.40	52.20	50.10	47.30
19:00-20:00	64.20	62.80	60.70	45.10	48.00	45.70
20:00-21:00	65.00	61.30	59.30	47.20	43.80	48.80
21:00-22:00	63.00	60.50	58.40	46.30	47.40	50.90
Night Time Noise Level dB(A) Leq						
22:00-23:00	62.80	58.20	57.30	45.20	45.30	41.90
23:00-00:00	63.10	56.20	55.90	44.30	41.60	44.70
00:00-01:00	59.00	55.50	54.20	43.10	40.60	37.30
01:00-02:00	56.30	53.20	52.90	42.90	41.30	44.80
02:00-03:00	51.50	50.60	51.70	41.80	40.80	43.30
03:00-04:00	48.60	47.80	50.80	40.90	43.50	39.60
04:00-05:00	45.70	45.20	47.30	41.70	41.30	36.60
05:00-06:00	44.70	43.60	45.20	42.80	40.80	37.10

Location 13: ROCK BOND APPROACH (JETTY)

Date of Monitoring	15/04/2016	16/05/2016	15/06/2016	15/07/2016	16/08/2016	15/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	43.10	42.70	40.30	43.20	40.70	47.60
7:00-8:00	41.20	43.90	41.20	44.80	42.00	41.60
8:00-9:00	49.10	47.80	44.50	46.30	46.50	47.80
9:00-10:00	53.90	51.30	46.80	48.90	46.10	45.20
10:00-11:00	56.70	55.60	48.30	46.80	44.40	41.80
11:00-12:00	57.60	58.70	51.50	45.20	41.50	48.90
12:00-13:00	61.40	60.20	56.80	52.10	55.40	56.60
13:00-14:00	62.60	62.40	58.30	46.90	49.90	49.80
14:00-15:00	65.90	64.30	59.20	44.80	40.40	48.50
15:00-16:00	65.10	68.50	60.40	46.30	48.80	51.20
16:00-17:00	68.20	66.60	61.60	50.10	48.20	45.70
17:00-18:00	67.20	64.30	59.30	51.30	55.00	55.30
18:00-19:00	63.40	63.10	57.40	49.40	49.50	48.80
19:00-20:00	59.90	62.40	56.30	48.30	48.80	47.80
20:00-21:00	60.80	60.10	55.20	46.60	44.00	46.70
21:00-22:00	57.30	59.80	54.80	45.20	45.20	47.40
Night Time Noise Level dB(A) Leq						
22:00-23:00	60.30	58.70	53.20	44.50	43.50	43.40
23:00-00:00	62.20	57.90	52.80	43.20	46.10	47.90
00:00-01:00	56.60	55.80	51.30	42.60	46.40	47.60
01:00-02:00	56.10	52.70	50.70	39.60	38.00	37.10
02:00-03:00	51.20	50.10	48.60	43.30	45.10	42.70
03:00-04:00	51.00	48.90	46.20	41.60	41.70	40.00
04:00-05:00	48.80	46.70	45.30	42.80	46.40	45.50
05:00-06:00	45.90	44.30	43.20	43.70	45.60	45.80

