# adani

AECTPL/KPL/EC-Compliance/ENV/-01

Date: 29/05/2018

To, **The General Manager (Operations)** Kamarajar Port Limited, 23 Rajaji Salai, Chennai – 600 001

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 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

Dear Sir,

With reference to above subjected matter, here Adani Ennore Container Terminal Private Limited is submitting the Half yearly compliance report of applicable conditions to the Environmental Clearance obtained by the M/s. Kamarajar Port Limited in various stages of development as referred above.

Pertaining to Container Terminal conditions compliance is enclosed for the period of July -2017 to Dec – 2017.

Hence it is requested to kindly acknowledge the same.

Thanking you sir, Yours Faithfully, For Adani Ennore Container Terminal Private Limited,

Chennal. Jeyaraj Thamburaj ot. - AECTPL ad

Encls: Half yearly EC compliance report for the period of July-17 to Dec-17.

Adani Ennore Container Terminal Pvt Ltd Adani House Nr Mithakhali Circle, Navrangpura Ahmedabad 380 009 Gujarat, India Tel +91 79 2656 56 5555 Fax +91 79 2555 5500 info@adani.com www.adani.com CIN: U61200GJ2014PTC078795

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India

# காமராஜர் துறைமுக நிறுவனம்

कामराजर पोर्ट लिमिटेड



Kamarajar Port Limited

(A Mini Ratna Government of India Undertaking)

#### No. KPL/MS/Env/MoEF&CC/2017

Date: 18.12.2017

#### Dr. C Kaliaperumal, M.E., Ph.D

Director (S)

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

**Sub:** Kamarajar Port Limited, Chennai (erstwhile Ennore Port Limited) -Status of Compliance on the conditions issued by Ministry of Environment & Forests-Request for issue of certificate-Reg.

#### Sir,

Please find enclosed the compliance report on the Ministry's conditions mentioned in the following referred 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, Ili dated 28.9.1992.
- 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.
- 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° Floor, (North Wing) & 3° Floor, Jawahar Building, 17, Rajaji Salai, Chennai - 600 001. Ph : 044-25251666-70 Fax : 044-25251665 CIN: U45203TN1999G0I043322

: पंजीवृत्त कार्यालय & व्यवसाय सुविधा केन्द्र : दूसरी मंजिल, (उत्तर विंग) & तीसरी मंजिल, जंबाहर बिल्डिंग. 17, राजाजी सलाई, चेन्नई-690 001. फोन : 044-25251666-70 फेक्स : 044-25251665 website : www.kamarajarport.ln e-mail : info@kplmail.in Kamarajar Port - India's Port of the Milleanium

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

पोर्ट कार्यालय : यल्लूर पोस्ट, चेन्नई - 600 120 फोन : 044-27950030-40 फेवरा : 044-27950002



- 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.
- 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.

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: Compliance report for the individual projects-Total six Nos.

### Vide order no: 10-28/2005-IA-III dated $19^{th}$ May, 2006

#### Specific Conditions:

SN	Environmental Clearance conditions	Compliance Status as on 31/06/2017
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.	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 month 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.	Operational Risk Assessment has been submitted to Independent Engineers (EIL – Engineers India Limited) and KPL.
vi.	Approval form Chief Controller of Chief Explosives should be obtained for hazardous chemicals storage, transfer and related activities.	Complied 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.
х.	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 been 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 bathymetric changes caused due	Status by KPL.

	h = h = = = = :	
xiii.	All development in the port should be	Status by KPL.
	accordance with the Coastal Regulation	
	Zone Notification, 1991 and approved	
	Coastal Zone Management Plan of Tamil	
	Nadu.	
xiv	The project proponent should undertake a	Status by KPL
	comprehensive mydrodynamic modering	
	sub sit the second to the Misister within C	
	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.	
XV.	Construction labour camps should be	Complied.
	located outside of CRZ area and should be	Construction of container terminal is
	provided with adequate cooking and	
	capitation facilities	completed.
Na di	The assignt affected encode of any should	Status by KDI
XVI.	The project affected people, of any should	SIGIUS UV NPL.
	be properly compensated and	
	rehabilitated.	
GENERA	L CONDITIONS:	
i.	Development of the proposed channel	Status by KPL.
	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	
	colation to the accessed development	
	activities must have approvals of the	
	concerned State Govt. Depts./Agencies.	
ii.	A well-equipped laboratory with suitable	Complied.
	instruments to monitor the quality of air	AECTPL has awarded Environmental
	and water shall be set up as to ensure	Monitoring to MoEF&CC accredited
	that the quality of ambient air and water	laboratory. The reports are being
	conforms to the prescribed standards.	submitted to KPL and State Pollution
	The laboratory will also equipped with	Control Board on monthly basis.
	qualified mannower including a marine	Environment Monitoring report for the
	biologist so that the masine water quality	poriod Sopt $2017 - Doc 2017$ are
	is socially monitored in order to opening	attached as Appavusa 1
	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	
	neriodic monitoring reports at least once	
	in 6 months must be send to this Ministry	
	(RO at Rangalore) and Pollution Control	
	Adaquata acquisiance for informations	Complied
111.	Auequate provisions for infrastructure	
	racilities such as water supply, fuel for	Construction completed.
	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.	
iv.	To prevent discharge of sewage and other	Complied.
	liquid wastes into the water bodies,	AECTPL has installed 25 KLD capacity
	adequate system for collection and	Sewage Treatment Plant and treated
	treatment of the waste must be provided.	water is being used for horticulture
	No Sewage and other liquid wastes	purpose
	without treatment should be allowed to	
	enter into the water bodies.	
V.	Appropriate facility should be created for	Status by KPL.
	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.	
VI.	Necessary navigational alos such as	Status by KPL.
	reconnized safety standards shall be	
	annied in case of barne/vessel	
	movements	
vii	The project authorities should take	Status by KPL
••••	appropriate community development and	However AECTPL has initiated few CSR
	welfare measures for villagers in the	initiatives in the vicinity of the project.
	vicinity of the project site, including	
	drinking water facilities. A separate fund	
	should be allocated for the purpose.	
viii.	The quarrying material required for the	Complied
	construction purpose should be obtained	AECTPL has completed construction.
	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.	
IX.	For employing Unskilled, semi-skilled and	Complied.
	skilled workers for the project, preference	AECTPL has considered local people
~	The recommendations made in the EMP	Status by KDI
<b>^</b> .	and DMP as contained in the EIA and PA	Status by NFL.
	reports of the projects shall be effectively	
	implemented.	
xi.	A separate EMC with suitable qualified	Noted for compliance
	staff to carry out various environment	AECTPL will deploy qualified
	should be set up under the charge of a	environmental executive, supported by
	Senior Executive who will report directly	Environment team from head office.
	to Chief Executive of the Company.	
xii.	The funds earmarked for environment	Complied
	protection measures should be	AECTPL allocated budget for
	maintained in a separate account and	Environment Management is about INR:
	there should be no diversion of these	8, 70,000 for Financial Year - 2018-
	funds for any other purpose. A year-wise	2019.
1		
	expenditure on environmental safeguards	
	expenditure on environmental safeguards should be reported to this Ministry.	
xiii.	expenditure on environmental safeguards should be reported to this Ministry. Full support should be extended to the	Noted for compliance
xiii.	expenditure on environmental safeguards should be reported to this Ministry. Full support should be extended to the officers of the Ministry's Regional office	Noted for compliance

