

क्र. उपप्र.अ./३४५५/घ.क.व्य./प्रकल्प/दिनांक २४/१/१६

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

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,  
15<sup>th</sup> 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: 1) Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.  
2) Half yearly compliance report submitted by MCGM vide letter U/No. Dy.Ch.E./1805/SWM/Project dtd. 01.08.2015.

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 methane generated if fully utilized for power generation/flaring and not let into atmosphere.	Complied. 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 hence flaring up under control conditions is carried out.
4.	The leachate generating from the cells will have to be systematically collected and treated to reduce BOD levels to allowable limits. Under no circumstances should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the south western and eastern side of the cell.	Arrangement for leachate collection from BLF-Cell-No1 is completed. Civil construction, erection of LTP is completed. Presently leachate collected is re-circulated in BLF Cell. The leachate Treatment Plant partly commissioned and is in operation.
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.	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.

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	Through regular monitoring it should be ensured that the odour levels are within the acceptable limits and remedial measures like applying odour controlling bacterial consortium to the garbage are taken up as and when necessary.	As regards measurement of odour levels by instrumental method, the work is being carried out through NEERI, Mumbai. NEERI is 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 section in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.	For protection and conservation of mangroves, proposal is under finalization with Chief Conservator of Forests( Mangrove Cell)
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.	
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 dumpsite.	The vehicles carrying MSW are having closed body system. Training for handling the Solid Waste is given to the staff. 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 waste to the TSDF conforms to the norms laid down in the Hazardous Waste (Management & Handling) Rules 2013.	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.

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		The said condition therefore is not applicable to this project as the project involves processing of MSW only.
12	The proponent should ensure that TSDF fulfills all the provision of Hazardous Waste (Management & Handling) Rules 2003 & the design of landfill is as per guidelines of CPCB with proper leachate collection arrangement.	The site is designed as per the guide lines of MSW (M&H) Rules-2000. However the provision of Hazardous waste (M&H)Rules 2003 for landfill design with Leachate collection, treatment & disposal is 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 leachate 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 in operation 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 landfill should be decided based on the ground water level at site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition is also being observed during the execution of project.
16	Project Proponent should prepare and implement an onsite 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 shall carryout periodical air quality monitoring in and around the site including VOC, HC.	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.

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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 firefighting facilities should be installed to handle the fire arising from hazardous chemicals/waste that are store/processed.	Adequate fire fighting system is in place, comprising of water tankers and fire extinguishers which are placed at strategic locations 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.	There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is 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 <sup>st</sup> 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	Noise monitoring is being done as per MSW

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	as per standards. for people working in the high noise area, requisite personal protective equipment like earplugs etc..shall be provided.	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 nose 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.

Report on compliance of General Conditions stipulated in Environment Clearance.		
Sr. No	General Conditions for Construction Phase	Proposed action plan
(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, crèche 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	All required provisions are in place.

	properly 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 shall 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 drainage is made to ensure that no waste water and storm water is mixed.
(vi)	All the top soil 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 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 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	Complied

	during 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		
Sr.No	General Condition for Post Construction/Operation Phase	Proposed Action Plan
(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 for warded 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 afresh 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.	Operator of the MSW processing facility having qualified staff for environment monitoring at site. The said condition is being implemented while carrying out the project activities. NEERI is also 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	Cost of environmental monitoring and management is included in the tipping fees which are being paid to the operator of the project.

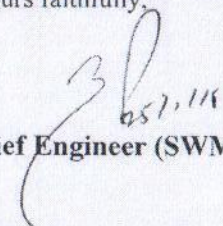


	MPCB & this department.	
(vi)	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <a href="http://ec.maharashtra.gov.in">http://ec.maharashtra.gov.in</a> .	Complied.
(vii)	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 <sup>th</sup> June & 15 <sup>th</sup> December of each calendar year.	Complied.
(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.	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 restored until the desired efficiency has been achieved.	Noted
(x)	Regular monitoring of the air quality including SOM & SO <sub>2</sub> 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 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	Air monitoring data is displayed on Company's website. Periodic Monitoring results are being sent to the said departments. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.

	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 <sub>2</sub> , NO <sub>x</sub> (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.	
(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 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-mail.	Environment Statement is submitted and the same is displayed on operator's website.

Submitted please.

Yours faithfully,

  
Chief Engineer (SWM)

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 at ISWM Project site, Kanjur, are as follows.