Location 14: NEW GATE

Date of Monitoring	16/04/2016	17/05/2016	16/06/2016	16/07/2016	17/08/2016	16/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	42.30	41.30	42.80	42.80	43.60	41.70
7:00-8:00	41.20	44.50	44.50	43.30	44.80	42.90
8:00-9:00	45.90	46.90	46.30	45.50	47.20	45.00
9:00-10:00	50.60	48.70	48.40	46.80	49.70	45.90
10:00-11:00	50.30	50.10	50.30	54.20	57.40	56.90
11:00-12:00	53.10	52.40	54.70	52.60	52.80	51.00
12:00-13:00	54.40	56.90	58.30	51.40	52.30	49.30
13:00-14:00	60.40	58.90	61.40	50.50	48.50	46.20
14:00-15:00	60.80	62.40	63.20	53.60	57.50	61.20
15:00-16:00	64.50	64.50	65.80	51.40	51.40	48.60
16:00-17:00	65.10	68.90	64.50	52.70	51.70	50.10
17:00-18:00	69.30	66.70	63.20	51.90	53.90	51.20
18:00-19:00	66.40	65.30	62.80	50.30	48.90	46.60
19:00-20:00	65.80	64.40	61.40	49.50	50.20	48.60
20:00-21:00	65.00	62.10	60.60	48.30	52.00	49.80
21:00-22:00	63.00	60.90	59.30	47.10	51.10	51.60
Night Time Noise Level dB(A) Leq						
22:00-23:00	59.10	59.20	58.30	46.30	45.60	42.60
23:00-00:00	56.20	57.30	56.40	42.90	43.70	39.90
00:00-01:00	59.00	55.40	55.30	43.50	39.00	38.70
01:00-02:00	56.50	53.20	54.20	41.30	44.10	39.30
02:00-03:00	52.30	50.60	52.70	40.70	38.60	40.70
03:00-04:00	51.60	47.90	51.80	41.50	44.50	44.50
04:00-05:00	48.60	45.60	50.60	42.30	41.20	37.70
05:00-06:00	47.30	43.20	48.40	44.10	45.60	43.20



Location 15: SECURITY BARRIER GATE

Date of Monitoring	18/04/2016	18/05/2016	17/06/2016	18/07/2016	19/08/2016	17/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	41.50	40.90	41.60	44.10	44.80	48.30
7:00-8:00	44.30	42.80	42.50	43.70	40.00	43.30
8:00-9:00	46.10	43.70	43.80	44.60	40.80	42.40
9:00-10:00	48.40	47.90	48.90	45.70	48.00	51.20
10:00-11:00	49.30	49.30	49.50	52.60	49.20	49.20
11:00-12:00	55.70	52.40	53.10	50.70	52.60	49.50
12:00-13:00	56.10	54.70	59.70	48.00	47.40	43.30
13:00-14:00	64.00	58.30	60.10	56.30	60.00	59.60
14:00-15:00	66.80	67.50	62.30	50.20	49.90	46.30
15:00-16:00	68.10	68.20	64.50	51.60	51.60	54.20
16:00-17:00	71.00	66.30	66.90	50.40	49.60	44.70
17:00-18:00	69.20	62.40	65.10	56.50	53.70	54.20
18:00-19:00	62.30	61.50	64.80	48.10	45.70	49.70
19:00-20:00	65.70	60.90	63.20	47.60	47.80	50.70
20:00-21:00	64.80	59.10	61.90	46.50	42.90	42.10
21:00-22:00	60.50	58.30	60.30	45.30	44.90	40.60
Night Time Noise Level dB(A) Leq						
22:00-23:00	59.90	57.30	59.40	44.90	45.70	47.60
23:00-00:00	56.20	55.60	57.30	45.20	41.80	41.30
00:00-01:00	58.50	53.20	55.40	43.70	44.40	40.90
01:00-02:00	54.50	50.80	53.20	42.80	43.90	40.50
02:00-03:00	55.10	48.60	50.70	41.20	45.00	40.30
03:00-04:00	50.90	45.30	47.30	40.30	39.50	41.90
04:00-05:00	51.50	43.90	45.80	41.00	36.50	41.50
05:00-06:00	49.30	42.70	43.20	42.60	46.00	43.20