	Orabal and CDOD by the endert	
	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.	
xiv.	In case there is an intension of deviation	Noted for compliance
	or alternation in the project including the	
	implementing approved fresh reference	
	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	
	environmental protection. The project	
	proponents should be responsible for	
	implementing the suggested safeguard	
	measures.	
XV.	The Ministry reserves right to revoke this	Noted.
	clearance if any of the conditions	
	stigulated as not compiled with to the	
	satisfaction of this Ministry.	
xvi.	This Ministry or any other competent	Noted.
	authority may stipulate additional	
	conditions subsequently if deemed	
	which shall be seenalied with	
	which shall be complied with.	
XVII.	The project proponent should advertise at	Status by KPL.
	least in two local newspapers widely	
	circulated in the region around the	
	project one of which shall be in the	
	versagular language of the legality	
	concerned available with the SPCB and	
	may also be seen at Website of the	
	Ministry of Environment & Forests at	
	http://www.envforenic.in. The	
	adverticement should be made within 7	
	dovertisement should be made within 7	
	days from the date of issue of the	
	clearance letter and a copy of the sam	
	e should be forwarded to the Regional	
	Office of the Ministry at Bangalore.	
xviii	The project proponents should inform the	Status by KPI
~~	DO as well as the Misistry the date of	
	financial closure and final approval of the	
	project by the concerned authorities and	
	the date of start of Land Development	
	Work.	
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Vide order no: 10-28/2005-IA-III dated: 10/09/2007 and validity extension date: 31.03/2017

#### A. Specific Conditions:

S.No	Environmental Clearance conditions	Compliance Status as on 31/06/2017
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.	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 are 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.	TNCZMA recommendation was obtained by KPL AECTPL accorded Tamil Nadu Pollution Control Board as Consent to Operate to handle 11.68 MMTPA containers vide order no: T5/TNPCB/F.1305AMB/RL/AMB/W/2017 – dated: 28/06/2017. Application for extension of validity has already been submitted to SPCB.

#### B. General Conditions:

S.No	Environmental Clearance conditions	Compliance Status as on 31/06/2017
i	Construction of the proposed structures should be undertaken meticulously confirming to the existing Central/ local rules and regulations including Coastal	Status by KPL.
	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.	

ii	Adequate provisions for infrastructure	Complied.
	facilities such as water supply, fuel.	Construction of container terminal is
	sanitation etc. should be ensured for	completed.
	construction workers during the	
	construction phase of the project so as to	
	avoid felling of trees/ Mangroves and	
	nollution of water and the surroundings	
iii	The project authorities much make	Complied
	necessary arrangements for disposal of	AECTPI has commissioned 25 KLD
	colid wastos and for the treatment of	sowage treatment plant to collect and
	offluents by providing a proper wastewater	treat the cowage approached from the
	troatmost plant outside the CP7 area. The	torminal
	cuality of tracted offluence calid waster	terminal.
	quality of treated efficients, solid wastes	
	and horse level etc. must comonn to the	
	suthesities isoludies the Costsel/State	
	Bollution Control Board and the Union	
	Ministry of Environment and Encosts under	
	the Equiserment (Distraction) Act 1086	
	whichever are more stringent.	
iv	The proponent shall obtain the requisite	Complied
	consents for discharge of effluents and	AECTPL accorded approval from Tamil
	emission under the Water (Prevention and	Nadu Pollution Control Board for Consent
	Control of Pollution) Act, 1974 and the Air	to Operate vide order no:
	(Prevention and Control of Pollution) Act,	T5/TNPCB/F.1305AMB/RL/AMB/W/2017 -
	1981 from the Tamil Nadu Pollution control	dated: 28/06/2017 under the Air & Water
	Board before commissioning of the project	Acts . Application for extension of validity
	and a copy of each of these shall be sent to	has already been submitted to SPCB.
	this Ministry.	
V	The proponent shall provide for a regular	Complied
V	The proponent shall provide for a regular monitoring mechanism so as to ensure that	Complied AECTPL has hired the service of
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v vi vii viii	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. 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. The sand dunes and mangroves, if any, on the site should not be disturbed in any way. A copy of the clearance letter will be marked to the concerned Panchavat/Local	Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring and reports are being submitted to state pollution control board. Reports are made available for inspection to the concerned State/Central officials during their visits. Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring Status by KPL.
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v vi vii viii	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. 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. The sand dunes and mangroves, if any, on the site should not be disturbed in any way. A copy of the clearance letter will be marked to the concerned Panchayat/Local NGO, if any from whom any suggestion/representation has been	Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring and reports are being submitted to state pollution control board. Reports are made available for inspection to the concerned State/Central officials during their visits. Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring Status by KPL.
v vi vii viii	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. 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. The sand dunes and mangroves, if any, on the site should not be disturbed in any way. 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.	Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring and reports are being submitted to state pollution control board. Reports are made available for inspection to the concerned State/Central officials during their visits. Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring Status by KPL.
v vi vii viii ix	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. 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. The sand dunes and mangroves, if any, on the site should not be disturbed in any way. 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. The Tamil Nadu Pollution Control Board	Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring and reports are being submitted to state pollution control board. Reports are made available for inspection to the concerned State/Central officials during their visits. Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring Status by KPL. Status by KPL.
v vi vii viii ix	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. 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. The sand dunes and mangroves, if any, on the site should not be disturbed in any way. 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. The Tamil Nadu Pollution Control Board should display a copy of the clearance	Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring and reports are being submitted to state pollution control board. Reports are made available for inspection to the concerned State/Central officials during their visits. Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring Status by KPL. Status by KPL.
v vi vii viii ix	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. 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. The sand dunes and mangroves, if any, on the site should not be disturbed in any way. 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. The Tamil Nadu Pollution Control Board should display a copy of the clearance letter at the Regional Office, District	Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring and reports are being submitted to state pollution control board. Reports are made available for inspection to the concerned State/Central officials during their visits. Complied AECTPL has hired the service of accrediated laboratory for carrying out regular Environment monitoring Status by KPL. Status by KPL.

