

Date: 24th Nov, 2016

To,
Scientist 'F'
Western Regional Office,
Ministry of Environment, Forest & Climate Change
E-5, Arera colony, Link Road-3,
Ravishankar Nagar, Bhopal-462016 (M.P.)
E-mail: rowz.bpl-mef@nic.in

Kind Attn: Dr.B. B.Berman

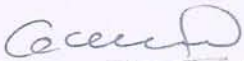
Dear Sir,

Sub : Half yearly Compliance report of Environment and CRZ clearance for the period from April 2016 to September 2016.

Ref : 1) Environment and CRZ clearance issued to M/s Kandla Port Trust (KPT) vide letter no. 10-10/2008-IA-III dated 1st November, 2011 and transferred to M/s Adani Kandla bulk Terminal Private Limited (AKBTPL) vide letter no. 10-10/2008-IA-III dated 10th November, 2014
2) CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010.

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

Thank you,
Yours Faithfully,
For M/s Adani Kandla Bulk Terminal Pvt. Ltd.


(Col. Parag Srivastava)
Chief Operating Officer

Copy to:

1. The Director (Monitoring -IA Division), Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003
2. The Director, Forests & Environment Department, Block - 14, 8th floor, Sachivalaya, Gandhi Nagar, Gujarat - 382 010
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, Regional Office, GPCB - Kutch East, Room No.215-216, KPT administrative Building, Gandhidham, 370201
6. The Chief Engineer, Administrative Building, Kandla Port Trust, Gandhidham 370201

Adani Kandla Bulk Terminal Pvt Ltd
Adani House
Nr Mithakhali Circle, Navrangpura
Ahmedabad 380 009
Gujarat, India
CIN: U63090GJ2012PTC069305

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Received
पर्यावरण एवं वन मंत्रालय (केन्द्रीय)
Ministry of Environment & Forests (C)
राज्य कार्यालय (पश्चिम क्षेत्र)
Regional Office (Western Region)
भोपाल (म.प्र.)-462016

Environmental and CRZ Clearance Compliance Report

Of



Construction of berthing & allied
facilities off Tekra near Tuna, Gujarat

Of

Adani Kandla Bulk Terminal Pvt. Ltd.

For Period:

April – 2016 to September – 2016



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Environmental and CRZ Clearance Letter issued by MOEF&CC

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

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

Dated: 1 November 2011

To,
The Deputy Chairman,
M/s Kandla Port Trust,
Administrative Office Building,
Post Box No. 50, Gandhidham (Kutch),
Gujarat - 370 201.

**Subject: Environmental and CRZ clearance for construction of
berthing & allied facilities off Tekra near Tuna, Gujarat by
M/s Kandla Port Trust -Reg.**

This has reference to letter No: ENV-10-2009-1543-E dated 23.06.2010 from Director and Additional Secretary, Forests & Environment Department, Govt. of Gujarat and your subsequent letter dated 13.03.2011, 29.07.2011 seeking prior Environmental and CRZ Clearance for the above project under the EIA Notification - 2006 and Coastal Regulation Zone (CRZ) Notification, 1991/ 2011. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification - 2006 and Coastal Regulation Zone Notification, 1991/2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, recommendation of State Coastal Zone Management Authority, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 18th - 20th January, 2011 and 21st - 23rd September, 2011.

2. It is interalia, noted that the proposal is for construction of berthing & allied facilities Off Tekra near Tuna, Gujarat. The Kandla Port is located on the West Coast of India, in the Gulf of Kutch and along the West Bank of Kandla creek at 70° 00' 13"E longitude and 23° 00' 01"N Latitude. At present Port has 10 berths for handling Dry cargo, 2 berths for handling containers, Six Oil Jetties for handling POL products of liquid cargo traffic at Kandla within Kandla Creek and 3 SBMs at Vadinar for handling Crude oil. Kandla Port is already developed up to the Shore Line i.e. having infrastructural facility like berthing facilities, Tank Farms, Roads, Railways, Storm water Drains, Warehouses & all other amenities. The total traffic handled by the Port has increased from 24.50 Million Tonnes in 1993-94 to 79.5 Million tonnes of cargo in 2009-10. The present handling capacity of existing ten dry cargo berths, as assessed is only 15.00 Million Tonnes. As against this, these berths have handled 24.58 MMT, which has resulted in berth occupancy of over 90% resulting in high waiting time for

ships. The Port is also in the process of constructing additional four berths on BOT basis (13th to 16th berths) based on the environmental and CRZ clearance already obtained, with a programme to commission the facilities by 2012. With commissioning of these berths by 2012, the existing dry cargo handling capacity will increase by 8 MMTPA and the total capacity will be around 23 MMTPA. Still, there will be a shortfall between demand and supply to the extent of about 06.94 MMTPA, 08.58 MMTPA and 09.74 MMTPA by the year 2011-12, 2012 -13 and 2013-14 respectively.

3. Further, topography of Kandla Creek has its own limitations and it may not be possible to go in for further developments beyond the construction of the 17th berth in the Kandla Creek. Hence, in order to meet the requirements of the trade and to overcome the draft restrictions at Kandla Creek, it is proposed to an off-shore Berthing Facility at Tekra near Tuna in the form of 'T' Shape. Dimensions of the Jetty system: 600m X 60m (Latitude 22 53'18"N & 70 06'20"E). The berthing facility shall be connected by 2000mX18m piled approach & 1700mX18m rubble mound approach (Total 3.7 km) to back up area. The backup area proposed shall be 80 hectares. The Dredged material will be dumped in area earmarked near back up area. The back up area shall be connected to Tuna Port by road of 5.0 km length and also with railway line along the road of 5.0 km length. The quantity of Dredging worked out by CWPRS shall be 784000 m³. The Terminal will be capable of handling four vessels at a time viz. two vessels, each of 1,00,000 DWT & 15 m draught on front and two vessels, each of 75,000 DWT & 14 m draught on rear side of Jetty head. The proposed Terminal (project) will handle all type of dry bulk cargo like coal, fertilizer, its raw material, salt, wheat, iron etc. The handling capacity of the terminal is worked out to 14 MMTPA. Total capital cost of the project is estimated at Rs.1060 crores (BOT operator: 818 crores + KPT:240 crores) and the implementation period is reckoned as 24 months.

4. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental and CRZ Clearance for the project. Accordingly, the Ministry hereby accord necessary Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment Notification - 2006 and Coastal Regulation Zone Notification, 2011, subject to strict compliance of the terms and conditions as follows:

5. SPECIFIC CONDITIONS :

- (i) "Consent for Establishment" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ii) Scientific studies shall be carried out by some expert & reputed organization like BNHS focusing among other things the marine environment in general and the preservation of mangroves in

particular against any possible adverse impact due to creation of the proposed facilities.

- (iii) Proponent shall explore the possibilities of plantation of mangroves in the entire mud flat areas and submit the action plan to the Ministry prior to the commencement of the activity.
- (iv) The dredge material shall be reused for low level rising wherever possible and excess shall be dumped into sea at the designated dumping areas identified based on mathematical model studies.
- (v) Though the project proponent has carried out EIA for individual components and it were examined by the Committee before the issue of clearances , it is suggested that proponent shall update and submit a comprehensive EMP for the whole project and submit to the Ministry and Regional Office of the Ministry at Bhopal prior to commencement of the activity.
- (vi) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (vii) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

6. GENERAL CONDITIONS:

- (i) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (ii) Full support shall be extended to the officers of this Ministry/Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- (iii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.
- (iv) Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (v) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.

- (vi) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.
- (vii) The project proponents shall inform the Regional Office 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.
- (viii) A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been made received while processing the proposal.
- (ix) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

7. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.

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

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

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

11. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

12. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local

Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.


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

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


(E. Thirunavukkarasu)
Deputy Director (IA-III)

Copy to:

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


(E. Thirunavukkarasu)
Deputy Director (IA-III)

F. No. 10-10/2008-IA.III
Government of India
Ministry of Environment, Forests and Climate Change

Indira Paryavaran Bhawan,
Jorbagh,
New Delhi – 110 003
Dated: 10th November, 2014

To

M/s Adani Kandla Bulk Terminal Pvt Ltd.
Adani House,
Near Mithakhali Six Roads,
Navarangpura,
Ahmedabad,
Gujarat- 380 009

Subject: Change of name/transfer of EC/CRZ granted for the project “Creation of berthing and allied facilities of Tekra near Tuna (Outside Kandla creek) – Reg.

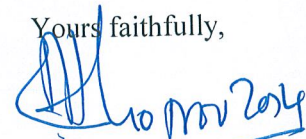
Sir,

This has reference to your letter dated 21.06.2014 regarding the subject mentioned above.

2. The request of transfer of EC/CRZ clearance dated 01.11.2011 granted to M/s Kandla Port Trust has been examined in the Ministry alongwith the MoU, Board resolution, NOC from KPT etc. The EC/CRZ clearance dated 01.11.2011 is hereby transferred to M/s Adani Kandla Bulk Terminal Pvt. Ltd. with the following conditions:

Though M/s Adani Kandla Bulk Terminal Pvt Ltd is the concessionaire for implementation of the project, the responsibility/ accountability to comply with conditions stipulated in the EC shall remain with both M/s Adani Kandla Bulk Terminal Pvt Ltd & M/s Kandla Port Trust. The Ministry of Environment, Forests and Climate Change shall hold both M/s Adani Kandla Bulk Terminal Pvt Ltd & M/s Kandla Port Trust accountable for non- compliance of EC/ CRZ conditions.

Yours faithfully,



(Dr. Manoranjan Hota) –
Director

Recd
21/11/14
[Signature]



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Compliance to Environmental and CRZ Clearance Letter issued by MOEF&CC

Environmental and CRZ clearance was obtained by KPT vide MoEF&CC letter dated 01.11.2011. AKBTPL and KPT entered in to concession agreement for development of the dry bulk terminal at Tuna on BOOT basis. Said clearance was then transferred to AKBTPL vide MOEFF&CC letter dated 10.11.2014



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of Environment and CRZ Clearance issued by MoEF dated 1st November, 2011 bearing F. No. 10-10/2008-IA-III for Construction of berthing & allied facilities off Tekra near Tuna, Gujarat

Sr. No	Condition	Compliance status
5.	Specific Condition	
(i)	"Consent for Establishment" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at site.	<ul style="list-style-type: none">Complied. Details related to Consent to Establishment as well as Consent to Operate are already submitted (as a part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change.
(ii)	Scientific studies shall be carried out by some expert and reputed organization like BNHS focusing among other things the marine environment in general and preservation of mangroves in particular against any possible adverse impact due to creation of the proposed facilities.	<ul style="list-style-type: none">Complied. M/s. Gujarat Institute of Desert Ecology, Bhuj (similar to BNHS) has conducted scientific studies for preservation of mangroves. Details related to the same are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change.
(iii)	Proponent shall explore the possibilities of plantation of mangrove in the entire mud flat areas and submit the action plan to the Ministry prior to the commencement of the activity.	<ul style="list-style-type: none">Complied. Based on the study, M/s. GUIDE has suggested KPT to carry out mangrove plantation in 500 ha. area. As agreed, AKBTPPL has completed Mangrove plantation in 250 ha area at Sat Saida bet. Balance 250 ha. Mangrove plantation shall be carried out by KPT. Details related to mangrove plantation are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change.
(iv)	The dredged material shall be reused for low level rising whenever possible and excess shall be dumped into sea at the	<ul style="list-style-type: none">Complied. Capital dredging was done by KPT and the dredge material was disposed at a

Half yearly Compliance report of Environment and CRZ Clearance issued by MoEF dated 1st November, 2011 bearing F. No. 10-10/2008-IA-III for Construction of berthing & allied facilities off Tekra near Tuna, Gujarat

Sr. No	Condition	Compliance status
	designated dumping areas identified based on mathematical model studies.	location identified by M/s. CWPRS, Pune in their study report. Project is in operation phase.
(v)	Though the project proponent has carried out EIA for individual components and it were examined by the committee before the issue of clearance, it is suggested that proponent shall update and submit a comprehensive EMP for the whole project and submit to the Ministry and Regional Office of the Ministry at Bhopal prior to commencement of the activity.	<ul style="list-style-type: none"> Complied EMP was updated by AKBTPL and submitted to KPT. KPT has submitted the same vide letter dated 03.12.2013 to MoEF&CC as part of compliance report Details related to EMP are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change.
(vi)	The project proponent shall set up environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	<ul style="list-style-type: none"> Complied AKBTPL has environment management cell with qualified manpower for implementation of environmental safeguards and management. The Environment Cell continuously remains in loop with Corporate Environment Cell. Please refer Annexure – 1 for further details.
(vii)	The funds earmarked for environmental management plan shall be included in the budget and this shall not be diverted for any other purpose.	<ul style="list-style-type: none"> Complied Environmental Management Plan is in place and the funds earmarked are being utilized for effective implementation of environmental safeguards and environment monitoring. Expenditure on environmental safeguards is approx. INR 181.58 Lac. Please refer Annexure – 2 for further details.
6	General Condition	
(i)	Appropriate measures must be taken while	<ul style="list-style-type: none"> Complied.



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : April 2016
To : September 2016**

Half yearly Compliance report of Environment and CRZ Clearance issued by MoEF dated 1st November, 2011 bearing F. No. 10-10/2008-IA-III for Construction of berthing & allied facilities off Tekra near Tuna, Gujarat

Sr. No	Condition	Compliance status
	undertaking digging activities to avoid any likely degradation of water quality.	Construction of the project completed in March, 2015. The project is in operation phase
(ii)	Full support shall be extended to the officers of this Ministry/Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	<ul style="list-style-type: none"> Complied Full support is always given to official from MoEF & CC, Bhopal during their visit to the project site.
(iii)	A six monthly monitoring report shall need to be submitted by the project proponent to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.	<ul style="list-style-type: none"> Complied Six monthly compliance reports are regularly submitted to MoEF & CC. Last compliance report was submitted by AKBTPPL vide letter dated 26.05.16
(iv)	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.	<ul style="list-style-type: none"> Noted and will be complied.
(v)	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.	<ul style="list-style-type: none"> Noted
(vi)	In the event of a change in the project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.	<ul style="list-style-type: none"> Complied. Details related to transfer of EC/CRZ clearance in the name of AKBTPPL are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change
(vii)	The project proponent shall inform the Regional Office as well as the Ministry, the	<ul style="list-style-type: none"> Complied. KPT has informed about the Financial



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : April 2016
To : September 2016**

Half yearly Compliance report of Environment and CRZ Clearance issued by MoEF dated 1st November, 2011 bearing F. No. 10-10/2008-IA-III for Construction of berthing & allied facilities off Tekra near Tuna, Gujarat

Sr. No	Condition	Compliance status
	date of financial closure and final approval of the project by the concerned authorities and date of start of land development work.	closure vide their letter no. EG/WK/4604(EC)/562 dated 26 th December, 2012. There is no further change.
(viii)	A copy of the clearance letter shall be marked to concern Panchayat /local NGO, if any, from whom any suggestion /representation has been made, received while processing the proposal.	• Condition is not applicable to AKBTPPL
(ix)	State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/ Tehsildar's office for 30 days.	• Condition is not applicable to AKBTPPL
7	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 1994 including the amendments and rules made thereafter.	• Noted and complied. Permissions under the applicable rules and acts mentioned are already obtained.
8	All other statutory clearances such as the approvals for the storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980, Wildlife (Protection) Act, 1972 etc shall be obtained as applicable by the project proponents from the respective competent authorities.	• Complied. Chief Controller of Explosives – Not Applicable Fire Department – Not Applicable Civil Aviation – Not Applicable Forest Conservation Act – Not Applicable Wildlife (Protection) Act – Not Applicable
9	The project proponent shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Env.	• Complied. Details related to advertisement are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of Environment and CRZ Clearance issued by MoEF dated 1st November, 2011 bearing F. No. 10-10/2008-IA-III for Construction of berthing & allied facilities off Tekra near Tuna, Gujarat

Sr. No	Condition	Compliance status
	Clearance and copies of clearances letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to RO of this Ministry at Bhopal.	further change
10	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	<ul style="list-style-type: none">Noted and same will be complied based on further directions given by concerned authorities in this regard
11	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.	<ul style="list-style-type: none">Complied. The documents are being uploaded regularly on our website: http://www.adaniports.com/ports-downloads
12	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	<ul style="list-style-type: none">Complied. Clearance letter is uploaded on our website of Adani Ports: http://www.adaniports.com/ports-downloads
13	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and	<ul style="list-style-type: none">Complied. Compliance report for period Oct'15 to Mar'16 was submitted to respective authorities vide our letter dated 26.05.16. The said report is also uploaded on our website.



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of Environment and CRZ Clearance issued by MoEF dated 1st November, 2011 bearing F. No. 10-10/2008-IA-III for Construction of berthing & allied facilities off Tekra near Tuna, Gujarat

Sr. No	Condition	Compliance status
	the SPCB.	
14	The environmental statement for each financial year ending 31 st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	<ul style="list-style-type: none">Complied Environment Statement for FY 2015 – 16 has already been submitted to GPCB vide letter dated 01.08.2016 bearing No. AKBTP/ENVSTATEMENT/2015-16. Copy of the same is attached as Annexure – 3.



