

To,  
**The General Manager (Marine Services)**  
Kamarajar Port Limited,  
Vallur Post, Ponneri Taluk,  
Ennore, Chennai-120.

Dear Sir,


**Sub:** Development of container terminal at Kamarajar Port Limited on DBFOT basis, KPL awarded to Adani Ennore Container Terminal Private Limited-  
**Submission of Half yearly Compliance (July 2018- December 2018) of Environmental Clearance issued to KPL in various stages of development with regards to Container Terminal – Reg.**

**Ref:** 1. Vide order no: 10-28/2005-IA-III dated 19<sup>th</sup> May, 2006  
2. Vide order no: 10-28/2005-IA-III dated: 10/09/2007 and validity extension date: 31.03/2017  
3. Vide order no: 10-28/2005-IA-III dated: 24/12/2014

With reference to above captioned subject and cited references, **Adani Ennore Container Terminal Private Limited** is submitting the **Half yearly compliance report** for the period **July 2018- December 2018** of applicable conditions to the Environmental & CRZ Clearance obtained by the M/s. Kamarajar Port Limited in various stages of development as referred above.

Kindly acknowledge us the receipt of the same.

For **Adani Ennore Container Terminal Private Limited,**

R.S. 

**R. Sathish Kumar**  
**Senior Manager – Environment**

Encl.: As above.

*Handwritten signature*  
14/1/19



காமராஜர் துறைமுக நிறுவனம்

कामराजर पोर्ट लिमिटेड

Kamarajar Port Limited

(A Mini Ratna Government of India Undertaking)

No. KPL/MS/Env/MoEF&CC/2019

Date:19.03.2018

To

**Director (S)**

Ministry of Environment, Forest and Climate Change,  
Regional Office (SEZ), 1<sup>st</sup> and 2<sup>nd</sup> Floor,  
Handloom Export Promotion Council,  
34, Cathedral Garden Road, Nungambakkam,  
Chennai – 34.

[Kind attn: Dr. C Kaliaperumal, M.E., Ph.D]

**Sub:** Kamarajar Port Limited, Chennai- Submission of Compliance report for the period of July to December-2019 on the conditions issued by Ministry of Environment & Forests-Reg.

Sir,

Please find enclosed the compliance report for the period of July to December-2019 on the Ministry's conditions mentioned in the Environment clearance letters issued for the following projects.

1. Construction of new Satellite Port at Ennore, near Madras. Ministry's letter Ref: J-16011/9/87-IA, III dated 28.9.1992.
2. Development of Terminals for marine liquids, coal, iron and containers in second phase and associated capital dredging at Ennore port. Ministry's letter F. No. 10-28/2005-1A-III dated 19<sup>th</sup> May, 2006.
3. Development of Terminals for marine liquids, coal, iron and containers in second phase and associated capital dredging at Ennore port. Ministry's letter F. No. 10-28/2005-1A-III dated 10<sup>th</sup> September, 2007.
4. CRZ and Environmental clearance for the construction of General Cargo Berth at Ennore port cargo terminal project. MoEF Letter F.No.11-21/2009-IA-III dated 23.7.2009.

**Registered Office & Trade Facilitation Centre :**  
2<sup>nd</sup> Floor, (North Wing) & 3<sup>rd</sup> Floor,  
Jawahar Building,  
17, Rajaji Salai, Chennai - 600 001.  
Ph : 044-25251666-70 Fax : 044-25251665  
CIN: U45203TN1999GOI043322

**पंजीकृत कार्यालय & व्यवसाय सुविधा केन्द्र :**  
दूसरी मंजिल, (उत्तर विंग) & तीसरी मंजिल,  
जवाहर बिल्डिंग,  
17, राजाजी सलाई, चेन्नई-600 001.  
फोन : 044-25251666-70 फैक्स : 044-25251665

**website :** www.kamarajarport.in **e-mail :** info@kplmail.in  
*Kamarajar Port - India's Port of the Millennium*

**Port Office :** Vallur Post, Chennai - 600 120  
Ph : 044-27950030-40 Fax : 044-27950002

**पोर्ट कार्यालय :** वल्लूर पोस्ट, चेन्नई - 600 120  
फोन : 044-27950030-40 फैक्स : 044-27950002

5. Expansion and modernization of existing handling of multicargo container terminal at Kamarajar Port by M/s. Kamarajar Port Limited - Environmental and CRZ clearance (Development of Multicargo berth (230m) and container terminal (730m)). MoEF's letter F.No. 10-28/2005-IA-III dated 24.12.2014.
6. Development of additional coal berths (CB3 and CB4) at Kamarajar Port, Tamil Nadu by M/s. KPL Environmental and CRZ clearance - MoEF's Letter F.No. 11-51/2012-IA-III dated 12.03.2015.
7. Modification of existing iron ore terminal on 'as is where is' basis to handle common user coal at Kamarajar Port- MoEF's Letter F.No.10-28/2005-IA-III dated 9th May 2018.
8. Development of facilities envisaged in the Port Master Plan(Phase-III) by M/s.Kamarajar Port Limited-MoEF's Letter F.No.11-51/2012-1A-111 dated 30.10.2018.

The six monthly environmental quality reports and the soft copy of the compliance report in CD are also enclosed.

Thanking you,

Yours sincerely,



**General Manager (Marine Services)**

*Encl: soft copy of the Compliance report for the above individual projects in CD.*

**Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018**Vide order no: 10-28/2005-IA-III dated 19<sup>th</sup> May, 2006**Specific Conditions:**

<b>Sl. No.</b>	<b>Environmental Clearance conditions</b>	<b>Compliance Status as on 31.12.2018</b>
i.	All the conditions stipulated in the NOC from TNPCB vide their letter No. T12/TNPCB/Misc./F.3322/TVLR/05, dated 07.12.2005 should be strictly implemented.	Status by KPL. Detailed compliance submitted as annexure by KPL dated 18.07.2013.
ii.	Groins and other suitable structures should be constructed to prevent the closing of the mouth of Ennore Creek.	Status by KPL.
iii.	The DPR and the technical details to be awarded to the BOT operator should provide to MoEF for post project monitoring within 6 months from the date of receipt of this letter.	Complied. Container Terminal DPR submitted vide letter number EPL/MS/49/2008 dt. 13/03/2008.
iv.	The marine terminal should be set up outside CRZ area.	Status by KPL.
v.	Recommendations of Risk Analysis report should be strictly implemented and a comprehensive quantitative Risk Analysis should be carried out before operationalizing the project.	Complied Operational Risk Assessment carried out and the recommendations are being implemented. Operational Risk Assessment submitted vide Letter Number AECTPL/KPL/EC-compliance/Env/02 dt. 13.07.2018
vi.	Approval form Chief Controller of Chief Explosives should be obtained for hazardous chemicals storage, transfer and related activities.	Not Applicable. AECTPL is not storing any Hazardous chemicals. Hence not applicable.
vii.	The reclamation of the port area should be carried out with the dredged materials. Dredged material should not be dumped into the sea. No reclamation should be carried outside the port limits.	Status by KPL.
viii.	The coastal protection works should be carried out after detailed hydrodynamic modelling studies and it should be ensured that no erosion or accretion takes place in the shore protection works.	Status by KPL.
ix.	Reclamation of 500 acres should be carried out only for the port development. The height of the reclaimed area will be maintained above the maximum flood level.	Status by KPL.
x.	The wave tranquillity study and the ship manuring studies carried out should be taken into account while operating the port.	Status by KPL.
xi.	The project proponent should ensure that doing construction and operation of the port there will be impact on the livelihood of the fisherman. The fishermen should be provided free access to carry out the fishing activity.	Status by KPL.
xii.	All necessary precaution while undertaking construction and operation of the port should be taken keeping in view the	Status by KPL.

## Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018

	bathymetric changes caused due to tsunami.	
xiii.	All development in the port should be accordance with the Coastal Regulation Zone Notification, 1991 and approved Coastal Zone Management Plan of Tamil Nadu.	Status by KPL.
xiv.	The project proponent should undertake a comprehensive hydrodynamic modelling study with regard to river diversion and submit the report to the Ministry within 6 months from the date of receipt of this letter. Further the unit should comply with all the findings/recommendations of the study.	Status by KPL.
xv.	Construction labour camps should be located outside of CRZ area and should be provided with adequate cooking and sanitation facilities.	Complied. Construction of container terminal is completed.
xvi.	The project affected people, of any should be properly compensated and rehabilitated.	Status by KPL.
<b>GENERAL CONDITIONS:</b>		
i.	Development of the proposed channel should be undertaken meticulously conforming to the existing Central/Local rules and regulations including CRZ Notification, 1991 and its amendments. All the construction designs/drawings relating to the proposed development activities must have approvals of the concerned State Govt. Depts./Agencies.	Status by KPL.
ii.	A well-equipped laboratory with suitable instruments to monitor the quality of air and water shall be set up as to ensure that the quality of ambient air and water conforms to the prescribed standards. The laboratory will also equipped with qualified manpower including a marine biologist so that the marine water quality is regularly monitored in order to ensure that the marine life is not adversely affected as a result of implementation of the said project. The quality of ambient air and water shall be monitored periodically in all the seasons and the results should be properly maintained for inspection of concerned pollution control agencies. The periodic monitoring reports at least once in 6 months must be send to this Ministry (RO at Bangalore) and Pollution Control Committee.	Complied. AECTPL has awarded Environmental Monitoring services to NABL accredited laboratory. The reports are being submitted to KPL and Tamil Nadu Pollution Control Board on monthly basis. Environment Monitoring report for the period July 2018 – December 2018 is attached as <b>Annexure - I.</b>
iii.	Adequate provisions for infrastructure facilities such as water supply, fuel for cooking, sanitation etc. must be provided for the labourers during the construction period in order to avoid damage to the environment. Colonies for the labourers should not be located in CRZ area. It should also be ensured that the construction workers do not cut trees including mangroves for fuel wood purpose.	Complied. Construction completed.

## Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018

iv.	To prevent discharge of sewage and other liquid wastes into the water bodies, adequate system for collection and treatment of the waste must be provided. No Sewage and other liquid wastes without treatment should be allowed to enter into the water bodies.	Complied. AECTPL has installed 25 KLD capacity Sewage Treatment Plant and treated water is being used for horticulture purpose
v.	Appropriate facility should be created for the collection of solid and liquid wastes generated by the barges/vessels and their safe treatment and disposal should be ensured to avoid possible contamination of the water bodies.	Status by KPL.
vi.	Necessary navigational aids such as channel markers should be provided to prevent accidents. Internationally recognized safety standards shall be applied in case of barge/vessel movements.	Status by KPL.
vii.	The project authorities should take appropriate community development and welfare measures for villagers in the vicinity of the project site, including drinking water facilities. A separate fund should be allocated for the purpose.	Status by KPL. However AECTPL has initiated few CSR initiatives in the vicinity of the project.
viii.	The quarrying material required for the construction purpose should be obtained only from the approved quarries/borrow areas. Adequate safeguards measures shall be taken to ensure that the overburden and rocks at the quarry site do not find their way in water bodies.	Complied AECTPL has completed construction.
ix.	For employing unskilled, semi-skilled and skilled workers for the project, preference should be given to local people.	Complied. AECTPL has considered local people during construction phase & also during Operation Phase through Contracts
x.	The recommendations made in the EMP and DMP, as contained in the EIA and RA reports of the projects shall be effectively implemented.	Status by KPL.
xi.	A separate EMC with suitable qualified staff to carry out various environment should be set up under the charge of a Senior Executive who will report directly to Chief Executive of the Company.	Complied. Environment Department headed by Senior Manager – Environment, who is reporting directly to Chief Executive Officer of the company is in place. He is well supported by Environment Management Team at H.O.
xii.	The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards should be reported to this Ministry.	Complied Environmental Expenditure carried out from April 2018 to December 2018 is Rs.12.5 Lakhs Breakup details are as follows; a) Environmental Monitoring – Rs 5.1 Lakhs b) Greenbelt Development – Rs. 1.0 Lakhs , c) House Keeping – Rs.1.0 Lakhs

**Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018**

		d) O&M of STP – Rs. 5.4 Lakhs
xiii.	Full support should be extended to the officers of the Ministry's Regional office at Bangalore and the officer of the Central and SPCB by the project proponent during this inspection for monitoring purposes, by furnishing full details and action plans including the action plans including the action taken reports in respect if mitigative measures and other environmental protection activities.	Noted for complianceTNPCCB Officials have visited our Port on monthly basis. There was no visit of officials from RO-MoEF&CC, and CPCB during the compliance period. All the necessary support will be provided in case of any visit.
	In case there is an intension of deviation or alternation in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures.	Noted for compliance
xiv.	The Ministry reserves right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Noted.
xv.	This Ministry or any other competent authority may stipulate additional conditions subsequently, if deemed necessary for environmental protection, which shall be complied with.	Noted for Compliance
xvi.	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned available with the SPCB and may also be seen at Website of the Ministry of Environment & Forests at <a href="http://www.envforenic.in">http://www.envforenic.in</a> . The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office of the Ministry at Bangalore.	Status by KPL.
xvii.	The project proponents should inform the RO 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.	Status by KPL.

**Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018**

Vide order no: 10-28/2005-IA-III dated: 10/09/2007 and validity extension date: 31.03/2017

**A. Specific Conditions:**

<b>S.No</b>	<b>Environmental Clearance conditions</b>	<b>Compliance Status as on 31.12.2018</b>
i	It should be ensured that no mangroves are destroyed during reclamation.	Status by KPL.
ii	The proposed extension to the project should not cause any shoreline change abutting Ennore Port.	Status by KPL.
iii	Adequate provision for beach nourishment and sand bypass should be provided.	Status by KPL.
iv	The dredged material obtained should be utilized for filling up of back up area.	Status by KPL.
v	All conditions stipulated in the environmental clearance letter of even number dated 19.05.2006 should be strictly complied with.	Complied All stipulated conditions applicable to AECTPL in the environmental clearance letter of even number dated 19.05.2006 are being complied and compliance reports are regularly submitted to KPL
vi	The additional dredged material of 4 million cu. Mts. obtained from the project should not be disposed of into the sea.	Status by KPL.
vii	The reclaimed area should be used as containers stack yard only.	Status by KPL.
viii	Adequate drainage facilities should be provided in the reclaimed area along with collection and treatment system for treating the run off from the container stack yards.	Status by KPL.
ix	Necessary approvals/clearances should be obtained from the Tamil Nadu Coastal Zone Management Authority and Tamil Nadu Pollution Control Board before implementing the project.	Complied TNCZMA recommendation was obtained by KPL  Tamil Nadu Pollution Control Board accorded Renewal of Consent to Operate orders to handle 11.68 MMTPA containers vide order no: 1808111676581 & 1808211676581 under Air and Water Act dated: 23/08/2018 valid for 3 years.

**B. General Conditions:**

<b>S.No</b>	<b>Environmental Clearance conditions</b>	<b>Compliance Status as on 31.12.2018</b>
i	Construction of the proposed structures should be undertaken meticulously confirming to the existing Central/ local rules and regulations including Coastal Regulation Zone Notification 1991 & its amendments. All the construction design drawings relating to the proposed construction activities must have approvals of the concerned State Government Departments / Agencies.	Status by KPL.
ii	Adequate provisions for infrastructure facilities such as water supply, fuel, sanitation etc. should be ensured for	Complied. Construction of container terminal is completed.

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	construction workers during the construction phase of the project so as to avoid felling of trees/ Mangroves and pollution of water and the surroundings.	
iii	The project authorities must make necessary arrangements for disposal of solid wastes and for the treatment of effluents by providing a proper wastewater treatment plant outside the CRZ area. The quality of treated effluents, solid wastes and noise level etc. must conform to the standards laid down by the competent authorities including the Central/State Pollution Control Board and the Union Ministry of Environment and Forests under the Environment (Protection) Act, 1986, whichever are more stringent.	Complied AECTPL has installed and operating 25 KLD sewage treatment plant to collect and treat the sewage generated from the terminal. The treated water is being used for horticulture purpose. AECTPL has implemented Integrated Waste Management System (IWMS) - Waste Segregation Yard.
iv	The proponent shall obtain the requisite consents for discharge of effluents and emission under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 from the Tamil Nadu Pollution control Board before commissioning of the project and a copy of each of these shall be sent to this Ministry.	Complied Tamil Nadu Pollution Control Board accorded Renewal of Consent to Operate orders to handle 11.68 MMTPA containers vide order no: 180811676581 & 1808211676581 under Air and Water Act dated: 23/08/2018 valid for 3 years.
v	The proponent shall provide for a regular monitoring mechanism so as to ensure that the treated effluents conform to the prescribed standards. The records of analysis reports must be properly maintained and made available for inspection to the concerned State/Central officials during their visits.	Complied AECTPL has awarded Environmental Monitoring services to NABL accredited laboratory. The reports are being submitted to KPL and Tamil Nadu Pollution Control Board on monthly basis. Environment Monitoring report for the period July 2018 – December 2018 is attached as <b>Annexure - I</b> . Reports are made available for inspection to the concerned State/Central officials during their visits.
vi	In order to carry out the environmental monitoring during the operational phase of the project, the project authorities should provide an environmental laboratory well equipped with standard equipment and facilities and qualified manpower to carry out the testing of various environmental parameters.	Complied Environmental Monitoring is being carried out through NABL accredited laboratory for carrying out regular Environment monitoring
vii	The sand dunes and mangroves, if any, on the site should not be disturbed in any way.	Status by KPL.
viii	A copy of the clearance letter will be marked to the concerned Panchayat/Local NGO, if any from whom any suggestion/representation has been received while processing the proposal.	Status by KPL.
ix	The Tamil Nadu Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/Tehsildar's Office for 30 days.	Status by KPL.
x	The funds earmarked for environment protection measures should be maintained in a separate account and there should be	Complied Environmental Expenditure carried out from April 2018 to December 2018 is

## Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018

	no diversion of these funds for any other purpose. A year wise expenditure on environmental safeguards should be reported to this Ministry's Regional Office at Bangalore and the State Pollution Control Board.	Rs.12.5 Lakhs Breakup details are as follows; a) Environmental Monitoring – Rs- 5.1 Lakhs b) Greenbelt Development – Rs. 1.0 Lakhs c) House Keeping – Rs. 1.0 Lakhs d) O&M of STP – Rs. 5.4 Lakhs
xi	Full support should be extended to the officers of this Ministry's Regional office at Bangalore and the officers of the Central and State Pollution Control Boards by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.	Noted for compliance TNPCB Officials have visited our Port on monthly basis. There was no visit of officials from RO-MoEF&CC and CPCB during the compliance period. All the necessary support will be provided in case of any visit.
xii	In case of deviation or alteration in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection.	Noted.
xiii	This Ministry reserve the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Noted.
xiv	This Ministry or any other component authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	Noted.
xv	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen at Website of the Ministry of Environment & Forests at <a href="http://www.envfor.in">http://www.envfor.in</a> . The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the regional Office of this Ministry at Bangalore.	Status by KPL.
xvi	The Project proponents should inform the Regional Office at Bangalore 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.	Status by KPL.

## Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018

Vide order no: 10-28/2005-IA-III dated: 24/12/2014

### A. Specific Conditions:

S.No	Environmental Clearance conditions	Compliance Status as on 31/12/2018
i	"Consent to Establish" for the present project, shall be obtained from State Pollution Control Board under Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act 1974.	Complied Tamil Nadu Pollution Control Board accorded Renewal of Consent to Operate orders to handle 11.68 MMTPA containers vide order no: 1808111676581 & 1808211676581 under Air and Water Act dated: 23/08/2018 valid for 3 years.
ii	Quality of Cargo should be handled in accordance with the details provided in the Form-I.	Complied AECTPL is handling only containerized cargo, as approved
iii	All the recommendations and conditions stipulated by Tamil Nadu Coastal Zone Management Authority (TNCZMA) No. 30060/EC.3/2005-1 dated 06.12.2005 shall be complied with.	Status by KPL.
iv	All the conditions as prescribed in the earlier Clearance letter no. 10-28/2005-IA-III dated 19.05.2006 and 10.09.2007 shall be complied with.	Status by KPL.
v	All the recommendation of the EIA/EMP & Risk Assessment and Disaster Management Report shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in the matrix format and the compliance for each mitigation plan shall be submitted to MoEF & CC along with half yearly compliance report to MoEF&CC- RO.	Status by KPL.
vi	The commitment made by the proponent to the issue raised during Public Hearing shall be implemented by the Proponent.	Status by KPL.
vii	Corporate Environmental Responsibility:  a. The Company shall have a well laid down Environmental Policy approved by the Board of Directors.  b. The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.  c. The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.  d. To have proper checks and	AECTPL having approved QHSE policy.  AECTPL having approved SOPs.  Status by KPL.  Standard procedures are made available to address corrective & preventive deviation and violations.

**Environmental & CRZ Clearance Half Yearly compliance Report: July2018 – December 2018**

	balances, the company shall have a well laid down system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large.	
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**B. GENERAL CONDITIONS:**

<b>S.No</b>	<b>Environmental Clearance conditions</b>	<b>Compliance Status as on 31/12/2018</b>
i	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.	Complied Construction completed
ii	Full support shall be extended to the officers of the Ministry/Regional Office at Chennai 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.	Noted for complianceTNPCCB Officials have visited our Port on monthly basis. There was no visit of officials from RO-MoEF&CC and CPCB during the compliance period. All the necessary support will be provided in case of any visit.
iii	A six-Monthly monitoring report shall be need to be submitted by the project proponents to the Regional Office of this Ministry at Chennai regarding the implementation of the stipulated conditions.	Status by KPL.
iv	Ministry of Environment, Forests & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the in the interest of environment and the same shall be complied with.	Noted for compliance.
v	The Ministry reserves the rights to revoke this clearance if any of the conditions stipulated are not complied with satisfaction of the Ministry.	Noted.
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, Forests & Climate Change.	Noted.
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.	Noted.
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.	Status by KPL.

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ix	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.	Complied. Environment Department headed by Senior Manager – Environment, reporting directly to Chief Executive Officer is in place. He is well supported by Environment Management Cell, HO.
x	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	Complied Environmental Expenditure carried out from April 2018 to December 2018 is Rs.12.5 Lakhs Breakup details are as follows; a) Environmental Monitoring – Rs. 5.1 Lakhs b) Greenbelt Development – Rs.1.0 Lakhs , c) House Keeping – Rs.1.0 Lakhs d) O&M of STP – Rs. 5.4 Lakhs
5.	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.
6.	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.	Noted.
7.	The project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded Environmental and CRZ clearance and copies of clearance letters are available with the Tamil Nadu State Pollution Control Board and may also be seen at Website of the Ministry of Environment, Forests and Climate Change at <a href="http://www.envfornic.in">http://www.envfornic.in</a> . The advertisement should be made within Seven days from the date of issue of the clearance letter and a copy of the same should be forwarded to the regional Office of this Ministry at Chennai.	Status by KPL.
8.	The 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 20014 as may be applicable this project.	Noted.