	Office/Tehsildar's Office for 30 days.	
х	The funds earmarked for environment	Complied.
	protection measures should be maintained	AECTPL allocated budget for Environment
	in a separate account and there should be	Management is about INR: 8, 70, 000 for
	no diversion of these funds for any other	Financial Year - 2018-2019.
	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.	
xi	Full support should be extended to the	Noted for compliance
	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	
vii	environmental protection activities.	Notod
<b>N</b> II	not case of deviation of alteration in the	
	a fresh reference should be made to this	
	Ministry for modification in the clearance	
	conditions or imposition of new ones for	
	ensuring environmental protection.	
xiii	This Ministry reserve the right to revoke	Noted.
	this clearance, if any of the conditions	
	stipulated are not complied with to the	
	satisfaction of this Ministry.	
xiv	This Ministry or any other component	Noted.
	authority may stipulate any other additional	
	conditions subsequently, if deemed	
	necessary, for environmental protection,	
NO /	which shall be complied with.	
XV	lost in two local nowspanors widely	SLOLUS UY KPL.
	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	
	http://www.envfornic.in. The advertisement	
	should be made within 7 days from the date	
	of issue of the clearance letter and a copy	
	of the same should be forwarded to the	
	regional Office of this Ministry at	
	Bangalore.	
XVI	The Project proponents should inform the	Status by KPL.
	Regional Onice at Bangalore as Well as the Ministry the date of figure as desure and	
	final approval of the project by the	
	concerned authorities and the date of start	
	of Land Development Work.	

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

#### A. Specific Conditions:

S.No	Environmental Clearance conditions	Compliance Status as on 31/06/2017
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 Consent to Establish obtained by the KPL and Construction of AECTPL completed and obtained CTO vide letter no: T5/TNPCB/F.1305AMB/RL/AMB/W/2017 – dated: 28/06/2017 under the Air & Water Acts. Application for extension of validity has already been submitted to SPCB.
ii	Quality of Cargo should be handled in accordance with the details provided in the Form-I.	Complied AECTPL will handle only containerized cargo only, 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.	AECTPL having approved QHSE policy.
	<ul> <li>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.</li> <li>c. The hierarchical system or Administrative Order of the company to deal with environmental issues and for</li> </ul>	Status by KPL.
	I ensuring compliance with the	Standard procedures are made

	environmental clearance	available to	address	s correctiv	ve &
	conditions shall be furnished.	preventive	the d	eviation	and
d.	To have proper checks and 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.	violations.			

#### B. GENERAL CONDITIONS:

S.No	Environmental Clearance conditions	Compliance Status as on 31/06/2017
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 compliance
111	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. However AECTPL has hired the service of Accredited laboratory to carry out Environment Monitoring and reports are being submitted to KPL regularly.
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	Status by KPL.
	marked to concerned Panchayat/ Local	
	NGO, if any, from whom any suggestion/	
	representation has been made received	
	while processing the proposal.	
ix	The project proponent shall set up	Noted for compliance
	separate environmental management	AECIPL WIII deploy qualified
	cell for effective implementation of the	environmental executive, supported by
	scipulated environmental saleguards	Environment team nom nead office.
x	The funds earmarked for environment	Complied
	management plan shall be included in	AECTPL allocated budget for Environment
	the budget and this shall not be diverted	Management is about INR: 8,70,000 for
	for any other purposes.	Financial Year - 2018-2019.
5.	These stipulations would be enforced	Noted.
	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 Lipbility (Insurance) Act, 1986, the	
	Fla Notification 1994 including the	
	amendments and rules made thereafter.	
6.	All other statutory clearances such as	Noted.
	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	
	competent authorities	
7.	The project proponent shall advertise at	Status by KPL
	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 Tamii Nadu	
	also be seen at Website of the Ministry	
	of Environment. Forests and Climate	
	Change at http://www.envfornic.in. 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.	•• • •
8.	The clearance is subject to final order of	Noted.
	the monole Supreme Court of India In	
	of India in Writ Petition (Civil) No. 460 of	
	20014 as may be applicable this project.	
9.	Any appeal against this clearance shall	Noted.
	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.	
10.	Status of compliance to the various	Noted.
	stipulated environment conditions and	
	environmental safeguards will be	
	uploaded by the project proponent in its	
11	Websile.	
11.	A copy of the clearance letter shall be	Status by KPL.
	Papehavat Zilla Pasicad/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.	
12.	The proponent shall upload the status of	Status by KPL.
	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	
	Reginal Office of MoEF, the respective	
47	Zonal Office of CPCB and the SPCB.	
13.	The project proportion shall also submit	Status by KPL.
	six monthly reports on the status of	
	conditions including cosults of monitored	
	data (both in hard conjes as well as by e-	
	mail) to the respective Regional Office of	
	MoEE the respective Zonal Office of	
	CPCB and the SPCB.	
14.	The Environmental Statement for each	will be complied.
	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	
	respective Reginal Office of MoEE & CC	
	hy email	
	oy emon.	

