

26th May, 2016

The Director (S),
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. A. Mehrotra

Dear Sir,

Sub : Half yearly Compliance report of Environment and CRZ clearance for the period from October 2015 to March 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.)

Adani Kandla Bulk Terminal Pvt Ltd
Adani House
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Gujarat, India

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Fax +91 79 2555 6490
info@adani.com
www.adani.com

Handwritten signature: *Parag Srivastava*
Stamp: *कायालय 3 OF 5/16*
Stamp: *पर्यावरण एवं वन मंत्रालय (केन्द्रीय)*
Stamp: *Ministry of Environment & Forests (C)*
Stamp: *पश्चिमी कार्यालय (पश्चिम क्षेत्र)*
Stamp: *Regional Office - Western Region*
Stamp: *बोपाल 26.05.2016*



5. The Regional Officer, Regional Office, GPCB - Katira Complex-1,
Mangalam Char Rasta, Sanskar Nagar, Bhuj (Kutch), Gujarat - 370 001
6. The Chief Engineer, Administrative Building, Kandla Port Trust,
Gandhidham

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:

October – 2015 to March – 2015



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 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.

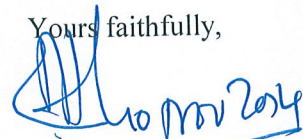
Sir,

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 : October 2015
To : March 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 : October 2015
To : March 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. <p>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.</p>
(ii)	Scientific studies shall be carried out by some expert and reported 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. <p>M/s. Gujarat Institute of Desert Ecology, Bhuj has conducted scientific studies for preservation of mangroves.</p> <p>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.</p>
(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. <p>Based on the study, M/s. GUIDE has suggested to carry out mangrove plantation in 500 ha. area.</p> <p>AKBTPL has completed Mangrove plantation in 250 ha area at Sat Saida bet. Balance 250 ha. Mangrove plantation shall 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>
(iv)	The dredged material shall be reused for low level rising whenever possible and excess shall be dumped into sea at the designated dumping areas identified	<ul style="list-style-type: none"> Complied. <p>Capital dredging was done by KPT and the dredge material was disposed at a location identified by M/s. CWPRS,</p>

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
	based on mathematical model studies.	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.
(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 244.45 Lac. Please refer Annexure – 1 for further details.
6	General Condition	
(i)	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.	<ul style="list-style-type: none"> Complied. Construction of the project completed in March, 2015.



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : October 2015
To : March 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 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 being submitted to MoEF regularly. Last compliance report was submitted by AKBTPL vide letter no. AKBTPL-out/2015-16/01 dated on 01.12.15
(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.	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 AKBTPL 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 date of financial closure and final approval	<ul style="list-style-type: none"> Complied. KPT has informed about the Financial closure vide their letter no.



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : October 2015
To : March 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
	of the project by the concerned authorities and date of start of land development work.	EG/WK/4604(EC)/562 dated 26 th December, 2012
(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 AKBTPL
(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 AKBTPL
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 with
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. All applicable statutory clearances have been obtained 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 Env. Clearance and copies of clearances letters	• 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 further change



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : October 2015
To : March 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
	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.	
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
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 on our website regularly on our website.
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.
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.	<ul style="list-style-type: none"> Complied. Compliance report for period Apr'15 to Sep'15 was submitted to respective authorities vide our letter dated 01.12.15. The said report is also uploaded on our website.
14	The environmental statement for each	<ul style="list-style-type: none"> Complied



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : October 2015
To : March 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
	financial year ending 31 st March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	<p>Environment Statement for FY 2014 – 15 has already been submitted to GPCB vide letter No. AKBTPL/ENVSTATEMENT/2014-15/01 (Dt. 18.09.2015).</p> <p>Copy of the same was attached in the last six monthly compliance report (dated 01.12.15) sent to MoEF as well as uploaded on our website.</p>



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 2016

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

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. <p>All activities are in line with the CRZ Notification 1991 and its subsequent amendment.</p>
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 <p>Construction of the project is completed in March, 2015.</p> <p>All construction activities are carried out as per the environmental and CRZ clearance granted vide MoEF&CC letter dated 01.11.2011.</p> <p>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.</p>
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. <p>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</p>
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. <p>No rivers are present at the project site. All culverts are clear for free flow of water.</p>
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. <p>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>



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : October 2015
To : March 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.	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
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. All activities are in line with the CRZ Notification 1991 and its subsequent amendment.
7	No ground water shall be tapped for any purpose during the proposed expansion/modernization activities.	<ul style="list-style-type: none">Complied. Ground water is not being used. Source of water is Gujarat Water Infrastructure Limited.
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. All the necessary permissions have been obtained and construction completed in March, 2015.
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. No effluent is generated at the project site. Sewage generated is collected by an external agency for its ultimate disposal at a site identified by Gandhidham Municipality.
10	All the recommendations and suggestions given by the NIOT in their Comprehensive Environment Impact Assessment report for conservation /protection and betterment of environment shall be implemented strictly by the KPT.	<ul style="list-style-type: none">Complied. EMP was updated by AKBTPPL and submitted to KPT. KPT has submitted the same vide letter dated 03.12.2013 to 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	<ul style="list-style-type: none">Complied. Construction activities have been completed in March, 2015 based on the NIOT recommendation.