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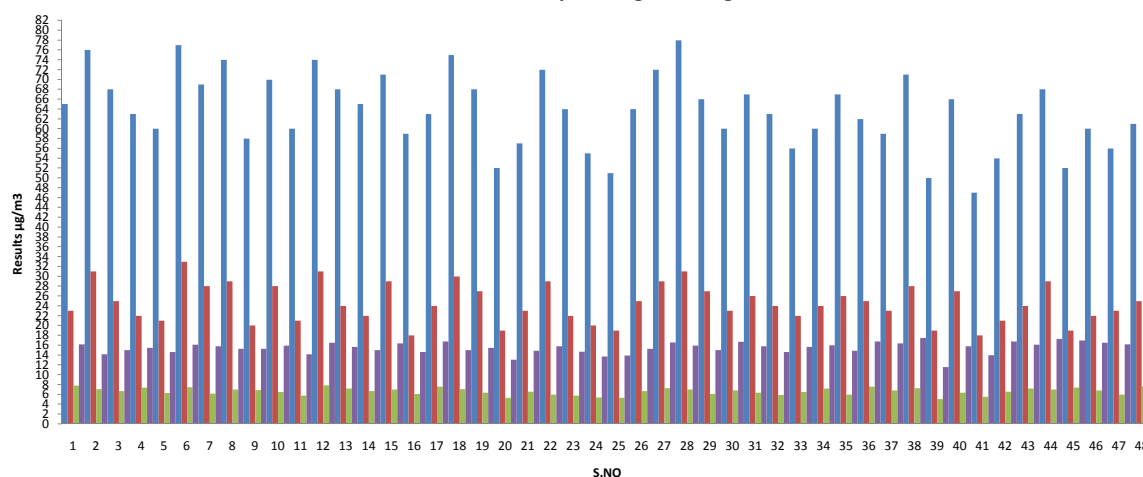
9.	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, with a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act 2010.	Noted.
10.	Status of compliance to the various stipulated environment conditions and environmental safeguards will be uploaded by the project proponent in its website.	Complied. The compliance to the various conditions stipulated for environmental safeguards are uploaded in our Company website and KPL website.
11.	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.	Status by KPL.
12.	The proponent shall upload the status of compliance of the stipulated Clearance 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.	Status by KPL. The compliance to the various conditions stipulated for environmental safeguards are uploaded in our Company website and KPL website.
13.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Status by KPL.
14.	The Environmental Statement for each financial year ending 31 <sup>st</sup> 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 Clearance conditions and shall also be sent to the respective Regional Office of MoEF & CC by email.	Complied. Environment Statement (Form -V) submitted FY 2017-18 vide our Letter No. AECTPL/KPT/GMP/CB/ENV/ES 2017-18 dated 10.09.2018. The same is enclosed as <b>Annexure-II</b> .

## ADANI ENNORE CONTAINER TERMINAL PRIVATE LIMITED (AECTPL)

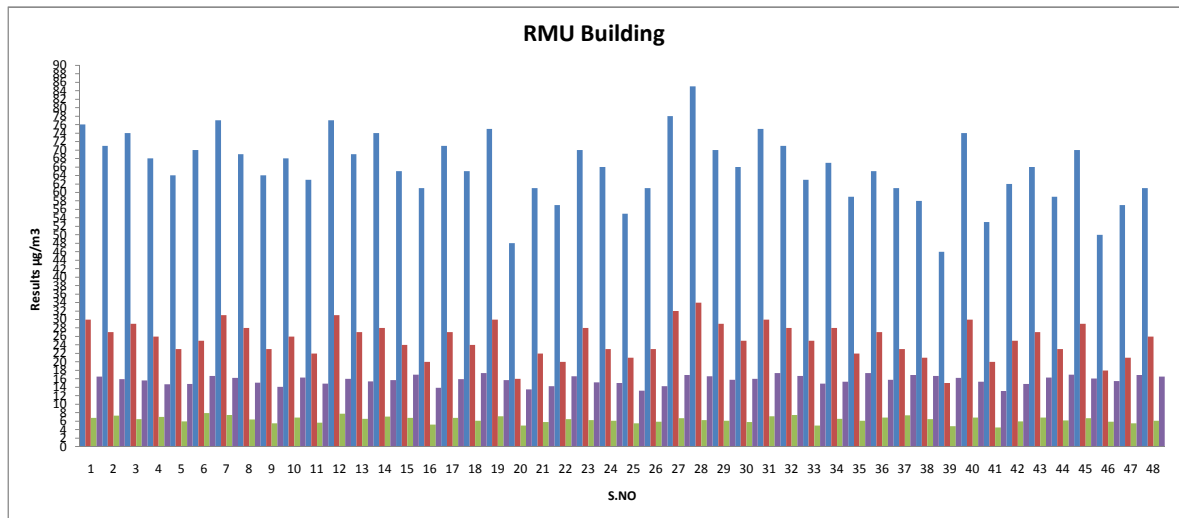
Jul - 18 to Dec - 18

PORT OPERATING BUILDING (AAQ1)													
Parameters		Particular matter PM <sub>10</sub>	Particular matter PM <sub>2.5</sub>	Sulphur dioxide as SO <sub>2</sub>	Nitrogen dioxide as NO <sub>2</sub>	Lead as Pb	Carbon monoxide as CO	Ozone as O <sub>3</sub>	Ammonia as NH <sub>3</sub>	Arsenic as As	Nickel as Ni	Benzene as C <sub>6</sub> H <sub>6</sub>	Benzo (a) pyrene as BaP
Unit		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>
National AAQM Standard		100	60	80	80	1	4	180	400	6	20	5	1
S.No.	Sampling Date	Report Number											
1	02.07.2018	GCS/LAB/S/2355/18-19	65	23	7.8	16.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
2	06.07.2018	GCS/LAB/S/2355/18-19	76	31	7.1	14.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
3	11.07.2018	GCS/LAB/S/2355/18-19	68	25	6.7	15.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
4	13.07.2018	GCS/LAB/S/2355/18-19	63	22	7.4	15.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
5	16.07.2018	GCS/LAB/S/2355/18-19	60	21	6.3	14.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
6	20.07.2018	GCS/LAB/S/2355/18-19	77	33	7.5	16.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
7	23.07.2018	GCS/LAB/S/2355/18-19	69	28	6.2	15.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
8	27.07.2018	GCS/LAB/S/2355/18-19	74	29	7.0	15.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
9	03.08.2018	GCS/LAB/S/2442/18-19	58	20	6.9	15.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
10	06.08.2018	GCS/LAB/S/2442/18-19	70	28	6.5	15.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
11	10.08.2018	GCS/LAB/S/2442/18-19	60	21	5.8	14.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
12	13.08.2018	GCS/LAB/S/2442/18-19	74	31	7.9	16.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
13	17.08.2018	GCS/LAB/S/2442/18-19	68	24	7.2	15.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
14	20.08.2018	GCS/LAB/S/2442/18-19	65	22	6.7	15.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
15	24.08.2018	GCS/LAB/S/2442/18-19	71	29	7.0	16.4	<0.1	<1.0	<10	<2	<2	<1	<0.1
16	27.08.2018	GCS/LAB/S/2442/18-19	59	18	6.1	14.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
17	03.09.2018	GCS/LAB/S/1074/18-19	63	24	7.6	16.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
18	07.09.2018	GCS/LAB/S/1074/18-19	75	30	7.1	15.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
19	10.09.2018	GCS/LAB/S/1074/18-19	68	27	6.4	15.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
20	14.09.2018	GCS/LAB/S/1074/18-19	52	19	5.3	13.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
21	17.09.2018	GCS/LAB/S/1074/18-19	57	23	6.6	14.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
22	21.09.2018	GCS/LAB/S/1074/18-19	72	29	6.0	15.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
23	24.09.2018	GCS/LAB/S/1074/18-19	64	22	5.8	14.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
24	28.09.2018	GCS/LAB/S/1074/18-19	55	20	5.4	13.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
25	06.10.2018	GCS/LAB/S/1165/18-19	51	19	5.3	13.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
26	08.10.2018	GCS/LAB/S/1165/18-19	64	25	6.7	15.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
27	12.10.2018	GCS/LAB/S/1165/18-19	72	29	7.3	16.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
28	15.10.2018	GCS/LAB/S/1165/18-19	78	31	7.0	15.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
29	19.10.2018	GCS/LAB/S/1165/18-19	66	27	6.1	15.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
30	22.10.2018	GCS/LAB/S/1165/18-19	60	23	6.8	16.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
31	26.10.2018	GCS/LAB/S/1165/18-19	67	26	6.4	15.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
32	29.10.2018	GCS/LAB/S/1165/18-19	63	24	5.9	14.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
33	02.11.2018	GCS/LAB/S/1217/18-19	56	22	6.5	15.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
34	07.11.2018	GCS/LAB/S/1217/18-19	60	24	7.2	16.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
35	09.11.2018	GCS/LAB/S/1217/18-19	67	26	6.0	14.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
36	12.11.2018	GCS/LAB/S/1217/18-19	62	25	7.6	16.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
37	16.11.2018	GCS/LAB/S/1217/18-19	59	23	6.8	16.4	<0.1	<1.0	<10	<2	<2	<1	<0.1
38	19.11.2018	GCS/LAB/S/1217/18-19	71	28	7.3	17.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
39	23.11.2018	GCS/LAB/S/1217/18-19	50	19	5.1	11.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
40	26.11.2018	GCS/LAB/S/1217/18-19	66	27	6.4	15.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
41	03.12.2018	GCS/LAB/S//18-19	47	18	5.5	14.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
42	07.12.2018	GCS/LAB/S//18-19	54	21	6.6	16.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
43	10.12.2018	GCS/LAB/S//18-19	63	24	7.2	16.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
44	14.12.2018	GCS/LAB/S//18-19	68	29	7.0	17.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
45	17.12.2018	GCS/LAB/S//18-19	52	19	7.4	17.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
46	21.12.2018	GCS/LAB/S//18-19	60	22	6.8	16.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
47	24.12.2018	GCS/LAB/S//18-19	56	23	6.0	16.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
48	26.12.2018	GCS/LAB/S//18-19	61	25	7.7	16.0	<0.1	<1.0	<10	<2	<2	<1	<0.1

