

MUNICIPAL CORPORATION OF GREATER MUMBAI
CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT.

क. उपप्र.अ. / 1805/प.क.वा. प्रकल्प दिनांक 11/11/15

Office of the Chief Engineer (SWM)

Love Grove Complex,

89, Dr. Annie Besant Road,

Worli,

Mumbai - 400 018.

Tel. No.: 022-24945186 /24955436

To,
Additional Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office (WZ),
E-5, Kendriya Paryavaran Bhawan,
E-5 Arera Colony, Link Road-3,
Ravishankar Nagar,
Bhopal - 462 016

Sub: Submission of hard copy of half yearly compliance reports in respect of the stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the General Conditions (vii) & (xii) for Construction Phase including results of monitored data as stipulated in the revised Environmental clearance (E.C.) accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kanjur, Mumbai.

Ref: Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.

Sir,

This has reference to the conditions of revised Environmental Clearance issued for proposed modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kanjur, Mumbai.

In this context, the MCGM is hereby submitting the hard copy of half yearly compliance reports in respect of the stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the General Conditions (vii) & (xii) for Construction Phase including results of monitored data as stipulated in the

revised Environmental clearance (E.C.) accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai as follows:-

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
1)	The proposal under consideration has to be restricted within the area 65.96 ha. outside the CRZ area. The PP shall maintain a buffer zone of 500 meters around the project perimeter which shall be incorporated as 'No Development Zone' in the Development Plan of MCGM.	MCGM had maintained a buffer zone of 500 meters around the project perimeter in existing Development Plan. MCGM is taking necessary steps for incorporation of the said buffer zone as 'No Development Zone' in the Development Plan of MCGM & the same will be incorporated after approval of Appropriate Authority.
2)	The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped/concretised so as to avoid generation of dust.	Complied.
3)	Generation of Green House Gases (GHG) like methane needs to be controlled so that it does not contaminate the atmosphere. It should be ensured that the methane generated is fully utilised for power generation/flaring and not let into atmosphere.	The gas flaring station is installed at the site. Methane gas generation and its capturing, storage with utilization for power generation is in process. At present, the Methane generated is not adequate for power generation, hence flaring up under control conditions will be carried out.
4)	The leachate generating from the cells will have to be systematically collected and treated to reduce its BOD levels to allowable limits. Under no circumstance should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the South Western and Eastern side of the cells.	Arrangement for leachate collection from BLF Cell-1 in plastic sheet lined pond is completed. Civil construction, erection of treatment plant is nearly at completion stage. At present, leachate collected is recirculated in BLFT Cell & excess leachate is treated in the treatment plant of BLFT. The Leachate Treatment Plant for BLF Cell 1 will be commissioning shortly.
5)	The PP shall take all out efforts to control odour nuisance. PP should take steps to measure odour levels using instruments which are currently available. The measurement of odour levels shall be taken at strategic locations depending on the wind direction and situation of habitats. Through regular monitoring it should be ensured that the odour levels are within the acceptable limits and remedial measures like applying odour controlling bacterial	As per the stipulated condition the odour nuisance is being controlled by applying odour controlling bacterial consortium (Bio wish) to the garbage regularly. As per the details of wind direction & wind speed data, locations for monitoring odour levels in windward and leeward directions along with nearby residential zones are finalized.

	consortium to the garbage are taken up as and when necessary.	As regards measurement of odour by instrumental method, the work will be carried out through NEERI, Mumbai. NEERI is being appointed for the said work.
6)	To save the mangroves on the south western side of the property which is starved of supply of sea water, the PP should ensure openings of sufficient cross sections in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.	MCGM had already requested Chief Conservator of Forests, Mangrove Cell for his suggestions for improvement of tidal flushing. The improvement in cross sections will be carried out as per his suggestions.
7)	Mangrove regeneration efforts should be undertaken at the costs of the PP once regular tidal flushing is assured through measures suggested in point 6 above.	Mangrove regeneration will be undertaken as per the suggestions of Chief Conservator of Forests, Mangrove Cell.
8)	The staff handling the solid waste should be trained to ensure zero spillage of the garbage during transport. The PP should ensure proper cleaning of the transport vehicles after unloading the garbage at the dumping site.	The MSW vehicles coming to the Kanjur site are having closed body system to avoid the spillage. Training is given to the site staff handling the Solid Waste to ensure minimum spillage. Arrangement is in place for Washing/cleaning of outgoing trucks etc.
9)	No land development/ construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	The project is having required Environment Clearance accorded by SEIAA and Authorization granted by MPCB. This project is for processing of MSW to carry out one of the obligatory duty of MCGM. As per provisions of MMC Act the project is approved by Standing Committee of MCGM.
10)	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	No additional land will be used / acquired for any activity of the project without obtaining proper permission.
11)	The project proponent should ensure that the transportation of the Hazardous wastes to the TSDF conforms to the norms laid down in the Hazardous Wastes (Management & Handling) Rules, 2003.	Hazardous Waste storage, handling, transportation to the authorized site for the treatment and disposal is monitored by statutory authority MPCB, for which authorization is separately given to industries, re-processors, & Hazardous waste site operators by MPCB. The said condition therefore is not applicable to this project as the project involves processing of MSW only.
12)	The proponent should ensure that the TSDF fulfills all the provisions of Hazardous Wastes	The site is designed as per the guide lines of MSW (M&H) Rules, 2000. However, the

	(Management & Handling) Rules, 2003 & the design of landfill is as per the guidelines of CPCB with proper leachate collection arrangement.	provision of Hazardous waste (M&H) Rules, 2003 for landfill design with Leachate collection, treatment & disposal is also taken into consideration.
13)	The TSDF should only handle the waste generated from the member units. A leachate collection system should be provided to collect the leachates at a collection point. Treatment facility for the collected leachate should be provided. The treated water should be reused as far as possible in the project.	Only MSW generated from human habitation is transported to this site. No industrial hazardous waste is accepted for TSDF; hence no member units contributing / generating hazardous waste are covered as member units. Leachate collection system is provided and treatment facility is nearly at completion stage for BLF Cell-1. The treated effluent is proposed for its use for gardening / plantation within the plot.
14)	The proponent should obtain necessary clearance from the Ground Water Authority before initiating the project.	Necessary clearance from the Ground Water Authority is already obtained before initiating the project. MCGM had also informed the Ground Water Authority about the revised E.C.
15)	The depth of the land fill should be decided based on the ground water level at the site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition will also be observed during the execution of project.
16)	Project proponent should prepare and implement an on site emergency management plan.	On site "Emergency Plan and Disaster Management Plan" is prepared as per EIA report (Chapter 6) and its implementation is in process.
17)	Project proponent shall carry out periodical ground water / soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.	Quarterly ground water monitoring is done through monitoring wells at strategic locations. Periodical ground water /soil monitoring in and around the site is carried out at intervals set out in the MSW Rules 2000 and through the agency approved by MOEF. As regards to TCLP test the parameters which are necessary as per MSW rules will be tested.
18)	Project proponent should carry out periodical air quality monitoring in and around the site including VOC, HC.	Bi-monthly air monitoring is being carried out and the reports are being submitted to MPCB, CPCB by the operator of the project. M/s Antony Lara Enviro Solutions Pvt. Ltd. & are being displayed on the website of