Location 16: JS - 2

Date of Monitoring	19/04/2016	19/05/2016	18/06/2016	19/07/2016	20/08/2016	19/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	44.20	46.40	42.30	41.30	42.60	40.60
7:00-8:00	44.40	47.10	44.00	42.80	45.30	46.40
8:00-9:00	50.30	49.20	46.30	43.70	42.40	46.10
9:00-10:00	49.80	52.40	49.50	47.80	45.70	48.30
10:00-11:00	50.30	54.20	51.30	45.60	46.30	41.30
11:00-12:00	51.50	55.90	54.90	46.90	49.70	52.10
12:00-13:00	55.70	58.00	57.60	47.30	50.00	49.90
13:00-14:00	62.90	61.10	59.40	46.40	47.80	47.00
14:00-15:00	65.50	63.30	60.30	48.30	45.80	42.00
15:00-16:00	66.60	64.80	62.40	50.40	53.70	52.50
16:00-17:00	67.80	66.40	64.50	52.20	49.20	50.40
17:00-18:00	67.50	67.30	63.20	50.60	50.40	49.70
18:00-19:00	63.60	67.90	62.90	46.70	46.90	41.90
19:00-20:00	66.20	69.10	61.80	45.90	45.90	42.40
20:00-21:00	59.20	69.70	60.90	47.50	48.80	46.50
21:00-22:00	61.30	68.90	59.30	46.30	48.70	49.00
Night Time Noise Level dB(A) Leq						
22:00-23:00	61.90	62.20	57.40	47.30	46.40	44.30
23:00-00:00	61.00	61.90	55.30	46.20	50.00	53.50
00:00-01:00	59.20	60.30	54.20	45.30	48.00	44.70
01:00-02:00	51.80	58.50	53.10	44.20	44.40	43.30
02:00-03:00	55.20	55.30	51.70	43.10	43.60	39.00
03:00-04:00	52.10	54.20	49.30	42.50	39.80	37.20
04:00-05:00	49.80	53.50	47.70	41.90	43.20	43.40
05:00-06:00	46.80	50.90	45.60	40.80	40.40	39.40

Location 17: RAILWAY DEAD END

Date of Monitoring	20/04/2016	20/05/2016	20/06/2016	20/07/2016	22/08/2016	20/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	42.30	43.50	41.60	40.90	42.70	43.50
7:00-8:00	45.20	45.40	43.20	43.60	44.30	44.50
8:00-9:00	45.80	48.80	45.50	46.50	48.90	49.70
9:00-10:00	51.90	50.90	48.30	44.60	46.00	42.10
10:00-11:00	52.40	54.40	50.90	48.50	45.10	45.80
11:00-12:00	56.70	55.60	54.60	47.70	50.10	48.30
12:00-13:00	56.00	57.40	58.70	45.30	46.10	44.00
13:00-14:00	60.10	59.60	59.20	48.30	43.90	40.60
14:00-15:00	66.30	60.90	61.30	49.40	48.50	50.50
15:00-16:00	65.40	62.50	63.50	52.30	53.70	57.40
16:00-17:00	68.20	65.20	62.10	51.40	51.50	49.20
17:00-18:00	68.60	67.40	60.90	53.30	53.30	50.00
18:00-19:00	68.80	68.90	59.30	49.30	52.90	52.80
19:00-20:00	64.50	66.90	58.40	48.40	51.10	50.10
20:00-21:00	66.80	65.80	57.00	44.50	44.50	43.70
21:00-22:00	64.00	65.40	56.50	43.20	44.20	40.20
Night Time Noise Level dB(A) Leq						
22:00-23:00	61.50	63.40	55.20	45.10	45.70	41.20
23:00-00:00	58.30	62.10	53.10	44.80	46.90	45.00
00:00-01:00	62.10	60.30	52.70	43.70	41.90	40.60
01:00-02:00	61.30	57.30	51.90	42.80	38.30	41.60
02:00-03:00	56.00	55.60	49.70	41.20	39.70	37.40
03:00-04:00	52.70	53.20	47.30	40.80	37.10	39.40
04:00-05:00	53.60	50.40	45.70	39.60	41.20	38.20
05:00-06:00	46.70	49.50	44.30	42.30	44.40	43.00



Location 18: S AND S YARD (SOUTH)