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

**Compliance to CRZ Recommendation
Letter issued by Forest and Environment
Department, Govt. of Gujarat**



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010

Sr. No	Condition	Compliance
1	The provisions of the CRZ notification of 1991 and subsequent amendments issued from time to time shall be strictly adhered to by the KPT. No activity in contradiction to the provisions of the CRZ Notification shall be carried out by the KPT.	<ul style="list-style-type: none">Complied. All activities are in line with the CRZ Notification 1991 and its subsequent amendment.
2	No dredging reclamation or any other project related activities shall be carried out in the CRZ area categorized as CRZ I (i) and it shall have to be ensured that the mangroves habitats and other ecologically important and significant areas, if any, in the region are not affected due to any of the project activities.	<ul style="list-style-type: none">Complied Construction of the project is completed in March, 2015. All construction activities are carried out as per the environmental and CRZ clearance granted vide MoEF&CC letter dated 01.11.2011. All necessary precautions are taken to ensure that the mangroves habitats and other ecologically important and significant areas in the region are not affected due to any of the project activities.
3	The KPT shall participate financially for installing and operating the Vessel Traffic Management System in the Gulf of Kutch and shall also take lead in preparing and operationalising the Regional Oil Spill Contingency plan in the Gulf of Kutch.	<ul style="list-style-type: none">Complied. Details related to participation of KPT for VTMS in GoK are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015. There is no further change.
4	The KPT shall strictly ensure that no creeks or rivers are blocked due to any activity at Kandla.	<ul style="list-style-type: none">Complied. No rivers are present at the project site. Bridges and culverts are provided for free flow of water through creeks.
5	Mangrove plantation in an area of 1000 ha. Shall be carried out by the KPT within 5 years in a time bound manner on Gujarat coastline either within or outside the Kandla Port Trust area and six	<ul style="list-style-type: none">Complied. M/s. Gujarat Institute of Desert Ecology, Bhuj has conducted scientific studies for preservation of mangroves.



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : April 2016
To : September 2016**

Half yearly Compliance report of CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010

Sr. No	Condition	Compliance
	monthly compliance reports along with the satellite images shall be submitted to Ministry of Environment and Forests as well as to this department without fail.	<p>Based on the study, M/s. GUIDE has suggested KPT to carry out mangrove plantation in 500 ha. area.</p> <p>As agreed, AKBTPL has completed Mangrove plantation in 250 ha area at Sat Saida bet. Balance 250 ha. Mangrove plantation to be carried out by KPT.</p> <p>Details related to mangrove plantation are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change</p>
6	No activities other than those permitted by the competent authority under the CRZ Notification shall be carried out.	<ul style="list-style-type: none"> Complied. <p>All activities are in line with the CRZ Notification 1991 and its subsequent amendment.</p>
7	No ground water shall be tapped for any purpose during the proposed expansion/modernization activities.	<ul style="list-style-type: none"> Complied. <p>Ground water is not being used. Source of water is Narmada sourced by Gujarat Water Infrastructure Limited.</p>
8	All necessary permission from different Government Departments/ agencies shall be obtained by the KPT before commencing the expansion activities.	<ul style="list-style-type: none"> Complied. <p>All the necessary permissions have been obtained and construction completed in March, 2015.</p>
9	No effluent or sewage shall be discharged into the sea/creek or in the CRZ area and it shall be treated to conform to the norms prescribed by the Gujarat Pollution Control Board and would be reused/recycled within the plant premises.	<ul style="list-style-type: none"> Complied. <p>No effluent is generated at the project site. Sewage generated is treated in STP and treated water is used for horticulture purpose.</p>
10	All the recommendations and suggestions given by the NIOT in their Comprehensive Environment Impact Assessment report for conservation /protection and	<ul style="list-style-type: none"> Complied. <p>EMP was updated by AKBTPL and submitted to KPT. KPT has submitted the same vide letter dated 03.12.2013 to</p>



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010

Sr. No	Condition	Compliance
	betterment of environment shall be implemented strictly by the KPT.	MoEF&CC as part of compliance report
11	The construction and operation activities shall be carried out in such a way that there is no negative impact on mangroves and other coastal/marine habitats. The construction activities and dredging shall be carried out only under the constant supervision and guidelines of the NIOT.	<ul style="list-style-type: none">Complied. Construction activities have been completed in March, 2015 based on the NIOT recommendation.
12	The KPT shall contribute financially for any common study or project that may be proposed by this Department for environmental management/ conservation / improvement for the Gulf of Kutchchh.	<ul style="list-style-type: none">Noted and same will be complied on receipt of such recommendations from concerned authorities
13	The construction debris and/or any other type of waste shall not be disposed off into the sea, creek or in the CRZ areas. The debris shall be removed from the construction site immediately after construction is over.	<ul style="list-style-type: none">Complied. Construction of the project is completed in March, 2015. All debris removed from the site.
14	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by the construction labours.	<ul style="list-style-type: none">Complied. Construction of the project is completed in March, 2015.
15	The KPT shall regularly update its 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 the MoEF, GOI and this Department after having it vetted through the Indian Coast Guard.	<ul style="list-style-type: none">Complied KPT is already having updated Disaster Management Plan as well as Oil Spill Contingency Plan. KPT has also executed MoU with oil companies i.e. IOCL, HPCL, BPCL etc. for setting up of their Tier I facility for combating Oil Spill at Kandla.



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010

Sr. No	Condition	Compliance
		Necessary action will be taken by AKBTPPL in consultation with KPT to combat with emergency situations.
16	The KPT 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 proposed activities.	<ul style="list-style-type: none"> Noted and same will be complied on receipt of such recommendations from concerned authorities
17	The KPT shall take up massive greenbelt development activities in and around Kandla and also within the KPT limits.	<ul style="list-style-type: none"> Complied. <p>Plantation activity is an on-going process. As part of the same, greenbelt along the periphery of the back-up area has been developed and still developing more.</p> <p>Approx. 11.83 hectare area developed so far. Types of trees; Neem (AZARDICA INDICA), Ficus Panda Topiary, Delonix regia, Washingtonia f.f, Almanda Dwarf, IXORA RED, Lilly (HYMENOCALLIS SPECIOSA), Euphorbia Milli, Eucalyptus spp, Boungainvella Red, Cycus, Clerodendron Inerme, Flat lawn, Casurina Spp, Neem (AZARDICA INDICA), Peltophorum, Nerrium, Inermi, Coconut, Sloppy lawn, Casurina Spp</p>
18	The KPT shall have to contribute financially for taking up the socio-economic upliftment activities in this region in consultation with the Forest and Environment Department and the District Collector/District Development Officer.	<ul style="list-style-type: none"> Complied. <p>As part of social responsibility, various activities related to socio-economic upliftment of surrounding villages are being carried out by Adani Foundation. Please refer Annexure – 5 for further details.</p>
19	A separate budget shall be earmarked for	<ul style="list-style-type: none"> Complied.



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010

Sr. No	Condition	Compliance
	environmental management and socio-economic activities and details thereof shall be furnished to this Department as well as the MoEF, Gol. The details with respect to the expenditure from this budget head shall also be furnished.	<p>Main constituents of the environmental management plan are environmental monitoring; greenbelt development; mangrove plantation; maintaining bridges/ culverts for protection of creeks; treatment and disposal of wastes; mechanization of operations etc.</p> <p>Approximately INR 181.58 Lac is spent for various activities mentioned here. Please refer to Annexure – 2 for details related to environmental expenditures and Annexure – 5 for expenditures related to CSR activities.</p>
20	A separate environmental management cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	<ul style="list-style-type: none">• Complied AKBTPL has environment management cell with qualified manpower for implementation of environmental safeguards and management. The Environment Cell continuously remains in loop with Corporate Environment Cell. Please refer Annexure – 1 for further details.
21	An Environmental report indicating the changes, if any, with respect to the baseline environment quality in the coastal and marine environment shall be submitted every year by the KPT to this Department as well as to the MoEF, Gol.	<ul style="list-style-type: none">• Complied Regular environmental monitoring is being carried out and results of the same for the period Oct '15 to Mar '16 are enclosed in Annexure – 4.
22	The KPT shall have to contribute financially to support the National Green Corps Scheme being implemented in the Gujarat by GEER Foundation, Gandhinagar, in consultation with Forest and Environment Department.	<ul style="list-style-type: none">• Details related to National Green Corps Scheme are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change.
23	A six monthly report on compliance of the conditions mentioned in this letter shall	<ul style="list-style-type: none">• Complied. Last compliance report was submitted

Half yearly Compliance report of CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010

Sr. No	Condition	Compliance
	have to be furnished by the KPT on a regular basis to this Department/MoEF, GOI.	by AKBTPL vide letter dated 26.05.16.
24	The KPT before commencing any activity, at the location under the consideration, shall have the latest CRZ map prepared through one of the authorized agencies and the map shall have land use features within the area of 5 km radius from the location along with the HTL and LTL and CRZ boundary and inland if any or mangroves area shall be used for the proposed development.	<ul style="list-style-type: none"> Complied. Details related to CRZ map are submitted (as part of half yearly compliance report) to MoEF & CC vide letter dated 11.05.2015 and there is no further change.
25	The entire jetty and approach shall be constructed on piles to ensure the free flow of water and that no creeks are blocked in any way.	<ul style="list-style-type: none"> Complied. Details already submitted in half yearly compliance report to MoEF & CC vide letter dated 11.05.2015 and there is no further change.
26	The KPT shall create a full-fledged and environmental cell for implementation of the Environment Management Programme and monitoring of the environmental parameters/post project monitoring.	<ul style="list-style-type: none"> Complied AKBTPL has environment management cell with qualified manpower for implementation of environmental safeguards and management. The Environment Cell continuously remains in loop with Corporate Environment Cell. Please refer Annexure – 1 for further details.
27	The KPT shall have to take up in-situ biodiversity conservation project for mangroves at least in 5 ha. of area in addition to plantation of mangrove in 1000 ha.	<ul style="list-style-type: none"> Biodiversity conservation project for mangroves is in progress and same will be intimated after completion.
	General conditions	
28	A separate budget shall be earmarked for environmental management and socio-economic activities and details thereof shall be furnished to this Department as	<ul style="list-style-type: none"> Complied. Main constituents of the environmental management plan are environmental monitoring; greenbelt development;



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Half yearly Compliance report of CRZ Recommendation for creation of Berthing and Allied Facilities off Tekra near Tuna issued by Forest and Environment, Govt. of Gujarat vide letter bearing no. ENV-10-2009-1543-E dated 23rd June, 2010

Sr. No	Condition	Compliance
	well as the MoEF, GoI. The details with respect to the expenditure from this budget head shall also be furnished.	mangrove plantation; disposal of wastes; etc. Approximately INR 181.58 Lac is spent for various activities mentioned here. Please refer to Annexure – 2 for details related to environmental expenditures and Annexure – 5 for expenditures related to CSR activities.
29	Any other condition that may be stipulated by this Department from time to time for environment protection/management purpose shall also have to be complied with by the KPT.	<ul style="list-style-type: none">• Agreed.

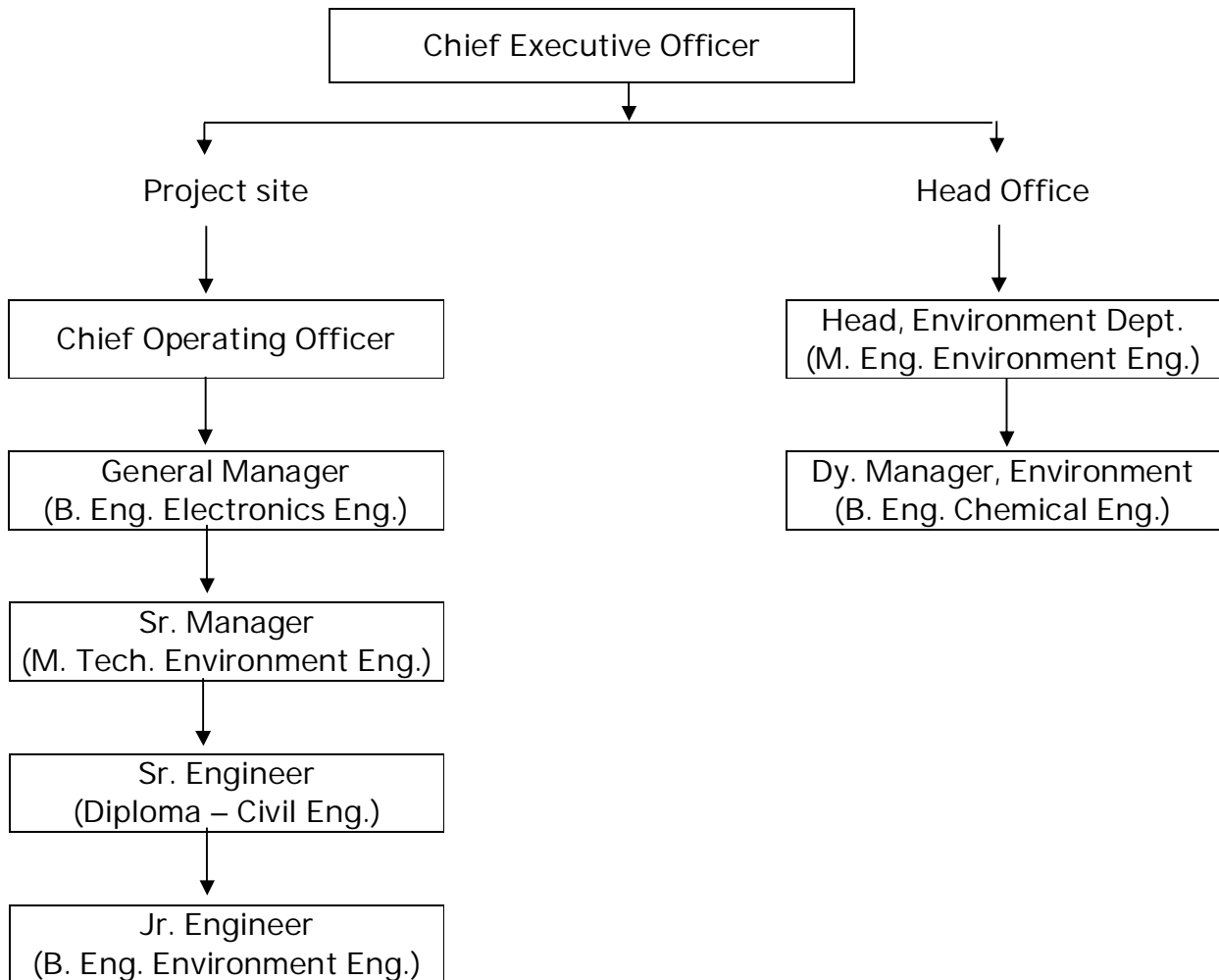


Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Annexure – 1

Annexure – 1: Environmental Management Cell





Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Annexure – 2



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Annexure 2: Expenditure Details on Environmental Safeguards
(Apr'16 to Sep'16)

Sr. no.	Activity	Cost incurred (INR in Lakh)
1	Environmental Monitoring (yearly)	20.00
2	Greenbelt development [Area: 11.83 Hectare]	54.13
3	Mangrove plantation (including biodiversity mangrove plantation)	25.50
4	Disposal of wastes (including STP operation)	5.39
5	Fire fighting Equipment	47.52
6	Dust Suppression	
7	Maintenance of conveyor belt	29.04
Total		181.58



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Annexure – 3



o/c

Date: 1st August, 2016

Ref No. AKBTP/ENVSTATEMENT/2015-16

To,
Member Secretary
Gujarat Pollution Control Board
Paryavaran Bhavan,
Sector-10-A, Gandhinagar-382010

Dear Sir,

Kind Attn. Sh. Hardik Shah

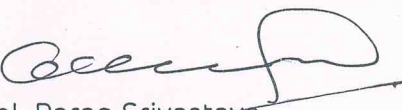
Sub: Environmental Statement for the financial year ending 31st March, 2016 for M/s
Adani Kandla Bulk Terminal Pvt Ltd (AKBTPL)

Ref: PCB ID: - 46110, Consent Order No. AWH - 68051

With reference to the above mentioned subject and reference, please find enclosed Environmental Statement in Form V prescribed under Rule 14 of the Environment (Protection) Rules 1986, for M/s **Adani Kandla Bulk Terminal Pvt Ltd, Ta. Anjar** for the financial year ending 31st March 2016.

Thank you,

Yours faithfully,
For **Adani Kandla Bulk Terminal Pvt Ltd**


Col. Parag Srivastava
(Head - AKBTPL)

Encl: Annexure - 1, 2 & 3.