		the operator. The VOC and HC are also monitored.
19)	Project proponent should develop green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement.	It is revealed that said condition is not applicable to the Kanjur Project as the Kanjur Project is only for treatment of Municipal Solid Waste (MSW). Plantation for green belt development is being done on progressive basis and majority of the plantation is already done.
20)	The project proponent should not store the hazardous wastes more than the quantity that has been permitted by the CPCB / Maharashtra State Pollution Control Board.	Only MSW is received at Kanjur site. Therefore, question of receiving of Hazardous waste does not arise.
21)	Adequate fire fighting facilities should be installed to handle the fire arising from hazardous chemicals / wastes that are store / processed.	Adequate fire fighting system comprising of water tankers and fire extinguishers placed at strategic locations is in place for prevention of any fire incidence.
22)	For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.	On leeward direction plantation is done to act as a wind barrier. The arrangement of water sprinkling on roads through tanker is carried out regularly.
23)	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	It is revealed that said condition is not applicable to the Kanjur Project as the furnace is not the part of Kanjur Project profile.
24)	Proper house keeping programmes shall be implemented.	Dedicated team of trained workers is already deployed to ensure the good housekeeping & cleanliness.
25)	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable) Arrangement shall be made that effluent and storm water does not get mixed.	At present there is power supply from MSEB on the project site. Standby DG of 125 KV capacity with stack height of 7 meter is provided. The DG is as per new EP guidelines of CPCB. Arrangement for separate leachate collection through HDPE pipeline is made.
26)	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra pollution control board.	Periodic ground water monitoring as prescribed in MSW Rules 2000 is being carried out at regular intervals through the agency approved by MoEF. The results will be compiled at the end of 1 st operation year i.e. April 2016 and quality of ground water will be ascertained with reference to base line data. Trend of water quality will be analyzed.

		and necessary steps will be taken to mitigate any deterioration of the ground water quality if found necessary.
27)	Leq of noise level shall be maintained as per standards. for people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	Noise monitoring is being done as per MSW Rules and all efforts as per EIA is being done to ensure that noise levels do not exceed the permitted values. Necessary precautions as per EIA are being taken in working area.
28)	The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources.	Noise levels are arising from movements of trucks, dozers, which are movables still all efforts as per EIA is being made to ensure that noise levels do not exceed the permissible values.
29)	PP has to abide by the conditions stipulated by SEAC & SEIAA.	Noted.
30)	"Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.	The project has already received Authorization to set up and operate waste processing / waste disposal facility with the approval of Consent Appraisal Committee of the Maharashtra Pollution Control Board, therefore, MPCB has issued NOC as against the Consent to Establishment and Consent to operate for the project.
31)	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	All required sanitation arrangements are available on site and same will be maintained throughout the construction period.

General Conditions for Construction Phase:-

(i)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche and First Aid Room etc.	All required housing and sanitation requirements are in place.
(ii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.	All required provisions are in place.
(iii)	The solid waste generated should be properly	All required provisions are in place.

	collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	
(iv)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	All necessary guidelines will be followed for disposal of muck (if any) generated during construction.
(v)	Arrangement shall be made that waste water and storm water do not get mixed.	Necessary arrangement is in place to ensure that no waste water and storm water is mixed.
(vi)	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	In case of landfill site, mostly the construction activity involves filling & compaction of soil and not excavation. However necessary precaution to preserve top soil for reuse will be taken.
(vii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	There is no additional fill material available on the present site as the site is situated in low lying area. As per the technical requirement, soil from various locations is transported for the purpose of filling the embankments.
(viii)	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	The plantation program is already undertaken & it is under implementation.
(ix)	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Liners are installed in landfill base as per MSW Rules 2000 to ensure that there is no leaching of leachate into the ground. Ground water and surface water is being regularly tested through the agency approved by the MoEF.
(x)	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.	Necessary due care is being taken.
(xi)	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.	Noted.
(xii)	The diesel generator sets to be used during	Noted.

	construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.	
(xiii)	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	Noted.
(xiv)	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Necessary and due care is being taken.
General Conditions for post – construction /operation phase		
(i)	Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority shall be obtained.	Plantation in green belt development is being done on progressive basis and majority of the same is already done.
(ii)	A complete set of all the documents submitted to SEAC & SEIAA should be forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	The said condition is being implemented while carrying out the project activities. NEERI is also being appointed to monitor the verious environmental conditions.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.	Cost of environmental monitoring and management is included in the tipping fees which are being paid to the operator of the project.
(vi)	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	The said condition is complied.
(vii)	Project management should submit half yearly	The said condition is complied.

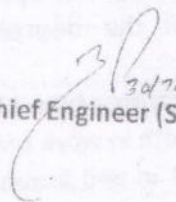
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(xii)	The diesel generator sets to be used during	Noted.

	compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 June & 15 December of each calendar year.	
(viii)	A copy of the clearance letter shall be sent by proponent, to the concerned Municipal Corporation 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.	The said condition is complied. A copy of Environment Clearance is hosted on the operator's website as per requirement.
(ix)	In the event of the failure of any pollution control system adopted by the unit the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Noted.
(x)	Regular monitoring of the air quality including SOM & so2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.	At the moment there is no power plant at the site, the same will be complied once the power plant is set up. Currently air monitoring at locations identified in EIA is being carried out at frequency defined in MSW Rules 2000 and reports of the same is being submitted to MPCB on regular basis by the operator of the project.
(xi)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NO2 (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Air monitoring data is displayed on Company's website as per requirement of the said clause. Monitoring results is being sent to the said departments as required in the said clause. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.
(xii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.
(xiii)	The environmental statement for each financial	Environment Statement is submitted and

<p>year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.</p>	<p>the same shall be displayed on operator's website.</p>
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Submitted please.