Date of Monitoring	21/04/2016	21/05/2016	21/06/2016	21/07/2016	23/08/2016	21/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	44.40	40.80	44.10	42.70	44.10	49.70
7:00-8:00	50.30	42.40	46.50	45.40	44.90	47.30
8:00-9:00	47.30	44.10	47.80	44.30	48.10	49.00
9:00-10:00	52.70	46.30	50.20	45.60	46.50	44.50
10:00-11:00	52.20	49.50	53.90	50.60	53.80	53.10
11:00-12:00	56.30	50.70	57.60	53.60	49.70	51.50
12:00-13:00	50.00	53.00	61.80	51.00	48.10	45.90
13:00-14:00	60.50	55.20	63.50	49.30	48.90	44.40
14:00-15:00	60.30	56.50	65.90	53.20	51.20	46.70
15:00-16:00	65.80	59.30	64.70	51.30	48.20	44.20
16:00-17:00	64.40	60.80	62.30	48.60	45.90	43.40
17:00-18:00	71.00	62.50	59.80	54.20	56.40	60.10
18:00-19:00	64.10	63.30	57.60	51.80	50.20	49.00
19:00-20:00	64.30	64.70	55.90	47.20	45.80	48.30
20:00-21:00	60.80	63.90	54.30	46.50	46.60	48.60
21:00-22:00	60.70	61.80	53.10	44.80	45.60	45.30
Night Time Noise Level dB(A) Leq						
22:00-23:00	62.70	60.20	52.40	44.30	48.00	51.60
23:00-00:00	60.70	58.30	51.30	43.20	41.80	40.90
00:00-01:00	56.30	56.40	50.80	42.80	40.20	38.30
01:00-02:00	52.50	53.20	49.60	40.10	36.00	42.40
02:00-03:00	52.50	50.80	48.50	40.80	40.40	40.40
03:00-04:00	48.30	48.90	46.20	41.20	37.10	38.30
04:00-05:00	50.60	46.50	45.30	42.30	42.60	38.90
05:00-06:00	45.80	44.70	44.20	43.90	40.80	42.20



Location 19: S AND S YARD (NORTH) BOUNDARY WALL

Date of Monitoring	22/04/2016	23/05/2016	22/06/2016	22/07/2016	24/08/2016	22/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	40.40	41.30	43.10	41.50	43.10	40.10
7:00-8:00	46.20	46.50	45.40	42.30	44.50	48.50
8:00-9:00	44.80	48.20	48.60	43.40	45.00	47.80
9:00-10:00	47.20	50.80	51.20	46.10	44.70	48.20
10:00-11:00	53.80	51.30	54.30	49.60	49.00	52.60
11:00-12:00	55.30	52.80	58.10	52.40	49.20	47.00
12:00-13:00	55.00	54.70	63.20	48.60	48.30	48.10
13:00-14:00	58.50	58.20	65.60	50.10	54.00	57.40
14:00-15:00	66.40	60.10	64.10	49.50	52.50	54.40
15:00-16:00	64.40	62.40	60.90	54.20	54.20	51.40
16:00-17:00	69.40	64.30	58.30	51.30	49.50	46.70
17:00-18:00	70.70	63.10	57.40	48.20	47.30	43.40
18:00-19:00	66.40	62.80	56.20	47.60	44.20	41.10
19:00-20:00	67.60	61.50	54.40	46.50	47.50	48.90
20:00-21:00	68.20	60.10	53.90	45.40	42.30	48.40
21:00-22:00	65.10	59.80	52.70	43.90	45.60	41.30
Night Time Noise Level dB(A) Leq						
22:00-23:00	59.90	56.20	51.30	43.80	41.30	41.00
23:00-00:00	57.00	53.40	50.40	42.40	39.10	37.50
00:00-01:00	55.50	50.80	50.80	41.80	39.10	39.50
01:00-02:00	53.20	48.70	48.30	42.10	38.60	40.50
02:00-03:00	54.40	46.90	47.50	41.90	41.00	41.70
03:00-04:00	52.10	45.30	45.30	42.70	44.50	48.10
04:00-05:00	50.50	43.20	44.20	42.90	46.60	47.70
05:00-06:00	47.80	41.90	43.10	40.10	40.30	40.70

Location 20: LAKHIGAM VILLAGE (BELOW CONVEYER BELT)