Copy to:

1. The Regional Officer, Gujarat Pollution Control Board, Gandhidham.

 12-8-2016
Received
Gujarat Pollution Control Board
Regional Office
Kutch (East)

**Environment Statement for 2015-16 for M/s Adani Kandla Bulk Terminal
Pvt Ltd**

FORM V
(See Rule 14)

Environmental Statement for the Financial Year ending 31st March 2016

PART - A

- | | | | |
|-------|--|---|--|
| (i) | Name and address of the Owner/
Occupier of the Industry Operation
or Process | : | Col. Parag Srivastava
Head – AKBTPL
Adani Kandla Bulk Terminal Pvt Ltd.
Tuna Tekra, Taluka - Anjar
Dist. Kutch (Gujarat) |
| | | | |
| (ii) | Industry Category
Primary (STC Code)
Secondary (STC Code) | : | Red – Large
NA
NA |
| | | | |
| (iii) | Production Capacity | : | Dry Bulk Cargo Handling – 12 MMTPA |
| | | | |
| (iv) | Year of Establishment | : | 2011 – 12 (As per certification of
incorporation date of company) |
| | | | |
| (v) | Date of last Environment
Statement submitted | : | 18.09.2015 |

Environment Statement for 2015-16 for M/s Adani Kandla Bulk Terminal
Pvt Ltd
PART - B

Water and Raw Material Consumption

(i) Water Consumption

Water Consumption Cu.Mtr./Day	
Process	Nil
Cooling (Used in sprinkling / gardening / dust suppression)	716.58 m ³ /day*
Domestic	26.50 m ³ /day*

Name of Products	Process Water Consumption per unit of Product Output	
	During the previous financial year (2014 - 15)	During the current financial year (2015 - 16)
Handling and Storage of dry bulk cargo*	0.194 MMT	3.727 MMT

(ii) Raw Material Consumption

Name of Raw Material	Name of Products	Consumption of Raw Material per Unit of output	
		During the previous financial year (2014 - 15)	During the current financial year (2015 - 16)
NIL*	Not Applicable	Nil	Nil

Note: AKBTPPL is involved logistic business, hence there no raw material being used.

Environment Statement for 2015-16 for M/s Adani Kandla Bulk Terminal
Pvt Ltd
PART - C

Pollutants discharged to Environment/Unit of Output
(Parameters as specified in consent issued)

Pollutants	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	AKBTPL is involved in logistic business; hence there is no process effluent discharge.		
(b) Air	<ul style="list-style-type: none">• DG sets are provided as standby power source and used during power failure.• All the ambient air parameters are within standards.• Refer Annexure 3 [Ambient Air Monitoring Reports]		

Environment Statement for 2015-16 for M/s Adani Kandla Bulk Terminal
Pvt Ltd
PART - D

Hazardous Wastes
(As specified under Hazardous Wastes Management and Handling Rules 1989)

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year (2014-15)	During the current financial year (2015-16)
(a) From Process Used Oil	Nil	Generation – 8.29 KL Reuse – 1.16 KL (Used in Railway siding and MBU machine as a lubricant)
* A (b) From Pollution Control facilities	Nil	Nil

AKBTPL is involved in logistic business; hence there is no process waste

PART - E
Solid Waste

Solid Waste	Total Quantity Generated (MT/Annum)	
	During the previous financial year (2014-15)	During the current financial year (2015-16)
(a) From Process (Ash)	Nil	Nil
(b) From Pollution Control facilities	Nil	Nil
(C-1) Quantity recycled or reutilized within the unit	--	--
(C-2) Sold	--	--
(C-3) Disposed	--	--

Environment Statement for 2015-16 for M/s Adani Kandla Bulk Terminal Pvt Ltd

PART - F

Please specify the characterization (in terms of Composition and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes:

Used oil is being used as a lubricant for maintenance purpose.

PART - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Unit has installed Sewage Treatment Plant and for treatment of the Sewage water being generated at site. AKBTP has planted mangroves in 250 ha area near Satsaida Bet (Kandla), Kutch sea coast. Unit has formed dedicated Horticulture department & developing green belt within port premises.

During the project, the total cost incurred on environmental protection measures is enclosed as Annexure 1 and the green belt developed so far enclosed as Annexure 2.

PART - H

Additional measures /investment/ proposal for environmental protection including abatement of pollution, prevention of pollution.

- Unit is doing Regular Environmental Monitoring of Port & surrounding area through reputed NABL certified Laboratory. All the required environmental parameters are well within specified limit & the details are being submitted regularly to GPCB, CPCB, MOEF & concerned authorities.
- Unit has installed STP for treatment of the Sewage water being generated at site. Unit has also provided dump pond & conveyance channel for collection of runoff generated from Coal Yard.
- Unit has provided DSS at coal yard & conveyer system and carrying out regular water spreading to control the dust exposure.
- Unit is developing green belt within port and outside continually with help of Horticulture dept.
- Continually taking new initiatives for protection of environment with respect to air-water-soil.

PART - I

**Environment Statement for 2015-16 for M/s Adani Kandla Bulk Terminal
Pvt Ltd**

Any other particulars for improving the quality of environment:

- Environmental awareness programs have been conducted for workmen.
- Integrated housekeeping and waste management being maintained regularly.

Date : 01.08.2016



(Signature of a person carrying out an industry,
operation or process)

Name : Col. Parag Srivastava

Designation : Head – AKBTPPL

Address : Adani Kandla Bulk Terminal Pvt Ltd,
Tuna Tekra, Taluka Anjar, District Kutch (Gujarat)



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 2016

Annexure 1: Expenditure Details on Environmental Safeguards

Sr. no.	Activity	Cost incurred (INR in Lakh)
1	Environmental Monitoring	16.00
2	Greenbelt development [Area: 7.15 Hectare]	60.59
3	Mangrove plantation	72
4	Disposal of wastes	10.86
5	Fire fighting Equipment	85.00
Total		244.45

**Environment Statement for 2015-16 for M/s Adani Kandla Bulk Terminal
Pvt Ltd**

Annexure – 2 Green developments for Year 2015 -16

Sr. No.	Green Zone Nos.	Location	Area (Ha)	Tree (No.)	Name of Species/Plant	Shrubs (SQM)	Green Carpet (SQM)	Palm (No.)
1	71a	SITE OFFICE BUILDING AND POB BUILDING AREA, SS-1 BUILDING	0.004	5	Neem (AZARDICA INDICA),			
			0.20	2000	CASURINA PLANT			
			0.01	25	Ficus Panda Topiary			
			0.00	0	Delonix regia			
			0.03	0	Washingtonia f.f.			87
			0.003	0	Almunda Dwarf.	25		
			0.00	0	IXORA RED	15		
			0.03	0	Lilly (HYMENOCALLIS SPECIOSA)	275		
			0.0015	0	Euphorbia Milli	15		
			0.60	1500	Eucalyptus spp			
			0.00	0	Boungainvillia Red	25		
			0.02	0	Cycus			48
			0.03	0	Clerodendron Inerme.	260		
			0.15	0	Flat lawn		1480	
2	71b	GREEN BELT AREA	2.31	5779	Casurina Spp.			
			0.334	417	Neem (AZARDICA INDICA),			
			0.334	417	Peltophorum			
					Nerrium	100		
3	71c	5KM. ROAD	0.40	0	Washingtonia F.F			1000
4	71d	SS-2 BUILDING AREA	0.00	0	Washingtonia F.F			
			0.08	815.00	Casurina Spp.			
			0.00		Lilly (HYMENOCALLIS SPECIOSA)			
			0.00		Inermi			
			0.50	1251.00	Coconut			
			0.00		Sloppy lawn			
4	71e	INTERNAL ROAD, RAILWAY BUILDING	0.10		Washingtonia F.F			250.00
			0.70	7000.00	Casurina Spp.			
			0.114	143	Neem (AZARDICA INDICA),			
			0.114	143	Peltophorum			
			1.08	2700	Eucalyptus spp			
			0.01	0	Flat lawn		60.78	
			0.00	0	Clerodendron Inerme.	100		



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

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

National Ambient Air Quality Standards Dated 16th Nov.2009, CPCB New Delhi.

Sr. No.	TEST PARAMETER	UNIT	Concentration in ambient air	Method Of Measurement
1	Particulate Matter (PM ₁₀)	µg/m ³	100	IS:5182(Part 23):Gravimetric CPCB - Method (Vol.I,May-2011)
2	Particulate Matter (PM _{2.5})	µg/m ³	60	Gravimetric- CPCB - Method (Vol.I,May-2011)
3	Lead as Pb	µg/m ³	1.0	CPCB Method (Vol.I,May-2011)
4	Benzo (a) Pyrene (BaP)- particulate phase only	ng/m ³	1.0	CPCB Method (Vol.I,May-2011)
5	Arsenic as As	ng/m ³	6.0	CPCB Method (Vol.I,May-2011)
6	Nickel as Ni	ng/m ³	20	CPCB Method (Vol.I,May-2011)
7	Carbon Monoxide as CO	mg/m ³	4.0	NDIR Digital Gas Analyzer
8	Benzene as C ₆ H ₆	µg/m ³	5.0	IS 5182 (Part XI):2006/CPCB Method
9	Ammonia (NH ₃)	µg/m ³	400	CPCB Method (Vol.I,May-2011)
10	Sulphur Dioxide (SO ₂)	µg/m ³	80	IS:5182(Part 2): Improved West and Gaeke
11	Oxides of Nitrogen (NO ₂)	µg/m ³	80	IS:5182(Part 6):Modified Jacob & Hochheiser (Na-Arsenite)
12	Ozone (O ₃)	µg/m ³	180	IS 5182 (PART IX) 1974 / CPCB Method (Vol.I,May-2011)

NS#: Not Specified, ** National Ambient Air Quality Standards Dated: 18/11/2009 as per Central Pollution Control Board, New Delhi.

Date of Sampling	: As Per Table	Sampling Location	: As Per Table
Sampling By	: Pollucon Laboratories Pvt. Ltd.	Protocol (purpose)	: Ambient Air Quality Monitoring

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)



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

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

Table No. 1 Ambient Air Quality Monitoring Results for Zero Point

Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	Lead (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)
01/10/2015	78.49	38.37	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	48.36	18.51	30.44	29.69
05/10/2015	66.81	35.41	BDL*	BDL*	BDL*	BDL*	0.64	BDL*	56.58	15.65	36.48	27.86
08/10/2015	70.00	31.62	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	46.5	19.56	39.45	19.5
12/10/2015	64.49	28.67	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	32.51	21.68	34.46	26.41
15/10/2015	58.41	34.72	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	41.94	24.73	20.64	24.26
19/10/2015	80.51	40.47	BDL*	BDL*	BDL*	BDL*	0.69	BDL*	34.47	10.46	26.45	28.44
22/10/2015	90.38	52.28	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	38.37	12.6	32.94	23.49
26/10/2015	57.59	29.51	BDL*	BDL*	BDL*	BDL*	0.77	BDL*	44.55	22.49	18.25	20.61
29/10/2015	65.52	32.46	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	42.51	17.47	29.38	18.47
02/11/2015	69.53	31.62	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	36.35	18.61	39.49	17.51
05/11/2015	56.42	22.77	BDL*	BDL*	BDL*	BDL*	0.6	BDL*	38.37	20.47	19.91	19.06
09/11/2015	63.48	35.41	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	33.82	16.48	29.42	20.38
14/11/2015	76.61	40.47	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	39.34	19.37	33.03	27.51
16/11/2015	65.52	36.41	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	43.89	14.42	40.55	28.65
19/11/2015	87.52	49.33	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	30.56	11.49	35.62	21.37
23/11/2015	61.49	26.56	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	25.69	21.5	37.66	24.31
26/11/2015	54.52	32.46	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	35.77	23.73	22.7	22.05
30/11/2015	78.71	43.42	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	26.8	9.51	28.94	25.91
3/12/2015	81.62	40.47	BDL*	BDL*	BDL*	BDL*	0.59	BDL*	29.08	8.61	30.62	30.45
7/12/2015	57.59	34.57	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	44.5	17.34	21.57	18.24
10/12/2015	68.42	32.46	BDL*	BDL*	BDL*	BDL*	0.69	BDL*	54.49	12.57	44.53	24.72
14/12/2015	56.38	29.51	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	34.51	20.37	24.58	27.6
17/12/2015	72.6	30.48	BDL*	BDL*	BDL*	BDL*	0.73	BDL*	42.18	15.57	42.91	28.82
21/12/2015	65.22	36.68	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	38.45	13.43	32.35	25.66
24/12/2015	82.38	45.53	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	30.36	18.57	40.63	29.29
28/12/2015	90.69	51.44	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	35.47	9.5	38.36	20.43
31/12/2015	78.88	35.41	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	45.71	16.58	35.37	26.81
04/01/2016	95.21	54.39	0.56	BDL*	BDL*	10.27	0.78	BDL*	31.54	20.48	34.5	29.38
07/01/2016	84.51	39.63	BDL*	BDL*	BDL*	10.52	0.57	BDL*	52.67	13.37	39.38	26.6
11/01/2016	60.58	26.56	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	30.5	18.45	21.89	30.51
14/01/2016	76.48	41.74	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	55.45	19.68	29.44	24.31
18/01/2016	87.48	48.69	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	22.76	7.37	25.38	28.62
21/01/2016	91.5	51.44	0.64	BDL*	BDL*	BDL*	0.55	BDL*	47.75	11.55	40.22	23.5
25/01/2016	82.62	43.42	BDL*	BDL*	BDL*	BDL*	0.76	BDL*	39.67	16.34	36.44	27.49
28/01/2016	65.52	34.57	BDL*	BDL*	BDL*	BDL*	0.52	BDL*	35.44	21.55	19.52	18.54
01/02/2016	84.68	47.64	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	30.56	18.58	39.51	19.21
04/02/2016	60.31	25.72	0.58	BDL*	BDL*	BDL*	0.47	BDL*	41.28	9.57	36.8	25.35
08/02/2016	52.51	22.34	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	52.98	16.64	26.32	27.18
11/02/2016	64.49	36.68	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	26.49	19.62	40.16	30.58
15/02/2016	85.72	52.5	BDL*	BDL*	BDL*	BDL*	0.48	BDL*	44.22	11.57	35.67	28.34
18/02/2016	76.79	33.73	BDL*	BDL*	BDL*	BDL*	0.68	BDL*	29.57	17.37	30.87	26.39
22/02/2016	67.88	28.67	BDL*	BDL*	BDL*	BDL*	0.4	BDL*	19.18	6.55	22.56	20.25
25/02/2016	78.52	42.58	BDL*	BDL*	BDL*	BDL*	0.65	BDL*	34.47	13.44	33.61	24.13
29/02/2016	82.72	37.52	BDL*	BDL*	BDL*	BDL*	0.7	BDL*	42.82	10.49	38.75	29.55
03/03/2016	83.48	39.63	BDL*	BDL*	BDL*	BDL*	0.61	BDL*	23.41	14.45	26.28	23.79
07/03/2016	92.37	35.41	0.64	BDL*	BDL*	10.23	0.41	BDL*	32.65	21.54	31.66	21.57
10/03/2016	85.59	47.64	BDL*	BDL*	BDL*	BDL*	0.62	BDL*	38.5	19.62	38.45	26.63
14/03/2016	78.5	34.57	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	29.26	15.66	33.59	18.44
17/03/2016	58.48	28.37	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	42.59	13.5	25.63	24.57
21/03/2016	73.19	32.46	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	17.56	5.61	27.63	22.33
24/03/2016	65.4	21.5	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	27.64	10.61	30.43	29.28
28/03/2016	70.58	40.47	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	21.46	16.59	34.3	27.89
31/03/2016	91.91	33.73	0.52	BDL*	BDL*	10.58	0.44	BDL*	35.42	9.5	39.37	25.67

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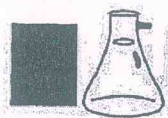
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BDL*: Below Detection Limit, Minimum Detection Limit, Lead as Pb ($\mu\text{g}/\text{m}^3$):0.5, Benzo (a) Pyrene (BaP) - particulate phase only (ng/m^3): 0.5, Nickel as Ni (ng/m^3):10, Arsenic as As (ng/m^3):2, Benzene as C_6H_6 ($\mu\text{g}/\text{m}^3$): 2**Table No. 2 Ambient Air Quality Monitoring Results for Starting of pile Approach**