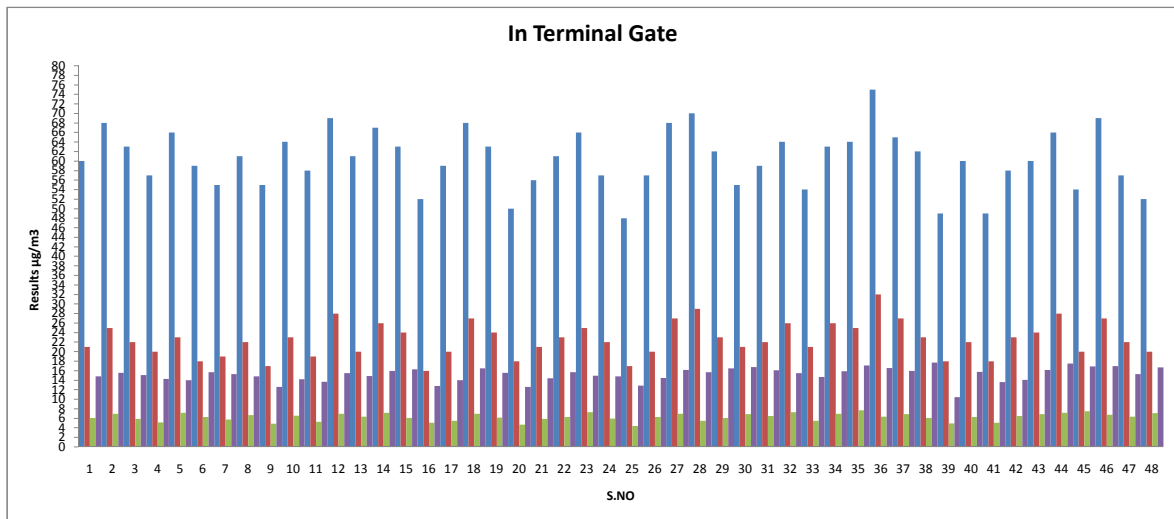
Port Operating Building



RMU BUILDING (AAQ2)													
Parameters		Particular matter PM <sub>10</sub>	Particular matter PM <sub>2.5</sub>	Sulphur dioxide as SO <sub>2</sub>	Nitrogen dioxide as NO <sub>2</sub>	Lead as Pb	Carbon monoxide as CO	Ozone as O <sub>3</sub>	Ammonia as NH <sub>3</sub>	Arsenic as As	Nickel as Ni	Benzene as C <sub>6</sub> H <sub>6</sub>	Benzo (a) pyrene as BaP
Unit		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>
National AAQM Standard		100	60	80	80	1	4	180	400	6	20	5	1
S.No.	Sampling Date	Report Number											
1	02.07.2018	GCS/LAB/S/2355/18-19	76	30	6.8	16.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
2	06.07.2018	GCS/LAB/S/2355/18-19	71	27	7.3	15.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
3	11.07.2018	GCS/LAB/S/2355/18-19	74	29	6.5	15.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
4	13.07.2018	GCS/LAB/S/2355/18-19	68	26	7.0	14.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
5	16.07.2018	GCS/LAB/S/2355/18-19	64	23	6.0	14.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
6	20.07.2018	GCS/LAB/S/2355/18-19	70	25	7.9	16.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
7	23.07.2018	GCS/LAB/S/2355/18-19	77	31	7.5	16.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
8	27.07.2018	GCS/LAB/S/2355/18-19	69	28	6.4	15.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
9	03.08.2018	GCS/LAB/S/2442/18-19	64	23	5.5	14.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
10	06.08.2018	GCS/LAB/S/2442/18-19	68	26	6.9	16.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
11	10.08.2018	GCS/LAB/S/2442/18-19	63	22	5.7	14.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
12	13.08.2018	GCS/LAB/S/2442/18-19	77	31	7.8	16.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
13	17.08.2018	GCS/LAB/S/2442/18-19	69	27	6.6	15.4	<0.1	<1.0	<10	<2	<2	<1	<0.1
14	20.08.2018	GCS/LAB/S/2442/18-19	74	28	7.1	15.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
15	24.08.2018	GCS/LAB/S/2442/18-19	65	24	6.8	17.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
16	27.08.2018	GCS/LAB/S/2442/18-19	61	20	5.2	13.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
17	03.09.2018	GCS/LAB/S/1074/18-19	71	27	6.8	15.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
18	07.09.2018	GCS/LAB/S/1074/18-19	65	24	6.1	17.4	<0.1	<1.0	<10	<2	<2	<1	<0.1
19	10.09.2018	GCS/LAB/S/1074/18-19	75	30	7.2	15.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
20	14.09.2018	GCS/LAB/S/1074/18-19	48	16	5.0	13.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
21	17.09.2018	GCS/LAB/S/1074/18-19	61	22	5.8	14.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
22	21.09.2018	GCS/LAB/S/1074/18-19	57	20	6.5	16.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
23	24.09.2018	GCS/LAB/S/1074/18-19	70	28	6.3	15.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
24	28.09.2018	GCS/LAB/S/1074/18-19	66	23	6.1	15.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
25	06.10.2018	GCS/LAB/S/1165/18-19	55	21	5.5	13.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
26	08.10.2018	GCS/LAB/S/1165/18-19	61	23	5.9	14.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
27	12.10.2018	GCS/LAB/S/1165/18-19	78	32	6.7	16.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
28	15.10.2018	GCS/LAB/S/1165/18-19	85	34	6.3	16.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
29	19.10.2018	GCS/LAB/S/1165/18-19	70	29	6.1	15.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
30	22.10.2018	GCS/LAB/S/1165/18-19	66	25	5.8	16.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
31	26.10.2018	GCS/LAB/S/1165/18-19	75	30	7.2	17.4	<0.1	<1.0	<10	<2	<2	<1	<0.1
32	29.10.2018	GCS/LAB/S/1165/18-19	71	28	7.5	16.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
33	02.11.2018	GCS/LAB/S/1217/18-19	63	25	5.0	14.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
34	07.11.2018	GCS/LAB/S/1217/18-19	67	28	6.6	15.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
35	09.11.2018	GCS/LAB/S/1217/18-19	59	22	6.1	17.4	<0.1	<1.0	<10	<2	<2	<1	<0.1
36	12.11.2018	GCS/LAB/S/1217/18-19	65	27	6.9	15.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
37	16.11.2018	GCS/LAB/S/1217/18-19	61	23	7.4	16.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
38	19.11.2018	GCS/LAB/S/1217/18-19	58	21	6.5	16.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
39	23.11.2018	GCS/LAB/S/1217/18-19	46	15	4.8	16.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
40	26.11.2018	GCS/LAB/S/1217/18-19	74	30	6.9	15.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
41	03.12.2018	GCS/LAB/S//18-19	53	20	4.5	13.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
42	07.12.2018	GCS/LAB/S//18-19	62	25	6.0	14.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
43	10.12.2018	GCS/LAB/S//18-19	66	27	6.9	16.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
44	14.12.2018	GCS/LAB/S//18-19	59	23	6.2	17.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
45	17.12.2018	GCS/LAB/S//18-19	70	29	6.7	16.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
46	21.12.2018	GCS/LAB/S//18-19	50	18	5.9	15.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
47	24.12.2018	GCS/LAB/S//18-19	57	21	5.5	16.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
48	26.12.2018	GCS/LAB/S//18-19	61	26	6.1	16.5	<0.1	<1.0	<10	<2	<2	<1	<0.1

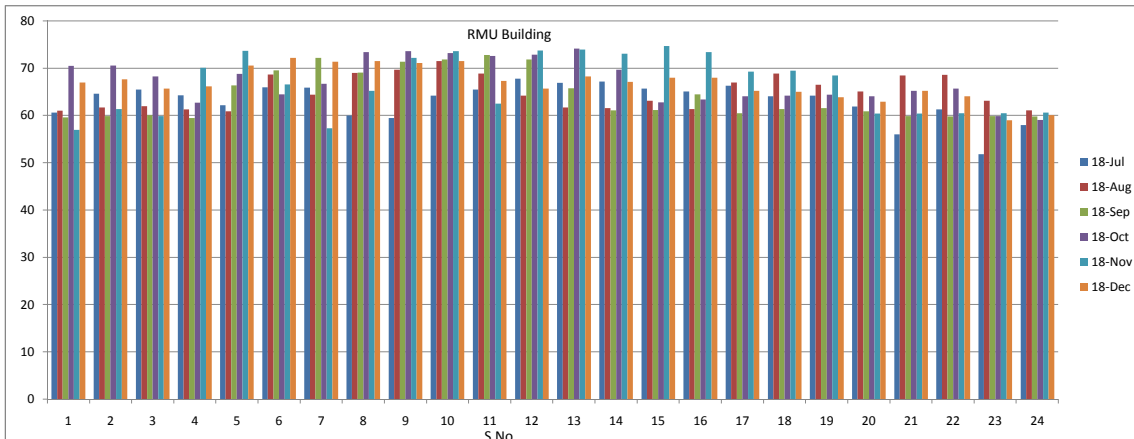
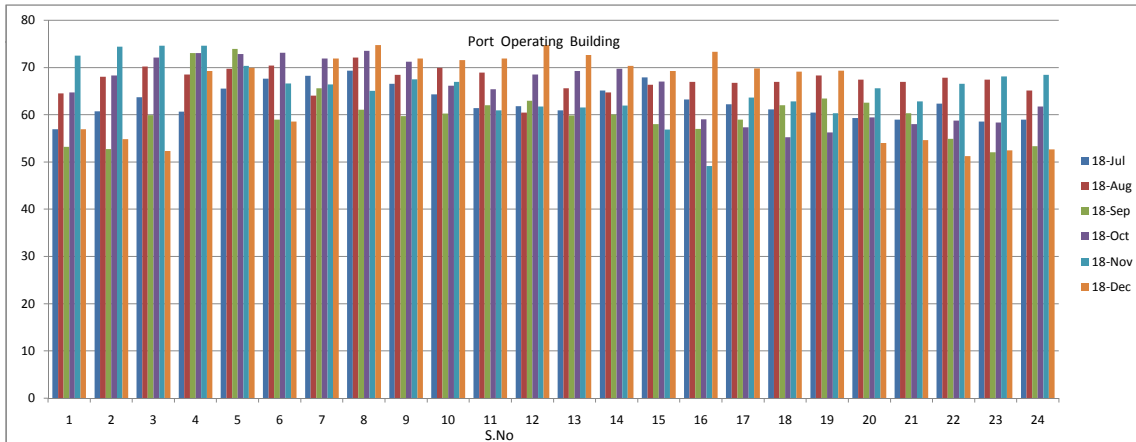