	ΡΟΡΤ ΟΡΕΡΑΤΙΝΟ ΒΙΙΙΙ DING (ΔΔΟ1)													
			Particular	Particular	Sulphur	Nitrogen		Carbon	1					Benzo (a)
	Para	meters	matter	matter	dioxide	dioxide	Lead as	monoxide	Ozone as	Ammonia	Arsenic	Nickel as	Benzene	pyrene as
			PM <sub>10</sub>	PM <sub>2.5</sub>	as SO <sub>2</sub>	as NO <sub>2</sub>	Pb	as CO	03	as NH <sub>3</sub>	as As	Ni	as C <sub>6</sub> H <sub>6</sub>	BaP
		Unit	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	µg/m³	µg/m³	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m³	ng/m <sup>3</sup>
	National A	AQM Standard	100	60	80	80	1	4	180	400	6	20	5	1
S.No.	Sampling Date	Report Number												
1	04.09.2017	GCS/LAB/S/1518/17-18	55	22	6.7	16.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
2	05.09.2017	GCS/LAB/S/1518/17-18	52	19	7	17.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
3	28.09.2017	GCS/LAB/S/1518/17-18	44	15	5.1	13.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
4	29.09.2017	GCS/LAB/S/1518/17-18	48	17	5.5	14.6	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
5	03.10.2017	GCS/LAB/S/1592/17-18	58	27	6.3	15.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
6	06.10.2017	GCS/LAB/S/1592/17-18	54	23	6.8	16	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
7	09.10.2017	GCS/LAB/S/1592/17-18	50	22	6	14.7	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
8	13.10.2017	GCS/LAB/S/1592/17-18	47	20	6.4	15.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
9	16.10.2017	GCS/LAB/S/1592/17-18	43	16	5.3	13.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
10	20.10.2017	GCS/LAB/S/1592/17-18	46	18	5.6	14.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
11	23.10.2017	GCS/LAB/S/1592/17-18	52	21	6.1	14.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
12	27.10.2017	GCS/LAB/S/1592/17-18	56	24	5.8	13.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
13	03.11.2017	GCS/LAB/S/1687/17-18	40	17	5.1	13.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
14	06.11.2017	GCS/LAB/S/1687/17-18	38	16	4.7	13	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
15	11.11.2017	GCS/LAB/S/1687/17-18	41	15	5.2	12.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
16	15.11.2017	GCS/LAB/S/1687/17-18	48	22	6	13.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
17	17.11.2017	GCS/LAB/S/1687/17-18	50	21	5.7	13.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
18	20.11.2017	GCS/LAB/S/1687/17-18	47	19	5.8	13.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
19	24.11.2017	GCS/LAB/S/1687/17-18	54	23	6.5	14	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
20	27.11.2017	GCS/LAB/S/1687/17-18	49	20	5.4	12.7	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
21	04.12.2017	GCS/LAB/S/1781/17-18	49	20	5.6	13.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
22	08.12.2017	GCS/LAB/S/1781/17-18	45	17	5.3	12.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
23	11.12.2017	GCS/LAB/S/1781/17-18	52	21	5.8	12.0	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
24	15.12.2017	GCS/LAB/S/1781/17-18	56	25	6.6	13.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
25	18.12.2017	GCS/LAB/S/1781/17-18	53	22	5	12.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
26	22.12.2017	GCS/LAB/S/1781/17-18	50	21	5.4	12.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
27	26.12.2017	GCS/LAB/S/1781/17-18	46	18	6.1	12.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
28	29.12.2017	GCS/LAB/S/1781/17-18	57	26	5.8	11.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1

## ADANI ENNORE CONTAINER TERMINAL PRIVATE LIMITED (AECTPL)

September - 17 to DECEMBER - 17



RMU BUILDING (AAQ2)														
			Particular	Particular	Sulphur	Nitrogen		Carbon	07000.05	Ammonia	Arconic	Nickolac	Bonzono	Benzo (a)
	Para	meters	matter	matter	dioxide	dioxide		monoxide		animonia as NH.		NICKEI as	as C.H.	pyrene as
			PM <sub>10</sub>	PM <sub>2.5</sub>	as SO <sub>2</sub>	as NO <sub>2</sub>	FU	as CO	03	as 1113	ds AS			BaP
	ι	Unit	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	µg/m³	µg/m³	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m³	ng/m <sup>3</sup>
	National A	AQM Standard	100	60	80	80	1	4	180	400	6	20	5	1
S.No.	Sampling Date	Report Number												
1	04.09.2017	GCS/LAB/S/1518/17-18	46	15	6.5	16.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
2	05.09.2017	GCS/LAB/S/1518/17-18	50	18	6.1	15.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
3	28.09.2017	GCS/LAB/S/1518/17-18	41	13	5.5	13.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
4	29.09.2017	GCS/LAB/S/1518/17-18	44	16	5.8	14.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
5	03.10.2017	GCS/LAB/S/1592/17-18	53	21	6.6	16.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
6	06.10.2017	GCS/LAB/S/1592/17-18	47	18	6	15.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
7	09.10.2017	GCS/LAB/S/1592/17-18	45	14	5.9	15.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
8	13.10.2017	GCS/LAB/S/1592/17-18	49	20	5.3	14.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
9	16.10.2017	GCS/LAB/S/1592/17-18	38	13	4.5	13	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
10	20.10.2017	GCS/LAB/S/1592/17-18	43	15	4.9	13.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
11	23.10.2017	GCS/LAB/S/1592/17-18	50	19	5.2	14.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
12	27.10.2017	GCS/LAB/S/1592/17-18	46	17	5.8	14	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
13	03.11.2017	GCS/LAB/S/1687/17-18	44	15	5.2	12.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
14	06.11.2017	GCS/LAB/S/1687/17-18	40	13	5	13.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
15	11.11.2017	GCS/LAB/S/1687/17-18	39	12	5.3	12.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
16	15.11.2017	GCS/LAB/S/1687/17-18	45	18	5.9	13.7	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
17	17.11.2017	GCS/LAB/S/1687/17-18	42	15	4.8	13.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
18	20.11.2017	GCS/LAB/S/1687/17-18	48	19	5.3	14.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
19	24.11.2017	GCS/LAB/S/1687/17-18	52	21	5.5	13.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
20	27.11.2017	GCS/LAB/S/1687/17-18	41	16	4.9	13.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
21	04.12.2017	GCS/LAB/S/1781/17-18	41	12	4.8	13.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
22	08.12.2017	GCS/LAB/S/1781/17-18	46	15	5.2	12.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
23	11.12.2017	GCS/LAB/S/1781/17-18	43	14	5.6	12.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
24	15.12.2017	GCS/LAB/S/1781/17-18	50	21	5.5	13.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
25	18.12.2017	GCS/LAB/S/1781/17-18	44	17	5.8	13.0	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
26	22.12.2017	GCS/LAB/S/1781/17-18	53	22	5	13.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
27	26.12.2017	GCS/LAB/S/1781/17-18	55	24	4.7	13.3	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
28	29.12.2017	GCS/LAB/S/1781/17-18	47	19	5.4	12.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1