Date of Sampling	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	Lead ($\mu\text{g}/\text{m}^3$)	BaP (ng/m^3)	As (ng/m^3)	Ni (ng/m^3)	CO (mg/m^3)	C ₆ H ₆ ($\mu\text{g}/\text{m}^3$)	NH ₃ ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NOx ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)
01/10/2015	86.49	46.44	BDL*	BDL*	BDL*	BDL*	0.49	BDL*	27.62	14.72	24.5	22.45
05/10/2015	75.57	39.32	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	20.47	7.41	27.58	18.52
08/10/2015	65.39	28.45	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	24.37	10.43	30.65	26.32
12/10/2015	72.41	34.3	BDL*	BDL*	BDL*	BDL*	0.63	BDL*	17.86	17.42	38.4	23.32
15/10/2015	91.5	55.64	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	22.17	21.58	29.4	21.67
19/10/2015	88.6	47.69	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	46.49	18.46	31.41	25.33
22/10/2015	78.39	35.56	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	52.32	16.76	28.37	19.28
26/10/2015	84.81	49.36	BDL*	BDL*	BDL*	BDL*	0.66	BDL*	33.56	19.56	35.41	24.69
29/10/2015	77.48	36.4	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	29.55	12.71	39.51	28.42
02/11/2015	62.37	26.36	BDL*	BDL*	BDL*	BDL*	0.17	BDL*	19.5	9.47	32.35	24.47
05/11/2015	81.53	47.69	0.56	BDL*	BDL*	10.13	0.52	BDL*	26.65	18.65	38.28	22.08
09/11/2015	77.52	42.67	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	23.4	11.7	42.57	25.39
14/11/2015	83.13	48.53	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	21.86	13.58	26.35	23.4
16/11/2015	73.42	41.42	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	15.7	6.52	29.74	30.35
19/11/2015	80.38	45.6	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	41.25	15.65	30.99	17.44
23/11/2015	69.28	30.54	0.52	BDL*	BDL*	10.13	0.49	BDL*	13.97	12.72	41.4	20.85
26/11/2015	89.37	40.58	BDL*	BDL*	BDL*	BDL*	0.27	BDL*	30.17	19.71	31.62	19.29
30/11/2015	92.41	50.62	0.58	BDL*	BDL*	10.38	0.41	BDL*	35.4	16.4	34.28	27.76
3/12/2015	96.5	54.38	0.68	BDL*	BDL*	10.57	0.45	BDL*	38.64	14.34	37.2	25.65
7/12/2015	85.63	45.6	BDL*	BDL*	BDL*	BDL*	0.56	BDL*	30.34	12.59	42.2	20.31
10/12/2015	77.48	40.58	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	18.52	5.63	32.3	27.59
14/12/2015	93.59	47.69	0.54	BDL*	BDL*	10.38	0.3	BDL*	26.19	16.56	34.24	18.59
17/12/2015	87.48	48.53	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	22.39	8.63	36.53	21.27
21/12/2015	79.51	32.63	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	28.14	18.56	29.2	23.42
24/12/2015	94.5	42.67	0.64	BDL*	BDL*	10.81	0.54	BDL*	15.73	10.35	44.51	19.59
28/12/2015	84.93	36.4	BDL*	BDL*	BDL*	BDL*	0.35	BDL*	47.2	13.47	23.6	22.62
31/12/2015	92.58	50.62	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	24.2	11.33	28.34	24.13
04/01/2016	69.51	47.69	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	42.57	12.5	21.38	26.56
07/01/2016	78.2	50.62	0.58	BDL*	BDL*	BDL*	0.14	BDL*	19.17	7.4	35.45	19.73
11/01/2016	84.29	44.34	0.52	BDL*	BDL*	BDL*	0.24	BDL*	48.42	15.68	29.35	17.21
14/01/2016	71.01	36.4	BDL*	BDL*	BDL*	BDL*	0.74	BDL*	41.59	13.65	26.4	21.82
18/01/2016	82.37	41.42	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	33.86	19.47	33.44	23.34
21/01/2016	70.49	29.7	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	16.62	22.64	28.55	25.41
25/01/2016	86.32	48.53	0.61	BDL*	BDL*	10.2	0.44	BDL*	54.18	9.54	42.57	18.15
28/01/2016	77.8	30.54	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	26.48	17.5	38.36	29.57
01/02/2016	79.79	43.51	BDL*	BDL*	BDL*	BDL*	0.38	BDL*	22.75	14.47	35.28	30.37
04/02/2016	84.51	48.53	BDL*	BDL*	BDL*	BDL*	0.3	BDL*	14.3	19.61	25.57	27.76
08/02/2016	91.52	54.38	0.62	BDL*	BDL*	BDL*	0.63	BDL*	35.42	11.55	23.34	23.49
11/02/2016	75.29	32.63	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	41.59	13.63	18.56	18.72
15/02/2016	68.47	29.28	BDL*	BDL*	BDL*	BDL*	0.17	BDL*	16.32	6.54	31.29	21.32
18/02/2016	90.7	50.62	0.68	BDL*	BDL*	BDL*	0.22	BDL*	36.63	10.35	19.85	28.57
22/02/2016	83.48	47.69	BDL*	BDL*	BDL*	BDL*	0.31	BDL*	29.55	16.42	28.58	25.4
25/02/2016	94.49	52.71	0.58	BDL*	BDL*	BDL*	0.37	BDL*	45.87	8.65	38.38	19.6
29/02/2016	89.31	43.51	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	31.09	17.65	34.52	22.24
03/03/2016	96.48	52.71	0.56	BDL*	BDL*	10.53	0.34	BDL*	29.25	8.68	17.44	25.6
07/03/2016	85.51	47.69	BDL*	BDL*	BDL*	BDL*	0.3	BDL*	10.4	16.76	22.34	23.55
10/03/2016	90.48	54.38	0.54	BDL*	BDL*	10.2	0.48	BDL*	24.7	14.67	29.45	20.55
14/03/2016	86.62	40.58	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	18.2	10.64	26.48	27.1
17/03/2016	93.37	49.36	0.7	BDL*	BDL*	10.38	0.56	BDL*	28.32	9.46	19.84	21.27
21/03/2016	84.2	39.32	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	44.64	13.55	32.59	26.71
24/03/2016	76.52	35.56	BDL*	BDL*	BDL*	BDL*	0.46	BDL*	36.94	17.37	38.66	18.4
28/03/2016	82.63	44.76	BDL*	BDL*	BDL*	BDL*	0.17	BDL*	31.4	11.76	31.75	22.52
31/03/2016	72.89	29.7	BDL*	BDL*	BDL*	BDL*	0.15	BDL*	13.85	5.35	27.25	19.83

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BDL*: Below Detection Limit, Minimum Detection Limit, Lead as Pb ($\mu\text{g}/\text{m}^3$):0.5, Benzo (a) Pyrene (BaP) - particulate phase only (ng/m^3): 0.5, Nickel as Ni (ng/m^3):10, Arsenic as As (ng/m^3):2, Benzene as C_6H_6 ($\mu\text{g}/\text{m}^3$): 2**Table No. 3 Ambient Air Quality Monitoring Results for South West Corner of Back up Area**

Date of Sampling	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	Lead ($\mu\text{g}/\text{m}^3$)	BaP (ng/m^3)	As (ng/m^3)	Ni (ng/m^3)	CO (mg/m^3)	C ₆ H ₆ ($\mu\text{g}/\text{m}^3$)	NH ₃ ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NOx ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)
01/10/2015	73.41	32.71	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	23.65	10.57	18.53	24.4
05/10/2015	60.37	27.45	BDL*	BDL*	BDL*	BDL*	0.3	BDL*	29.49	13.35	22.63	20.2
08/10/2015	52.6	22.22	BDL*	BDL*	BDL*	BDL*	0.44	BDL*	32.25	16.41	16.26	23.35
12/10/2015	82.63	38.22	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	13.62	14.31	23.54	27.53
15/10/2015	63.51	28.56	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	17.83	18.57	25.47	18.36
19/10/2015	72.62	36.58	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	26.59	7.75	20.35	21.32
22/10/2015	58.6	26.58	BDL*	BDL*	BDL*	BDL*	0.52	BDL*	33.4	9.56	24.33	25.32
26/10/2015	65.64	35.73	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	19.66	12.6	29.3	22.5
29/10/2015	71.63	42.61	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	38.26	11.5	34.47	26.52
02/11/2015	51.63	21.52	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	25.8	14.65	17.81	21.48
05/11/2015	63.66	26.58	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	15.36	11.39	31.76	26.44
09/11/2015	70.49	38.35	BDL*	BDL*	BDL*	BDL*	0.4	BDL*	29.49	13.44	35.45	24.54
14/11/2015	68.37	29.4	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	17.51	9.42	19.85	22.33
16/11/2015	59.15	34.44	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	22.7	12.69	24.36	18.3
19/11/2015	74.62	41.32	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	26.26	8.66	26.18	23.23
23/11/2015	80.65	37.48	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	10.7	10.34	25.54	25.57
26/11/2015	61.58	35.73	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	18.43	17.32	27.36	16.75
30/11/2015	71.86	40.46	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	20.75	7.32	22	19.44
3/12/2015	51.63	21.52	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	25.8	14.65	17.81	21.48
7/12/2015	63.66	26.58	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	15.36	11.39	31.76	26.44
10/12/2015	70.49	38.35	BDL*	BDL*	BDL*	BDL*	0.4	BDL*	29.49	13.44	35.45	24.54
14/12/2015	68.37	29.4	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	17.51	9.42	19.85	22.33
17/12/2015	59.15	34.44	BDL*	BDL*	BDL*	BDL*	0.23	BDL*	22.7	12.69	24.36	18.3
21/12/2015	74.62	41.32	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	26.26	8.66	26.18	23.23
24/12/2015	80.65	37.48	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	10.7	10.34	25.54	25.57
28/12/2015	61.58	35.73	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	18.43	17.32	27.36	16.75
31/12/2015	71.86	40.46	BDL*	BDL*	BDL*	BDL*	0.33	BDL*	20.75	7.32	22	19.44
04/01/2016	61.55	38.74	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	26.72	7.74	25.59	18.24
07/01/2016	71.39	32.68	BDL*	BDL*	BDL*	BDL*	0.26	BDL*	21.4	10.39	17.59	24.41
11/01/2016	52.48	22.66	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	17.51	12.38	23.23	19.24
14/01/2016	65.7	46.2	BDL*	BDL*	BDL*	BDL*	0.36	BDL*	29.49	9.44	34.3	27.18
18/01/2016	72.56	33.6	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	19.35	5.78	20.54	21.11
21/01/2016	57.51	25.39	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	20.75	13.45	18.49	20.5
25/01/2016	66.49	30.5	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	32.56	6.51	26.56	25.1
28/01/2016	70.59	39.22	BDL*	BDL*	BDL*	BDL*	0.15	BDL*	16.59	14.58	30.64	23.37
01/02/2016	65.58	32.71	BDL*	BDL*	BDL*	BDL*	0.14	BDL*	12.59	12.65	27.73	25.56
04/02/2016	58.78	29.63	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	17.83	15.11	30.34	22
08/02/2016	67.78	35.73	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	25.29	7.76	16.48	18.5
11/02/2016	53.85	21.42	BDL*	BDL*	BDL*	BDL*	0.13	BDL*	15.67	10.36	21.85	20.63
15/02/2016	60.81	33.6	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	19.04	8.67	17.61	26.69
18/02/2016	71.59	28.41	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	23.67	6.6	24.54	19.7
22/02/2016	51.52	23.53	BDL*	BDL*	BDL*	BDL*	0.24	BDL*	16.59	11.57	15.5	21.56
25/02/2016	62.38	30.5	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	28.87	5.65	23.79	27.22
29/02/2016	75.58	29.7	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	14.59	9.44	31.76	17.83
03/03/2016	77.95	35.72	BDL*	BDL*	BDL*	BDL*	0.29	BDL*	19.04	5.61	20.55	17.57
07/03/2016	58.6	28.33	BDL*	BDL*	BDL*	BDL*	0.14	BDL*	14.59	12.7	25.34	20.6
10/03/2016	80.93	33.55	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	10.38	7.41	18.6	23.49
14/03/2016	70.44	30.66	BDL*	BDL*	BDL*	BDL*	0.11	BDL*	26.42	18.45	36.73	21.48
17/03/2016	65.22	38.64	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	19.97	6.15	16.53	18.82
21/03/2016	55.35	24.53	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	13.62	9.47	24.47	19.43
24/03/2016	60.5	29.63	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	21.5	14.61	21.35	24.58
28/03/2016	57.31	36.6	BDL*	BDL*	BDL*	BDL*	0.13	BDL*	11.37	8.62	27.51	29.57
31/03/2016	65.11	25.82	BDL*	BDL*	BDL*	BDL*	0.19	BDL*	25.61	11.58	22.61	27.41

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



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Table No. 4 Ambient Air Quality Monitoring Results for North East Corner of Back up Area

Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	Lead (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)
01/10/2015	54.48	24.38	BDL*	BDL*	BDL*	BDL*	0.22	BDL*	42.56	12.49	27.46	20.32
05/10/2015	85.62	43.48	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	38.67	18.67	39.54	25.54
08/10/2015	78.57	39.09	BDL*	BDL*	BDL*	BDL*	0.27	BDL*	39.4	22.65	33.38	29.33
12/10/2015	94.5	50.44	BDL*	BDL*	BDL*	BDL*	0.58	BDL*	22.47	19.54	29.62	21.56
15/10/2015	76.48	38.25	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	34.48	11.49	35.51	26.28
19/10/2015	92.5	52.54	BDL*	BDL*	BDL*	BDL*	0.57	BDL*	40.63	14.66	38.86	30.36
22/10/2015	84.51	47.7	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	44.51	20.6	40.45	27.26
26/10/2015	75.43	41.61	BDL*	BDL*	BDL*	BDL*	0.5	BDL*	26.47	15.52	32.49	19.28
29/10/2015	90.48	48.34	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	30.47	24.48	42.42	24.48
02/11/2015	76.91	36.57	BDL*	BDL*	BDL*	BDL*	0.47	BDL*	31.52	20.39	36.55	26.18
05/11/2015	69.87	33.35	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	20.79	14.72	35.87	17.58
09/11/2015	88.27	51.7	0.54	BDL*	BDL*	10.28	0.55	BDL*	24.63	22.49	39.46	21.82
14/11/2015	52.61	22.7	BDL*	BDL*	BDL*	BDL*	0.15	BDL*	33.55	11.65	30.19	18.26
16/11/2015	82.51	46.66	BDL*	BDL*	BDL*	BDL*	0.5	BDL*	37.55	17.65	34.62	22.86
19/11/2015	68.42	30.68	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	35.71	19.34	40.75	28.42
23/11/2015	91.4	48.54	0.58	BDL*	BDL*	10.24	0.46	BDL*	17.55	18.72	32.35	19.19
26/11/2015	74.47	44.55	BDL*	BDL*	BDL*	BDL*	0.3	BDL*	26.16	10.63	38.39	29.41
30/11/2015	86.49	47.5	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	29.55	13.47	31.83	27.48
3/12/2015	90.49	49.6	0.56	BDL*	BDL*	10.24	0.48	BDL*	31.61	11.67	35.49	28.55
7/12/2015	73.78	39.68	BDL*	BDL*	BDL*	BDL*	0.43	BDL*	22.35	15.53	38.22	22.44
10/12/2015	87.14	44.55	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	40.23	17.69	37.76	29.5
14/12/2015	77.32	32.36	BDL*	BDL*	BDL*	10.13	0.32	BDL*	30.25	8.66	41.48	26.6
17/12/2015	81.58	36.57	BDL*	BDL*	BDL*	BDL*	0.51	BDL*	36.91	19.43	39.44	23.9
21/12/2015	93.81	54.64	0.62	BDL*	BDL*	10.75	0.6	BDL*	44.17	21.42	42.56	30.5
24/12/2015	88.9	47.7	0.58	BDL*	BDL*	10.37	0.5	BDL*	20.44	16.43	34.46	24.25
28/12/2015	72.02	38.67	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	41.19	18.67	44.24	25.63
31/12/2015	85.31	45.4	BDL*	BDL*	BDL*	BDL*	0.16	BDL*	38.72	10.48	33.73	27.31
04/01/2016	86.53	43.71	0.52	BDL*	BDL*	BDL*	0.53	BDL*	36.39	15.49	39.47	24.5
07/01/2016	92.42	54.45	0.62	BDL*	BDL*	10.75	0.42	BDL*	46.46	18.55	29.57	22.76
11/01/2016	72.68	35.73	BDL*	BDL*	BDL*	BDL*	0.25	BDL*	26.97	7.37	40.3	26.21
14/01/2016	85.39	50.44	BDL*	BDL*	BDL*	10.58	0.48	BDL*	34.48	21.54	37.53	29.41
18/01/2016	79.48	38.67	BDL*	BDL*	BDL*	BDL*	0.18	BDL*	29.55	10.38	31.46	27.15
21/01/2016	84.36	45.4	0.56	BDL*	BDL*	BDL*	0.5	BDL*	35.71	17.72	33.51	30.19
25/01/2016	70.69	39.68	0.53	BDL*	BDL*	10.54	0.4	BDL*	48.74	13.77	19.61	23.5
28/01/2016	84.62	46.66	BDL*	BDL*	BDL*	BDL*	0.34	BDL*	21.77	19.44	34.23	21.31
01/02/2016	70.56	29.42	BDL*	BDL*	BDL*	BDL*	0.53	BDL*	18.52	16.45	30.53	23.41
04/02/2016	90.45	55.72	0.52	BDL*	BDL*	BDL*	0.44	BDL*	32.82	21.72	41.56	30.11
08/02/2016	73.78	40.35	BDL*	BDL*	BDL*	BDL*	0.41	BDL*	29.57	18.72	38.51	20.2
11/02/2016	84.9	48.76	BDL*	BDL*	BDL*	BDL*	0.21	BDL*	22.47	6.57	33.36	28.34
15/02/2016	76.54	38.67	BDL*	BDL*	BDL*	10.01	0.36	BDL*	37.55	15.55	26.76	24.21
18/02/2016	86.49	23.54	0.62	BDL*	BDL*	BDL*	0.45	BDL*	46.48	13.6	35.27	21.51
22/02/2016	77.79	36.72	BDL*	BDL*	BDL*	BDL*	0.55	BDL*	25.67	8.67	31.5	29.59
25/02/2016	88.62	39.51	0.54	BDL*	BDL*	BDL*	0.48	BDL*	39.64	11.69	17.42	25.88
29/02/2016	94.28	54.64	0.68	BDL*	BDL*	BDL*	0.22	BDL*	20.93	7.41	28.69	27.46
03/03/2016	91.56	44.55	0.52	BDL*	BDL*	10.22	0.52	BDL*	37.37	11.76	32.44	19.73
07/03/2016	80.66	39.68	BDL*	BDL*	BDL*	BDL*	0.39	BDL*	26.64	23.59	37.62	26.64
10/03/2016	79.55	43.71	BDL*	BDL*	BDL*	BDL*	0.45	BDL*	16.57	16.48	24.85	28.54
14/03/2016	93.53	50.44	0.56	BDL*	BDL*	10.46	0.47	BDL*	38.48	20.49	42.39	25.47
17/03/2016	86.7	45.4	BDL*	BDL*	BDL*	BDL*	0.37	BDL*	24.01	15.27	31.28	29.49
21/03/2016	64.51	29.42	BDL*	BDL*	BDL*	BDL*	0.49	BDL*	19.39	7.75	27.84	23.45
24/03/2016	72.62	32.5	BDL*	BDL*	BDL*	BDL*	0.42	BDL*	31.19	19.63	35.55	27.62
28/03/2016	94.62	47.5	0.64	BDL*	BDL*	10.64	0.18	BDL*	18.52	13.52	38.25	20.1
31/03/2016	82.31	38.67	BDL*	BDL*	BDL*	BDL*	0.32	BDL*	46.48	14.7	34.55	30.12