IN TERMINAL GATE (AAQ3)													
Parameters		Particular matter PM <sub>10</sub>	Particular matter PM <sub>2.5</sub>	Sulphur dioxide as SO <sub>2</sub>	Nitrogen dioxide as NO <sub>2</sub>	Lead as Pb	Carbon monoxide as CO	Ozone as O <sub>3</sub>	Ammonia as NH <sub>3</sub>	Arsenic as As	Nickel as Ni	Benzene as C <sub>6</sub> H <sub>6</sub>	Benzo (a) pyrene as BaP
Unit		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>
National AAQM Standard		100	60	80	80	1	4	180	400	6	20	5	1
S.No.	Sampling Date	Report Number											
1	02.07.2018	GCS/LAB/S/2355/18-19	60	21	6.1	14.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
2	06.07.2018	GCS/LAB/S/2355/18-19	68	25	7.0	15.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
3	11.07.2018	GCS/LAB/S/2355/18-19	63	22	5.9	15.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
4	13.07.2018	GCS/LAB/S/2355/18-19	57	20	5.2	14.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
5	16.07.2018	GCS/LAB/S/2355/18-19	66	23	7.2	14.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
6	20.07.2018	GCS/LAB/S/2355/18-19	59	18	6.3	15.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
7	23.07.2018	GCS/LAB/S/2355/18-19	55	19	5.8	15.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
8	27.07.2018	GCS/LAB/S/2355/18-19	61	22	6.7	14.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
9	03.08.2018	GCS/LAB/S/2442/18-19	55	17	4.9	12.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
10	06.08.2018	GCS/LAB/S/2442/18-19	64	23	6.6	14.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
11	10.08.2018	GCS/LAB/S/2442/18-19	58	19	5.3	13.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
12	13.08.2018	GCS/LAB/S/2442/18-19	69	28	7.0	15.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
13	17.08.2018	GCS/LAB/S/2442/18-19	61	20	6.4	14.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
14	20.08.2018	GCS/LAB/S/2442/18-19	67	26	7.2	16.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
15	24.08.2018	GCS/LAB/S/2442/18-19	63	24	6.1	16.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
16	27.08.2018	GCS/LAB/S/2442/18-19	52	16	5.1	12.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
17	03.09.2018	GCS/LAB/S/1074/18-19	59	20	5.5	14.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
18	07.09.2018	GCS/LAB/S/1074/18-19	68	27	7.0	16.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
19	10.09.2018	GCS/LAB/S/1074/18-19	63	24	6.2	15.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
20	14.09.2018	GCS/LAB/S/1074/18-19	50	18	4.7	12.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
21	17.09.2018	GCS/LAB/S/1074/18-19	56	21	5.9	14.4	<0.1	<1.0	<10	<2	<2	<1	<0.1
22	21.09.2018	GCS/LAB/S/1074/18-19	61	23	6.3	15.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
23	24.09.2018	GCS/LAB/S/1074/18-19	66	25	7.3	15.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
24	28.09.2018	GCS/LAB/S/1074/18-19	57	22	6.0	14.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
25	06.10.2018	GCS/LAB/S/1165/18-19	48	17	4.4	12.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
26	08.10.2018	GCS/LAB/S/1165/18-19	57	20	6.3	14.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
27	12.10.2018	GCS/LAB/S/1165/18-19	68	27	7.0	16.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
28	15.10.2018	GCS/LAB/S/1165/18-19	70	29	5.5	15.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
29	19.10.2018	GCS/LAB/S/1165/18-19	62	23	6.1	16.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
30	22.10.2018	GCS/LAB/S/1165/18-19	55	21	6.9	16.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
31	26.10.2018	GCS/LAB/S/1165/18-19	59	22	6.5	16.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
32	29.10.2018	GCS/LAB/S/1165/18-19	64	26	7.3	15.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
33	02.11.2018	GCS/LAB/S/1217/18-19	54	21	5.5	14.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
34	07.11.2018	GCS/LAB/S/1217/18-19	63	26	7.0	15.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
35	09.11.2018	GCS/LAB/S/1217/18-19	64	25	7.7	17.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
36	12.11.2018	GCS/LAB/S/1217/18-19	75	32	6.4	16.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
37	16.11.2018	GCS/LAB/S/1217/18-19	65	27	6.9	16.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
38	19.11.2018	GCS/LAB/S/1217/18-19	62	23	6.1	17.7	<0.1	<1.0	<10	<2	<2	<1	<0.1
39	23.11.2018	GCS/LAB/S/1217/18-19	49	18	5.0	10.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
40	26.11.2018	GCS/LAB/S/1217/18-19	60	22	6.3	15.8	<0.1	<1.0	<10	<2	<2	<1	<0.1
41	03.12.2018	GCS/LAB/S//18-19	49	18	5.1	13.6	<0.1	<1.0	<10	<2	<2	<1	<0.1
42	07.12.2018	GCS/LAB/S//18-19	58	23	6.5	14.1	<0.1	<1.0	<10	<2	<2	<1	<0.1
43	10.12.2018	GCS/LAB/S//18-19	60	24	6.9	16.2	<0.1	<1.0	<10	<2	<2	<1	<0.1
44	14.12.2018	GCS/LAB/S//18-19	66	28	7.2	17.5	<0.1	<1.0	<10	<2	<2	<1	<0.1
45	17.12.2018	GCS/LAB/S//18-19	54	20	7.5	16.9	<0.1	<1.0	<10	<2	<2	<1	<0.1
46	21.12.2018	GCS/LAB/S//18-19	69	27	6.8	17.0	<0.1	<1.0	<10	<2	<2	<1	<0.1
47	24.12.2018	GCS/LAB/S//18-19	57	22	6.4	15.3	<0.1	<1.0	<10	<2	<2	<1	<0.1
48	26.12.2018	GCS/LAB/S//18-19	52	20	7.1	16.7	<0.1	<1.0	<10	<2	<2	<1	<0.1

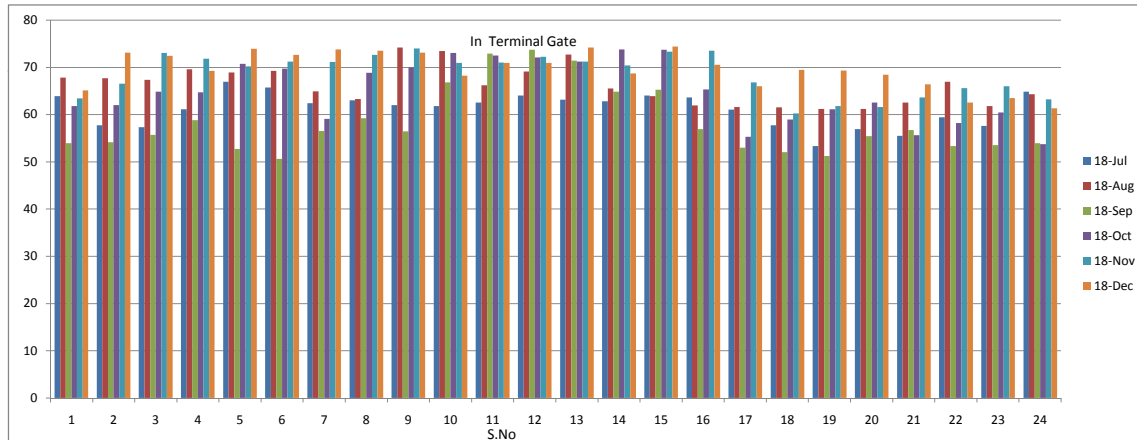


# AMBIENT NOISE LEVEL MONITORING

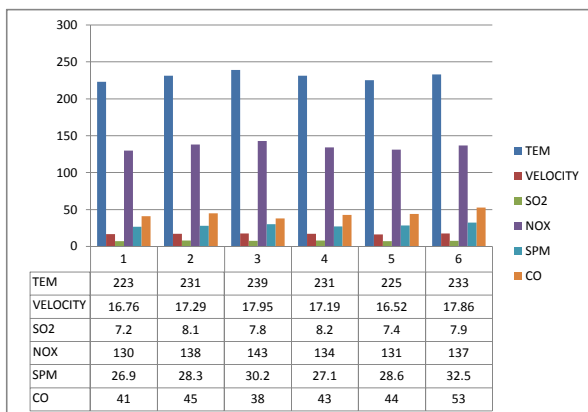
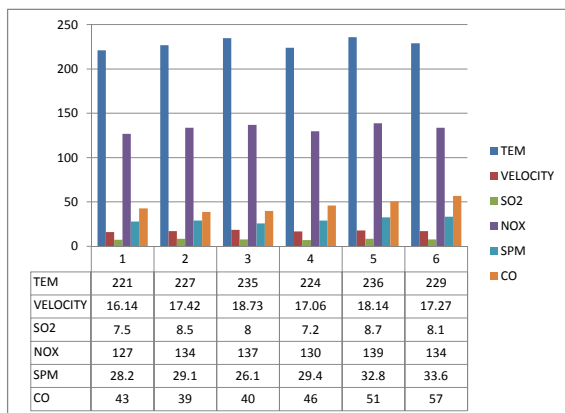
Location		PORT OPERATING BUILDING						RMU BUILDING					
Month & Year		Jul - 18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18	Jul - 18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18
Parameter & Unit		Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)
S.No.	Time of Sampling												
1	06.00 – 07.00 (Day)	56.9	64.5	53.2	64.7	72.5	56.9	60.6	61.0	59.6	70.5	57.0	67.0
2	07.00 – 08.00	60.7	68.0	52.7	68.3	74.4	54.8	64.6	61.7	59.9	70.6	61.4	67.7
3	08.00 – 09.00	63.7	70.2	59.9	72.1	74.6	52.3	65.5	62.0	60.1	68.3	59.9	65.7
4	09.00 – 10.00	60.6	68.5	73.0	73.0	74.6	69.2	64.3	61.3	59.5	62.7	70.1	66.2
5	10.00 – 11.00	65.5	69.7	73.9	72.8	70.3	69.9	62.2	60.9	66.4	68.8	73.7	70.6
6	11.00 – 12.00	67.6	70.4	58.9	73.1	66.6	58.5	66.0	68.7	69.6	64.5	66.6	72.2
7	12.00 – 13.00	68.2	64.0	65.6	71.9	66.4	71.9	65.9	64.4	72.2	66.7	57.3	71.4
8	13.00 – 14.00	69.3	72.1	61.0	73.5	65.0	74.7	60.0	69.0	69.1	73.4	65.2	71.5
9	14.00 – 15.00	66.5	68.4	59.7	71.2	67.5	71.9	59.5	69.7	71.4	73.6	72.2	71.1
10	15.00 – 16.00	64.3	69.9	60.2	66.1	66.9	71.5	64.2	71.5	71.9	73.2	73.6	71.5
11	16.00 – 17.00	61.4	68.9	62.0	65.4	60.9	71.9	65.5	68.9	72.8	72.6	62.5	67.3
12	17.00 – 18.00	61.8	60.4	62.9	68.5	61.7	74.7	67.8	64.2	71.9	72.9	73.8	65.7
13	18.00 – 19.00	60.9	65.6	59.8	69.2	61.5	72.6	66.9	61.7	65.8	74.2	74.0	68.3
14	19.00 – 20.00	65.1	64.7	60.0	69.7	61.9	70.3	67.2	61.6	61.1	69.7	73.1	67.1
15	20.00 – 21.00	67.9	66.3	58.0	67.0	56.8	69.2	65.7	63.1	61.2	62.8	74.7	68.0
16	21.00 – 22.00	63.2	66.9	57.0	59.0	49.1	73.3	65.1	61.4	64.5	63.4	73.4	68.0
17	22.00 – 23.00 (Night)	62.2	66.7	58.9	57.3	63.6	69.8	66.3	67.0	60.5	64.1	69.3	65.2
18	23.00 – 00.00	61.1	66.9	62.0	55.2	62.8	69.1	64.1	68.9	61.4	64.2	69.5	65.0
19	00.00 – 01.00	60.4	68.3	63.4	56.2	60.3	69.3	64.2	66.5	61.6	64.4	68.5	63.9
20	01.00 – 02.00	59.3	67.4	62.5	59.4	65.6	54	61.9	65.1	60.9	64.1	60.4	62.9
21	02.00 – 03.00	58.9	66.9	60.3	58.0	62.8	54.6	56.0	68.5	59.9	65.2	60.4	65.2
22	03.00 – 04.00	62.3	67.8	54.9	58.7	66.5	51.2	61.3	68.6	59.8	65.7	60.5	64.1
23	04.00 – 05.00	58.5	67.4	52.0	58.3	68.1	52.4	51.8	63.1	59.9	59.9	60.5	59.0
24	05.00 – 06.00	58.9	65.1	53.3	61.7	68.4	52.6	58.0	61.1	59.8	59.1	60.6	60.1