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 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
	supervision and guidelines of the NIOT.	
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.
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. 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	<ul style="list-style-type: none">Agreed.



Adani Kandla Bulk Terminal Pvt. Ltd.

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Sr. No	Condition	Compliance
	environmental impacts of proposed activities.	
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">Being complied with. 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. Approx. 7.15 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
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">Being complied with. As a part of social responsibility, various activities related to socio-economic upliftment of surrounding villages are being carried out by Adani Foundation. Please refer Annexure – 3 for further details.
19	A separate budget shall be earmarked for environmental management and socio-economic activities and details thereof shall be furnished to this Department as well as the MoEF, Gol. The details with respect to the expenditure from this budget head shall also be furnished.	<ul style="list-style-type: none">Complied. 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. Approximately INR 244.45 Lac is spent



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 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
		for various activities mentioned here. Please refer to Annexure – 1 for details related to environmental expenditures and Annexure – 3 for expenditures related to CSR activities.
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.
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">Regular environmental monitoring is being carried out and results of the same are already enclosed in Annexure – 2.
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 have to be furnished by the KPT on a regular basis to this Department/MoEF, GOI.	<ul style="list-style-type: none">Being complied. Last compliance report was submitted by AKBTPL vide letter no. AKBTPL-Out/2015-16/01 dated on 01.12.15.
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	<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.



Adani Kandla Bulk Terminal Pvt. Ltd.

**From : October 2015
To : March 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
	CRZ boundary and inland if any or mangroves area shall be used for the proposed development.	
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. <p>Details already submitted in half yearly compliance report to MoEF & CC vide letter dated 11.05.2015 and there is no further change.</p>
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 <p>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.</p>
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 will be carried out once the required land is allocated to AKBTPL by KPT.
	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 well as the MoEF, Gol. The details with respect to the expenditure from this budget head shall also be furnished.	<ul style="list-style-type: none"> Complied. <p>Main constituents of the environmental management plan are environmental monitoring; greenbelt development; mangrove plantation; disposal of wastes; etc. Approximately INR 244.45 Lac is spent for various activities mentioned here.</p> <p>Please refer to Annexure – 1 for details related to environmental expenditures and Annexure – 3 for expenditures related to CSR activities.</p>
29	Any other condition that may be stipulated by this Department from time	<ul style="list-style-type: none"> Agreed.



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 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
	to time for environment protection/management purpose shall also have to be complied with by the KPT.	



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 2016

Annexure – 1

	Adani Kandla Bulk Terminal Pvt. Ltd.	From : October 2015 To : March 2016
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Annexure 1: Expenditure Details on Environmental Safeguards

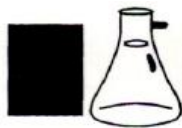
Sr. no.	Activity	Cost incurred (INR in Lakh)
1	Environmental Monitoring	16.00
2	Greenbelt development [Area: 7.15 Hectare]	60.59
3	Mangrove plantation	72
4	Disposal of wastes	10.86
5	Fire fighting Equipment	85.00
Total		244.45



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 2016

Annexure – 2

**POLLUCON****LABORATORIES PVT. LTD.**

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

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

“ENVIRONMENTAL MONITORING REPORT”

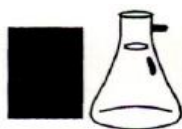
For

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

OCTOBER 2015 TO MARCH 2016

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)

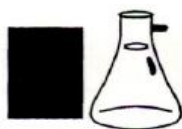
**POLLUCON****LABORATORIES PVT. LTD.**Environmental Auditors, Consultants & Analysts.
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EQUIPMENTS USED FOR SAMPLING AND ANALYSIS

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)

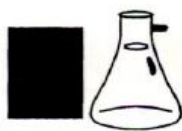
**National Ambient Air Quality Standards Dated 16th Nov.2009, CPCB New Delhi.**

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)

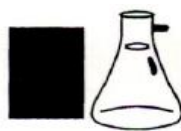
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Table No. 1 Ambient Air Quality Monitoring Results for Zero Point

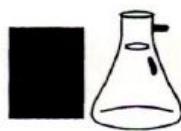
Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	Lead (µg/m ³)	BaP (ng/m ³)	As (ng/m ³)	Ni (ng/m ³)	CO (mg/m ³)	C ₆ H ₆ (µg/m ³)	NH ₃ (µg/m ³)	SO ₂ (µg/m ³)	NOx (µg/m ³)	O ₃ (µg/m ³)
01/10/2015	78.49	38.37	BDL*	BDL*	BDL*	BDL*	0.54	BDL*	48.36	18.51	30.44	29.69
05/10/2015	66.81	35.41	BDL*	BDL*	BDL*	BDL*	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

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

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

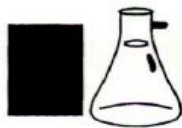
Date of Sampling	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	Lead ($\mu\text{g}/\text{m}^3$)	BaP (ng/m^3)	As (ng/m^3)	Ni (ng/m^3)	CO (mg/m^3)	C ₆ H ₆ ($\mu\text{g}/\text{m}^3$)	NH ₃ ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NOx ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)
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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Cleaner Production / Waste Minimization Facilitator**Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986**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