BDL*: Below Detection Limit, Minimum Detection Limit, Lead as Pb (µg/m³):0.5, Benzo (a) Pyrene (BaP) - particulate phase only (ng/m³): 0.5, Nickel as Ni (ng/m³):10, Arsenic as As (ng/m³):2, Benzene as C₆H₆ (µg/m³): 2

H. T. Shah
Lab Manager

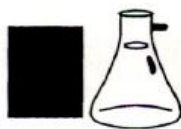
Dr. Arun Bajpai
Lab Manager (Q)



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Annexure – 4



POLLUCON LABORATORIES PVT. LTD.

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

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“ENVIRONMENTAL MONITORING REPORT”

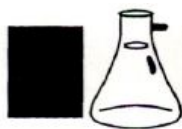
For

**ADANI KANDLA BULK TERMINAL PRIVATE LIMITED.
KANDLA, KUTCH.**

APRIL 2016 TO SEPTEMBER 2016

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)



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EQUIPMENTS USED FOR SAMPLING AND ANALYSIS

SR. NO.	Monitoring Details	Equipments Used	Sampling and Analysis Method
1	Ambient Air Quality Monitoring	RDS,FDS, Impinger, Gas Analyser	CPCB Guideline/IS 5182
2	Noise Monitoring	Noise Meter	IS 11702
3	Sea Water Monitoring	Depth Sampler	IS/APHA/USEPA/ASTM
4	Sea Sediment Monitoring	Grab Sampler	CPCB Guideline/ IS/APHA/USEPA/ASTM
5	Drinking Water Analysis	Sealed & Steriled Bottle	IS:10500:2012

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)

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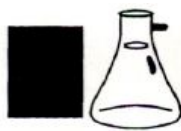
National Ambient Air Quality Standards Dated 16th Nov.2009, CPCB New Delhi.

SR. NO.	TEST PARAMETER	UNIT	Concentration in ambient air	Method Of Measurement
1	Particulate Matter (PM ₁₀)	µg/m ³	100	IS:5182(Part 23):Gravimetric CPCB - Method (Vol.I,May-2011)
2	Particulate Matter (PM _{2.5})	µg/m ³	60	Gravimetric- CPCB - Method (Vol.I,May-2011)
3	Lead as Pb	µg/m ³	1.0	CPCB Method (Vol.I,May-2011)
4	Benzo (a) Pyrene (BaP)- particulate phase only	ng/m ³	1.0	CPCB Method (Vol.I,May-2011)
5	Arsenic as As	ng/m ³	6.0	CPCB Method (Vol.I,May-2011)
6	Nickel as Ni	ng/m ³	20	CPCB Method (Vol.I,May-2011)
7	Carbon Monoxide as CO	mg/m ³	4.0	NDIR Digital Gas Analyzer
8	Benzene as C ₆ H ₆	µg/m ³	5.0	IS 5182 (Part XI):2006/CPCB Method
9	Ammonia (NH ₃)	µg/m ³	400	CPCB Method (Vol.I,May-2011)
10	Sulphur Dioxide (SO ₂)	µg/m ³	80	IS:5182(Part 2): Improved West and Gaeke
11	Oxides of Nitrogen (NO ₂)	µg/m ³	80	IS:5182(Part 6):Modified Jacob & Hochheiser (Na-Arsenite)
12	Ozone (O ₃)	µg/m ³	180	IS 5182 (PART IX) 1974 / CPCB Method (Vol.I,May-2011)

NS#: Not Specified, ** National Ambient Air Quality Standards Dated: 18/11/2009 as per Central Pollution Control Board, New Delhi.

Date of Sampling	:	As Per Table	Sampling Location	:	As Per Table
Sampling By	:	Pollucon Laboratories Pvt. Ltd.	Protocol (purpose)	:	Ambient Air Quality Monitoring

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

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Table No. 1 Results of AAQM for Zero point [April 2016 – September 2016]

Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	O ₃ (µg/m ³)	Lead (µg/m ³)	BaP (ng/m ³)	As (ng/m ³)	Ni (ng/m ³)	C ₆ H ₆ (µg/m ³)
04/04/2016	66.10	36.68	6.69	29.56	0.30	20.25	30.27	BDL*	BDL*	BDL*	BDL*	BDL*
07/04/2016	80.31	44.69	10.64	35.57	0.55	41.40	24.25	BDL*	BDL*	BDL*	BDL*	BDL*
11/04/2016	53.91	29.51	14.56	27.86	0.26	48.85	22.64	BDL*	BDL*	BDL*	BDL*	BDL*
14/04/2016	76.79	35.41	18.54	32.58	0.52	27.10	20.59	BDL*	BDL*	BDL*	BDL*	BDL*
18/04/2016	59.59	25.40	11.72	36.54	0.62	32.17	23.72	BDL*	BDL*	BDL*	BDL*	BDL*
21/04/2016	83.42	46.38	23.74	39.15	0.34	37.83	21.74	0.52	BDL*	BDL*	BDL*	BDL*
25/04/2016	72.10	37.52	17.37	33.59	0.32	40.51	18.51	BDL*	BDL*	BDL*	BDL*	BDL*
28/04/2016	90.38	50.59	20.64	37.63	0.78	25.02	26.80	0.62	BDL*	2.42	10.43	BDL*
02/05/2016	71.79	40.74	17.72	33.64	0.87	23.46	29.61	BDL*	BDL*	BDL*	BDL*	BDL*
05/05/2016	64.68	30.76	10.28	39.35	0.71	27.32	25.73	BDL*	BDL*	BDL*	BDL*	BDL*
09/05/2016	90.43	48.64	19.41	42.60	0.38	35.63	23.55	0.58	BDL*	2.18	10.26	BDL*
12/05/2016	82.60	36.58	13.65	35.24	0.57	28.21	28.36	BDL*	BDL*	BDL*	BDL*	BDL*
16/05/2016	73.58	32.56	9.68	26.77	0.32	38.30	26.51	BDL*	BDL*	BDL*	BDL*	BDL*
19/05/2016	62.39	24.53	15.51	30.35	0.64	32.36	30.57	BDL*	BDL*	BDL*	BDL*	BDL*
23/05/2016	92.41	43.65	21.62	31.54	0.54	19.60	22.41	0.62	BDL*	2.12	10.58	BDL*
26/05/2016	76.51	38.66	12.40	24.49	0.29	24.64	24.57	BDL*	BDL*	BDL*	BDL*	BDL*
30/05/2016	88.59	44.48	23.41	36.84	0.60	30.28	31.19	0.52	BDL*	BDL*	BDL*	BDL*
02/06/2016	82.47	39.49	22.37	35.59	0.30	42.49	21.26	BDL*	BDL*	BDL*	BDL*	BDL*
06/06/2016	65.50	28.68	19.39	28.72	0.50	28.63	27.26	BDL*	BDL*	BDL*	10.09	BDL*
09/06/2016	76.78	34.50	13.35	31.54	0.46	33.56	29.09	BDL*	BDL*	BDL*	BDL*	BDL*
13/06/2016	84.72	48.64	25.56	25.60	0.39	23.40	20.56	BDL*	BDL*	BDL*	BDL*	BDL*
16/06/2016	69.71	30.47	14.56	29.48	0.23	30.17	22.34	BDL*	BDL*	BDL*	BDL*	BDL*
20/06/2016	74.47	41.57	11.67	34.37	0.63	41.57	24.67	BDL*	BDL*	BDL*	BDL*	BDL*
23/06/2016	80.58	35.75	15.44	30.35	0.48	35.72	28.22	0.52	BDL*	2.1	10.31	BDL*
27/06/2016	58.62	26.61	18.51	24.34	0.53	44.65	30.26	BDL*	BDL*	BDL*	BDL*	BDL*
30/06/2016	66.42	31.59	10.55	20.21	0.26	29.56	25.23	BDL*	BDL*	BDL*	BDL*	BDL*
04/07/2016	60.89	32.43	16.55	36.54	0.50	24.49	26.30	BDL*	BDL*	BDL*	BDL*	BDL*
07/07/2016	91.52	50.72	18.38	31.52	0.26	38.39	21.35	0.54	BDL*	2.18	10.31	BDL*
11/07/2016	69.33	28.68	14.55	37.42	0.60	21.46	24.37	BDL*	BDL*	BDL*	BDL*	BDL*
14/07/2016	78.52	44.48	23.56	29.56	0.34	35.67	18.56	BDL*	BDL*	BDL*	BDL*	BDL*
18/07/2016	59.42	23.38	8.70	21.65	0.21	26.30	23.69	BDL*	BDL*	BDL*	BDL*	BDL*
21/07/2016	75.72	39.49	13.61	38.18	0.44	39.60	27.56	BDL*	BDL*	BDL*	BDL*	BDL*
25/07/2016	62.60	33.67	19.45	25.74	0.48	25.70	19.27	BDL*	BDL*	BDL*	BDL*	BDL*
28/07/2016	70.38	30.76	17.71	28.67	0.41	29.63	30.69	BDL*	BDL*	BDL*	BDL*	BDL*
01/08/2016	84.60	30.35	13.64	38.80	0.71	38.30	29.35	0.52	BDL*	BDL*	BDL*	BDL*
04/08/2016	76.19	35.75	10.58	40.30	0.62	27.61	26.44	BDL*	BDL*	BDL*	BDL*	BDL*
08/08/2016	68.17	29.52	16.75	25.64	0.38	23.46	19.65	BDL*	BDL*	BDL*	BDL*	BDL*
11/08/2016	86.19	49.47	22.49	32.45	0.53	36.82	22.34	0.58	BDL*	BDL*	BDL*	BDL*
15/08/2016	70.61	45.50	20.35	38.46	0.48	43.94	30.19	BDL*	BDL*	BDL*	BDL*	BDL*
25/08/2016	52.40	24.53	9.73	23.41	0.29	32.36	18.52	BDL*	BDL*	BDL*	BDL*	BDL*
29/08/2016	75.23	34.50	12.36	39.15	0.61	19.60	23.74	BDL*	BDL*	BDL*	BDL*	BDL*
01/09/2016	57.49	24.53	10.48	24.65	0.32	36.82	16.58	BDL*	BDL*	BDL*	BDL*	BDL*
05/09/2016	75.82	34.50	15.48	35.29	0.39	25.53	19.53	BDL*	BDL*	BDL*	BDL*	BDL*
08/09/2016	65.39	30.76	12.57	30.73	0.70	31.18	22.32	BDL*	BDL*	BDL*	BDL*	BDL*
12/09/2016	81.52	42.40	16.34	27.39	0.42	23.46	30.11	BDL*	BDL*	BDL*	BDL*	BDL*
15/09/2016	90.30	39.66	13.37	39.54	0.79	48.69	26.16	0.52	BDL*	2.26	10.38	BDL*
19/09/2016	68.40	33.67	9.70	34.31	0.68	32.66	20.66	BDL*	BDL*	BDL*	BDL*	BDL*
22/09/2016	78.42	29.52	17.66	38.74	0.54	50.77	27.35	BDL*	BDL*	BDL*	BDL*	BDL*
26/09/2016	85.68	44.48	14.55	40.83	0.69	30.58	29.38	0.64	BDL*	BDL*	BDL*	BDL*
29/09/2016	70.30	35.75	19.52	33.55	0.52	42.46	18.70	0.54	BDL*	2.08	BDL*	BDL*

BDL*: Below Detection Limit, Minimum Detection Limit, Lead as Pb (µg/m³):0.5, Benzo (a) Pyrene (BaP) - particulate phase only (ng/m³): 0.5, Nickel as Ni (ng/m³):10, Arsenic as As (ng/m³):2, Benzene as C₆H₆ (µg/m³): 2**H. T. Shah**
Lab Manager**Dr. Arun Bajpai**
Lab Manager (Q)

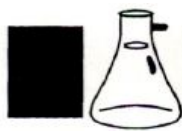
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Table No. 2 Results of AAQM for Starting of pile approach [April 2016 – September 2016]

Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	O ₃ (µg/m ³)	Lead (µg/m ³)	BaP (ng/m ³)	As (ng/m ³)	Ni (ng/m ³)	C ₆ H ₆ (µg/m ³)
04/04/2016	74.81	39.37	15.47	35.86	0.22	51.2	23.69	BDL*	BDL*	BDL*	BDL*	BDL*
07/04/2016	68.60	31.50	5.34	30.14	0.41	15.48	29.70	BDL*	BDL*	BDL*	BDL*	BDL*
11/04/2016	84.59	35.64	10.51	21.74	0.47	38.7	27.31	0.52	BDL*	BDL*	BDL*	BDL*
14/04/2016	91.39	54.71	9.71	19.18	0.29	46.44	22.53	0.68	BDL*	2.24	10.38	BDL*
18/04/2016	65.61	29.43	19.53	42.68	0.49	39.59	25.44	BDL*	BDL*	BDL*	BDL*	BDL*
21/04/2016	76.58	34.40	17.52	24.39	0.24	11.91	30.57	BDL*	BDL*	BDL*	BDL*	BDL*
25/04/2016	90.49	50.57	11.56	28.77	0.27	20.84	24.56	0.54	BDL*	2.04	10.24	BDL*
28/04/2016	82.40	45.59	14.55	31.52	0.63	36.32	28.29	BDL*	BDL*	BDL*	BDL*	BDL*
02/05/2016	91.59	52.61	12.40	25.49	0.66	30.67	25.52	BDL*	BDL*	BDL*	10.66	BDL*
05/05/2016	72.82	36.58	21.65	34.25	0.53	38.49	22.75	BDL*	BDL*	BDL*	BDL*	BDL*
09/05/2016	83.50	31.65	14.35	38.35	0.26	19.54	29.11	BDL*	BDL*	BDL*	BDL*	BDL*
12/05/2016	96.30	51.38	8.57	27.46	0.31	52.62	26.21	0.76	BDL*	2.36	10.91	BDL*
16/05/2016	81.81	41.51	16.62	31.63	0.23	43.3	20.72	BDL*	BDL*	BDL*	BDL*	BDL*
19/05/2016	94.23	47.68	13.57	35.57	0.70	20.75	27.64	0.58	BDL*	2.12	10.6	BDL*
23/05/2016	71.58	38.64	18.41	26.68	0.45	13.53	30.55	BDL*	BDL*	BDL*	BDL*	BDL*
26/05/2016	87.59	42.75	9.38	18.66	0.50	46.91	21.51	0.51	BDL*	BDL*	BDL*	BDL*
30/05/2016	76.20	32.47	20.46	32.56	0.69	24.66	19.55	BDL*	BDL*	BDL*	BDL*	BDL*
02/06/2016	76.31	34.53	16.60	31.51	0.22	22.45	25.90	BDL*	0.5	BDL*	BDL*	BDL*
06/06/2016	93.62	51.38	14.55	24.79	0.62	36.17	23.21	0.56	BDL*	2.56	10.51	BDL*
09/06/2016	88.71	40.69	9.40	35.46	0.32	50.20	21.59	BDL*	BDL*	BDL*	BDL*	BDL*
13/06/2016	62.49	37.40	21.66	19.19	0.60	15.90	27.68	BDL*	BDL*	BDL*	BDL*	BDL*
16/06/2016	81.63	43.57	11.53	21.63	0.41	35.55	18.66	BDL*	BDL*	BDL*	10.38	BDL*
20/06/2016	65.68	26.72	19.47	27.65	0.44	46.15	20.38	BDL*	BDL*	BDL*	BDL*	BDL*
23/06/2016	72.29	30.42	23.61	25.89	0.64	29.31	19.15	BDL*	BDL*	BDL*	BDL*	BDL*
27/06/2016	84.22	44.39	19.60	29.41	0.24	51.45	28.25	BDL*	BDL*	2.34	BDL*	BDL*
30/06/2016	75.68	36.58	15.39	23.60	0.18	34.61	17.27	BDL*	BDL*	BDL*	BDL*	BDL*
04/07/2016	70.48	38.64	21.58	22.32	0.16	31.53	26.28	BDL*	BDL*	BDL*	BDL*	BDL*
07/07/2016	69.39	29.59	16.42	28.28	0.17	20.51	21.45	BDL*	BDL*	BDL*	BDL*	BDL*
11/07/2016	90.81	46.45	19.50	25.30	0.39	42.56	24.38	0.64	BDL*	2.46	10.39	BDL*
14/07/2016	68.38	36.58	17.31	20.55	0.53	52.66	18.66	BDL*	BDL*	BDL*	BDL*	BDL*
18/07/2016	76.78	31.65	10.64	17.37	0.19	18.37	23.69	BDL*	BDL*	BDL*	BDL*	BDL*
21/07/2016	87.52	45.62	20.73	23.42	0.56	26.33	27.46	BDL*	BDL*	BDL*	BDL*	BDL*
25/07/2016	91.17	50.56	11.74	21.21	0.62	32.45	19.28	0.72	BDL*	2.83	10.51	BDL*
28/07/2016	82.40	39.46	15.54	32.59	0.36	45.92	30.63	BDL*	BDL*	BDL*	BDL*	BDL*
01/08/2016	78.18	46.45	18.69	35.55	0.26	30.07	23.47	BDL*	BDL*	BDL*	BDL*	BDL*
04/08/2016	91.23	54.67	24.60	29.25	0.50	35.18	28.24	0.64	BDL*	2.46	10.22	BDL*
08/08/2016	86.67	38.64	21.43	32.51	0.27	27.36	16.85	BDL*	BDL*	BDL*	BDL*	BDL*
11/08/2016	77.61	45.62	19.67	26.26	0.57	55.33	25.66	BDL*	BDL*	BDL*	BDL*	BDL*
15/08/2016	87.63	48.50	26.43	34.15	0.76	29.47	27.33	BDL*	BDL*	BDL*	BDL*	BDL*
18/08/2016	94.22	50.56	16.52	37.23	0.68	38.79	19.42	0.64	BDL*	2.32	10.16	BDL*
22/08/2016	50.19	21.37	12.67	28.19	0.31	16.54	29.26	BDL*	BDL*	BDL*	BDL*	BDL*
25/08/2016	64.53	27.54	7.63	18.6	0.21	20.75	20.18	BDL*	BDL*	BDL*	BDL*	BDL*
29/08/2016	80.60	42.75	17.38	35.46	0.73	51.42	24.65	0.52	BDL*	BDL*	10.16	BDL*
01/09/2016	48.52	18.50	8.51	18.34	0.23	24.36	18.24	BDL*	BDL*	BDL*	BDL*	BDL*
05/09/2016	68.47	28.36	18.39	39.37	0.30	34.58	22.65	BDL*	BDL*	BDL*	BDL*	BDL*
08/09/2016	58.60	24.66	15.7	26.39	0.74	45.4	19.34	BDL*	BDL*	BDL*	BDL*	BDL*
12/09/2016	62.38	34.53	10.75	30.35	0.34	19.24	27.28	BDL*	BDL*	BDL*	BDL*	BDL*
15/09/2016	78.59	29.59	16.6	35.63	0.29	35.48	20.81	BDL*	BDL*	BDL*	BDL*	BDL*
19/09/2016	85.41	47.68	14.73	31.23	0.81	59.54	23.46	0.6	BDL*	BDL*	10.16	BDL*
22/09/2016	69.37	32.47	22.41	41.56	0.84	25.26	26.71	BDL*	BDL*	BDL*	BDL*	BDL*
26/09/2016	79.58	37.40	11.42	36.56	0.56	42.7	24.16	BDL*	BDL*	BDL*	BDL*	BDL*

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

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29/09/2016	84.22	40.69	17.42	29.25	0.63	64.35	21.62	BDL*	BDL*	BDL*	10.27	BDL*
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BDL*: Below Detection Limit, Minimum Detection Limit, Lead as Pb ($\mu\text{g}/\text{m}^3$):0.5, Benzo (a) Pyrene (BaP) - particulate phase only (ng/m^3): 0.5, Nickel as Ni (ng/m^3):10, Arsenic as As (ng/m^3):2, Benzene as C_6H_6 ($\mu\text{g}/\text{m}^3$): 2**Table No. 3 Results of AAQM for South west corner of back up area [April 2016 – September 2016]**

Date of Sampling	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NOx ($\mu\text{g}/\text{m}^3$)	CO (mg/m^3)	NH ₃ ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)	Lead ($\mu\text{g}/\text{m}^3$)	BaP (ng/m^3)	As (ng/m^3)	Ni (ng/m^3)	C ₆ H ₆ ($\mu\text{g}/\text{m}^3$)
04/04/2016	50.41	18.74	10.44	21.58	0.17	15.74	18.55	BDL*	BDL*	BDL*	BDL*	BDL*
07/04/2016	60.42	25.59	12.44	25.26	0.25	29.41	22.20	BDL*	BDL*	BDL*	BDL*	BDL*
11/04/2016	57.31	20.74	8.30	18.25	0.21	23.17	24.19	BDL*	BDL*	BDL*	BDL*	BDL*
14/04/2016	71.59	43.38	6.68	24.57	0.23	18.71	26.43	BDL*	BDL*	BDL*	BDL*	BDL*
18/04/2016	54.47	21.69	16.33	20.45	0.41	28.51	19.76	BDL*	BDL*	BDL*	BDL*	BDL*
21/04/2016	70.30	30.51	13.34	27.95	0.11	16.93	25.22	BDL*	BDL*	BDL*	BDL*	BDL*
25/04/2016	63.58	33.54	20.62	19.58	0.37	30.59	23.84	BDL*	BDL*	BDL*	BDL*	BDL*
28/04/2016	76.49	29.56	9.67	34.55	0.47	13.07	21.49	BDL*	BDL*	BDL*	BDL*	BDL*
02/05/2016	84.28	37.38	8.35	30.53	0.41	19.29	19.84	BDL*	BDL*	BDL*	BDL*	BDL*
05/05/2016	59.62	21.75	13.45	18.64	0.21	12.46	26.71	BDL*	BDL*	BDL*	BDL*	BDL*
09/05/2016	77.58	27.41	10.65	25.35	0.13	31.45	21.37	BDL*	BDL*	BDL*	BDL*	BDL*
12/05/2016	68.50	30.61	5.34	21.23	0.25	22.25	24.47	BDL*	BDL*	BDL*	BDL*	BDL*
16/05/2016	50.82	28.52	12.35	34.34	0.18	29.08	28.63	BDL*	BDL*	BDL*	BDL*	BDL*
19/05/2016	65.60	36.52	17.61	28.70	0.40	15.73	23.40	BDL*	BDL*	BDL*	BDL*	BDL*
23/05/2016	58.60	23.49	9.59	22.64	0.27	10.39	25.81	BDL*	BDL*	BDL*	BDL*	BDL*
26/05/2016	62.28	31.76	6.69	15.55	0.22	18.10	18.44	BDL*	BDL*	BDL*	BDL*	BDL*
30/05/2016	56.90	26.64	11.54	19.55	0.44	30.56	22.53	BDL*	BDL*	BDL*	BDL*	BDL*
02/06/2016	70.60	28.36	12.64	18.47	0.14	35.70	19.35	BDL*	BDL*	BDL*	BDL*	BDL*
06/06/2016	59.41	22.62	9.27	20.65	0.34	21.23	26.35	BDL*	BDL*	BDL*	BDL*	BDL*
09/06/2016	65.21	30.46	6.66	28.59	0.21	28.31	18.62	BDL*	BDL*	BDL*	BDL*	BDL*
13/06/2016	54.39	20.55	11.43	17.50	0.27	10.15	23.50	BDL*	BDL*	BDL*	BDL*	BDL*
16/06/2016	60.19	27.68	7.51	25.33	0.16	20.92	24.55	BDL*	BDL*	BDL*	BDL*	BDL*
20/06/2016	55.20	18.48	5.43	21.23	0.17	14.16	28.44	BDL*	BDL*	BDL*	BDL*	BDL*
23/06/2016	75.59	25.67	10.51	16.20	0.37	36.00	21.41	BDL*	BDL*	BDL*	BDL*	BDL*
27/06/2016	62.50	32.63	13.64	27.65	0.33	33.85	25.61	BDL*	BDL*	BDL*	BDL*	BDL*
30/06/2016	51.18	19.77	8.39	19.39	0.13	13.54	27.08	BDL*	BDL*	BDL*	BDL*	BDL*
04/07/2016	50.55	27.50	5.37	17.44	0.23	12.08	28.28	BDL*	BDL*	BDL*	BDL*	BDL*
07/07/2016	63.19	23.49	13.68	24.31	0.38	31.12	19.52	BDL*	BDL*	BDL*	BDL*	BDL*
11/07/2016	55.29	31.33	11.62	19.62	0.33	14.2	29.55	BDL*	BDL*	BDL*	BDL*	BDL*
14/07/2016	60.32	28.52	9.54	25.55	0.24	21.15	20.68	BDL*	BDL*	BDL*	BDL*	BDL*
18/07/2016	52.53	17.61	6.54	15.65	0.11	11.18	18.33	BDL*	BDL*	BDL*	BDL*	BDL*
21/07/2016	67.60	29.65	10.34	31.42	0.32	29.61	21.52	BDL*	BDL*	BDL*	BDL*	BDL*
25/07/2016	56.71	24.36	7.42	18.30	0.37	19.03	27.32	BDL*	BDL*	BDL*	BDL*	BDL*
28/07/2016	65.81	20.45	12.68	23.22	0.18	25.08	25.41	BDL*	BDL*	BDL*	BDL*	BDL*
04/08/2016	70.22	28.71	12.74	23.54	0.24	19.58	30.20	BDL*	BDL*	BDL*	BDL*	BDL*
08/08/2016	56.40	26.54	7.53	16.73	0.40	15.43	20.60	BDL*	BDL*	BDL*	BDL*	BDL*
11/8/2016	68.51	31.45	10.45	20.56	0.30	23.14	17.79	BDL*	BDL*	BDL*	BDL*	BDL*
15/08/2016	59.33	36.48	16.36	31.39	0.36	32.94	19.43	BDL*	BDL*	BDL*	BDL*	BDL*
18/08/2016	65.73	27.50	6.64	22.51	0.41	20.47	29.29	BDL*	BDL*	BDL*	BDL*	BDL*
22/08/2016	53.23	20.45	9.74	19.57	0.17	12.17	24.49	BDL*	BDL*	BDL*	BDL*	BDL*
25/08/2016	48.62	17.40	5.72	15.31	0.13	17.51	16.85	BDL*	BDL*	BDL*	BDL*	BDL*
29/08/2016	67.52	30.51	14.53	33.35	0.53	28.49	26.41	BDL*	BDL*	BDL*	BDL*	BDL*
01/09/2016	53.67	21.49	6.61	15.58	0.14	19.58	15.6	BDL*	BDL*	BDL*	BDL*	BDL*
05/09/2016	61.90	24.36	8.36	26.69	0.45	14.24	24.35	BDL*	BDL*	BDL*	BDL*	BDL*
08/09/2016	72.39	39.59	10.63	33.45	0.46	23.74	26.27	BDL*	BDL*	BDL*	BDL*	BDL*
12/09/2016	58.36	29.35	13.75	21.19	0.19	12.46	21.52	BDL*	BDL*	BDL*	BDL*	BDL*
15/09/2016	71.56	35.64	11.5	28.32	0.41	39.46	17.72	BDL*	BDL*	BDL*	BDL*	BDL*
19/09/2016	62.52	25.35	12.38	25.54	0.61	21.66	27.62	BDL*	BDL*	BDL*	BDL*	BDL*
22/09/2016	59.62	23.49	14.50	22.57	0.40	42.43	22.40	BDL*	BDL*	BDL*	BDL*	BDL*
26/09/2016	66.69	28.71	16.71	24.74	0.26	22.25	28.61	BDL*	BDL*	BDL*	BDL*	BDL*
29/09/2016	76.39	38.67	9.58	20.40	0.33	35.61	16.48	BDL*	BDL*	BDL*	BDL*	BDL*

BDL*: Below Detection Limit, Minimum Detection Limit, Lead as Pb ($\mu\text{g}/\text{m}^3$):0.5, Benzo (a) Pyrene (BaP) - particulate phase only (ng/m^3): 0.5, Nickel as Ni (ng/m^3):10, Arsenic as As (ng/m^3):2, Benzene as C_6H_6 ($\mu\text{g}/\text{m}^3$): 2**H. T. Shah**
Lab Manager**Dr. Arun Bajpai**
Lab Manager (Q)

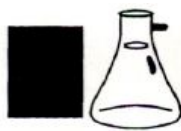


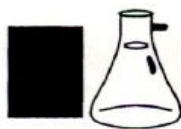
Table No. 4 Results of AAQM for North East corner of back up area [April 2016 – September 2016]

Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NOx (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	O ₃ (µg/m ³)	Lead (µg/m ³)	BaP (ng/m ³)	As (ng/m ³)	Ni (ng/m ³)	C ₆ H ₆ (µg/m ³)
04/04/2016	58.14	33.46	8.46	26.59	0.60	26.79	25.53	BDL*	BDL*	BDL*	BDL*	BDL*
07/04/2016	77.58	39.48	16.65	38.69	0.33	52.39	26.81	BDL*	BDL*	BDL*	BDL*	BDL*
11/04/2016	92.58	54.37	19.50	34.77	0.31	31.55	19.58	0.74	BDL*	2.18	10.25	BDL*
14/04/2016	80.18	48.52	13.33	39.56	0.44	42.86	28.51	0.56	BDL*	BDL*	BDL*	BDL*
18/04/2016	73.40	32.62	21.67	32.56	0.36	36.31	29.39	BDL*	BDL*	BDL*	BDL*	BDL*
21/04/2016	94.69	50.61	25.48	21.25	0.48	30.66	27.13	0.68	BDL*	2.2	10.13	BDL*
25/04/2016	82.31	45.36	22.60	36.47	0.46	44.94	30.77	0.5	BDL*	BDL*	BDL*	BDL*
28/04/2016	70.33	34.72	18.35	41.30	0.56	21.73	24.55	BDL*	BDL*	BDL*	BDL*	BDL*
02/05/2016	78.82	46.62	15.47	38.54	0.62	46.53	22.31	BDL*	BDL*	BDL*	BDL*	BDL*
05/05/2016	86.28	41.38	17.69	27.57	0.42	30.51	29.44	BDL*	BDL*	BDL*	BDL*	BDL*
09/05/2016	96.18	53.69	21.63	35.74	0.52	25.98	27.41	0.65	BDL*	2.46	10.78	BDL*
12/05/2016	89.30	42.45	10.36	17.58	0.47	38.07	30.64	BDL*	BDL*	BDL*	BDL*	BDL*
16/05/2016	90.58	48.70	7.69	23.63	0.30	22.66	24.56	0.56	BDL*	BDL*	BDL*	BDL*
19/05/2016	85.62	40.37	19.50	39.35	0.49	41.39	28.25	BDL*	BDL*	BDL*	10.46	BDL*
23/05/2016	79.48	32.60	14.42	34.30	0.36	48.64	20.28	BDL*	BDL*	BDL*	BDL*	BDL*
26/05/2016	94.26	51.61	16.58	30.74	0.33	37.76	19.50	0.62	BDL*	2.24	10.55	BDL*
30/05/2016	81.72	37.46	18.71	28.87	0.63	16.31	26.78	BDL*	BDL*	BDL*	BDL*	BDL*
02/06/2016	89.72	45.37	24.62	39.26	0.45	29.14	23.49	BDL*	BDL*	BDL*	BDL*	BDL*
06/06/2016	75.70	31.77	17.15	32.43	0.54	54.20	19.64	BDL*	BDL*	2.32	10.64	BDL*
09/06/2016	81.52	37.46	11.52	37.74	0.40	45.12	27.63	BDL*	BDL*	BDL*	BDL*	BDL*
13/06/2016	72.79	43.70	16.56	28.27	0.31	54.83	18.53	BDL*	BDL*	BDL*	BDL*	BDL*
16/06/2016	86.55	38.71	19.70	34.35	0.29	44.18	28.67	BDL*	BDL*	BDL*	BDL*	BDL*
20/06/2016	91.22	50.36	14.46	30.14	0.38	30.39	26.30	0.64	BDL*	2.46	10.43	BDL*
23/06/2016	85.56	47.65	18.77	27.23	0.55	18.80	24.60	0.72	BDL*	BDL*	BDL*	BDL*
27/06/2016	77.28	41.62	21.65	38.20	0.42	47.31	21.61	BDL*	BDL*	BDL*	BDL*	BDL*
30/06/2016	82.31	39.54	15.44	29.21	0.47	18.80	29.44	BDL*	BDL*	BDL*	BDL*	BDL*
04/07/2016	75.17	42.45	18.76	26.75	0.30	35.68	20.62	BDL*	BDL*	BDL*	BDL*	BDL*
07/07/2016	84.25	46.39	20.49	37.84	0.40	26.76	23.81	BDL*	BDL*	BDL*	BDL*	BDL*
11/07/2016	71.55	38.71	16.39	28.42	0.55	52.60	28.28	0.56	BDL*	2.64	10.19	BDL*
14/07/2016	88.62	53.27	19.62	32.74	0.71	45.53	29.62	BDL*	BDL*	BDL*	BDL*	BDL*
18/07/2016	65.23	26.64	12.49	19.31	0.31	21.53	25.22	BDL*	BDL*	BDL*	BDL*	BDL*
21/07/2016	94.20	47.45	17.69	27.65	0.47	16.30	30.68	0.75	BDL*	2.2	10.31	BDL*
25/07/2016	82.58	44.30	15.59	31.19	0.57	48.60	21.49	BDL*	BDL*	BDL*	BDL*	BDL*
28/07/2016	76.51	34.55	10.72	36.19	0.52	40.30	22.71	BDL*	BDL*	BDL*	BDL*	BDL*
01/08/2016	70.48	40.37	20.76	42.53	0.54	26.59	26.60	BDL*	BDL*	BDL*	BDL*	BDL*
04/08/2016	85.60	45.56	22.36	35.61	0.32	40.18	22.42	0.58	BDL*	2.22	10.13	BDL*
08/08/2016	79.58	34.13	25.45	27.27	0.19	19.34	24.31	BDL*	BDL*	BDL*	BDL*	BDL*
11/08/2016	93.41	38.71	17.52	36.66	0.42	46.53	28.33	0.63	BDL*	2.46	10.31	BDL*
15/08/2016	82.58	41.62	23.36	29.72	0.52	24.47	20.21	BDL*	BDL*	BDL*	BDL*	BDL*
18/08/2016	78.61	32.46	18.42	34.07	0.56	31.72	23.69	BDL*	BDL*	BDL*	BDL*	BDL*
22/08/2016	67.19	29.68	14.76	23.16	0.39	20.54	27.51	BDL*	BDL*	BDL*	BDL*	BDL*
25/08/2016	59.22	20.39	12.64	20.68	0.18	23.57	25.66	BDL*	BDL*	BDL*	BDL*	BDL*
29/08/2016	91.19	47.45	19.36	28.94	0.47	45.32	30.48	BDL*	BDL*	2.1	10.25	BDL*
01/09/2016	65.44	29.55	12.73	21.43	0.21	29.31	19.58	BDL*	BDL*	BDL*	BDL*	BDL*
05/09/2016	80.57	39.71	21.64	29.16	0.22	20.54	27.50	BDL*	BDL*	BDL*	BDL*	BDL*
08/09/2016	76.80	46.62	17.6	39.22	0.85	36.25	21.38	BDL*	BDL*	BDL*	BDL*	BDL*
12/09/2016	94.62	50.36	20.57	24.42	0.48	23.57	23.74	0.51	BDL*	2.16	10.53	BDL*
15/09/2016	83.61	42.45	18.45	42.65	0.60	27.49	22.71	BDL*	BDL*	BDL*	10	BDL*
19/09/2016	91.58	52.44	16.57	38.45	0.53	51.66	29.37	0.66	BDL*	2.35	10.85	BDL*
22/09/2016	85.57	37.62	19.64	36.35	0.64	33.54	24.63	BDL*	BDL*	BDL*	BDL*	BDL*
26/09/2016	70.21	32.46	23.44	28.92	0.36	47.13	26.75	BDL*	BDL*	BDL*	BDL*	BDL*
29/09/2016	92.29	54.52	14.35	37.20	0.55	53.48	25.67	0.71	BDL*	2.22	10.48	BDL*

BDL*: Below Detection Limit, Minimum Detection Limit, Lead as Pb (µg/m³):0.5, Benzo (a) Pyrene (BaP) - particulate phase only (ng/m³): 0.5, Nickel as Ni (ng/m³):10, Arsenic as As (ng/m³):2, Benzene as C₆H₆ (µg/m³): 2

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RESULTS OF NOISE LEVEL MONITORING

Sampling Date	: As Per Table
Test Method	: IS 11702
Sampling Location	: As Per Table
Sampling By	: Pollucon Laboratories Pvt. Ltd.
Protocol (purpose)	: Environmental Monitoring

Table No. 5 Results of Day Time Noise level monitoring [April 2016 to September 2016]

Noise Level Day Time dB (A)Leq*									
Sr. No.	Name of Location	Zero Point Near KPT		Starting Of Pile Approach		South Corner of Back up Area		North East Corner of Back up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	April	68.4	54.7	69.6	59.1	66.0	51.4	66.1	51.5
2.	May	68.8	51.0	74.5	55.6	72.8	53.1	71.4	56.0
3.	June	70.7	51.0	72.1	54.6	71.8	52.9	70.5	56.1
4.	July	68.8	48.4	74.5	55.6	71.3	49.9	66.8	48.2
5.	August	69.8	51.0	74.5	55.6	70.7	50.6	66.8	48.8
6.	September	68.8	51.0	74.5	55.6	72.8	53.1	71.4	56.0

Table No. 6 Results of Night Time Noise level monitoring [April 2016 to September 2016]

Noise Level Night Time dB (A)Leq*									
Sr. No.	Name of Location	Zero Point Near KPT		Starting Of Pile Approach		South Corner of Back up Area		North East Corner of Back up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	April	55.1	45.3	60.4	49	53.6	39.5	55.2	44.0
2.	May	64.4	47.2	67.9	53.2	69.1	50.1	68.1	45.7
3.	June	61.0	47.7	61.3	50.5	60.2	51.5	58.3	52.6
4.	July	64.4	44.2	67.9	49.0	59.0	48.3	61.1	46.5
5.	August	65.5	47.2	67.9	54.0	68.3	55.3	64.2	52.1
6.	September	64.4	47.2	67.9	53.2	70.1	50.1	68.1	45.7

Ambient Air Quality Standards for Noise Specified by CPCB

Area Code	Category of Area/Zone	Limits in dB (A) Leq [#]	
		Day time	Night time
A	Industrial area	75	70
Notes:			
1. Day time shall mean from 6.00 a.m. to 10.00 p.m.			
2. Night time shall mean from 10.00 p.m. to 06.00 a.m.			
[#] dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing			

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Ambient Air Quality Monitoring & Noise quality Monitoring Locations

Sr. No	Name of Location	GPS Coordinate
1.	Zero Point	N 22°58' 14.67' E 70°05 50.86'
2.	Starting Of Pile Approach	N 22°54' 27.47' E 70°06 15.63'
3.	South West Corner Of Back Up Area	N 22°55' 22.98' E 70°06 7.37'
4.	North East Corner Of Back Up Area	N 22°55' 48.37' E 70°06 28.1'

Figure No. 1 Google earth image of Ambient Air Quality Monitoring & Noise quality monitoring location



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RESULTS OF SEA WATER MONITORING

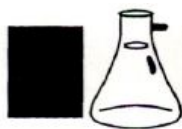
Table No. 7 Results of Sea water [April 2016 to June 2016]

Description of Sample	: Sea Water Samples	Quantity/No. of Samples	: 10 Lit/Two
Sampling By	: Pollucon Laboratories Pvt. Ltd.	Sampling Procedure	: Grab
Packing/Seal	: Sealed	Protocol (purpose)	: Env. Monitoring
Test Method	: IS 3025 & APHA (22 nd Edi.) 2008	Test Parameters	: As per Table

SR. NO.	TEST PARAMETERS	UNIT	Near Mouth of Creek (M1)		Near Jetty (M2)		Near Mouth of Creek (M1)	
			April-16		May-16		June -16	
			25/04/2016		24/05/2016		23/06/2016	
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	pH	--	7.92	8.04	8.01	8.28	8.2	8.31
2	Temperature	°C	29	30	30	29	29	29
3	Total Suspended Solids	mg/L	36	40	38	32	22	20
4	BOD (3 Days @ 27 °C)	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Dissolved Oxygen	mg/L	5.2	4.8	5.6	4.6	6	4.8
6	Salinity	ppt	39.82	40.76	40.18	40.96	41.4	42.6
7	Oil & Grease	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
8	Nitrate as NO ₃	mg/L	0.56	0.68	0.68	0.57	0.8	0.64
9	Nitrite as NO ₂	mg/L	0.077	0.058	0.06	0.054	0.044	0.032
10	Ammonical Nitrogen as NH ₃	mg/L	0.38	0.44	0.315	0.358	0.51	0.44
11	Phosphates as PO ₄	mg/L	0.013	0.015	0.089	0.102	0.11	0.16
12	Total Nitrogen	mg/L	1.017	1.178	1.055	0.982	1.35	1.11
13	Petroleum Hydrocarbon	µg/L	6	BDL*	4	BDL*	2.9	BDL*
14	Total Dissolved Solids	mg/L	48590	50230	47290	48220	45910	46340
15	COD	mg/L	24	28	22	27	14	20
16	Oxidisable Particular Organic Carbon	%	0.47	0.56	0.48	0.464	0.28	0.21
A	Flora and Fauna							
17.1	Primary Productivity	mgC/L/day	2.47	0.563	1.238	0.338	1.23	0.18
B	Phytoplankton							
18.1	Chlorophyll	mg/m ³	3.17	0.828	2.93	0.347	2.67	0.29
18.2	Phaeophytin	mg/m ³	BDL*	1.49	BDL*	1.48	BDL*	1.58
18.3	Cell Count	Unit x 10 ³ /L	256	41	264	82	264	82
18.4	Name of Group Number and name of group species of each group	--	Bacillariophyceae Nitzschia sp. Navicula sp. Rhizosolenia sp. Skeletonema sp. Coscinodiscus sp. Asterionella sp. Gomphonema sp. Melosira sp. Cyanophyceae	Bacillariophyceae Cocconeis sp. Navicula sp. Coscinodiscus sp. Pleurosigma sp. Skeletonema sp. Cyanophyceae Oscillatoria sp. Microcystis sp. Spirulina sp. Green Algae	Bacillariophyceae Cymbella sp. Gyrosigma sp. Synedra sp. Coscinodiscus sp. Navicula sp. Cyclotella sp. Rhizosolenia sp. Cyanophyceae Oscillatoria sp. Lyngbya sp.	Bacillariophyceae Thalassionema sp. Fragillaria sp. Nitzschia sp. Green Algae Chlorella sp. Pandorina sp. -- -- -- --	Bacillariophyceae Nitzschia sp. Navicula sp. Synedra sp. Asterionella sp. Skeletonema sp. Thalassionema sp. Pinnularia sp. Cyanophyceae Oscillatoria sp. Lyngbya sp.	Bacillariophyceae Nitzschia sp. Fragillaria sp. Navicula sp. Gyrosigma sp. Gomphonema sp. Thalassionema sp. -- -- -- --

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			Oscillatoria sp. Green Algae Oedogonium sp. Chlorella sp. Volvox sp.	Chlorella sp. Pandorina sp. Ulothrix sp. --	Green Algae Pediastrum sp. Chlorella sp.	-- -- --	Green Algae Chlorella sp. Pediastrum sp. Volvox sp.	-- -- -- --
C	Zooplanktons							
19.1	Abundance (Population)	no/m ²	300	100	225	125	225	125
19.2	Name of Group Number and name of group species of each group	--	Gastropods Crustaceans Mysids Copepods Snail	Echinoderms Polychaetes Worms -- -- --	Copepods Crustaceans Nematodes Isopods Crabs Molluscans	Krill Polychaetes Worms Daphnia -- -- --	Polychaetes Worms Echinoderms Decapods Mysids Gastropods	Polychaetes Worms Gastropods Molluscans -- --
19.3	Total Biomass	ml/10 0 m ³	132	12.5	110	2.54	89.65	1.58
D	Microbiological Parameters							
20.1	Total Bacterial Count	CFU/ ml	1520	1340	1100	1440	1280	1410
20.2	Total Coliform	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.3	E.coli	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.4	Enterococcus species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.5	Salmonella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.6	Shigella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.7	Vibrio species	/ml	Absent	Absent	Absent	Absent	Absent	Absent

Note: BDL*: Below Detection Limit, Minimum Detection Limit, BOD: 10 mg/L, Oil & Grease: 1.0 mg/L, Phaeophytin: 0.1 mg/m³, Petroleum Hydrocarbon: 10 µg/L

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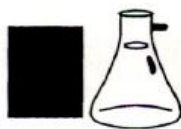


Table No. 8 Results of Sea water [July 2016 to September 2016]

SR. NO.	TEST PARAMETERS	UNIT	Near Jetty (M2)		Near Mouth of Creek (M1)		Near Jetty (M2)	
			July-16		August-16		September-16	
			22/07/2016		19/08/2016		22/09/2016	
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	pH	--	8.14	8.27	8.11	8.26	6.68	7.8
2	Temperature	°C	30	29	30	29	29	30
3	Total Suspended Solids	mg/L	30	34	30	34	30	36
4	BOD (3 Days @ 27 °C)	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Dissolved Oxygen	mg/L	5.4	4.8	5.4	4.4	5.4	4.6
6	Salinity	ppt	41.15	42.02	40.36	41.1	40.8	41.6
7	Oil & Grease	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
8	Nitrate as NO ₃	mg/L	0.631	0.743	0.55	0.7	0.56	0.64
9	Nitrite as NO ₂	mg/L	0.081	0.062	0.092	0.068	0.09	0.06
10	Ammonical Nitrogen as NH ₃	mg/L	0.24	0.34	0.3	0.43	0.32	0.43
11	Phosphates as PO ₄	mg/L	0.077	0.092	0.066	0.047	0.12	0.21
12	Total Nitrogen	mg/L	0.398	0.494	0.458	0.545	0.97	1.13
13	Petroleum Hydrocarbon	µg/L	2.9	BDL*	10.8	BDL*	10	BDL*
14	Total Dissolved Solids	mg/L	48880	49210	47660	48120	49420	50320
15	COD	mg/L	26	34	20	24	20	24
16	Oxidisable Particular Organic Carbon	%	0.72	0.48	0.42	0.5	0.52	0.44
A	Flora and Fauna							
17.1	Primary Productivity	mgC/L /day	1.913	0.27	2.13	0.54	2.47	0.675
B	Phytoplankton							
18.1	Chlorophyll	mg/m ³	2.88	0.58	2.723	0.828	2.77	0.614
18.2	Phaeophytin	mg/m ³	BDL*	1.3	BDL*	1.06	BDL*	1.27
18.3	Cell Count	Unit x 10 ³ /L	190	40	196	35	235	74
18.4	Name of Group Number and name of group species of each group	--	Bacillariophyceae Rhizosolenia sp. Navicula sp. Coscinodiscus sp. Cymbella sp. Skeletonema sp. Fragillaria sp. Skeletonema sp. Cyanophyceae Microcystis sp. Lyngbya sp. Green Algae Chlorella sp. Pandorina sp. Ankistrodesmus sp.	Bacillariophyceae Nitzschia sp. Thalassionema sp. Pinnularia sp. Cyanophyceae Oscillatoria sp. Green Algae Spirogyra sp. Pandorina sp.	Bacillariophyceae Nitzschia sp. Coscinodiscus sp. Surirella sp. Rhizosolenia sp. Pinnularia sp. Pleurosigma sp. Cymbella sp. Cyanophyceae Oscillatoria sp. Microcystis sp. Green Algae Ankistrodesmus sp. Chlorella sp. Pandorina sp. Scenedesmus sp.	Bacillariophyceae Navicula sp. Pinnularia sp. Fragillaria sp. Cocconeis sp. Synedra sp. Tabellaria sp. -- -- -- -- -- -- -- -- --	Bacillariophyceae Nitzschia sp. Navicula sp. Pinnularia sp. Coscinodiscus sp. Gomphonema sp. Rhizosolenia sp. Skeletonema sp. Asterionella sp. Green Algae Ankistrodesmus sp. Pediastrum sp. Hydrodictyon sp. Cyanophyceae Nostoc sp. Spirulina sp.	Bacillariophyceae Fragillaria sp. Thalassiosira sp. Navicula sp. Nitzschia sp. -- -- -- -- -- -- -- -- -- -- -- --
C	Zooplanktons							
19.1	Abundance (Population)	no/m ²	167	33	175	75	275	100
19.2	Name of Group Number and name of group species of each group	--	Polychaetes Worms Echinoderms Decapods Crustaceans Copepods	Gastropods -- -- -- --	Crustaceans Polychaete worms Gastropods Copepods Decapods	Copepods Gastropods -- -- --	Copepods Decapods Gastropods Crustaceans Polychaete worms	Crustaceans Polychaete worms -- -- --