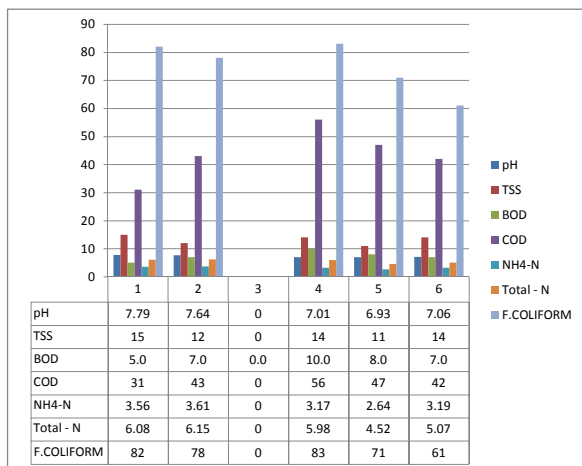
Location		IN TERMINAL GATE					
Month & Year		Jul - 18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18
Parameter & Unit		Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)
S.No.	Time of Sampling						
1	06.00 – 07.00 (Day)	63.9	67.8	53.9	61.8	63.4	65.1
2	07.00 – 08.00	57.7	67.7	54.1	62.0	66.5	73.1
3	08.00 – 09.00	57.3	67.3	55.7	64.8	73.0	72.4
4	09.00 – 10.00	61.1	69.6	58.8	64.7	71.8	69.2
5	10.00 – 11.00	66.9	68.9	52.7	70.7	70.2	73.9
6	11.00 – 12.00	65.7	69.2	50.6	69.7	71.2	72.6
7	12.00 – 13.00	62.4	64.9	56.5	59.1	71.1	73.8
8	13.00 – 14.00	63.0	63.3	59.2	68.8	72.6	73.5
9	14.00 – 15.00	62.0	74.2	56.4	70.0	74.0	73.1
10	15.00 – 16.00	61.8	73.4	66.8	73.0	70.9	68.2
11	16.00 – 17.00	62.5	66.2	72.9	72.5	71.0	70.9
12	17.00 – 18.00	64.0	69.1	73.7	72.1	72.2	70.9
13	18.00 – 19.00	63.1	72.7	71.4	71.2	71.2	74.2
14	19.00 – 20.00	62.8	65.5	64.8	73.8	70.4	68.7
15	20.00 – 21.00	64.0	63.9	65.2	73.7	73.3	74.4
16	21.00 – 22.00	63.6	61.9	56.9	65.3	73.5	70.5
17	22.00 – 23.00 (Night)	61.0	61.6	53.0	55.3	66.8	66
18	23.00 – 00.00	57.7	61.5	52.0	58.9	60.2	69.4
19	00.00 – 01.00	53.3	61.2	51.2	61.1	61.8	69.3
20	01.00 – 02.00	56.9	61.2	55.4	62.5	61.6	68.4
21	02.00 – 03.00	55.5	62.5	56.7	55.6	63.6	66.4
22	03.00 – 04.00	59.4	66.9	53.3	58.2	65.6	62.5
23	04.00 – 05.00	57.6	61.8	53.5	60.4	66.0	63.5
24	05.00 – 06.00	64.8	64.3	53.9	53.7	63.2	61.3



STACK MONITORING													
Location		DG 1500KVA - 1						DG 1500KVA - 2				DG - 3	DG - 2
Month & Year		Jul - 18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18	Jul - 18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18
S.No.	Parameters												
1	Stack Temperature, °C	221	227	235	224	236	229	223	231	239	231	225	233
2	Flue Gas Velocity, m/s	16.14	17.42	18.73	17.06	18.14	17.27	16.76	17.29	17.95	17.19	16.52	17.86
3	Sulphur Dioxide, mg/Nm3	7.5	8.5	8	7.2	8.7	8.1	7.2	8.1	7.8	8.2	7.4	7.9
4	NOX (as NO2) in ppmv	127	134	137	130	139	134	130	138	143	134	131	137
5	Particular matter, mg/Nm3	28.2	29.1	26.1	29.4	32.8	33.6	26.9	28.3	30.2	27.1	28.6	32.5
6	Carbon Monoxide, mg/Nm3	43	39	40	46	51	57	41	45	38	43	44	53
7	Gas Discharge, Nm3/hr	4376	4667	4939	4598	4775	4608	4527	4596	4697	4569	4443	4728



STP OUTLET WATER							
Location		STP OUTLET					
Month & Year		Jul - 18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec-18
S.No.	Parameters						
1	pH @ 25°C	7.79	7.64	-	7.01	6.93	7.06
2	Total Suspended Solids	15	12	-	14	11	14
3	BOD at 27°C for 3 days	5.0	7.0	-	10.0	8.0	7.0
4	COD	31	43	-	56	47	42
5	Ammonical Nitrogen as NH4-N	3.56	3.61	-	3.17	2.64	3.19
6	Total Kjeldahl Nitrogen as N - Total	6.08	6.15	-	5.98	4.52	5.07
7	Fecal Coliform	82	78	-	83	71	61



DRINKING WATER								
Month & Year		Unit	Jul - 18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec-18
S.No.	Parameters							
1	pH @ 25°C	-	-	-	-	6.56	7.51	7.32
2	Total Hardness as CaCo3	mg/L	-	-	-	11.0	19	25.0
3	Chloride as Cl	mg/L	-	-	-	14	34	24
4	Total Dissolved Solids	mg/L	-	-	-	35	70	69
5	Calcium as Ca	mg/L	-	-	-	3.23	4.8	8
6	Sulphate as SO4	mg/L	-	-	-	BDL (DL:1.0)	5	7.6
7	Nitrate as No3	mg/L	-	-	-	BDL(DL:1.0)		
8	Total Alkalinity as CaCo3	mg/L	-	-	-	17	28	37
9	Magnesium as Mg	mg/L	-	-	-	0.72	1.68	1.2
10	Color	Hazen	-	-	-	<1.0		
11	Odour	-	-	-	-	Unobjectionable		
12	Taste	-	-	-	-	Agreeable		
13	Turbidity	NTU	-	-	-	<0.5		
14	Iron as Fe	mg/L	-	-	-	BDL(DL 0.05)		
15	Total Residual Chlorine	mg/L	-	-	-	BDL(DL 0.1)		
16	Copper as Cu	mg/L	-	-	-	BDL(DL 0.05)		
17	Manganese as Mn	mg/L	-	-	-	BDL(DL 0.05)		
18	Fluoride as F	mg/L	-	-	-	BDL(DL 0.1)		
19	Phenolic compounds as C6H5OH	mg/L	-	-	-	BDL(DL 0.001)		
20	Mercury as Hg	mg/L	-	-	-	BDL(DL 0.001)		
21	Cadmium as Cd	mg/L	-	-	-	BDL(DL 0.003)		
22	Selenium as Se	mg/L	-	-	-	BDL(DL 0.01)		
23	Arsenic as As	mg/L	-	-	-	BDL(DL 0.01)		
24	Lead as Pb	mg/L	-	-	-	BDL(DL 0.01)		
25	Zinc as Zn	mg/L	-	-	-	BDL(DL 0.05)		
26	Anionic Detergents as MBAS	mg/L	-	-	-	Nil		
27	Total Chromium as Cr	mg/L	-	-	-	BDL(DL 0.05)		
28	Phenolphthalein Alkalinity as CaCo3	mg/L	-	-	-	Nil		
29	Aluminium as Al	mg/L	-	-	-	BDL(DL 0.05)		
30	Boron as B	mg/L	-	-	-	BDL(DL 0.1)		
31	Mineral Oil	mg/L	-	-	-	Nil		
32	Polynuclear Aromatic Hydrocarbons as	mg/L	-	-	-	Nil		
33	Pesticides	mg/L	-	-	-	Nil		
34	Cyanide as CN	mg/L	-	-	-	BDL (DL : 0.01)		
35	E. coli	MPN/100ml	-	-	-	Absence		
36	Total Coliform	MPN/100ml	-	-	-	Absence		

MARINE WATER														
Location		Surface Water												
Month & Year		Unit	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18
S.No.	Parameters													
1	pH @ 25°C	-	7.54	7.63	7.48	7.6	7.38	7.44	-	7.41	7.35	7.63	7.50	7.73
2	Temperature	°C	29	29	29	29	29	29	-	29	29	29	29	29
3	Total Suspended Solids	mg/L	16	12	16	11	14	18	-	15	18	15	17	20
4	BOD at 27 °C for 3 days	mg/L	12	10	12	8	10	12	-	8	10	12	13	11
5	Dissolved oxygen	mg/L	4.4	4.1	4.4	3.8	3.1	3.3	-	4.6	4.2	4.6	3.8	3.5
6	Salinity at 25 °C	-	39.3	34	33.1	27.3	30.9	32.7	-	32.3	33.9	36.8	32.7	38.2
7	Oil & Grease	mg/L	BDL(DL 1.0)				7.5	BDL(DL 1.0)	-	BDL(DL 1.0)				5.9
8	Nitrate as NO <sub>3</sub>	mg/L	4.88	4.78	5.26	4.96	5.62	6.03	-	4.3	4.87	5.03	5.84	6.17
9	Nitrite as NO <sub>2</sub>	mg/L	3.45	3.76	3.49	2.92	3.17	3.97	-	3.21	3.6	4.11	3.86	4.04
10	Ammonical Nitrogen as N	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
11	Ammonia as NH <sub>3</sub>	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
12	Kjeldahl Nitrogen as N	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
13	Total phosphates as PO <sub>4</sub>	mg/L	3.17	3.09	3.25	3.07	3.74	4.16	-	3.28	3.21	4.15	4.02	3.83
14	Total Nitrogen	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
15	Total Dissolved Solids	mg/L	39023	38197	37268	35194	36208	36988	-	37075	37796	39548	37430	36395
16	COD	mg/L	45	34	39	47	69	77	-	37	41	54	72	84
17	Total bacterial count	cfu/ml	69	61	70	64	68	55	-	70	73	71	65	61
18	Coliforms	Per 100 ml	Absence						-	Absence				
19	Escherichia coli	Per 100 ml	Absence						-	Absence				
20	Salmonella	Per 100 ml	Absence						-	Absence				
21	Shigella	Per 100 ml	Absence						-	Absence				
22	Vibrio cholerae	Per 100 ml	Absence						-	Absence				
23	Vibrio parahaemolyticus	Per 100 ml	Absence						-	Absence				
24	Enterococci	Per 100 ml	Absence						-	Absence				
25	Octane	µg/L	161	150	158	150	141	149	-	154	160	157	146	155
26	Nonane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
27	Decane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
28	Undecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
29	Tridecane	µg/L	7.6	7.2	7.4	6.7	7.3	8.4	-	7	7.5	7.2	7.7	8.2
30	Tetradecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
31	Pentadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
32	Hexadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
33	Octadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
34	Nonadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
35	Eicosane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
36	Primary Productivity	mg C/m <sup>3</sup> /hr	8.23	8.31	8.96	7.12	7.98	8.56	-	8.04	8.78	9.21	9.84	9.12
37	Chlorophylla	mg /m <sup>3</sup>	6.18	6.24	6.83	5.37	6.02	7.04	-	6.1	7.05	6.69	7.27	6.79
38	Phaeophytin	mg /m <sup>3</sup>	0.91	0.87	0.71	0.59	0.65	0.52	-	0.75	0.84	0.73	0.85	0.68
39	Oxidisable Paticular Organic	mg /L	7.06	7.12	6.42	5.84	6.46	7.89	-	6.97	6.36	9.17	8.38	7.14
PHYTOPLANKTON														
40	Bacteriastrium hyalinum	nos/ml	16	14	16	14	18	15	-	17	14	12	15	12
41	Bacteriastrium varians	nos/ml	7	10	12	8	11	10	-	8	16	14	9	14
42	Chaetoceros didymus	nos/ml	13	15	11	10	13	14	-	14	10	16	12	10
43	Chaetoceros decipiens	nos/ml	Nil	Nil	4	6	8	11	-	Nil	3	11	14	9
44	Biddulphia mobiliensis	nos/ml	5	7	10	5	7	9	-	9	8	9	11	13
45	Ditylum brightwellii	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
46	Gyrosigma sp	nos/ml	10	12	10	8	6	5	-	15	11	15	13	7
47	Cladophyxis sps	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
48	Coscinodiscus centralis	nos/ml	14	16	18	12	10	12	-	10	14	17	16	13
49	Coscinodiscus granii	nos/ml	8	11	13	15	9	8	-	13	15	19	8	11
50	Cylcotella sps	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
51	Hemidiscus hardmanianus	nos/ml	12	17	19	17	19	16	-	11	17	10	17	15
52	Laudaria annulata	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
53	Pyropacus horologicum	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
54	Pleurosigma angulatum	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
55	Leptocylindrus danicus	nos/ml	11	9	8	13	15	13	-	14	11	8	10	16
56	Guinardia flaccida	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
57	Rhizosolenia alata	nos/ml	9	13	15	20	22	18	-	10	17	13	19	22
58	Rhizosolenia impricata	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
59	Rhizosolenia semispina	nos/ml	15	18	16	11	16	19	-	16	18	15	18	20
60	Thalassionema nitzschioides	nos/ml	12	14	8	14	12	17	-	11	9	7	9	19
61	Triceratium reticulatum	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
62	Ceratium trichoceros	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
63	Ceratium furca	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
64	Ceratium macroceros	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
65	Ceracium longipes	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
ZOOPLANKTONS														
66	Acrocalanus gracilis	nos/ml	13	15	17	13	10	12	-	10	14	18	15	10
67	Acrocalanus sp	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
68	Paracalanus parvus	nos/ml	14	19	15	17	13	11	-	17	11	12	16	13
69	Eutintinus sps	nos/ml	12	14	10	8	9	14	-	9	15	11	12	15
70	Centropages furcatus	nos/ml	9	11	14	12	14	16	-	13	18	14	17	18
71	Corycaeus dana	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
72	Oithona brevicornis	nos/ml	11	13	16	19	17	15	-	15	17	15	12	14
73	Euterpina acutifrons	nos/ml	10	7	9	5	8	10	-	11	13	16	11	8
74	Metacalanus aurivilli	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
75	Copepod nauplii	nos/ml	16	18	13	11	12	16	-	14	10	8	10	17
76	Cirripede nauplii	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
77	Bivalve veliger	nos/ml	15	12	18	16	15	17	-	18	12	7	9	11
78	Gastropod veliger	nos/ml	8	10	12	14	18	20	-	12	14	10	13	18