	IN TERMINAL GATE (AAQ3)													
	Para	meters	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
	l	Unit	µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m³	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 A	AQM Standard	100	60	80	80	1	4	180	400	6	20	5	1
S.No.	Sampling Date	Report Number												
1	04.09.2017	GCS/LAB/S/1518/17-18	62	24	7.6	17.3	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
2	05.09.2017	GCS/LAB/S/1518/17-18	58	21	7.8	16.6	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
3	28.09.2017	GCS/LAB/S/1518/17-18	51	17	6	14.3	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
4	29.09.2017	GCS/LAB/S/1518/17-18	55	19	6.4	15.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
5	03.10.2017	GCS/LAB/S/1592/17-18	57	23	6.5	16.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
6	06.10.2017	GCS/LAB/S/1592/17-18	54	21	7.1	15.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
7	09.10.2017	GCS/LAB/S/1592/17-18	60	25	6	14.8	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
8	13.10.2017	GCS/LAB/S/1592/17-18	64	27	6.8	15.7	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
9	16.10.2017	GCS/LAB/S/1592/17-18	45	16	5.7	14.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
10	20.10.2017	GCS/LAB/S/1592/17-18	48	19	6.1	15	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
11	23.10.2017	GCS/LAB/S/1592/17-18	51	20	6.4	15.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
12	27.10.2017	GCS/LAB/S/1592/17-18	46	17	5.9	14.6	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
13	03.11.2017	GCS/LAB/S/1687/17-18	42	14	5.5	13.7	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
14	06.11.2017	GCS/LAB/S/1687/17-18	45	19	5.2	12.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
15	11.11.2017	GCS/LAB/S/1687/17-18	48	17	4.9	12.0	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
16	15.11.2017	GCS/LAB/S/1687/17-18	54	23	6.1	14.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
17	17.11.2017	GCS/LAB/S/1687/17-18	52	20	6	15.3	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
18	20.11.2017	GCS/LAB/S/1687/17-18	56	22	5.7	14.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
19	24.11.2017	GCS/LAB/S/1687/17-18	48	18	5.4	14.3	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
20	27.11.2017	GCS/LAB/S/1687/17-18	43	15	5.1	13.7	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
21	04.12.2017	GCS/LAB/S/1781/17-18	47	16	5.8	14.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
22	08.12.2017	GCS/LAB/S/1781/17-18	54	22	5.6	13.1	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
23	11.12.2017	GCS/LAB/S/1781/17-18	51	19	6	13.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
24	15.12.2017	GCS/LAB/S/1781/17-18	57	26	6.4	15.2	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
25	18.12.2017	GCS/LAB/S/1781/17-18	50	18	5.5	14.4	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
26	22.12.2017	GCS/LAB/S/1781/17-18	59	27	6.2	13.0	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
27	26.12.2017	GCS/LAB/S/1781/17-18	52	21	5.9	14.9	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1
28	29.12.2017	GCS/LAB/S/1781/17-18	55	23	5.7	14.5	<0.1	<1.0	<10	<2	<2	<2	<1	<0.1



	Location	PORT	OPERATI	NG BUILD	ING		RMU BU	ILDING			IN TERM	1INAL GATI	E
	Month & Year	Sep-17	Oct-17	Nov-17	Dec-17	Sep-17	Oct-17	Nov-17	Dec-17	Sep-17	Oct-17	Nov-17	Dec-17
	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)	56.6	55.2	66.2	56.2	56.4	54.9	60.5	59.7	62.2	61.4	63.3	58.1
2	07.00 -08.00	61.5	53.8	71.2	53.5	55.1	67.4	60.7	59.3	63.7	62.8	63.7	64.7
3	08.00 - 09.00	56.8	55.4	69	63.9	56.6	62.6	60.1	59.6	64.2	63	52.1	68.9
4	09.00 - 10.00	61.7	56	65.9	63.1	54.8	65.9	62.2	61.2	53.3	68.7	65.1	67.5
5	10.00 - 11.00	66.7	53.8	65	65.9	58.4	66.4	65.1	59.3	54.1	63.9	72.3	66.6
6	11.00 – 12.00	65.2	55.1	66.5	64.8	66.4	65.2	61.4	64.4	64.3	63.2	66.6	75.4
7	12.00 – 13.00	61.7	54.6	67	70.9	58	65.7	61.2	61.4	62.5	63.4	73.6	73.6
8	13.00 - 14.00	52.9	58.6	66.8	75.3	55.6	64.8	58.9	61.3	59.4	63.3	71.8	69
9	14.00 – 15.00	55.6	56.2	69.6	72.0	51.6	67.1	59.1	61.0	56.9	63.4	71.2	71.7
10	15.00 – 16.00	54.9	59	68.1	71.9	54.5	67.0	61.7	62.3	59.1	63.5	68.3	74.0
11	16.00 - 17.00	53.3	54.7	67.1	60.3	51.6	68.3	60.5	60.7	57.8	63.4	56.7	66.7
12	17.00 – 18.00	59.5	55.8	67.1	57.8	54.2	65.8	60	60.5	50.3	63.3	71.8	57.5
13	18.00 – 19.00	49.7	54.9	66.1	58	53.1	64.4	61.7	60.3	48	62.8	77	57.4
14	19.00 –20.00	62.2	54	70.1	58	54.4	64.3	60.7	60.3	49.7	63	76.2	57.5
15	20.00 - 21.00	56	53.8	70.7	58.2	59.3	64.1	61.6	60.4	50.4	62.9	65.1	58
16	21.00 – 22.00	57.9	56.4	67.5	58.3	55.8	59.5	60.2	70	51.8	62.9	72.9	58.4
17	22.00 – 23.00 (Night)	55.8	60.2	68.1	58.6	53.4	63.2	60.3	58.6	51.2	63	60.3	58.3
18	23.00 - 00.00	59.5	57.5	66.8	58.4	51.6	56.8	60.1	59.7	51.4	61.2	56	58.9
19	00.00 - 01.00	57.7	57.6	70.2	55.6	52.9	59.7	60.2	59.8	59.4	56.3	52.7	58.2
20	01.00 - 02.00	51.2	56.1	66.7	60.5	53.9	60.3	60.3	59.8	55.9	51.5	65.7	59
21	02.00 - 03.00	57.0	56.7	68.3	70.5	53.3	58.9	59.9	59.9	64.3	54.6	72.3	57.5
22	03.00 - 04.00	53.8	54.8	69.2	61.4	54	60.6	60.1	59.5	73.5	56.3	64.3	58.9
23	04.00 - 05.00	56.9	59.8	68.0	70.9	58.2	56.7	60.6	59.8	70.6	59.6	48.0	58.0
24	05.00 - 06.00	56.2	58.3	64.3	54.9	57.7	57.4	61	60.1	79.6	55.7	47.5	58.4