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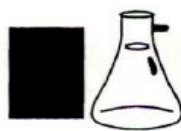
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H. T. Shah
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Dr. Arun Bajpai
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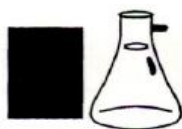
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Table No. 4 Ambient Air Quality Monitoring Results for North East Corner of Back up Area

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)



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 [October 2015 to March 2016]

Noise Level Day Time dB (A)Leq*									
Sr. No.	Name of Location	Zero Point Near KPT		Near Security Cabin Entry of Back up Area		South West Corner Of Back Up Area		North East Corner Of Back Up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	October	66.5	44.2	66.5	48.3	67.1	48.2	66.2	48.6
2.	November	68.5	48.7	66.8	53.9	66.0	57.0	67.3	51.9
3.	December	69.0	49.0	70.0	52.0	67.8	51.0	66.8	48.6
4.	January	67.8	41.0	70.1	40.0	70.0	45.0	66.8	49.0
5.	February	66.9	39.7	70.6	48.9	71.3	45.9	66.8	48.8
6.	March	65.4	38.6	68.3	43.2	69.4	43.9	63.2	47.6

Table No. 6 Results of Night Time Noise level monitoring [October 2015 to March 2016]

Noise Level Night Time dB (A)Leq*									
Sr. No.	Name of Location	Zero Point Near KPT		Near Security Cabin Entry of Back up Area		South West Corner Of Back Up Area		North East Corner Of Back Up Area	
	Month	Max	Min	Max	Min	Max	Min	Max	Min
1.	October	67.8	57.4	61.3	44.6	59.3	45.2	60.3	45.6
2.	November	60.0	49.5	64.0	55.2	66.2	55.3	67.8	54.0
3.	December	66.2	45.5	62.5	51.8	67.7	52.2	65.0	48.9
4.	January	67.0	45.5	65.0	56.0	67.7	45.0	64.0	44.0
5.	February	52.7	45.7	52.5	46.7	56.1	44.2	52.3	42.1
6.	March	65.4	43.6	63.8	56.4	65.2	53.2	64.2	46.0

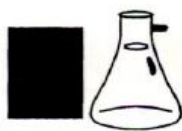
Ambient Air Quality Standards for Noise Specified by CPCB

Area Code	Category of Area/Zone	Limits in dB (A) Leq*	
		Day time	Night time
A	Industrial area	75	70

Notes:

- Day time shall mean from 6.00 a.m. to 10.00 p.m.
- Night time shall mean from 10.00 p.m. to 06.00 a.m.

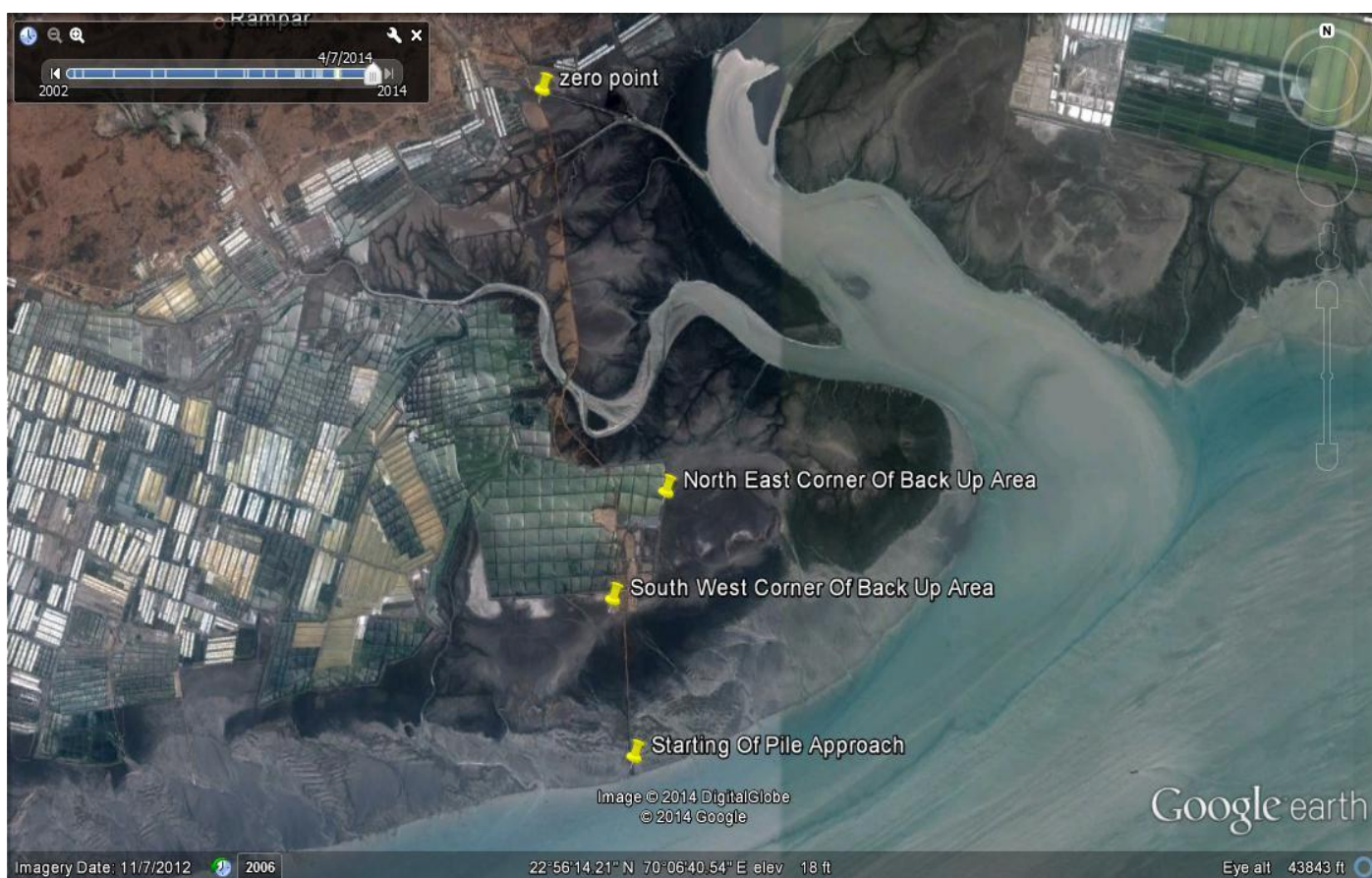
#dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing

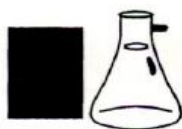
**POLLUCON****LABORATORIES PVT. LTD.**Environmental Auditors, Consultants & Analysts.
Cleaner Production / Waste Minimization Facilitator

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

Ambient Air Quality Monitoring & Noise quality Monitoring Locations

Sr. No	Name of Location	GPS Coordinate
1.	Zero Point	N 22°58.392' E 70°05.596'
2.	Starting Of Pile Approach	N 22°55.293' E 70°06.232'
3.	South West Corner Of Back Up Area	N 22°55.915' E 70°06.465'
4.	North East Corner Of Back Up Area	N 22°55.307' E 70°06.114'

Figure No. 1 Google earth image of Ambient Air Quality Monitoring & Noise quality monitoring location**H. T. Shah**
Lab Manager**Dr. Arun Bajpai**
Lab Manager (Q)



RESULTS OF SEA WATER MONITORING

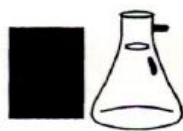
Table No. 7 Results of Sea water [October 2015 to March 2016]

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 (22nd Edi.) 2008	Test Parameters	: As per Table

SR. NO.	TEST PARAMETERS	UNIT	Near Jetty (M2)		Near Jetty (M2)		Near Jetty (M2)	
			Oct-15		Nov-15		Dec-15	
			08/10/2015		19/11/2015		18/12/2015	
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	pH	--	8.18	8.3	7.05	8.77	7.26	8.12
2	Temperature	°C	29	30	30	30	29	30
3	Total Suspended Solids	mg/L	36	28	38	42	32	46
4	BOD (3 Days @ 27 °C)	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Dissolved Oxygen	mg/L	5.8	4.8	5.4	4.6	5.6	4.4
6	Salinity	ppt	39.71	40.17	40.62	41.07	39.96	40.82
7	Oil & Grease	mg/L	0.4	BDL*	0.2	BDL*	0.6	BDL*
8	Nitrate as NO ₃	mg/L	0.59	0.69	0.57	0.72	0.53	0.7
9	Nitrite as NO ₂	mg/L	0.092	0.064	0.071	0.053	0.088	0.068
10	Ammonical Nitrogen as NH ₃	mg/L	0.258	0.37	0.4	0.46	0.26	0.39
11	Phosphates as PO ₄	mg/L	0.145	0.16	0.14	0.2	0.15	0.16
12	Total Nitrogen	mg/L	0.94	1.124	1.041	1.234	0.87	1.15
13	Petroleum Hydrocarbon	µg/L	12	BDL*	4	BDL*	8	BDL*
14	Total Dissolved Solids	mg/L	46988	47220	47200	47990	47010	47520
15	COD	mg/L	30.9	41	20.4	30.6	50.4	30.9
16	Oxidisable Particular Organic Carbon	%	0.55	0.33	0.62	0.38	0.5	0.4
A	Flora and Fauna							
17.1	Primary Productivity	mgC/L/day	1.463	0.113	1.575	0.563	2.58	0.338
B	Phytoplankton							
18.1	Chlorophyll	mg/m ³	1.522	0.774	1.81	0.29	2.77	0.427
18.2	Phaeophytin	mg/m ³	0.571	1.263	0.072	1.55	BDL*	1.591
18.3	Cell Count	Unit x 10 ³ /L	208	75	198	68	226	65

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)