Yours faithfully,


30/7/13
Chief Engineer (SWM) : /c

As per the general conditions number (xi) stipulated in EC dated 5th December 2014 for post construction/operation phase, the details of Air pollution levels monitored as on 18-19.05.2015 at ISWM Project site, Kanjur, are as follow.

Sr. No.	Parameters	Permissible Limits	Values recorded	Remarks
1	Sulphur Dioxide (SO ₂)*	80 µg/m ³ (24 hrs)	12 µg/m ³ (24 hrs)	Within limits
2	Suspended Particulate Matter*	500 µg/m ³ (24 hrs)	108 µg/m ³ (24 hrs)	Within limits
3	PM ₁₀ **	-	79 µg/m ³ (24 hrs)	-
4	PM _{2.5} **	-	24 µg/m ³ (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m ³)	< 0.33 mg/m ³	Within limits
6	Ammonia*	0.4 mg/m ³ (400 µg/m ³ 24 hrs)	79 µg/m ³ (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m ³ 8 hour average: 1 mg/m ³	1 hour average: 0.9 mg/m ³	Within limits
8	Nitrogen Dioxide (NO _x)**	-	34 µg/m ³ (24 hrs)	-

* As per Authorisation dated 30/3/2012

** As per EC dated 5/12/2014. Permissible limits for PM₁₀ & PM_{2.5} are not prescribed for Landfill site.

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To,

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3)	Generation of Green House Gases (GHG) like methane needs to be controlled so that it does not contaminate the atmosphere. It should be ensured that the methane generated is fully utilised for power generation/flaring and not let into atmosphere.	The gas flaring station is installed at the site. Methane gas generation and its capturing, storage with utilization for power generation is in process. At present, the Methane generated is not adequate for power generation, hence flaring up under control conditions will be carried out.
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6)	To save the mangroves on the south western side of the property which is starved of supply of sea water, the PP should ensure openings of sufficient cross sections in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.	MCGM had already requested Chief Conservator of Forests, Mangrove Cell for his suggestions for improvement of tidal flushing. The improvement in cross sections will be carried out as per his suggestions.
7)	Mangrove regeneration efforts should be undertaken at the costs of the PP once regular tidal flushing is assured through measures suggested in point 6 above.	Mangrove regeneration will be undertaken as per the suggestions of Chief Conservator of Forests, Mangrove Cell.
8)	The staff handling the solid waste should be trained to ensure zero spillage of the garbage during transport. The PP should ensure proper cleaning of the transport vehicles after unloading the garbage at the dumping site.	The MSW vehicles coming to the Kanu site are having closed body system to avoid the spillage. Training is given to the site staff handling the Solid Waste to ensure minimum spillage. Arrangement is in place for Washing/cleaning of outgoing trucks tyres.
9)	No land development/ construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	The project is having required Environment Clearance accorded by SEIAA and Authorization granted by MPCB. This project is for processing of MSW i.e. to carry out one of the obligatory duty of MCGM. As per provisions of MMC Act the project is approved by Standing Committee of MCGM.
10)	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	No additional land will be used / acquired for any activity of the project without obtaining proper permission.
11)	The project proponent should ensure that the transportation of the Hazardous wastes to the TSDF conforms to the norms laid down in the Hazardous Wastes (Management & Handling) Rules, 2003.	Hazardous Waste storage, handling, transportation to the authorized site for the treatment and disposal is monitored by statutory authority MPCB, for which authorization is separately given to industries, re-processors, & Hazardous waste site operators by MPCB. The said condition therefore is not applicable to this project as the project involves processing of MSW only.
12)	The proponent should ensure that the TSDF fulfills all the provisions of Hazardous Wastes	The site is designed as per the guide lines of MSW (M&H) Rules, 2000. However, the

	(Management & Handling) Rules, 2003 & the design of landfill is as per the guidelines of CPCB with proper leachate collection arrangement.	provision of Hazardous waste (M&H) Rules, 2003 for landfill design with Leachate collection, treatment & disposal is also taken into consideration.
13)	The TSDF should only handle the waste generated from the member units. A leachate collection system should be provided to collect the leachates at a collection point. Treatment facility for the collected leachate should be provided. The treated water should be reused as far as possible in the project.	Only MSW generated from human habitation is transported to this site. No industrial hazardous waste is accepted for TSDF; hence no member units contributing / generating hazardous waste are covered as member units. Leachate collection system is provided and treatment facility is nearly at completion stage for BLF Cell-1. The treated effluent is proposed for its use for gardening / plantation within the plot.
14)	The proponent should obtained necessary clearance form the Ground Water Authority before initiating the project.	Necessary clearance from the Ground Water Authority is already obtained before initiating the project. MCGM had also informed the Ground Water Authority about the revised E.C.
15)	The depth of the land fill should be decided based on the ground water level at the site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition will also be observed during the execution of project.
16)	Project proponent should prepare and implement an on site emergency management plan.	On site "Emergency Plan and Disaster Management Plan" is prepared as per EIA report (Chapter 6) and its implementation is in process.
17)	Project proponent shall carryout periodical ground water / soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.	Quarterly ground water monitoring is done through monitoring wells at strategic locations. Periodical ground water /soil monitoring in and around the site is carried out at intervals set out in the MSW Rules 2000 and through the agency approved by MOEF. As regards to TCLP test the parameters which are necessary as per MSW rules will be tested.
18)	Project proponent should carryout periodical air quality monitoring in and around the site including VOC, HC.	Bi-monthly air monitoring is being carried out and the report are being submitted to MPCB, CPCB by the operator of the project M/s Antony Lara Enviro Solutions Pvt. Ltd. & are being displayed on the website of

		and necessary steps will be taken to mitigate any deterioration of the ground water quality if found necessary.
27)	Leq of noise level shall be maintained as per standards. for people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	Noise monitoring is being done as per MSW Rules and all efforts as per EIA is being done to ensure that noise levels do not exceed the permitted values. Necessary precautions as per EIA are being taken in working area.
28)	The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources.	Noise levels are arising from movements of trucks, dozers, which are movables still all efforts as per EIA is being made to ensure that noise levels do not exceed the permissible values.
29)	PP. has to abide by the conditions stipulated by SEAC & SEIAA.	Noted.
30)	"Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.	The project has already received Authorization to set up and operate waste processing / waste disposal facility with the approval of Consent Appraisal Committee of the Maharashtra Pollution Control Board, therefore, MPCB has issued NOC as against the Consent to Establishment and Consent to operate for the project.
31)	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	All required sanitation arrangements are available on site and same will be maintained throughout the construction period.
General Conditions for Construction Phase:-		
(i)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche and First Aid Room etc.	All required housing and sanitation requirements are in place.
(ii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.	All required provisions are in place.
(iii)	The solid waste generated should be properly	All required provisions are in place.

	collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	
(iv)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	All necessary guidelines will be followed for disposal of muck (if any) generated during construction.
(v)	Arrangement shall be made that waste water and storm water do not get mixed.	Necessary arrangement is in place to ensure that no waste water and storm water is mixed.
(vi)	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	In case of landfill site, mostly the construction activity involves filling & compaction of soil and not excavation. However necessary precaution to preserve top soil for reuse will be taken.
(vii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	There is no additional fill material available on the present site as the site is situated in low lying area. As per the technical requirement, soil from various locations is transported for the purpose of filling the embankments.
(viii)	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	The plantation program is already undertaken & it is under implementation.
(ix)	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Liners are installed in landfill base as per MSW Rules 2000 to ensure that there is no leaching of leachate into the ground. Ground water and surface water is being regularly tested through the agency approved by the MoEF.
(x)	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.	Necessary due care is being taken.
(xi)	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.	Noted.
(xii)	The diesel generator sets to be used during	Noted.

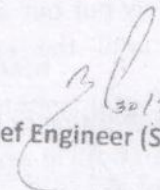
	construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.	
(xiii)	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	Noted.
(xiv)	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Necessary and due care is being taken.
General Conditions for post – construction /operation phase		
(i)	Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority shall be obtained.	Plantation in green belt development is being done on progressive basis and majority of the same is already done.
(ii)	A complete set of all the documents submitted to SEAC & SEIAA should be forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	The said condition is being implemented while carrying out the project activities. NEERI is also being appointed to monitor the various environmental conditions.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.	Cost of environmental monitoring and management is included in the tipping fees which are being paid to the operator of the project.
(vi)	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	The said condition is complied.
(vii)	Project management should submit half yearly	The said condition is complied.

	compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 June & 15 December of each calendar year.	
(viii)	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation 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.	The said condition is complied. A copy of Environment Clearance is hosted on the operator's website as per requirement.
(ix)	In the event of the failure of any pollution control system adopted by the unit the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Noted.
(x)	Regular monitoring of the air quality including SO ₂ & SO ₂ levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.	At the moment there is no power plant at the site, the same will be complied once the power plant is set up. Currently air monitoring at locations identified in EIA is being carried out at frequency defined in MSW Rules 2000 and reports of the same is being submitted to MPCB on regular basis by the operator of the project.
(xi)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO ₂ (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Air monitoring data is displayed on Company's website as per requirement of the said clause. Monitoring results is being sent to the said departments as required in the said clause. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.
(xii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.
(xiii)	The environmental statement for each financial	Environment Statement is submitted and

<p>year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.</p>	<p>the same shall be displayed on operator's website.</p>
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Submitted please.

Yours faithfully,


30/7/15
Chief Engineer (SWM) i/c

As per the general conditions number (xi) stipulated in EC dated 5th December 2014 for post construction/operation phase, the details of Air pollution levels monitored as on 18-19.05.2015 at ISWM Project site, Kanjur, are as follow.

Sr. No.	Parameters	Permissible Limits	Values recorded	Remarks
1	Sulphur Dioxide (SO ₂)*	80 µg/m ³ (24 hrs)	12 µg/m ³ (24 hrs)	Within limits
2	Suspended Particulate Matter*	500 µg/m ³ (24 hrs)	108 µg/m ³ (24 hrs)	Within limits
3	PM ₁₀ **	-	79 µg/m ³ (24 hrs)	-
4	PM _{2.5} **	-	24 µg/m ³ (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m ³)	< 0.33 mg/m ³	Within limits
6	Ammonia*	0.4 mg/m ³ (400 µg/m ³ 24 hrs)	79 µg/m ³ (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m ³ 8 hour average: 1 mg/m ³	1 hour average: 0.9 mg/m ³	Within limits
8	Nitrogen Dioxide (NO _x)**	-	34 µg/m ³ (24 hrs)	-

* As per Authorisation dated 30/3/2012

** As per EC dated 5/12/2014. Permissible limits for PM₁₀ & PM_{2.5} are not prescribed for Landfill site.

MUNICIPAL CORPORATION OF GREATER MUMBAI

CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT.

क. उपप्र.अ./ 1805/घ.क.स्य./प्रकल्प/दिनांक

Office of the Chief Engineer (SWM)

Love Grove Complex,

89, Dr. Annie Besant Road,

Worli,

Mumbai - 400 018.

Tel. No.: 022-24945186 /24955436

To,
Scientist & Incharge,
Central Pollution Control Board,
Parivesh Bhavan,
Opposite VMC ward office No.10,
Shubanpura,
Vadodra- 390 023

Sub: Submission of hard copy of half yearly compliance reports in respect of the stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the General Conditions (vii) & (xii) for Construction Phase including results of monitored data as stipulated in the revised Environmental clearance (E.C.) accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kanjur, Mumbai.

Ref: Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.

Sir,

This has reference to the conditions of revised Environmental Clearance issued for proposed modernization of MSW processing & disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai.

In this context, the MCGM is hereby submitting the hard copy of half yearly compliance reports in respect of the stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the General Conditions (vii) & (xii) for Construction Phase including results of monitored data as stipulated in the

revised Environmental clearance (E.C.) accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai as follows:-

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
1)	The proposal under consideration has to be restricted within the area 65.96 ha. out side the CRZ area. The PP shall maintain a buffer zone of 500 meters around the project perimeter which shall be incorporated as 'No Development Zone' in the Development Plan of MCGM.	MCGM had maintained a buffer zone of 500 meters around the project perimeter in existing Development Plan. MCGM is taking necessary steps for incorporation of the said buffer zone as 'No Development Zone' in the Development Plan of MCGM & the same will be incorporated after approval of Appropriate Authority.
2)	The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped/concretised so as to avoid generation of dust.	Complied.
3)	Generation of Green House Gases (GHG) like methane needs to be controlled so that it does not contaminate the atmosphere. It should be ensured that the methane generated is fully utilised for power generation/flaring and not let into atmosphere.	The gas flaring station is installed at the site. Methane gas generation and its capturing, storage with utilization for power generation is in process. At present, the Methane generated is not adequate for power generation, hence flaring up under control conditions will be carried out.
4)	The leachate generating from the cells will have to be systematically collected and treated to reduce its BOD levels to allowable limits. Under no circumstance should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the South Western and Eastern side of the cells.	Arrangement for leachate collection from BLF Cell-1 in plastic sheet lined pond is completed. Civil construction, erection of treatment plant is nearly at completion stage. At present, leachate collected is recirculated in BLFT Cell & excess leachate is treated in the treatment plant of BLFT. The Leachate Treatment Plant for BLF Cell 1 will be commissioning shortly.
5)	The PP shall take all out efforts to control odour nuisance. PP should take steps to measure odour levels using instruments which are currently available. The measurement of odour levels shall be taken at strategic locations depending on the wind direction and situation of habitats. Through regular monitoring it should be ensured that the odour levels are within the acceptable limits and remedial measures like applying odour controlling bacterial	As per the stipulated condition the odour nuisance is being controlled by applying odour controlling bacterial consortium (Bio wish) to the garbage regularly. As per the details of wind direction & wind speed data, locations for monitoring odour levels in windward and leeward directions along with nearby residential zones are finalized.