AMBIENT NOISE LEVEL MONITORING







		STACK MONITOR	NG	
	Location	DG 1500KVA - 1		DG 1500KVA - 2
	Month & Year	Sep-17		Sep-17
S.No.	Parameters			
1	Stack Temperature, °C	221		213
2	Flue Gas Velocity, m/s	18.54	]	16.91
3	Sulphur Dioxide, mg/Nm3	6.2	]	6.5
4	NOX (as NO2) in ppmv	128	]	119
5	Particular matter, mg/Nm3	26.4	]	28
6	Carbon Monoxide, mg/Nm3	12		14
7	Gas Discharge, Nm3/hr	5027	]	4662





	STP OUTLET WATER										
	Location	STP OUTLET									
	Month & Year	Sep-17	Oct-17	Nov-17	Dec-17						
S.No.	Parameters										
1	рН @ 25°С	7.46	7.81	7.76	7.31						
2	Total Suspended Solids	8	10	8	6						
3	BOD at 27°C for 3 days	7.0	6.0	5.0	4.0						
4	СОД	43	35	32	28						
5	Ammonical Nitrogen as NH4-N	3.5	3.1	2.9	2.1						
6	Total Kjeldahl Nitrogen as N - Total	6.8	4.9	3.7	3.2						

7	Fecal Coliform	52	57	51
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	MARINE WATER								
	Location		CB - 1 S	urface \	Nater				
	Month & Year	Unit	Sep-17	Oct-17	Nov-17	Dec-17			
S.No.	Parameters		0.01		0.40	0.00			
1	pH @ 25°C	- °C	8.01	8.09	8.12	8.38			
3	Total Suspended Solids	mg/L	5	8	<u>2</u> 5 7	10			
4	BOD at 27 °C for 3 days	mg/L	6	7	6	9			
5	Dissolved oxygen	mg/L	4.6	4.5	4.8	4.1			
6	Salinity at 25 °C	-	31.7	32	31	30.3			
7	Oil & Grease	mg/L	F 42	BDL(D	L 1.0)	4.12			
8 9	Nitrite as No <sub>3</sub>	mg/L	5.4Z	5.73	4.75	4.12			
10	Ammonical Nitrogen as N	mg/L	4.20	BDL(D	L 1.0)	5.05			
11	Ammonia as NH3	mg/L		BDL(D	0.01)				
12	Kjeldahl Nitrogen as N	mg/L		BDL(D	L 1.0)				
13	Total phosphates as PO4	mg/L	1.41	1.54	1.29	1.04			
14	Total Nitrogen	mg/L	22016	BDL(D	L 1.0)	21002			
15		mg/L mg/l	33310	34065	32/80	31983			
17	Total bacterial count	cfu/ml	50	47	45	41			
18	Coliforms	Per 100 ml		Abse	nce				
19	Escherichia coli	Per 100 ml		Abse	nce				
20	Salmonella	Per 100 ml		Abse	nce				
21	Shigella	Per 100 ml		Abse	nce				
22	Vibrio porchagmaliticus	Per 100 ml		Abse	nce				
23	Enterococci	Per 100 ml		ADSE	nce				
24	Octane	це/L	178	172	168	159			
26	Nonane	μg/L		BDL(D	L 0.1)				
27	Decane	μg/L		BDL(D	L 0.1)				
28	Undecane	μg/L		BDL(D	L 0.1)				
29	Tridecane	μg/L	7.3	7.4	6.4	5.7			
30	Tetradecane	μg/L		BDL(D	L 0.1)				
31	Pentadecane	μg/L							
32	Actadecane	μg/L							
34	Nonadecane	μg/L μg/L		BDL(D	L 0.1)				
35	Elcosane	μg/L		BDL(D	<u>L 0.1)</u>				
36	Primary Productivity	mg C/m <sup>3</sup> /hr	7.42	7.81	7.05	7.93			
37	Chlorophyll a	mg /m <sup>3</sup>	4.56	4.95	5.28	6.01			
38	Phaeophytin	mg /m <sup>3</sup>	0.73	0.67	0.69	0.74			
39	Oxidisable Paticular Organic carbon	mg /L	5.27	5.74	5.12	5.86			
	РНУТО	PLANKTON							
40	Bacteriastrum hyalinum	nos/ml	10 F	12	14	11 6			
41	Chaetoceros didymus	nos/ml	9	6	9 5	8			
43	Chaetoceros decipiens	nos/ml	Nil	2	3	2			
44	Biddulphia mobiliensis	nos/ml	4	5	8	9			
45	Ditylum brightwellii	nos/ml	Nil	Nil	Nil	Nil			
46	Gyrosigma sp	nos/ml	Nil	Nil	Nil	Nil			
47	Cladophyxis sps	nos/ml	Nil	Nil	Nil	Nil			
48	Coscinodiscus centralis	nos/ml	8		11	12			
49 50	Coscinodiscus granii	nos/mi	/ Nil	4 Nil	3 Nil	NII			
51	Hemidiscus hardmanianus	nos/ml	2	3	6	8			
52	Laudaria annulata	nos/ml	Nil	Nil	Nil	Nil			
53	Pyropacus horologicum	nos/ml	Nil	Nil	Nil	Nil			
54	Pleurosigma angulatum	nos/ml	Nil	Nil	Nil	Nil			
55	Leptocylindrus danicus	nos/ml	9	11	13	10			
56	Guinardia flaccida	nos/ml	Nil	Nil	Nil	Nil			
57	Rhizosolena alata	nos/ml	11 N:1	9	8	/ Ni:I			
58 50	Rhizosolena semisnina	nos/mi	12	10	17	14			
60	Thalassionema nitzschioides	nos/ml	5	7	9	8			
61	Triceratium reticulatum	nos/ml	Nil	Nil	Nil	Nil			
62	Ceratium trichoceros	nos/ml	Nil	Nil	Nil	Nil			
63	Ceratium furca	nos/ml	Nil	Nil	Nil	Nil			
64	Ceratium macroceros	nos/ml	Nil	Nil	Nil	Nil			
65	Iceracium longipes		Nil	Nil	Nil	Nil			
66	Acrocalanus gracilis		11	12	10	12			
67	Acrocalanus sp	nos/ml	Nil	Nil	Nil	Nil			
68	Paracalanus parvus	nos/ml	7	9	8	10			
69	Eutintinus sps	nos/ml	8	6	3	4			
70	Centropages furcatus	nos/ml	9	11	6	8			
71	Corycaeus dana	nos/ml	Nil	Nil	Nil	Nil			
72	Uithona brevicornis	nos/ml	12		13	11			
73	Euterpina acutifrons Metacalapus aurivilli	nos/ml		3 Nii	5				
74	Copipod nauplii	nos/ml	4	5	7	9			
76	Cirripede nauplii	nos/ml	Nil	Nil	Nil	Nil			
77	Bivalve veliger	nos/ml	6	8	5	6			
78	Gastropod veliger	nos/ml	12	14	12	14			