SR. NO.	TEST PARAMETERS	UNIT	Near Jetty (M2)		Near Jetty (M2)		Near Jetty (M2)	
			Oct-15		Nov-15		Dec-15	
			08/10/2015		19/11/2015		18/12/2015	
			SURFACE	SURFACE	SURFACE	BOTTOM	SURFACE	BOTTOM
18.4	Name of Group Number and name of group species of each group	--	Bacillariophyceae Nitzschia sp. Coscinodiscus sp. Rhizosolenia sp. Cyclotella sp. Asterionella sp. Cymbella sp. Green Algae Chlorella sp. Volvox sp. Scenedesmus sp. Cyanophyceae Nostoc sp. Oscillatoria sp.	Bacillariophyceae Navicula sp. Fragillaria sp. Pleurosigma sp. Biddulphia sp. Green Algae Chlorella sp. Pandorina sp. Cyanophyceae Oscillatoria sp. Spirulina sp.	Diatoms Nitzschia sp. Thalassiosira sp. Nitzschia sp. Synedra Sp. Coscinodiscus sp. Cyanophyceae Nostoc sp. Desmids Closterium sp.	Bacillariophyceae Achnanthes sp. Cocconeis sp. Gomphonema sp. Pinnularia sp. Coscinodiscus sp. Skeletonema sp. Green Algae Chlorella sp. Hydrodictyon sp. Pediastrum sp. Cyanophyceae Spirulina sp. Oscillatoria sp.	Bacillariophyceae Nitzschia sp. Synedra sp. Fragillaria sp. Coscinodiscus sp. Cocconeis sp. Thalassionema sp. Gyrosigma sp. Pinnularia sp. Cyanophyceae Oscillatoria sp. Anabaena sp. Green Algae Ankistrodesmus sp. Chlorella sp. Pandorina sp. Scenedesmus sp.	Bacillariophyceae Synedra sp. Fragillaria sp. Tabellaria sp. Pinnularia sp. Biddulphia sp. Cyanophyceae Oscillatoria sp. Anabaena sp. Green Algae Chlorella sp. Ulothrix sp. Ankistrodesmus sp.
C	Zooplanktons							
19.1	Abundance (Population)	no/m ²	280	60	250	75	260	80
19.2	Name of Group Number and name of group species of each group	--	Copepods Hydrozoa Molluscs Nematodes Isopods Daphnia	Decapods Crustaceans Krill Cyclops	Barnacles Crustaceans Gastropods Chaetognathes Polychaete worms	Copepods Ostracods Gastropods	Copepods Isopods Gastropods Crustaceans	Gastropods Cyclops Ostracods
19.3	Total Biomass	ml/100 m ³	89	12	112	7.8	102	7.4
D	Microbiological Parameters							
20.1	Total Bacterial Count	CFU/ml	1340	1160	1220	1050	1450	1200
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

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)

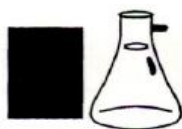
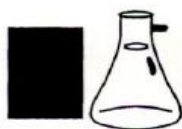


Table No. 8 Results of Sea water [October 2015 to March 2016]

SR. NO.	TEST PARAMETERS	UNIT	Near Jetty (M2)		Near Mouth of Creek (M1)		Near Jetty (M2)	
			Jan-16		Feb-16		Mar-16	
			14/01/2016		11/02/2016		28/03/2016	
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	pH	--	7.26	8.12	7.87	8.5	8.02	8.33
2	Temperature	°C	29	30	29	30	29	30
3	Total Suspended Solids	mg/L	32	46	30	34	32	26
4	BOD (3 Days @ 27 °C)	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
5	Dissolved Oxygen	mg/L	5.6	4.4	5.2	4.6	5.6	4.4
6	Salinity	ppt	39.96	40.82	41.45	42.07	40.82	41.08
7	Oil & Grease	mg/L	0.6	BDL*	BDL*	BDL*	1	BDL*
8	Nitrate as NO ₃	mg/L	0.53	0.7	0.53	0.68	0.65	0.82
9	Nitrite as NO ₂	mg/L	0.088	0.068	0.084	0.056	0.084	0.064
10	Ammonical Nitrogen as NH ₃	mg/L	0.26	0.39	0.38	0.44	0.23	0.32
11	Phosphates as PO ₄	mg/L	0.15	0.16	0.16	0.21	0.087	0.013
12	Total Nitrogen	mg/L	0.87	1.15	0.994	1.176	0.964	1.204
13	Petroleum Hydrocarbon	µg/L	8	BDL*	3	BDL*	6	BDL*
14	Total Dissolved Solids	mg/L	47010	47520	48280	49860	48550	49100
15	COD	mg/L	50.4	30.9	20.83	31.24	24	33
16	Oxidisable Particular Organic Carbon	%	0.5	0.4	0.46	0.56	0.6	0.46
A	Flora and Fauna							
17.1	Primary Productivity	mgC/L/day	2.58	0.338	2.36	0.675	1.68	0.78
B	Phytoplankton							
18.1	Chlorophyll	mg/m ³	2.77	0.427	3.31	0.053	2.83	0.74
18.2	Phaeophytin	mg/m ³	BDL*	1.591	ND	2.53	BDL*	1.57
18.3	Cell Count	Unit x 10 ³ /L	226	65	275	79	196	39