	consortium to the garbage are taken up as and when necessary.	As regards measurement of odour levels by instrumental method, the work will be carried out through NEERI, Mumbai. NEERI is being appointed for the said work.
6)	To save the mangroves on the south western side of the property which is starved of supply of sea water, the PP should ensure openings of sufficient cross sections in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.	MCGM had already requested Chief Conservator of Forests, Mangrove Cell for his suggestions for improvement of tidal flushing. The improvement in cross sections will be carried out as per his suggestions.
7)	Mangrove regeneration efforts should be undertaken at the costs of the PP once regular tidal flushing is assured through measures suggested in point 6 above.	Mangrove regeneration will be undertaken as per the suggestions of Chief Conservator of Forests, Mangrove Cell.
8)	The staff handling the solid waste should be trained to ensure zero spillage of the garbage during transport. The PP should ensure proper cleaning of the transport vehicles after unloading the garbage at the dumping site.	The MSW vehicles coming to the Kanjur site are having closed body system to avoid the spillage. Training is given to the site staff handling the Solid Waste to ensure minimum spillage. Arrangement is in place for Washing/cleaning of outgoing trucks tyres.
9)	No land development/ construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	The project is having required Environment Clearance accorded by SEIAA and Authorization granted by MPCB. This project is for processing of MSW to carry out one of the obligatory duty of MCGM. As per provisions of MMC Act the project is approved by Standing Committee of MCGM.
10)	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	No additional land will be used / acquired for any activity of the project without obtaining proper permission.
11)	The project proponent should ensure that the transportation of the Hazardous wastes to the TSDF conforms to the norms laid down in the Hazardous Wastes (Management & Handling) Rules, 2003.	Hazardous Waste storage, handling, transportation to the authorized site for the treatment and disposal is monitored by statutory authority MPCB, for which authorization is separately given to industries, re-processors, & Hazardous waste site operators by MPCB. The said condition therefore is not applicable to this project as the project involves processing of MSW only.
12)	The proponent should ensure that the TSDF fulfills all the provisions of Harzardous Wastes	The site is designed as per the guide lines of MSW (M&H) Rules, 2000. However, the

	(Management & Handling) Rules, 2003 & the design of landfill is as per the guidelines of CPCB with proper leachate collection arrangement.	provision of Hazardous waste (M&H) Rules, 2003 for landfill design with Leachate collection, treatment & disposal is also taken into consideration.
13)	The TSDF should only handle the waste generated from the member units. A leachate collection system should be provided to collect the leachates at a collection point. Treatment facility for the collected leachate should be provided. The treated water should be reused as far as possible in the project.	Only MSW generated from human habitation is transported to this site. No industrial hazardous waste is accepted for TSDF; hence no member units contributing / generating hazardous waste are covered as member units. Leachate collection system is provided and treatment facility is nearly at completion stage for BLF Cell-1. The treated effluent is proposed for its use for gardening / plantation within the plot.
14)	The proponent should obtain necessary clearance from the Ground Water Authority before initiating the project.	Necessary clearance from the Ground Water Authority is already obtained before initiating the project. MCGM had also informed the Ground Water Authority about the revised E.C.
15)	The depth of the land fill should be decided based on the ground water level at the site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition will also be observed during the execution of project.
16)	Project proponent should prepare and implement an on site emergency management plan.	On site "Emergency Plan and Disaster Management Plan" is prepared as per EIA report (Chapter 6) and its implementation is in process.
17)	Project proponent shall carry out periodical ground water / soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.	Quarterly ground water monitoring is done through monitoring wells at strategic locations. Periodical ground water / soil monitoring in and around the site is carried out at intervals set out in the MSW Rules 2000 and through the agency approved by MOEF. As regards to TCLP test the parameters which are necessary as per MSW rules will be tested.
18)	Project proponent should carry out periodical air quality monitoring in and around the site including VOC, HC.	Bi-monthly air monitoring is being carried out and the reports are being submitted to MPCB, CPCB by the operator of the project M/s Antony Lara Enviro Solutions Pvt. Ltd. & are being displayed on the website of

		the operator. The VOC and HC are monitored.
19)	Project proponent should develop green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement.	It is revealed that said condition is not applicable to the Kanjur Project as the Kanjur Project is only for treatment of Municipal Solid Waste (MSW). Plantation for green belt development is being done on progressive basis and majority of the plantation is already done.
20)	The project proponent should not store the hazardous wastes more than the quantity that has been permitted by the CPCB / Maharashtra State Pollution Control Board.	Only MSW is received at Kanjur. Therefore, question of receiving Hazardous waste does not arise.
21)	Adequate fire fighting facilities should be installed to handle the fire arising from hazardous chemicals / wastes that are store / processed.	Adequate fire fighting system comprising of water tankers and fire extinguishers placed at strategic locations is in place for prevention of any fire incidence.
22)	For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.	On leeward direction plantation is done to act as a wind barrier. The arrangement of water sprinkling on roads through tankers is carried out regularly.
23)	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	It is revealed that said condition is not applicable to the Kanjur Project as the furnace is not the part of Kanjur Project profile.
24)	Proper house keeping programmes shall be implemented.	Dedicated team of trained workers is already deployed to ensure the good housekeeping & cleanliness.
25)	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable) Arrangement shall be made that effluent and storm water does not get mixed.	At present there is power supply from MSEB on the project site. Standby DG of 125 KV capacity with stack height of 7 meter is provided. The DG is as per new EP guidelines of CPCB. Arrangement for separate leachate collection through HDPE pipeline is made.
26)	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra pollution control board.	Periodic ground water monitoring as prescribed in MSW Rules 2000 is being carried out at regular intervals through the agency approved by MoEF. The results will be compiled at the end of 1 st operation year i.e. April 2016 and quality of ground water will be ascertained with reference to base line data. Trend of water quality will be analyzed.