Date of Monitoring	23/04/2016	24/05/2016	23/06/2016	23/07/2016	25/08/2016	23/09/2016
Day Time Noise Level dB(A) Leq						
6:00-7:00	43.60	40.20	42.30	40.30	41.00	43.40
7:00-8:00	48.90	42.80	44.80	41.50	42.50	45.70
8:00-9:00	49.80	44.60	46.90	42.80	46.80	47.40
9:00-10:00	53.30	48.70	50.80	50.20	49.40	46.20
10:00-11:00	50.10	49.30	56.90	56.30	58.50	57.70
11:00-12:00	53.10	51.30	59.80	51.50	51.70	47.40
12:00-13:00	54.90	53.70	62.30	49.20	50.50	53.50
13:00-14:00	62.80	55.90	64.80	43.70	42.60	42.50
14:00-15:00	65.40	59.00	66.70	50.30	49.80	53.20
15:00-16:00	62.00	61.20	68.30	51.40	48.00	50.10
16:00-17:00	68.90	62.40	66.90	49.20	50.30	48.20
17:00-18:00	71.50	60.00	64.60	58.60	58.80	59.40
18:00-19:00	68.80	59.40	62.30	52.30	52.10	51.50
19:00-20:00	69.10	58.30	60.90	48.60	44.60	48.20
20:00-21:00	64.40	56.40	59.70	44.60	43.40	45.00
21:00-22:00	63.60	55.60	57.40	42.80	39.60	42.90
Night Time Noise Level dB(A) Leq						
22:00-23:00	64.10	53.20	56.30	43.20	41.30	38.90
23:00-00:00	58.40	50.90	54.20	40.10	41.90	45.80
00:00-01:00	60.60	48.30	51.70	42.20	38.30	40.60
01:00-02:00	59.30	46.50	50.20	40.90	40.80	38.90
02:00-03:00	54.10	44.30	48.70	41.70	45.40	43.80
03:00-04:00	54.40	42.70	46.20	42.30	43.50	42.50
04:00-05:00	51.80	41.90	45.30	43.40	40.00	39.30
05:00-06:00	49.50	40.70	44.80	44.50	43.30	42.10

G. DG (Standby) Stack Monitoring Report:

Location 1: DG SET # 1 MRSS (SS5) 125 KVA

SR. NO.	TEST PARAMETER	UNIT	Date of Sampling	
			26/04/16	27/07/16
1	Particulate Matter	mg/Nm ³	13.85	25.66
2	Sulfur Dioxide as SO ₂	ppm	6.41	7.11
3	Oxides of Nitrogen as NO _x	ppm	38.54	33.65
4	Non Methyl Hydro Carbon (NMHC)	mg/m ³	9.59	7.19
5	Carbon Monoxide	mg/m ³	BDL*	BDL*
DG Noise Leq dB (A)			69.8	67.5

Location 2: DG SET # 2 SS7B 125 kVA

SR. NO.	TEST PARAMETER	UNIT	Date of Sampling	
			26/04/16	27/07/16
1	Particulate Matter	mg/Nm ³	26.71	19.44
2	Sulfur Dioxide as SO ₂	ppm	5.72	4.41
3	Oxides of Nitrogen as NO _x	ppm	31.38	27.3
4	Non Methyl Hydro Carbon (NMHC)	mg/m ³	6.25	4.58
5	Carbon Monoxide	mg/m ³	BDL*	BDL*
DG Noise Leq dB (A)			71.2	72.8

Location 3: DG SET # 3 Marine (SS8)125 kVA

SR. NO.	TEST PARAMETER	UNIT	Date of Sampling	
			26/04/16	27/07/16
1	Particulate Matter	mg/Nm ³	15.64	16.9
2	Sulfur Dioxide as SO ₂	ppm	8.42	6.4
3	Oxides of Nitrogen as NO _x	ppm	35.65	36.78
4	Non Methyl Hydro Carbon (NMHC)	mg/m ³	5.57	6.12
5	Carbon Monoxide	mg/m ³	BDL*	BDL*
DG Noise Leq dB (A)			68.5	65.7