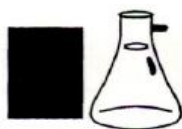


SR. NO.	TEST PARAMETERS	UNIT	Near Jetty (M2)		Near Mouth of Creek (M1)		Near Jetty (M2)	
			Jan-16		Feb-16		Mar-16	
			14/01/2016		11/02/2016		28/03/2016	
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
18.4	Name of Group Number and name of group species of each group	--	Bacillariophyceae Nitzschia sp. Skeletonema sp. Rhizosolenia sp. Asterionella sp. Pleurosigma sp. Synedra sp. Navicula sp. Cyanophyceae Oscillatoria sp. Spirulina sp. Nostoc sp. Green Algae Oedogonium sp. Spirogyra sp. Pandorina sp. Scenedesmus sp.	Bacillariophyceae Fragillaria sp. Nitzschia sp. Gyrosigma sp. Coscinodiscus sp. Navicula sp. Thallasionema sp. Cyanophyceae Oscillatoria sp. Green Algae Chlorella sp. Pandorina sp. Ulothrix sp.	Bacillariophyceae Nitzschia sp. Synedra sp. Navicula sp. Skeletonema sp. Rhizosolenia sp. Asterionella sp. Pleurosigma sp. Cyanophyceae Oscillatoria sp. Spirulina sp. Nostoc sp. Green Algae Oedogonium sp. Spirogyra sp. Pandorina sp. Chlorella sp.	Bacillariophyceae Fragillaria sp. Coscinodiscus sp. Navicula sp. Thallasionema sp. Nitzschia sp. Gyrosigma sp. Cyanophyceae Oscillatoria sp. Green Algae Chlorella sp. Pandorina sp. Ulothrix sp. Oscillatoria sp.	Bacillariophyceae Asterionella sp. Biddulphia sp. Coscinodiscus sp. Fragillaria sp. Gomphonema sp. Navicula sp. Rhizosolenia sp. Skeletonema sp. Cyanophyceae Oscillatoria sp. Lyngbya sp. Microcystis sp. Green Algae Ankistrodesmus sp. Chlorella sp. Pandorina sp. Pediastrum sp.	Bacillariophyceae Nitzschia sp. Navicula sp. Fragillaria sp. Gomphonema sp. Thallasionema sp. Pinnularia sp. Cyanophyceae Anabaena sp. Oscillatoria sp. Green Algae Chlorella sp. Spirogyra sp.
C	Zooplanktons							
19.1	Abundance (Population)	no/m ²	350	150	225	100	180	40
19.2	Name of Group Number and name of group species of each group	--	Nauplius larvae Decapods Nematodes Bivalves Rotifers	Polychaetes Gastropods	Nauplius larvae Decapods Nematodes mysids isopond	Polychaetes Gastropods	Gastropods Ctenophores Echinoderms Copepods Polychaetes Worms	Ostracods Polychaetes Worms
19.3	Total Biomass	ml/100 m ³	93.5	6.54	93.5	12.5	112	10.85
D	Microbiological Parameters							
20.1	Total Bacterial Count	CFU/ml	1240	1480	1440	1210	1220	1470
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

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)



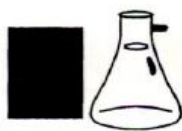
RESULTS OF SEA SEDIMENT MONITORING

Table No. 9 Results of Sea Sediment [October 2015 to March 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 Jetty (M2)	Near Jetty (M2)	Near Jetty (M2)	Near Jetty (M2)	Near Mouth of Creek (M1)	Near Jetty (M2)
			Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
			08/10/2015	19/11/2015	18/12/2015	14/01/2016	11/02/2016	28/03/2016
1	Organic Matter	%	0.58	0.66	0.5	0.53	0.52	0.52
2	Phosphorus as P	mg/kg	363	356	348	340	342	371
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	%	6.1	7	5.63	6.22	5.6	6.66
5.2	Total Chromium as Cr ⁺³	mg/kg	132	118	141	128	140	122
5.3	Manganese as Mn	mg/kg	784	960	880	466	868	608
5.4	Iron as Fe	%	2.48	3.02	2.64	2.84	2.66	2.74
5.5	Nickel as Ni	mg/kg	42	37.98	48	38.44	50	40.64
5.6	Copper as Cu	mg/kg	94	90	108	86	110	110
5.7	Zinc as Zn	mg/kg	136	140	150	144	156	148
5.8	Lead as Pb	mg/kg	1.88	1.68	2.37	2.1	2.38	1.84
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)	--	Echinoderms Isopods Decapods Mysids Prawns	Polychaete worms Isopods Echinoderms	Copepods Isopods Mysids Ostracodes	Polychaete Worms Decapods Isopods	Polychaete Worms Mysids Isopods	Polychaete worms Echinoderms Crabs
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Copepods Bryozoans Hydrozoa	Nematodes Copepods	Nematodes Foraminiferans	Copepods Foraminiferans	Nematods	Copepods
6.3	Population	no/m2	385	385	433	337	433	288

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

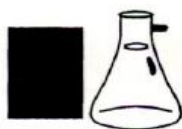
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Sea Water & Sea Sediment Locations

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

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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)