	Location		CB - 1 B	ottom \	Water	
	Month & Year	Unit	Sep-17	Oct-17	Nov-17	Dec-17
S.No.	Parameters					
1	рН @ 25°С	-	7.91	8.05	8.07	8.26
2	Temperature	°C	29	29	29	29
3	Total Suspended Solids	mg/L	8.0	10	9	12
4	BOD at 27 °C for 3 days	mg/L	3.6	6	5	8
5	Dissolved oxygen	mg/L	1.5	1.2	1.6	1.4
6	Salinity at 25 °C	-	32.1	31.9	31.4	31.1
7	OII & Grease	mg/L	BDL(DL	L.U)	2 70	2 27
8	Nitrate as $NO_3$	mg/L	4.74	4.83	3.78	3.27
9	Ammonical Nitrogon as N	iiig/L	4.03		4.12	3.75
10		mg/L				
11	Annonia as NHS Kieldebl Nitrogen es N	mg/L				
12	Total phosphatos as PO4	mg/L	1 56		1 56	1.00
13	Total Nitrogon	mg/L	1.50		1.50	1.09
14	Total Dissolved Solids	mg/L	3/1780	35078	23652	3258/
16		mg/L	34780	51	47	<u>52584</u>
17	Total bacterial count	cfu/ml	50	49	47	41
18	Coliforms	Per 100 ml	51	Abse	nce	45
19	Escherichia coli	Per 100 ml		Abse	nce	
20	Salmonella	Per 100 ml		Abse	nce	
21	Shigella	Per 100 ml		Abse	nce	
22	Vibrio cholerae	Per 100 ml		Abse	nce	
23	Vibrio parahaemolyticus	Per 100 ml		Abse	nce	
24	Enterococci	Per 100 ml		Abse	nce	
25	Colour	Hazan	5	7	5	7
26	Odour	-		Unohiec	tionable	-
20	Taste	_	· · · · · ·	Discorr	aabla	
2/		-				4.0
28	Turbidity	NIU	14	16	14	16
29	Calcium as Ca	mg/L	408	421	418	412
30	Chloride as Cl	mg/L	18835	19807	18524	17853
31	Cyanide as CN	mg/L		BDL(DI	L 0.01)	
32	Fluoride as F	mg/L	0.57	0.62	0.57	0.51
33	Magnesium as Mg	mg/L	1310	1365	1342	1336
34	Total Iron as Fe	mg/L	0.12	0.16	0.13	0.1
35	Residual Free Chlorine	mg/L		BDL(D	L 0.1)	
36	Phenolic Compounds as C6H5OH	mg/L		BDL(D	L 1.0)	
37	Total Hardness as CaCO3	mg/L	6477	6741	6658	6640
38	Total Alkalinity as CaCO3	mg/L	128	137	133	128
39	Sulphide as H2S	mg/L		BDL(D	L 0.5)	
40	Sulphate as SO4	mg/L	2650	2705	2685	2653
41	Anionic surfactants as MBAS	mg/L		BDL(D	L 1.0)	
42	Monocrotophos	μg/L		BDL(DI	L 0.01)	
43	Atrazine	μg/L		BDL(DI	L 0.01)	
44	Ethion	µg/L		BDL(DI	L 0.01)	
45	Chiorpyrifos	µg/L		BDL(DI	L 0.01)	
46	Phorate	μg/L		BDL(DI	<u> </u>	
47	Mehyle parathion	μg/L		BDL(DI	<u> </u>	
48	Malathion	μg/L		BDL(DI	L 0.01)	
49	and p.p-isomers of DD1,DDE	μg/L		BDL(DI	L 0.01)	
50	and DDD				0.01)	
50		μg/L				
51		μg/L				
52	Delta HCH	με/ι			0.01)	
54	Endosulfan (Alnha heta and sulnhate)	μg/L μσ/Ι		BDL(D		
55	Butachlor	μσ/I		BDI (DI	0.01	
56	Alachlor	110/I		BDI (DI	0.01	
57	Aldrin/Dieldrin	<u>гъ/-</u> µg/I	ļ	BDI (DI	0.01	
58	Isoproturon	μg/l	ļ	BDL(D	0.01)	
59	2,4-D	μg/L		BDL(D	. 0.01)	
60	Polychlorinated Biphenvls (PCB)	ug/L		BDL(D	. 0.01)	
	Polynuclear aromatic hydrocarbons	μg/L			0.04	
61	(PAH)	- 07 -		RDT(D	L U.U1)	
62	Arsenic as As	mg/L		BDL(DI	0.01)	
63	Mercury as Hg	mg/L		BDL(DL	0.001)	
64	Cadmium as Cd	mg/L		BDL(DL	0.003)	
65	Total Chromium as Cr	mg/L		BDL(DI	0.05)	
66	Copper as Cu	mg/L		BDL(DI	0.05)	
67	Lead as Pb	mg/L		BDL(DI	0.01)	
68	Manganese as Mn	mg/L		BDL(DI	L 0.05)	
69	Nickel as Ni	mg/L		BDL(D	L 0.05)	
70	Selenium as Se	mg/L		BDL(DI	0.01)	
71	Barium as Ba	mg/L		BDL(D	L 0.1)	
72	Silver as Ag	mg/L		BDL(DI	. 0.01)	
73	Molybdenum as Mo	mg/L		BDL(DI	. 0.01)	
74	Octane	μg/L	180	178	173	168
75	Nonane	μg/L		BDL(D		
76	Decane	μg/L		BDL(D	L U.1)	
77		μg/L	7.2	7.5	6.8	6.1
78	I ridecane	μg/L		BDL(D		
79	letradecane	μg/L		BDL(D		
80	rentadecane	μg/L		BDL(D		
81	nexauecane	μg/L		BDL(D	L U.1)	