Location		Bottom Water												
Month & Year		Unit	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18
S.No.	Parameters		CB-1	Bollard 1	Bollard 1	Bollard 4	Bollard 1	Bollard 5	CB-1	Bollard 26	Bollard 27	Bollard 24	Bollard 27	Bollard 25
1	pH @ 25 °C	-	7.7	7.87	7.72	7.58	7.63	7.65	-	7.65	7.78	7.61	7.7	7.78
2	Temperature	°C	29	29	29	29	29	29	-	29	29	29	29	29
3	Total Suspended Solids	mg/L	18	15	17	13	19	23	-	13	16	18	22	25
4	BOD at 27 °C for 3 days	mg/L	13	11	13	9	13	16	-	9	12	14	15	17
5	Dissolved oxygen	mg/L	2.4	2	2.3	3	2.7	2.5	-	2.2	2.4	2.8	2.9	2.3
6	Salinity at 25 °C	-	35.6	36	34.7	31.4	34.6	37.9	-	35	35.1	33.6	37.3	36.6
7	Oil & Grease	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
8	Nitrate as No <sub>3</sub>	mg/L	6.03	6.1	7.21	5.92	6.83	7.49	-	5.97	6.86	6.19	6.56	7.02
9	Nitrite as No <sub>2</sub>	mg/L	5.17	5.21	5.4	4.17	4.56	5.61	-	5.04	5.46	4.65	4.84	5.26
10	Ammonical Nitrogen as N	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
11	Ammonia as NH <sub>3</sub>	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
12	Kjeldahl Nitrogen as N	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
13	Total phosphates as PO <sub>4</sub>	mg/L	2.98	3.14	3.94	3.29	3.91	3.78	-	3.07	3.83	3.66	4.05	4.21
14	Total Nitrogen	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
15	Total Dissolved Solids	mg/L	39781	40076	39146	37613	38010	38543	-	39468	39876	38275	38942	38127
16	COD	mg/L	73	98	108	92	118	102	-	80	97	87	109	89
17	Total bacterial count	cfu/ml	70	75	80	74	71	83	-	69	76	69	66	75
18	Coliforms	Per 100 ml	Absence						-	Absence				
19	Escherichia coli	Per 100 ml	Absence						-	Absence				
20	Salmonella	Per 100 ml	Absence						-	Absence				
21	Shigella	Per 100 ml	Absence						-	Absence				
22	Vibrio cholerae	Per 100 ml	Absence						-	Absence				
23	Vibrio parahaemolyticus	Per 100 ml	Absence						-	Absence				
24	Enterococci	Per 100 ml	Absence						-	Absence				
25	Colour	Hazan	10	12	10	15	10	15	-	8	15	20	15	12
26	Odour	-	Unobjectionable						-	Unobjectionable				
27	Taste	-	Disagreeable						-	Disagreeable				
28	Turbidity	NTU	25	22	26	20	23	28	-	20	24	17	19	24
29	Calcium as Ca	mg/L	594	598	567	545	569	543	-	572	558	587	554	518
30	Chloride as Cl	mg/L	19712	19860	19205	17371	19129	21000	-	19327	19416	18611	20638	20240
31	Cyanide as CN	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
32	Fluoride as F	mg/L	0.41	0.45	0.42	0.34	0.38	0.31	-	0.36	0.39	0.45	0.42	0.37
33	Magnesium as Mg	mg/L	1368	1379	1298	1247	1197	1216	-	1344	1305	1263	1231	1099
34	Total Iron as Fe	mg/L	0.26	0.3	0.35	0.21	0.31	0.38	-	0.25	0.31	0.29	0.33	0.42
35	Residual Free Chlorine	mg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
36	Phenolic Compounds as C6H5OH	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
37	Total Hardness as CaCO <sub>3</sub>	mg/L	7185	7238	6825	6558	6410	6424	-	7029	6832	6731	6514	5874
38	Total Alkalinity as CaCO <sub>3</sub>	mg/L	181	186	206	197	205	243	-	175	194	186	210	231
39	Sulphide as H <sub>2</sub> S	mg/L	BDL(DL 0.5)						-	BDL(DL 0.5)				
40	Sulphate as SO <sub>4</sub>	mg/L	2837	2859	2794	2685	2514	2587	-	2791	3018	2987	2689	2420
41	Anionic surfactants as MBAS	mg/L	BDL(DL 1.0)						-	BDL(DL 1.0)				
42	Monocrotophos	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
43	Atrazine	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
44	Ethion	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
45	Chlorpyrifos	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
46	Phorate	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
47	Mehyle parathion	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
48	Malathion	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
49	DDT (o,p and p,p-Isomers of DDT,DDE	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
50	Gamma HCH (Lindane)	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
51	Alppha HCH	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
52	Beta HCH	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
53	Delta HCH	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
54	Endosulfan (Alpha,beta and sulphate)	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
55	Butachlor	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
56	Alachlor	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
57	Aldrin/Dieldrin	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
58	Isoproturon	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
59	2,4-D	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
60	Polychlorinated Biphenyls (PCB)	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
61	Polynuclear aromatic hydrocarbons	µg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
62	Arsenic as As	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
63	Mercury as Hg	mg/L	BDL(DL 0.001)						-	BDL(DL 0.001)				
64	Cadmium as Cd	mg/L	BDL(DL 0.003)						-	BDL(DL 0.003)				
65	Total Chromium as Cr	mg/L	BDL(DL 0.05)						-	BDL(DL 0.05)				
66	Copper as Cu	mg/L	BDL(DL 0.05)						-	BDL(DL 0.05)				
67	Lead as Pb	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
68	Manganese as Mn	mg/L	BDL(DL 0.05)						-	BDL(DL 0.05)				
69	Nickel as Ni	mg/L	BDL(DL 0.05)						-	BDL(DL 0.05)				
70	Selenium as Se	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
71	Barium as Ba	mg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
72	Silver as Ag	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
73	Molybdenum as Mo	mg/L	BDL(DL 0.01)						-	BDL(DL 0.01)				
74	Octane	µg/L	179	174	183	169	178	170	-	167	179	184	181	187
75	Nonane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
76	Decane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
77	Undecane	µg/L	7.5	7.8	8.4	8	8.8	8.3	-	7.1	8.7	8.2	8.6	8.9
78	Tridecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
79	Tetradecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
80	Pentadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
81	Hexadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				