H. T. Shah
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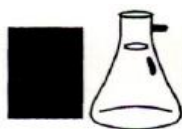


Table No.10 Results of Drinking Water [October 2015 to March 2016]

Results of Drinking Water [Full Parameter in March-2016]

SR. NO.	TEST PARAMETERS	UNIT	Mar-16	
			28/03/2016	
			Adani Tuna Raw Water (Narmada Water)	Adani Tuna RO Outlet
Chemical Parameters				
1	Odour	--	Agreeable	Agreeable
2	Colour	Hazen	< 1.0	< 1.0
3	Taste	--	Agreeable	Agreeable
4	pH Value	--	7.84	7.43
5	Turbidity	NTU	0.99	0.02
6	Total Dissolved Solids	mg/L	484	36
7	Total Hardness as CaCO3	mg/L	196	7.0
8	Alkalinity	mg/L	92	10
9	Residual Free Chlorine	mg/L	< 0.1	< 0.1
10	Chloride as Cl	mg/L	163	10.99
11	Calcium as Ca	mg/L	42.4	1.2
12	Magnesium as Mg	mg/L	21.6	0.96
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	0.018	BDL*
19	Iron as Fe	mg/L	0.021	0.016
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	28.2	6.4
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	1.60	0.80
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

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)

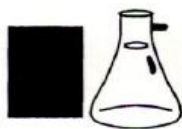
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Results of Drinking Water [Essential parameter in October 2015 – February 2016]

SR. NO.	TEST PARAMETERS	UNIT	Oct-15		Nov-15		Dec-15		Jan-16		Feb-16	
			08/10/2015		19/11/2015		18/12/2015		14/01/2016		11/02/2016	
			Narmada Water Pump House	PMC RO Water	Narmada Water Pump House	PMC RO Water	Narmada Water Pump House	PMC RO Water	Narmada Water Pump House	PMC RO Water	Narmada Water Pump House	PMC RO Water
1	Odour	--	Agreeable	Agreeable	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	< 1.0	< 1.0
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	pH	--	8.36	7.73	8.28	7.69	7.96	8.12	8.39	8.45	8.48	7.75
5	Turbidity	NTU	1.65	0.37	0.23	0.09	0.43	0.01	0.64	0.10	0.30	0.01
6	Total Dissolved Solids	mg/L	149	23	86	24	276	17	388	26	567	35
7	Total Hardness as CaCO ₃	mg/L	105	10	49	14	140	14	170	5.0	160	8.0
8	Residual Free Chlorine	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
9	Chloride as Cl	mg/L	12.99	2.50	11.49	1.76	66.97	5.49	120	8.49	171.95	13.99
10	Fluoride as F	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*
11	Iron as Fe	mg/L	BDL*	BDL*	BDL*	BDL*	BDL*	BDL*	0.012	BDL*	0.013	BDL*
12	Coliform	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
13	E-Coli	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

H. T. Shah
Lab Manager

Dr. Arun Bajpai
Lab Manager (Q)

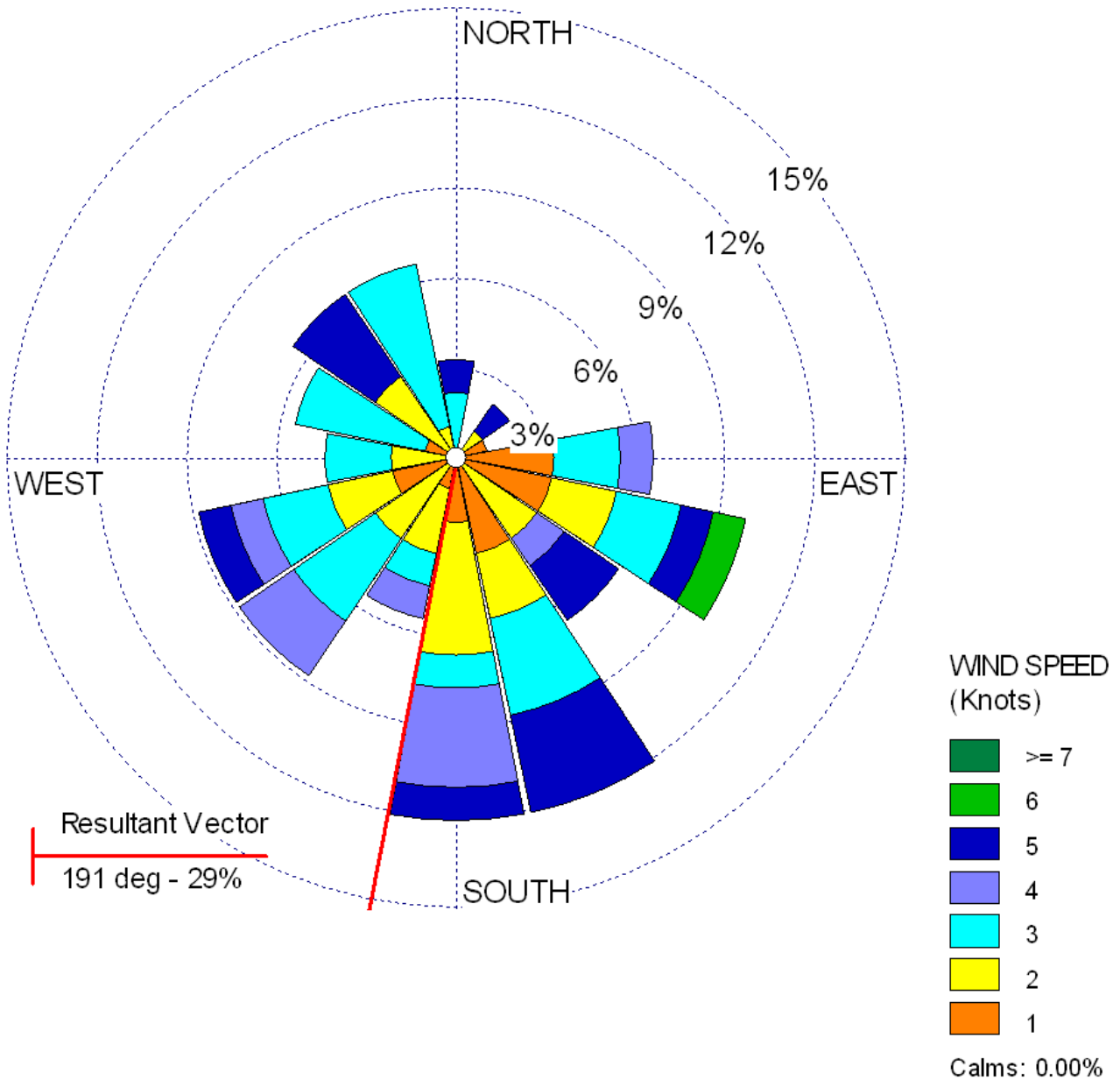
**DUMP POND WATER [OCTOBER 2015 AND FEBRUARY 2016]**