		and necessary steps will be taken to mitigate any deterioration of the ground water quality if found necessary.
27)	Leq of noise level shall be maintained as per standards, for people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	Noise monitoring is being done as per MSW Rules and all efforts as per EIA is being done to ensure that noise levels do not exceed the permitted values. Necessary precautions as per EIA are being taken in working area.
28)	The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources.	Noise levels are arising from movements of trucks, dozers, which are movables still all efforts as per EIA is being made to ensure that noise levels do not exceed the permissible values.
29)	PP has to abide by the conditions stipulated by SEAC & SEIAA.	Noted.
30)	"Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.	The project has already received Authorization to set up and operate waste processing / waste disposal facility with the approval of Consent Appraisal Committee of the Maharashtra Pollution Control Board, therefore, MPCB has issued NOC as against the Consent to Establishment and Consent to operate for the project.
31)	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	All required sanitation arrangements are available on site and same will be maintained throughout the construction period.
General Conditions for Construction Phase:-		
(i)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche and First Aid Room etc.	All required housing and sanitation requirements are in place.
(ii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.	All required provisions are in place.
(iii)	The solid waste generated should be properly	All required provisions are in place.

	collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	
(iv)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	All necessary guidelines will be followed for disposal of muck (if any) generated during construction.
(v)	Arrangement shall be made that waste water and storm water do not get mixed.	Necessary arrangement is in place to ensure that no waste water and storm water is mixed.
(vi)	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	In case of landfill site, mostly the construction activity involves filling & compaction of soil and not excavation. However necessary precaution to preserve top soil for reuse will be taken.
(vii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	There is no additional fill material available on the present site as the site is situated in low lying area. As per the technical requirement, soil from various locations is transported for the purpose of filling the embankments.
(viii)	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	The plantation program is already undertaken & it is under implementation.
(ix)	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Liners are installed in landfill base as per MSW Rules 2000 to ensure that there is no leaching of leachate into the ground. Ground water and surface water is being regularly tested through the agency approved by the MoEF.
(x)	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.	Necessary due care is being taken.
(xi)	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.	Noted.
(xii)	The diesel generator sets to be used during	Noted.

	construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.	
(xiii)	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	Noted.
(xiv)	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Necessary and due care is being taken.
General Conditions for post – construction /operation phase		
(i)	Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority shall be obtained.	Plantation in green belt development is being done on progressive basis and majority of the same is already done.
(ii)	A complete set of all the documents submitted to SEAC & SEIAA should be forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	The said condition is being implemented while carrying out the project activities. NEERI is also being appointed to monitor the verious environmental conditions.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.	Cost of environmental monitoring and management is included in the tipping fees which are being paid to the operator of the project.
(vi)	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	The said condition is complied.
(vii)	Project management should submit half yearly	The said condition is complied.

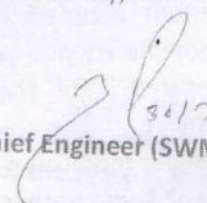
	compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 June & 15 December of each calendar year.	
(viii)	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation 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.	The said condition is complied. A copy of Environment Clearance is hosted on the operator's website as per requirement.
(ix)	In the event of the failure of any pollution control system adopted by the unit the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Noted.
(x)	Regular monitoring of the air quality including SOM & so2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.	At the moment there is no power plant at the site, the same will be complied once the power plant is set up. Currently air monitoring at locations identified in EIA is being carried out at frequency defined in MSW Rules 2000 and reports of the same is being submitted to MPCB on regular basis by the operator of the project.
(xi)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NO2 (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Air monitoring data is displayed on Company's website as per requirement of the said clause. Monitoring results is being sent to the said departments as required in the said clause. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.
(xii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.
(xiii)	The environmental statement for each financial	Environment Statement is submitted and

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

the same shall be displayed on operator's website.

Submitted please.

Yours faithfully,


36/17
Chief Engineer (SWM) :/11

As per the general conditions number (xi) stipulated in EC dated 5th December 2014 for post construction/operation phase, the details of Air pollution levels monitored as on 18-19.05.2015 at ISWM Project site, Kanjur, are as follow.

Sr. No.	Parameters	Permissible Limits	Values recorded	Remarks
1	Sulphur Dioxide (SO ₂)*	80 µg/m ³ (24 hrs)	12 µg/m ³ (24 hrs)	Within limits
2	Suspended Particulate Matter*	500 µg/m ³ (24 hrs)	108 µg/m ³ (24 hrs)	Within limits
3	PM ₁₀ **	-	79 µg/m ³ (24 hrs)	-
4	PM _{2.5} **	-	24 µg/m ³ (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m ³)	< 0.33 mg/m ³	Within limits
6	Ammonia*	0.4 mg/m ³ (400 µg/m ³ 24 hrs)	79 µg/m ³ (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m ³ 8 hour average: 1 mg/m ³	1 hour average: 0.9 mg/m ³	Within limits
8	Nitrogen Dioxide (NO _x)**	-	34 µg/m ³ (24 hrs)	-

* As per Authorisation dated 30/3/2012

** As per EC dated 5/12/2014. Permissible limits for PM₁₀ & PM_{2.5} are not prescribed for Landfill site.

MUNICIPAL CORPORATION OF GREATER MUMBAI
CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT.

क्र. उपप्र.अ./ 1805/घ.क.व्य./प्रकल्प/दिनांक

Office of the Chief Engineer (SWM)
Love Grove Complex,
89, Dr. Annie Besant Road,
Worli,
Mumbai - 400 018.
Tel. No.: 022-24945186 /24955436

To,
The Member-Secretary,
S.E.I.A.A.
Environment Department,
Government of Maharashtra,
15th floor, New Adm. Building,
Mantralaya,
Mumbai - 400 032.

Sub: Submission of hard copy of half yearly compliance reports in respect of the stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the General Conditions (vii) & (xii) for Construction Phase including results of monitored data as stipulated in the revised Environmental clearance (E.C.) accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kanjur, Mumbai.

Ref: Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.

Sir,

This has reference to the conditions of revised Environmental Clearance issued for proposed modernization of MSW processing & disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai.