	Location	CB - 1 Bottom Water							
	Month & Year	Unit	Sep-17	Oct-17	Nov-17	Dec-17			
S.No.	Parameters								
82	Heptadecane	μg/L		BDL(D	L 0.1)				
83	Octadecane	μg/L		BDL(D	L 0.1)				
84	Nonadecane	μg/L		BDL(D	L 0.1)				
85	Elcosane	μg/L		BDL(D	L 0.1)				
86	Primary Productivity	mg C/m <sup>3</sup> /hr	8.18	9.05	9.73	9.26			
87	Chlorophyll a	mg /m³	3.02	3.78	4.65	5.12			
88	Phaeophytin	mg /m³	0.81	0.92	0.86	0.95			
89	Oxidisable Paticular Organic carbon	mg /L	5.96	6.12	7.01	7.58			
	РНҮТО	PLANKTON							
90	Bacteriastrum hyalinum	nos/ml	14	16	18	15			
91	Bacteriastrum varians	nos/ml	8	10	12	10			
92	Chaetoceros didymus	nos/ml	10	8	7	11			
93	Chaetoceros decipiens	nos/ml	3	4	5	6			
94	Biddulphia mobiliensis	nos/ml	6	7	10	13			
95	Ditylum brightwellii	nos/ml	Nil	Nil	Nil	Nil			
96	Gyrosigma sp	nos/ml	Nil	Nil	Nil	Nil			
97	Cladophyxis sps	nos/ml	Nil	Nil	Nil	Nil			
98	Coscinodiscus centralis	nos/ml	5	8	7	9			
99	Coscinodiscus granii	nos/ml	11	9	6	5			
100	Cylcotella sps	nos/ml	Nil	Nil	Nil	Nil			
101	Hemidiscus hardmanianus	nos/ml	4	6	8	10			
102	Laudaria annulata	nos/ml	Nil	Nil	Nil	Nil			
102	Pyropacus horologicum	nos/ml	Nil	Nil	Nil	Nil			
103	Pleurosigma angulatum	nos/ml	Nil	Nil	Nil	Nil			
104		nos/ml	7	10	11	0			
105		nos/mi	/ NI:1	10		0			
106	Buinardia Haccida	nos/mi		12	10				
107	Rhizosolenia alata	nos/mi	15	13	10	11			
108	Rhizosolena impricata	nos/ml	NII	NII	NI	NII			
109	Rhizosolena semispina	nos/ml	14	16	15	17			
110	Thalassionema nitzschioides	nos/ml	3	4	6	5			
111	Triceratium reticulatum	nos/ml	Nil	Nil	Nil	Nil			
112	Ceratium trichoceros	nos/ml	Nil	Nil	Nil	Nil			
113	Ceratium furca	nos/ml	Nil	Nil	Nil	Nil			
114	Ceratium macroceros	nos/ml	Nil	Nil	Nil	Nil			
115	Ceracium longipes	nos/ml	Nil	Nil	Nil	Nil			
	ZOOP	LANKTONS		<b>I</b>					
116	Acrocalanus gracilis	nos/ml	14	17	14	15			
117	Acrocalanus sp	nos/ml	Nil	Nil	Nil	Nil			
118	Paracalanus parvus	nos/ml	12	14	12	14			
119	Eutintinus sps	nos/ml	10	11	7	8			
120	Centropages furcatus	nos/ml	11	8	4	6			
121	Corycaeus dana	nos/ml	Nil	Nil	Nil	Nil			
122	Oithona brevicornis	nos/ml	15	12	16	13			
123	Euterpina acutifrons	nos/ml	5	7	10	11			
124	Metacalanus aurivilli	nos/ml	Nil	Nil	Nil	Nil			
125	Copipod nauplii	nos/ml	7	9	11	12			
126	Cirripede nauplii	nos/ml	Nil	Nil	Nil	Nil			
127	Bivalve veliger	nos/ml	8	10	8	9			
128	Gastropod veliger	nos/ml	9	12	9	10			

SEA SEDIMENT									
	Location		CB - 1 S	ea Sedi	ment				
	Month & Year	Unit	Sep-17	Oct-17	Nov-17	Dec-17			
S.No.	Parameters								
1	Total organic matter	%	0.28	0.31	0.29	0.34			
2	% Sand	%	32	34	36	32			
3	%silt	%	15	15	16	18			
4	%Clay	%	53	51	48	50			
5	Iron (as Fe)	mg/kg	18.4	19.5	18.7	17.9			
6	Aluminium (as Al)	mg/kg	15926	15958	15939	15837			
7	Chromium (as cr)	mg/kg	59	60	58	52			
8	Copper (as cu)	mg/kg	73	75	72	68			
9	Manganese (as Mn)	mg/kg	475	482	475	465			
10	Nickel (as Ni)	mg/kg	15.2	15.9	14.8	13.6			
11	Lead (as Pb)	mg/kg	34	36	34	31			
12	Zinc (as Zn)	mg/kg	237	243	241	237			
13	Mercury(as Hg)	mg/kg	0.51	0.58	0.56	0.53			
14	Total phosphorus as P	mg/kg	182	184	179	171			
15	Octane	mg/kg		BDL(D	L 0.1)				
16	Nonane	mg/kg		BDL(D	L 0.1)				
17	Decane	mg/kg		BDL(D	L 0.1)				
18	Undecane	mg/kg	0.26	0.27	0.25	0.21			
19	Dodecane	mg/kg	BDL(DL 0.1)						
20	Tridecane	mg/kg		BDL(D	L 0.1)				
21	Tetradecane	mg/kg		BDL(D	L 0.1)				
22	Phntadecane	mg/kg		BDL(D	L 0.1)				
23	Hexadecane	mg/kg		BDL(D	L 0.1)				
24	Heptadecane	mg/kg		BDL(D	L 0.1)				
25	Octadecane	mg/kg		BDL(D	L 0.1)				
26	Nonadecane	mg/kg		BDL(D	L 0.1)				
27	Elcosane	mg/kg		BDL(D	L 0.1)				
	I. Ne	ematoda							
28	Oncholaimussp	nos/m <sup>2</sup>	11	12	14	16			
29	Tricomasp	nos/m <sup>2</sup>	14	16	18	19			
	II. For	aminifera							
30	Ammoniabeccarii	nos/m <sup>2</sup>	17	15	11	10			
31	Quinqulinasp	nos/m <sup>2</sup>	13	10	13	15			
32	Discorbinellasp.,	nos/m <sup>2</sup>	18	17	15	17			
33	Bolivinaspathulata	nos/m <sup>2</sup>	10	14	12	10			
34	Elphidiumsp	nos/m <sup>2</sup>	8	11	9	7			
35	Noniondepressula	nos/m <sup>2</sup>	15	12	16	14			
	III. Moll	uscs-Bivalvi	а						
36	Meretrixveligers	nos/m <sup>2</sup>	19	18	20	22			
37	Anadoraveligers	nos/m <sup>2</sup>	21	23	25	27			
	Total No. of individuals	nos/m <sup>2</sup>	146	148	153	157			
	Shanon Weaver Diversity Index		2.26	2.27	2.26	2.24			