Location		Bottom Water												
Month & Year		Unit	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18
S.No.	Parameters		CB-1	Bollard 1	Bollard 1	Bollard 4	Bollard 1	Bollard 5	CB-1	Bollard 26	Bollard 27	Bollard 24	Bollard 27	Bollard 25
82	Heptadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
83	Octadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
84	Nonadecane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
85	Elcosane	µg/L	BDL(DL 0.1)						-	BDL(DL 0.1)				
86	Primary Productivity	mg C/m <sup>3</sup> /hr	9.57	9.43	9.72	8.78	8.12	9.05	-	9.26	9.54	9.04	9.91	9.49
87	Chlorophyll a	mg /m <sup>3</sup>	7.73	7.69	8.27	7.64	7.25	7.98	-	7.5	8.36	6.95	8.08	7.33
88	Phaeophytin	mg /m <sup>3</sup>	0.85	0.96	0.89	0.91	0.84	0.74	-	0.8	0.95	0.79	0.96	0.81
89	Oxidisable Paticular Organic	mg /L	8.28	8.34	7.78	7.15	7.93	8.16	-	8.21	7.69	8.23	8.75	8.27
PHYTOPLANKTON														
90	Bacteriastrum hyalinum	nos/ml	18	15	18	10	14	16	-	13	17	16	12	10
91	Bacteriastrum varians	nos/ml	9	6	9	12	10	12	-	11	14	18	20	16
92	Chaetoceros didymus	nos/ml	10	13	15	14	16	18	-	8	12	13	17	14
93	Chaetoceros decipiens	nos/ml	4	8	11	8	11	15	-	10	7	11	15	12
94	Biddulphia mobiliensis	nos/ml	10	11	13	9	13	10	-	14	10	17	10	15
95	Ditylum brightwellii	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
96	Gyrosigma sp	nos/ml	Nil	Nil	5	13	12	8	-	Nil	3	4	7	11
97	Cladophyxis sps	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
98	Coscinodiscus centralis	nos/ml	12	9	12	11	15	16	-	11	9	14	16	9
99	Coscinodiscus granii	nos/ml	7	5	7	9	7	9	-	9	11	12	14	13
100	Cylcotella sps	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
101	Hemidiscus hardmanianus	nos/ml	13	10	12	16	15	11	-	15	13	10	13	17
102	Laudaria annulata	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
103	Pyropacus horologicum	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
104	Pleurosigma angulatum	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
105	Leptocylindrus danicus	nos/ml	8	16	14	15	18	17	-	12	15	17	11	8
106	Guinardia flaccida	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
107	Rhizosolenia alata	nos/ml	13	14	10	18	9	14	-	9	12	9	8	15
108	Rhizosolenia impricata	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
109	Rhizosolenia semispina	nos/ml	17	15	13	10	15	13	-	19	17	13	9	19
110	Thalassionema nitzschioides	nos/ml	15	19	21	19	17	21	-	17	20	22	18	22
111	Triceratium reticulatum	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
112	Ceratium trichoceros	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
113	Ceratium furca	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
114	Ceratium macroceros	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
115	Ceracium longipes	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
ZOOPLANKTONS														
116	Acrocalanus gracilis	nos/ml	16	12	10	12	13	15	-	18	12	16	18	14
117	Acrocalanus sp	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
118	Paracalanus parvus	nos/ml	10	15	9	16	18	14	-	16	13	11	15	16
119	Eutintinus sps	nos/ml	15	11	16	14	10	12	-	13	18	15	13	10
120	Centropages furcatus	nos/ml	12	17	12	10	12	17	-	14	17	13	10	15
121	Corycaeus dana	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
122	Oithona brevicornis	nos/ml	14	18	20	18	15	19	-	12	15	9	11	13
123	Euterpina acutifrons	nos/ml	11	13	17	20	14	11	-	10	16	12	16	9
124	Metacalanus aurivilli	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
125	Copipod nauplii	nos/ml	13	10	8	5	8	13	-	17	7	10	11	18
126	Cirripede nauplii	nos/ml	Nil	Nil	Nil	Nil	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil
127	Bivalve veliger	nos/ml	17	19	15	11	16	20	-	15	10	9	12	17
128	Gastropod veliger	nos/ml	9	7	11	13	17	16	-	11	8	5	14	19

SEA SEDIMENT														
Location		Sea Sediment												
Month & Year		Unit	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18	Jul-18	Aug - 18	Sep - 18	Oct - 18	Nov - 18	Dec - 18
S.No.	Parameters			Bollard 1	Bollard 1	Bollard 4	Bollard 1	Bollard 5		Bollard 26	Bollard 27	Bollard 24	Bollard 27	Bollard 25
1	Total organic matter	%	0.47	0.41	0.48	0.43	0.75	0.54	-	0.45	0.51	0.55	0.82	0.51
2	% Sand	%	43	34	30	32	34	29	-	37	33	36	31	27
3	%silt	%	15	10	17	20	17	18	-	12	20	23	20	21
4	%Clay	%	42	56	53	48	50	53	-	51	47	41	49	52
5	Iron (as Fe)	mg/kg	15.9	16.3	15.5	17.1	15.8	17.4	-	15	15.9	16.7	16	18.6
6	Aluminium (as Al)	mg/kg	13127	13425	12964	13443	14012	13126	-	12863	12998	13380	13884	13404
7	Chromium (as cr)	mg/kg	55	49	45	51	63	79	-	42	46	49	55	67
8	Copper (as cu)	mg/kg	63	67	74	68	74	58	-	64	78	62	69	61
9	Manganese (as Mn)	mg/kg	486	472	423	395	343	370	-	467	440	434	386	363
10	Nickel (as Ni)	mg/kg	14.8	15.4	14.6	12.6	13.7	12.2	-	14	15.1	14.9	13.1	14.5
11	Lead (as Pb)	mg/kg	51	56	61	55	68	63	-	53	59	67	74	66
12	Zinc (as Zn)	mg/kg	274	280	215	230	255	241	-	269	247	258	237	228
13	Mercury(as Hg)	mg/kg	0.61	0.55	0.71	0.54	0.61	0.67	-	0.67	0.85	0.72	0.75	0.6
14	Total phosphorus as P	mg/kg	172	163	178	161	186	149	-	170	163	170	183	153
15	Octane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
16	Nonane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
17	Decane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
18	Undecane	mg/kg	0.43	0.5	0.63	0.49	0.52	0.58	-	0.41	0.57	0.65	0.59	0.67
19	Dodecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
20	Tridecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
21	Tetradecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
22	Phntadecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
23	Hexadecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
24	Heptadecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
25	Octadecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
26	Nonadecane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
27	Elcosane	mg/kg	BDL(DL 0.1)						-	BDL(DL 0.1)				
I. Nematoda														
28	Oncholaimussp	nos/m <sup>2</sup>	18	13	18	14	18	15	-	16	17	20	16	20
29	Tricomasp	nos/m <sup>2</sup>	14	11	14	9	12	10	-	13	11	13	15	18
II. Foraminifera														
30	Ammoniaebecarii	nos/m <sup>2</sup>	7	10	13	16	18	14	-	8	15	19	13	16
31	Quinulinasp	nos/m <sup>2</sup>	12	15	11	8	11	16	-	11	9	6	14	12
32	Discorbinellasp.,	nos/m <sup>2</sup>	10	12	15	13	10	12	-	9	12	17	12	15
33	Bolivinaspathulata	nos/m <sup>2</sup>	11	14	10	15	9	11	-	12	16	18	10	13
34	Elphidiumsp	nos/m <sup>2</sup>	9	7	12	10	14	18	-	10	13	11	17	20
35	Noniondepressula	nos/m <sup>2</sup>	12	16	14	19	17	9	-	14	8	12	9	11
III. Molluscs-Bivalvia														
36	Meretrixveligers	nos/m <sup>2</sup>	26	24	20	17	13	17	-	22	25	21	18	14
37	Anadoraveligers	nos/m <sup>2</sup>	19	17	21	23	27	21	-	15	18	16	21	23
	Total No. of individuals	nos/m <sup>2</sup>	138	139	148	144	147	143	-	130	144	153	145	162
	Shanon Weaver Diversity Index		2.22	2.25	2.27	2.25	2.26	2.27	-	2.26	2.25	2.26	2.27	2.28

## Form-V

Environmental Statement for the financial year ending 31<sup>st</sup> March 2018**Part-A**

- i) Name and Address : Ennarasu Karunesan  
CEO – Southern Ports  
Adani Ennore Container Terminal Private Limited  
C/O Kamarajar Port Limited  
Vallur post, Ennore  
Thiruvallur – 600120  
Tamil Nadu, India
- ii) Industry Category : Container Terminal
- iii) Production Capacity : **Handling Capacity** : 11.68 MMTPA  
Containers 11.68 MMTPA
- iv) Year of establishment : 2016
- v) Date of the last environmental statement submitted : First Environmental Statement in the name of Adani Ennore Container Terminal Private Limited

**Part -B****WATER AND RAW MATERIAL CONSUMPTION**

- (i) Water Consumption

S.No	Water Consumption (m <sup>3</sup> /Calendar Day)	2016-2017	2017-2018
1	Domestic	-	10.64

The project activity does not involve any product to be generated except for the operation of the port in material handling. Hence there is no water consumption per product generated. However the water is consumed for the purposes as mentioned above.

(ii) Raw Material Consumption

S.No	Name of the Raw Material/Chemicals/Other Consumptions.	Consumption during the financial year 2016 – 17.	Consumption during the financial year 2017 – 18.
1	Not Applicable	NIL	NIL
The project activity does not involve any product to be generated except for the operation of the port in material handling. Hence there is no water consumption per product generated. However the water is consumed for the purposes as mentioned above.			

**Part-C**

**Pollution Generated  
(As per consent order)**

**WATER**

Parameter	Consent Limit	Actual	% Variation with prescribed standard
pH	5.5-9	7.31	-Nil-
Total Suspended Solids (mg/l)	30	6	-Nil-
BOD (3 days at 27°C) (mg/l)	20	4	-Nil-
Water sewage discharged (KLD)	25	15	-Nil-

**AIR**

**Point source emission with stack:**

Parameter	Quantity of pollutants discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	% Variation with prescribed standard
PM <sub>10</sub>	Since there is no product produced, so no measurement made on mass per day basis for the products.	45	-Nil-
PM <sub>2.5</sub>		9	-Nil-
SO <sub>2</sub>		5	-Nil-
NO <sub>2</sub>		9	-Nil-

**Part-D**

**HAZARDOUS WASTES**

S.No.	Hazardous Wastes.		Quantity (2016-2017)	Quantity (2017-2018)
1.	Process	5.1 Used Oil.	Nil	Nil
2.		5.2 Waste / residues containing oil.	Nil	Nil
3.		3.3 Sludge and filters contaminated with oil.	Nil	Nil
5.		21.1 Waste & Residues [Paint wastes].	Nil	Nil
6.		33.3 Discarded containers/barrels/liners contaminated with hazardous wastes/chemicals.	Nil	Nil

**Part-E**

**SOLID WASTES**

Solid Waste		Quantity (2016-2017)	Quantity (2017-2018)
a)	From process	Processes from this Project activity does not generate any Solid Waste	
b)	From pollution control facilities	Nil	Nil

**Part-F**

**Characteristics & disposal practices for hazardous and solid wastes**

- Used oil & Waste Containing Oil**

At Adani Ennore Container Terminal Private Limited (AECTPL), used oil to be handled is mainly generated from diesel generators. Used oils are collected and stored in barrels and are being mechanically processed to recover oil. AECTPL has tied up with M/s Lakshmi & Co for reprocessing the oil.

## **Part-G**

### **Impact on pollution control measures on conservation of natural resources and consequently on the cost of production**

- Adani Ennore Container Terminal Private Limited is the first container terminal to have all electrified cranes hence the diesel consumption by the cranes are totally eradicated
- Sewage Treatment Plants (STPs) were in continuous and treated water quality is meeting the norms. The total cost spent on STP operations was INR: 6,00,000
- Environmental monitoring is carried out through NABL accredited laboratory.

Since the unit has not yet reached the optimal capacity of handling the impact of the abatement measures are not measured on the cost of production

**Part-H**

**Additional investment proposal for environment protection including abatement of pollution**

	Description	
<b><u>Major Investments Proposal (total project cost in INR lakhs)</u></b>		
1	Integrated waste management shed	15
<b><u>Regular Expenditure ( cost in INR lakhs/year)</u></b>		
1	Environmental monitoring of MOEF recognized third party	9
2	Green belt & Horticulture development	3
3	Annual maintenance contractor of STP operation	6

## **Part-I**

### **ANY OTHER PARTICULARS IN RESPECT TO ENVIRONMENT**

- Formation of Energy Conservation Committee to measure the amount of energy consumed and to actions to reduce the energy consumed through container operations
- Study by Prof.Dr.N.Kumar, Ph.D., F.H.S.I., Former Dean ( Hort), Tamil Nadu Agricultural University, Coimbatore horticulture consultant for afforestation and adoption of "Woodlot Planting Technique"
- Formation of Water Warriors committee to identify and reduce the water consumption. The committee would propose innovative water solutions
- Integrated Management System certification under ISO 14001 : 2015. Stage -1 audit completed.
- Waste management in line to 5R principle.