SR NO	TEST PARAMETER	UNIT	October 2015	February 2016	TEST/SAMPLING METHOD
1	pH	--	8.41	7.19	IS3025(P11)83Re.02
2	Total Dissolved Solids	mg/L	16473	23625	IS3025(P16)84Re.02
3	Total Suspended Solids	mg/L	110	90	IS3025(P17)84Re.02
4	Turbidity	NTU	6.57	28.7	APHA 2130-B
5	BOD (3 Days @ 27 oC)	mg/L	66	60	IS 3025 (P44)1993 Re.03Edition2.1
6	Dissolved Oxygen	mg/L	5.8	5.4	IS3025(P38)89Re.99
7	COD	mg/L	226	252	APHA(22ndEdi) 5520-D Open Reflux
8	Salinity	ppt	5.16	20.85	APHA 2550 B
9	Oil & Grease	mg/L	0.20	BDL*	APHA(22ndEdi)5520D
10	Total Hardness as CaCO ₃	mg/L	3020	4100	IS3025(P-21) 84EDTARe.02
11	Fluoride as F	mg/L	0.7	1.8	APHA(22ndEdi) 4500 F D SPANDS
12	Chloride as Cl	mg/L	8859	11546	IS3025(P-32) 88Re.99Argentometric method
13	Zinc as Zn	mg/L	0.050	0.088	AAS- APHA (22ndEdition) 3111 B
14	Cadmium as Cd	mg/L	BDL*	BDL*	AAS- APHA (22nd Edition) 3111 B
15	Lead as Pb	mg/L	0.076	0.083	AAS- APHA (22nd Edition) 3111 B
16	Mercury as Hg	mg/L	BDL*	BDL*	AAS-APHA (22nd Edition) 3112 B

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

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Figure No.3 Wind Rose Diagram**H. T. Shah**
Lab Manager**Dr. Arun Bajpai**
Lab Manager (Q)



Adani Kandla Bulk Terminal Pvt. Ltd.

From : October 2015
To : March 2016

Annexure – 3

adani ™	Adani Kandla Bulk Terminal Pvt. Ltd.	From : October 2015 To : March 2016
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Annexure – 3: Details of CSR activities carried out by Adani Foundation

S. no.	Village	CSR activity done	Expenses (INR in Lakh)
1	Rampar	Education	
		Material Support in Primary School	0.10
		Health	
		Poor Patient Support	
		Senior Citizen Support - 20 patients	0.13
		Rural Clinic	0.40
		Sustainable Livelihood	
		Fodder Support – upto oct end	12.94
		Tree Plantation	0.50
2	Wandi	Education	
		Scholarship Support	0.00
		Computer Support	0.00
		Health	
		Poor Patient Support – 8 patients	0.33
		Senior Citizen Support – 7 patients	0.05
		Rural Clinic	0.40
3	Tuna Related Bandars	Health	
	1 Ghavar Bandar	Drinking Water Supply- Per day-10 K.L	2.31
		Mobile Van Visits	0.44
		Poor Patient Support- 19 Nos	1.38
	2 Veera Bandar	Drinking Water Supply- Per day-10 K.L	2.31
		Poor Patient Support- 10 Nos	1.00
	Village: Tuna	Sustainable Livelihood	
		Fodder Support - upto oct end	20.81
Total			43.10

Virabandar- Tuna port Total Fishermen- Total:- 55 had visited Port, Power and Willmar