Location 4: DG SET # 4 Silo (SS11)125 kVA

SR. NO.	TEST PARAMETER	UNIT	Date of Sampling	
			26/04/16	27/07/16
1	Particulate Matter	mg/Nm ³	19.67	28.67
2	Sulfur Dioxide as SO ₂	ppm	4.82	5.1
3	Oxides of Nitrogen as NO _x	ppm	35	31.07
4	Non Methyl Hydro Carbon (NMHC)	mg/m ³	8.59	5.25
5	Carbon Monoxide	mg/m ³	BDL*	BDL*
DG Noise Leq dB (A)			70.1	71.3

BDL*: Below Detection Limit, Minimum Detection Limit: Hydro Carbon: 1 ppm, Results on 11 % O₂ Correction when Oxygen is greater than 11 %

Annexure – 2

Environment Expenditure & Budget for F.Y. 2016-17

SN No	Activity/ Category	Budget	Expenditure
		(Lac INR)	(Lac INR)
1	Environmental Study / Audit and Consultancy	1.50	0.90
2	Legal & Statutory Expenses	1.50	0.25
3	Environmental Monitoring Services	20.00	9.60
4	Hazardous Waste Management & Disposal	0.80	0.00
5	Greenbelt Operation & Maintenance expense	21.60	9.72
6	O&M of Pollution control measures	7.75	3.30
7	Environment Day Celebration	0.50	0.00
8	Treatment and Disposal of Bio-Medical Waste	2.10	1.05
9	sustainability	5.00	0.00
10	Operation & maintenance of Dust prevention equipment/Facility	112.02	49.24
Total Amount (Lac INR)		172.77	74.06
Capital Expenditure			
1	Green Belt Development	35.0	12.5
2	Canteen Solar Project	12.0	0.0
3	EHS Hygiene survey	10.0	0.0
4	Magnetic flow meter with software	3.0	0.0
5	Hazardous waste storage yard development	64	32.5
Total Amount (Lac INR)		124.00	45.0

Annexure 3
ADANI FOUNDATION, DAHEJ
CSR ACTIVITY DETAILS (April 2016 TO September 2016)

Adani Foundation the CSR wing of Adani Groups functions in four core areas i.e. Education, Community Health, Sustainable Livelihood Development and Rural Infrastructure Development. Following activities have been carried out during the first half of financial year 2016-17