In this context, the MCGM is hereby submitting the hard copy of half yearly compliance reports in respect of the stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the General Conditions (vii) & (xii) for Construction Phase including results of monitored data as stipulated in the

revised Environmental clearance (E.C.) accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai as follows:-

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
1)	The proposal under consideration has to be restricted within the area 65.96 ha. out side the CRZ area. The PP shall maintain a buffer zone of 500 meters around the project perimeter which shall be incorporated as 'No Development Zone' in the Development Plan of MCGM.	MCGM had maintained a buffer zone of 500 meters around the project perimeter in existing Development Plan. MCGM taking necessary steps for incorporation of the said buffer zone as 'No Development Zone' in the Development Plan of MCGM & the same will be incorporated after approval of Appropriate Authority.
2)	The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped/concretised so as to avoid generation of dust.	Complied.
3)	Generation of Green House Gases (GHG) like methane needs to be controlled so that it does not contaminate the atmosphere. It should be ensured that the methane generated is fully utilised for power generation/flaring and not let into atmosphere.	The gas flaring station is installed at the site. Methane gas generation and capturing, storage with utilization for power generation is in process. At present, the Methane generated is not adequate for power generation, hence flaring up under control conditions will be carried out.
4)	The leachate generating from the cells will have to be systematically collected and treated to reduce its BOD levels to allowable limits. Under no circumstance should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the South Western and Eastern side of the cells.	Arrangement for leachate collection from BLF Cell-1 in plastic sheet lined pond is completed. Civil construction, erection of treatment plant is nearly at completion stage. At present, leachate collected is recirculated in BLFT Cell & excess leachate is treated in the treatment plant of BLFT Cell. The Leachate Treatment Plant for BLF Cell 1 will be commissioning shortly.
5)	The PP shall take all out efforts to control odour nuisance. PP should take steps to measure odour levels using instruments which are currently available. The measurement of odour levels shall be taken at strategic locations depending on the wind direction and situation of habitats. Through regular monitoring it should be ensured that the odour levels are within the acceptable limits and remedial measures like applying odour controlling bacterial	As per the stipulated condition the odour nuisance is being controlled by applying odour controlling bacterial consortium (Bio wish) to the garbage regularly. As per the details of wind direction & wind speed data, locations for monitoring odour levels in windward and leeward directions along with nearby residential zones are finalized.

	consortium to the garbage are taken up as and when necessary.	As regards measurement of odour levels by instrumental method, the work will be carried out through NEERI, Mumbai. NEERI is being appointed for the said work.
6)	To save the mangroves on the south western side of the property which is starved of supply of sea water, the PP should ensure openings of sufficient cross sections in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.	MCGM had already requested Chief Conservator of Forests, Mangrove Cell for his suggestions for improvement of tidal flushing. The improvement in cross sections will be carried out as per his suggestions.
7)	Mangrove regeneration efforts should be undertaken at the costs of the PP once regular tidal flushing is assured through measures suggested in point 6 above.	Mangrove regeneration will be undertaken as per the suggestions of Chief Conservator of Forests, Mangrove Cell.
8)	The staff handling the solid waste should be trained to ensure zero spillage of the garbage during transport. The PP should ensure proper cleaning of the transport vehicles after unloading the garbage at the dumping site.	The MSW vehicles coming to the Karjar site are having closed body system to avoid the spillage. Training is given to the site staff handling the Solid Waste to ensure minimum spillage. Arrangement is in place for Washing/cleaning of outgoing trucks tyres.
9)	No land development/ construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	The project is having required Environment Clearance accorded by SEIAA and Authorization granted by MPCB. This project is for processing of MSW to carry out one of the obligatory duty of MCGM. As per provisions of MMC Act the project is approved by Standing Committee of MCGM.
10)	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	No additional land will be used / acquired for any activity of the project without obtaining proper permission.
11)	The project proponent should ensure that the transportation of the Hazardous wastes to the TSDF conforms to the norms laid down in the Hazardous Wastes (Management & Handling) Rules, 2003.	Hazardous Waste storage, handling, transportation to the authorized site for the treatment and disposal is monitored by statutory authority MPCB, for which authorization is separately given to industries, re-processors, & Hazardous waste site operators by MPCB. The said condition therefore is not applicable to this project as the project involves processing of MSW only.
12)	The proponent should ensure that the TSDF fulfills all the provisions of Hazardous Wastes	The site is designed as per the guide lines of MSW (M&H) Rules, 2000. However, the

	(Management & Handling) Rules, 2003 & the design of landfill is as per the guidelines of CPCB with proper leachate collection arrangement.	provision of Hazardous waste (M&H) Rules, 2003 for landfill design with Leachate collection, treatment & disposal is also taken into consideration.
13)	The TSDF should only handle the waste generated from the member units. A leachate collection system should be provided to collect the leachates at a collection point. Treatment facility for the collected leachate should be provided. The treated water should be reused as far as possible in the project.	Only MSW generated from human habitation is transported to this site. No industrial hazardous waste is accepted for TSDF; hence no member units contributing / generating hazardous waste are covered as member units. Leachate collection system is provided and treatment facility is nearly at completion stage for BLF Cell-1. The treated effluent is proposed for its use for gardening / plantation within the plot.
14)	The proponent should obtain necessary clearance from the Ground Water Authority before initiating the project.	Necessary clearance from the Ground Water Authority is already obtained before initiating the project. MCGM had also informed the Ground Water Authority about the revised E.C.
15)	The depth of the land fill should be decided based on the ground water level at the site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition will also be observed during the execution of project.
16)	Project proponent should prepare and implement an on site emergency management plan.	On site "Emergency Plan and Disaster Management Plan" is prepared as per EIA report (Chapter 6) and its implementation is in process.
17)	Project proponent shall carry out periodical ground water / soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.	Quarterly ground water monitoring is done through monitoring wells at strategic locations. Periodical ground water / soil monitoring in and around the site is carried out at intervals set out in the MSW Rules 2000 and through the agency approved by MOEF. As regards to TCLP test the parameters which are necessary as per MSW rules will be tested.
18)	Project proponent should carry out periodical air quality monitoring in and around the site including VOC, HC.	Bi-monthly air monitoring is being carried out and the reports are being submitted to MPCB, CPCB by the operator of the project M/s Antony Lara Enviro Solutions Pvt. Ltd. & are being displayed on the website of