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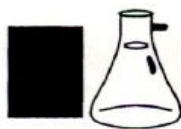
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19.3	Total Biomass	ml/10 0 m ³	114	12.5	132	25.2	145	56.5
D	Microbiological Parameters							
20.1	Total Bacterial Count	CFU/ml	1440	1360	1490	1310	1370	1110
20.2	Total Coliform	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.3	E.coli	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.4	Enterococcus species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.5	Salmonella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.6	Shigella species	/ml	Absent	Absent	Absent	Absent	Absent	Absent
20.7	Vibrio species	/ml	Absent	Absent	Absent	Absent	Absent	Absent

Note: BDL*: Below Detection Limit, Minimum Detection Limit, BOD: 10 mg/L, Oil & Grease: 1.0 mg/L, Phaeophytin: 0.1 mg/m³, Petroleum Hydrocarbon: 10 µg/L

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RESULTS OF SEA SEDIMENT MONITORING

Table No. 9 Results of Sea Sediment [April 2016 to September 2016]

Description of Sample	: Sea Sediment Sample	Quantity/No. of Samples	: 10 Kg/Two
Sampling By	: Pollucon Laboratories Pvt. Ltd.	Sampling Procedure	: Grab
Packing/Seal	: Sealed	Protocol (purpose)	: QC
Test Method	: IS/ASTM/CPCB Guidelines	Test Parameters	: As per Table

SR. NO.	TEST PARAMETERS	UNIT	Near Mouth of Creek (M1)	Near Jetty (M2)	Near Mouth of Creek (M1)	Near Jetty (M2)	Near Mouth of Creek (M1)	Near Jetty (M2)
			April-16	May-16	June-16	July-16	August-16	Sep-16
			25/04/2016	24/05/2016	23/06/2016	22/07/2016	19/08/2016	22/09/2016
1	Organic Matter	%	0.65	0.75	0.54	0.63	0.60	0.55
2	Phosphorus as P	mg/kg	357	399	308	382	410	343
3	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy
4	Petroleum Hydrocarbon	mg/kg	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Heavy Metals							
5.1	Aluminum as Al	%	6.06	6.8	6.4	6.52	5.88	6.28
5.2	Total Chromium as Cr ⁺³	mg/kg	127	136	158	128	120	129
5.3	Manganese as Mn	mg/kg	768	862	740	746	596	768
5.4	Iron as Fe	%	2.7	3.1	2.9	2.84	2.56	2.7
5.5	Nickel as Ni	mg/kg	42.43	40	28	41.02	44.52	42.99
5.6	Copper as Cu	mg/kg	98	108	116	106	98	99
5.7	Zinc as Zn	mg/kg	146	160	212	152	152	145
5.8	Lead as Pb	mg/kg	2.09	2.44	1.9	2.12	2.28	2.02
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 Crabs	Decapods Isopods Mysids	Decapods Isopods Mysids Polychaete Worms	Isopods Mysids Decapods	Bivalves Echinoderms Isopods	Polychaete worms Echinoderms Isopods
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Copepods Hydrozoa Nematodes	Hydrozoa Copepods	--	Hydrozoa Foraminiferans Copepods	Nematodes Copepods	Nematodes Ostracodes
6.3	Population	no/m2	377	337	288	377	433	440

Note: BDL*: Below Detection Limit, Minimum Detection Limit, Mercury as Hg: 0.00025 mg/L, Petroleum Hydrocarbon: 5 mg/kg

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)

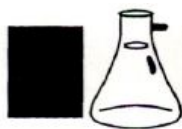
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Sea Water & Sea Sediment Locations

Sr. No	Name of Location	GPS Coordinate
1.	NEAR MOUTH OF CREEK(M1)	N 22°54'10.58" E 70° 8'34.86"
2.	NEAR JETTY(M2)	N 22°53.60" E 70° 6.47"

Figure No. 2 Google earth image of sea water and sediment location**H. T. Shah**
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RESULTS OF DRINKING WATER ANALYSIS**Standard Methods & Permissible limit for Drinking water**

SR. NO.	PARAMETERS	UNIT	DESIRABLE LIMIT AS PER IS:10500:2012	TEST METHOD
Chemical Parameters				
1	Odour	--	Agreeable	IS3025(P-5)83Re.02
2	Colour	Hazen	Max 5	IS3025(P-4)83Re.02
3	Taste	--	Agreeable	IS3025(P-8)84Re.02
4	pH Value	--	6.5 to 8.5	IS3025(P-11)83Re.02
5	Turbidity	NTU	Max 1	APHA 2130-B
6	Total Dissolved Solids	mg/L	Max 500	IS3025(P16)84Re.02
7	Total Hardness as CaCO ₃	mg/L	Max 200	IS3025(P-21) 84EDTARe.02
8	Alkalinity	mg/L	Max 200	IS 3025(P-23)
9	Residual Free Chlorine	mg/L	Min 0.2	APHA(22 nd Edi) 4500 Cl
10	Chloride as Cl	mg/L	Max 250	IS3025(P-32) 88Re.99Argentometric method
11	Calcium as Ca	mg/L	Max 75	IS3025(P40)91Re.03EDTA
12	Magnesium as Mg	mg/L	Max 30	IS3025(P46)94Re.99EDTA
13	Oil & Grease	mg/L	Max 0.5	IS3025(P-39)
14	Phenolic compounds as C ₆ H ₅ OH	mg/L	Max 0.001	IS3025(P43)92Re.03
15	Hexavalent Chromium as Cr ⁺⁶	mg/L	Max 0.05	APHA (22 nd Edi) 3500 Cr B
16	Cadmium as Cd	mg/L	Max 0.003	AAS-APHA(22 nd Edi) 3111 B
17	Copper as Cu	mg/L	Max 0.05	AAS-APHA(22 nd Edi) 3111 B
18	Zinc as Zn	mg/L	Max 5	AAS-APHA(22 nd Edi) 3111 B
19	Iron as Fe	mg/L	Max 0.3	AAS-APHA(22 nd Edi) 3111 B
20	Lead as Pb	mg/L	Max 0.01	AAS-APHA(22 nd Edi) 3111 B
21	Mercury as Hg	mg/L	Max 0.001	AAS-APHA 3112 B
22	Selenium as Se	mg/L	Max 0.01	AAS-APHA 3114 B
23	Aluminum as Al	mg/L	Max 0.03	AAS-APHA(22 nd Edi) 3111 B
24	Manganese as Mn	mg/L	Max 0.1	AAS-APHA(22 nd Edi) 3111 B
25	Arsenic as As	mg/L	Max 0.01	AAS-APHA(22 nd Edi) 3114 B
26	Sulphate as SO ₄	mg/L	Max 200	IS 3025(P-24)
27	Cyanide as CN	mg/L	Max 0.05	APHA(22 nd Edi)4500CN E
28	Boron as B	mg/L	Max 0.5	APHA(22 nd Edi)4500 B
29	Fluoride as F	mg/L	Max 1.0	APHA(22 nd Edi) 4500 F D SPANDS
30	Nitrate Nitrogen as NO ₃	mg/L	Max 45	IS3025(P34)88
31	Anionic Detergents as MBAS	mg/L	Max 0.2	14542/Methylene Blue extraction method
32	Pesticides	mg/L	Absent	GCMS
33	Coliform	/100 ml	Absent	APHA (22 nd Edi. Method) 9221-D
34	E-Coli	/100 ml	Absent	IS: 1622:1981 Edi. 2.4 (2003-05)

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Table No.10 Results of Drinking Water [April 2016 to September 2016]**Results of Drinking Water [Full Parameter in September-2016]**

SR. NO.	TEST PARAMETERS	UNIT	September-2016	
			27/09/2016	
			Narmada Water Pump House	Canteen RO Water
Chemical Parameters				
1	Odour	--	Agreeable	Agreeable
2	Colour	Hazen	< 1.0	< 1.0
3	Taste	--	Agreeable	Agreeable
4	pH Value	--	8.17	7.71
5	Turbidity	NTU	0.44	0.03
6	Total Dissolved Solids	mg/L	260	38
7	Total Hardness as CaCO3	mg/L	102	8
8	Alkalinity	mg/L	51	11
9	Residual Free Chlorine	mg/L	< 0.1	< 0.1
10	Chloride as Cl	mg/L	86.99	11.99
11	Calcium as Ca	mg/L	21.9	1.92
12	Magnesium as Mg	mg/L	11.28	1.15
13	Oil & Grease	mg/L	BDL *	BDL *
14	Phenolic compounds as C6H5OH	mg/L	BDL *	BDL *
15	Hexavalent Chromium as Cr+6	mg/L	BDL *	BDL *
16	Cadmium as Cd	mg/L	BDL *	BDL *
17	Copper as Cu	mg/L	BDL *	BDL *
18	Zinc as Zn	mg/L	0.022	BDL *
19	Iron as Fe	mg/L	0.018	0.013
20	Lead as Pb	mg/L	BDL *	BDL *
21	Mercury as Hg	mg/L	BDL *	BDL *
22	Selenium as Se	mg/L	BDL *	BDL *
23	Aluminum as Al	mg/L	BDL *	BDL *
24	Manganese as Mn	mg/L	BDL *	BDL *
25	Arsenic as As	mg/L	BDL *	BDL *
26	Sulphate as SO4	mg/L	17.36	6.76
27	Cyanide as CN	mg/L	BDL *	BDL *
28	Boron as B	mg/L	BDL *	BDL *
29	Fluoride as F	mg/L	BDL *	BDL *
30	Nitrate Nitrogen as NO3	mg/L	1.22	0.67
31	Anionic Detergents as MBAS	mg/L	BDL *	BDL *
32	Pesticides	mg/L	BDL *	BDL *
Microbiological Parameters				
33	Coliform	/100 ml	Absent	Absent
34	E-Coli	/100 ml	Absent	Absent

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Results of Drinking Water [Essential parameter in April 2016 – August 2016]

SR. NO.	TEST PARAMETERS	UNIT	April-16		May-16		June-16		August-16	
			25/04/2016		24/05/2016		23/06/2016		19/08/2016	
			Narmada Water Pump House	Canteen RO Water	Narmada Water Pump House	Canteen RO Water	Narmada Water Pump House	Canteen RO Water	Narmada Water Pump House	Canteen RO Water
1	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
2	Colour	Hazen	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	pH	--	7.53	7.54	7.68	7.46	7.46	7.22	8.31	7.44
5	Turbidity	NTU	0.32	0.03	0.29	0.05	0.26	0.042	5.59	1.5
6	Total Dissolved Solids	mg/L	432	54	501	70	558	104	156	66
7	Total Hardness as CaCO ₃	mg/L	180	14	200	18	19.5	8	100	35
8	Residual Free Chlorine	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
9	Chloride as Cl	mg/L	170	22.99	183	31.99	101	57.98	28.99	13.99
10	Fluoride as F	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	0.2	0.1
11	Iron as Fe	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	0.11	0.01
12	Coliform	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
13	E-Coli	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)

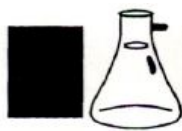
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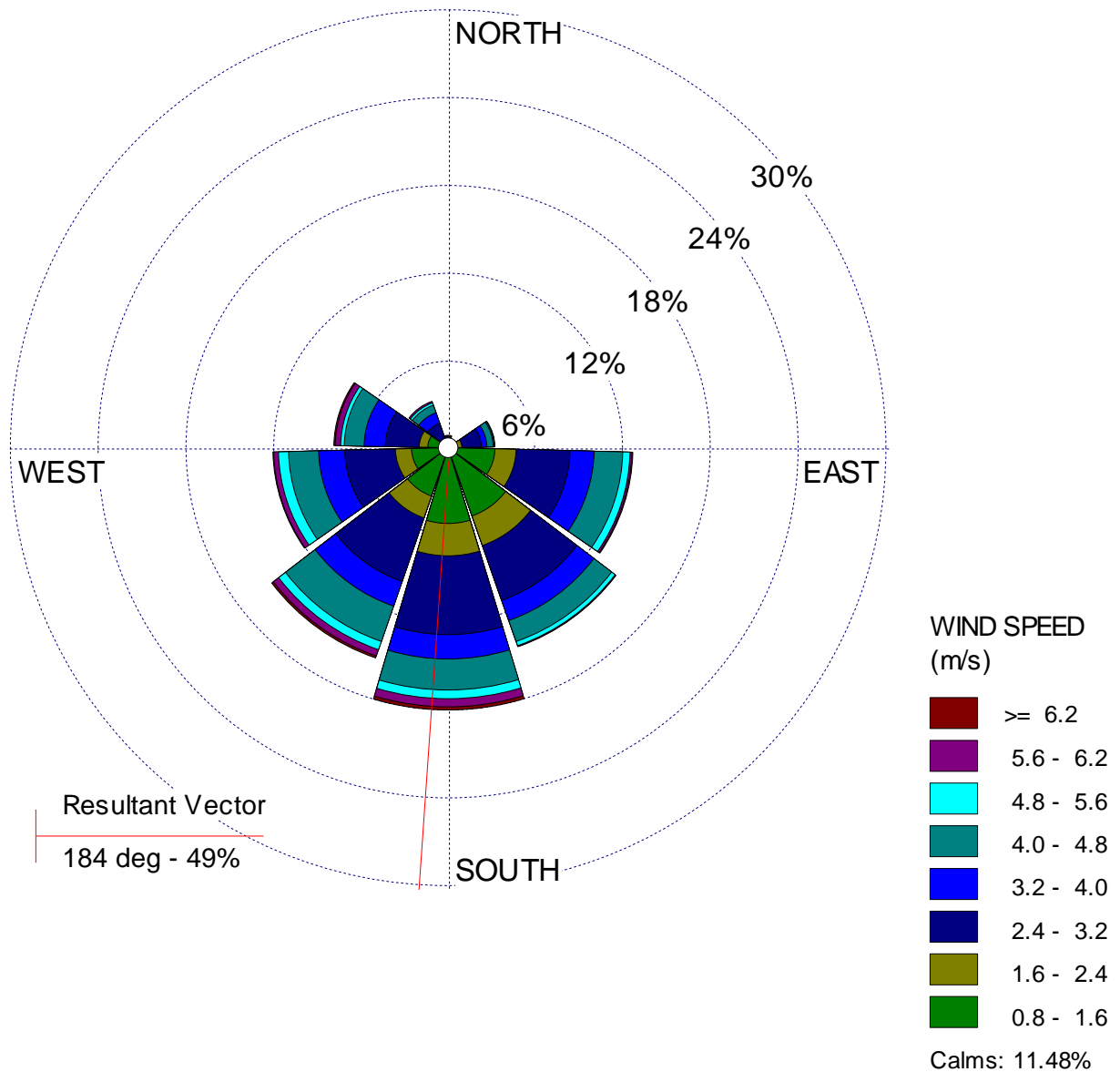
Table No.11 Results of Sewage Water [April 2016 to September 2016]**RESULTS OF SEWAGE WATER ANALYSIS**

DATE OF SAMPLING			08/07/2016		TEST METHOD
SR. NO.	PARAMETERS	UNIT	RESULTS		
			STP Equalization Tank	STP Outlet	
1	Total Suspended Solids	mg/L	294	27	IS3025(P17)84Re.02
2	BOD (3 Days @ 27 °C)	mg/L	70	36	IS 3025 (P44)1993Re.03Edition2.1
3	Residual Chlorine	mg/L	< 0.1	1.0	APHA(22ndEdi)4500 Cl

H. T. Shah
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Lab Manager (Q)

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Figure No.3 Wind Rose Diagram [April 2016 - September 2016]**H. T. Shah**
Lab Manager**Dr. Arun Bajpai**
Lab Manager (Q)



Adani Kandla Bulk Terminal Pvt. Ltd.

From : April 2016
To : September 2016

Annexure – 5

Annexure – 5: Details of CSR activities carried out by Adani Foundation

S. no.	Village	CSR activity done	Expenses (INR in Lakh)
1	Rural Infrastructure Development		
	Wandi	Community hall	16.17
	Tuna	boundary wall around fodder shed	8.76
	Rampar	Under Ground Tank-100 KL	8.20
	Veera fisherman	construction of water tank-3 Nos (total :15KL capacity)	1.83
2	Health Projects		
	Mobile Van	Rampar, Tuna, Wandi	0.80
	Senior Citizen	Rampar, Tuna, Wandi	0.68
	Medical Support	Rampar, Wandi	0.08
3	Sustainable Livelihood Development Projects		
	Fodder Support	Rampar	8.67
		Tuna	13.51
4	Education Projects		
	Furniture support to Primary School	Kandla	1.10
Total			59.80