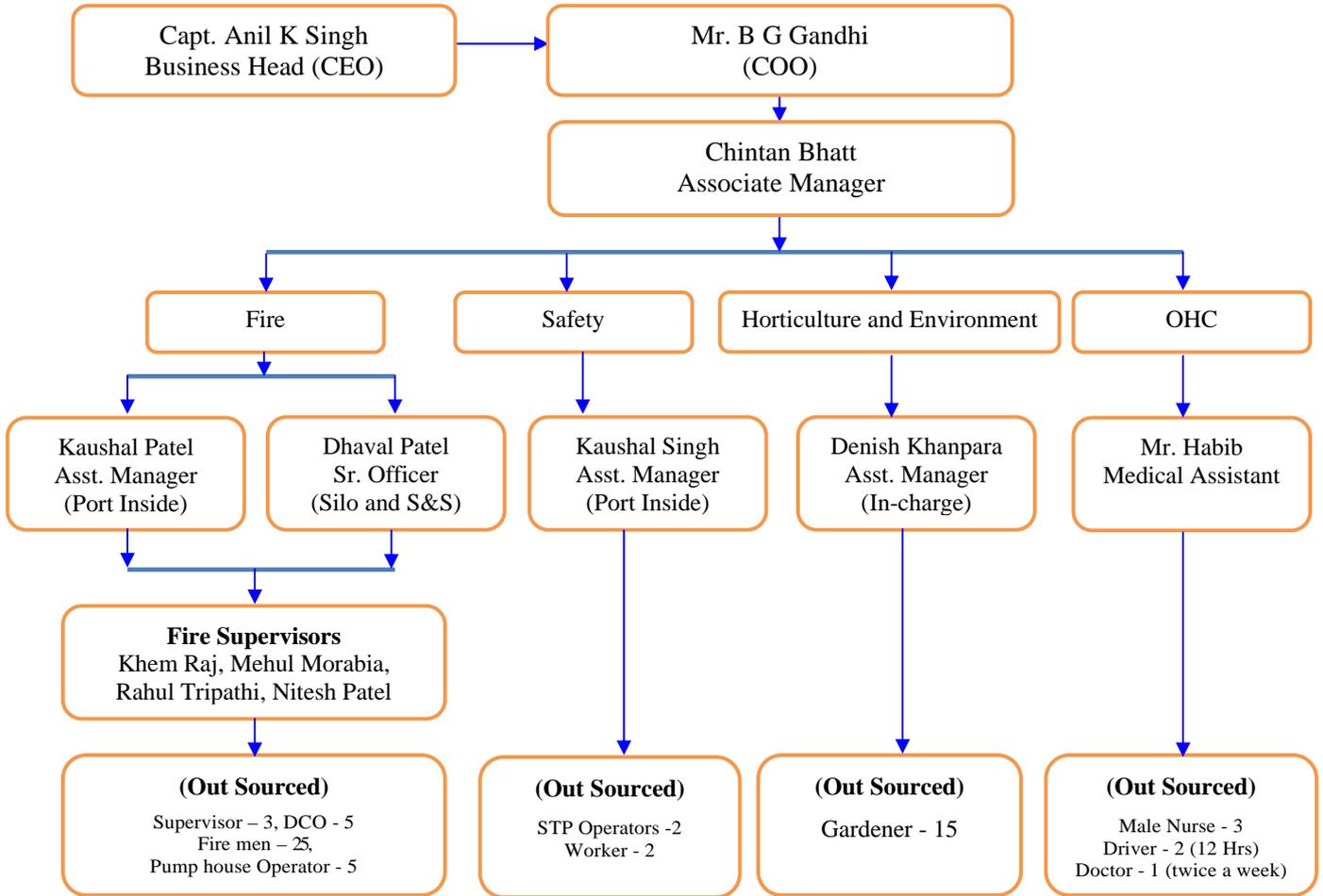
Sr. no	Activities	Domain	Beneficiaries
1	Medical Health Care Unit	Community Health	Mobile Health Care Unit (MHCU) deployed by the Foundation reached out to 10144 patients from 12 villages/locations located in close vicinity of the Adani Petronet Port. The MHCU plays a pivotal role in providing basic healthcare/medical services to the patients.
2	Special Medical Camps - Gynaecology	Community Health	Special medical camp for Gynaecology was organised for women of villages in the vicinity of Adani Petronet Port benefitting 126 women of the region.
3	Rural Infrastructure Development	Rural Infrastructure Development	Adani Foundation installed 20 solar street lights benefitting 500 villagers.

A detail of the Budget and Expenditure for the FY 2016-17 is given in the table below:

s. no	Activity	Budget FY 2016-17 (INR in Lakh)	Expenditure (INR in Lakh)
1	Education	16.50	0.00
2	Community Health	24.70	10.00
3	Sustainable Livelihood Development	17.00	0.00
4	Rural Infrastructure Development	169.57	10.85
5	Admin	25.92	0.00
	Total amount (INR in Lakh)	253.69	20.85

Annexure 4

Adani Petronet (Dahej) Port Pvt Ltd
Dept: QHSE Management Cell



Details of Environment Cell				
SN	Name	Designation	Qualification	Work Experience
1	Chintan N. Bhatt	Asso. Manager HSE	M.Sc. Environment Science, PDIS, NEBOSH	14 Years
2	Denish Khanpara	Asst. Manager	B.Sc. Horticulture, Post Diploma In Environment Technology (PDIEMT)	8 Years
3	Kaushal Patel	Asst. Manager	B.Sc. Horticulture, Post Diploma In Environment Technology (PDIEMT) pursuing	12 Year
4	Dhaval Patel	Officer	B.Sc. Horticulture, Post Diploma In Environment Technology (PDIEMT) pursuing	9 Year