		the operator. The VOC and HC are also monitored.
19)	Project proponent should develop green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement.	It is revealed that said condition is not applicable to the Kanjur Project as the Kanjur Project is only for treatment of Municipal Solid Waste (MSW). Plantation for green belt development is being done on progressive basis and majority of the plantation is already done.
20)	The project proponent should not store the hazardous wastes more than the quantity that has been permitted by the CPCB / Maharashtra State Pollution Control Board.	Only MSW is received at Kanjur site. Therefore, question of receiving of Hazardous waste does not arise.
21)	Adequate fire fighting facilities should be installed to handle the fire arising from hazardous chemicals / wastes that are store / processed.	Adequate fire fighting system comprising of water tankers and fire extinguishers placed at strategic locations is in place for prevention of any fire incidence.
22)	For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.	On leeward direction plantation is done to act as a wind barrier. The arrangement of water sprinkling on roads through tankers is carried out regularly.
23)	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	It is revealed that said condition is not applicable to the Kanjur Project as the furnace is not the part of Kanjur Project profile.
24)	Proper house keeping programmes shall be implemented.	Dedicated team of trained workers is already deployed to ensure the good housekeeping & cleanliness.
25)	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable). Arrangement shall be made that effluent and storm water does not get mixed.	At present there is power supply from MSEB on the project site. Standby DG of 125 KV capacity with stack height of 7 meter is provided. The DG is as per new EP guidelines of CPCB. Arrangement for separate leachate collection through HDPE pipeline is made.
26)	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra pollution control board.	Periodic ground water monitoring as prescribed in MSW Rules 2000 is being carried out at regular intervals through the agency approved by MoEF. The results will be compiled at the end of 1 st operation year i.e. April 2016 and quality of ground water will be ascertained with reference to base line data. Trend of water quality will be analyzed.

		and necessary steps will be taken to mitigate any deterioration of the ground water quality if found necessary.
27)	Leq of noise level shall be maintained as per standards. for people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	Noise monitoring is being done as per MSW Rules and all efforts as per EIA is being done to ensure that noise levels do not exceed the permitted values. Necessary precautions as per EIA are being taken in working area.
28)	The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources.	Noise levels are arising from movements of trucks, dozers, which are movables still all efforts as per EIA is being made to ensure that noise levels do not exceed the permissible values.
29)	PP has to abide by the conditions stipulated by SEAC & SEIAA.	Noted.
30)	"Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.	The project has already received Authorization to set up and operate waste processing / waste disposal facility with the approval of Consent Appraisal Committee of the Maharashtra Pollution Control Board, therefore, MPCB has issued NOC as against the Consent to Establishment and Consent to operate for the project.
31)	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	All required sanitation arrangements are available on site and same will be maintained throughout the construction period.
General Conditions for Construction Phase:-		
(i)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche and First Aid Room etc.	All required housing and sanitation requirements are in place.
(ii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.	All required provisions are in place.
(iii)	The solid waste generated should be properly	All required provisions are in place.

	collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	
(iv)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	All necessary guidelines will be followed for disposal of muck (if any) generated during construction.
(v)	Arrangement shall be made that waste water and storm water do not get mixed.	Necessary arrangement is in place to ensure that no waste water and storm water is mixed.
(vi)	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	In case of landfill site, mostly the construction activity involves filling & compaction of soil and not excavation. However necessary precaution to preserve top soil for reuse will be taken.
(vii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	There is no additional fill material available on the present site as the site is situated in low lying area. As per the technical requirement, soil from various locations is transported for the purpose of filling the embankments.
(viii)	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	The plantation program is already undertaken & it is under implementation.
(ix)	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Liners are installed in landfill base as per MSW Rules 2000 to ensure that there is no leaching of leachate into the ground. Ground water and surface water is being regularly tested through the agency approved by the MoEF.
(x)	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.	Necessary due care is being taken.
(xi)	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.	Noted.
(xii)	The diesel generator sets to be used during	Noted.

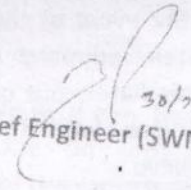
	construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.	
(xiii)	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	Noted.
(xiv)	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Necessary and due care is being taken.
General Conditions for post – construction /operation phase		
(i)	Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority shall be obtained.	Plantation in green belt development is being done on progressive basis and majority of the same is already done.
(ii)	A complete set of all the documents submitted to SEAC & SEIAA should be forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	The said condition is being implemented while carrying out the project activities. NEERI is also being appointed to monitor the various environmental conditions.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.	Cost of environmental monitoring and management is included in the tipping fees which are being paid to the operator of the project.
(vi)	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	The said condition is complied.
(vii)	Project management should submit half yearly	The said condition is complied.

	compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 June & 15 December of each calendar year.	
(viii)	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation 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.	The said condition is complied. A copy of Environment Clearance is hosted on the operator's website as per requirement.
(ix)	In the event of the failure of any pollution control system adopted by the unit the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Noted.
(x)	Regular monitoring of the air quality including SO ₂ & SO ₂ levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.	At the moment there is no power plant at the site, the same will be complied once the power plant is set up. Currently air monitoring at location-identified in EIA is being carried out at frequency defined in MSW Rules 2000 and reports of the same is being submitted to MPCB on regular basis by the operator of the project.
(xi)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO ₂ (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Air monitoring data is displayed on Company's website as per requirement of the said clause. Monitoring results is being sent to the said departments as required in the said clause. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.
(xii)	The project proponent shall also submit six monthly reports, on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.
(xiii)	The environmental statement for each financial	Environment Statement is submitted and

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

Yours faithfully,


30/11/15
Chief Engineer (SWM) 1/1

As per the general conditions number (xi) stipulated in EC dated 5th December 2014 for post construction/operation phase, the details of Air pollution levels monitored as on 18-19.05.2015 at ISWM Project site, Kanjur, are as follow.

Sr. No.	Parameters	Permissible Limits	Values recorded	Remarks
1	Sulphur Dioxide (SO ₂)*	80 µg/m ³ (24 hrs)	12 µg/m ³ (24 hrs)	Within limits
2	Suspended Particulate Matter*	500 µg/m ³ (24 hrs)	108 µg/m ³ (24 hrs)	Within limits
3	PM ₁₀ **	-	79 µg/m ³ (24 hrs)	-
4	PM _{2.5} **	-	24 µg/m ³ (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m ³)	< 0.33 mg/m ³	Within limits
6	Ammonia*	0.4 mg/m ³ (400 µg/m ³ 24 hrs)	79 µg/m ³ (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m ³ 8 hour average: 1 mg/m ³	1 hour average: 0.9 mg/m ³	Within limits
8	Nitrogen Dioxide (NO _x)**	-	34 µg/m ³ (24 hrs)	-

* As per Authorisation dated 30/3/2012

** As per EC dated 5/12/2014. Permissible limits for PM₁₀ & PM_{2.5} are not prescribed for Landfill site.