Sr. No	Parameters	Permissible Limits	Values recorded May-2015	Values recorded Jul-2015	Values Recorded Sep-2015	Values Recorded Oct-2015	Values Recorded Nov-2015	Values Recorded Dec-2015	Values Recorded Dec-2015
1	Sulphur Dioxide (SO <sub>2</sub> )*	80 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	BDL [DL=10 µg/m <sup>3</sup> ]	12 µg/m <sup>3</sup> (24 hrs)	22 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	Within limits
2	Suspended Particulate Matter*	500 µg/m <sup>3</sup> (24 hrs)	108 µg/m <sup>3</sup> (24 hrs)	46 µg/m <sup>3</sup> (24 hrs)	195 µg/m <sup>3</sup> (24 hrs)	296 µg/m <sup>3</sup> (24 hrs)	219 µg/m <sup>3</sup> (24 hrs)	391 µg/m <sup>3</sup> (24 hrs)	Within limits
3	PM <sub>10</sub> **	-	79 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	96 µg/m <sup>3</sup> (24 hrs)	246 µg/m <sup>3</sup> (24 hrs)	Within limits
4	PM <sub>2.5</sub> **	-	24 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	28 µg/m <sup>3</sup> (24 hrs)	58 µg/m <sup>3</sup> (24 hrs)	49 µg/m <sup>3</sup> (24 hrs)	82 µg/m <sup>3</sup> (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m <sup>3</sup> )	BDL [DL=0.3 mg/m <sup>3</sup> ]	BDL [DL=0.3 mg/m <sup>3</sup> ]	1.6 mg/m <sup>3</sup> (24 hrs)	2.1 mg/m <sup>3</sup> (24 hrs)	2 mg/m <sup>3</sup> (24 hrs)	6.1 mg/m <sup>3</sup> (24 hrs)	Within limits
6	Ammonia*	0.4 mg/m <sup>3</sup> (400 µg/m <sup>3</sup> 24 hrs)	79 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	2 µg/m <sup>3</sup> (24 hrs)	20 µg/m <sup>3</sup> (24 hrs)	17 µg/m <sup>3</sup> (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: 0.6 mg/m <sup>3</sup>	1 hour average: 1.4 mg/m <sup>3</sup>	1 hour average: 0.8 mg/m <sup>3</sup>	1 hour average: 1.0 mg/m <sup>3</sup>	Within limits
8	Nitrogen Dioxide (NO <sub>x</sub> )*	-	34 µg/m <sup>3</sup> (24 hrs)	11 µg/m <sup>3</sup> (24 hrs)	28 µg/m <sup>3</sup> (24 hrs)	34 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	44 µg/m <sup>3</sup> (24 hrs)	Within limits
* As per Authorisation dated 30/03/2012									
** As per EC dated 05/12/2014. Permissible limits for PM <sub>10</sub> , PM <sub>2.5</sub> & NO <sub>x</sub> are not prescribed for Landfill site.									

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**CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT.**

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Love Grove Complex,  
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**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**

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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 methane generated if fully utilized for power generation/flaring and not let into atmosphere.	Complied. 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 hence flaring up under control conditions is carried out.
4.	The leachate generating from the cells will have to be systematically collected and treated to reduce BOD levels to allowable limits. Under no circumstances should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the south western and eastern side of the cell.	Arrangement for leachate collection from BLF-Cell-No1 is completed. Civil construction, erection of LTP is completed. Presently leachate collected is re-circulated in BLF Cell. The leachate Treatment Plant partly commissioned and is in operation.
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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 dumpsite.	The vehicles carrying MSW are having closed body system. Training for handling the Solid Waste is given to the staff. 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 waste to the TSDF conforms to the norms laid down in the Hazardous Waste (Management & Handling) Rules 2013.	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

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
		this project as the project involves processing of MSW only.
12	The proponent should ensure that TSDF fulfills all the provision of Hazardous Waste (Management & Handling) Rules 2003 & the design of landfill is as per guidelines of CPCB with proper leachate collection arrangement.	The site is designed as per the guide lines of MSW (M&H) Rules-2000. However the provision of Hazardous waste (M&H)Rules 2003 for landfill design with Leachate collection, treatment & disposal is 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 leachate 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 in operation 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 landfill should be decided based on the ground water level at site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition is also being observed during the execution of project.
16	Project Proponent should prepare and implement an onsite 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 shall carryout periodical air quality monitoring in and around the site including VOC, HC.	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	It is revealed that said condition is not applicable

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement.	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 firefighting facilities should be installed to handle the fire arising from hazardous chemicals/waste that are store/processed.	Adequate fire fighting system is in place, comprising of water tankers and fire extinguishers which are placed at strategic locations 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.	There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is 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 <sup>st</sup> 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	Noise monitoring is being done as per MSW Rules and all efforts as per EIA is being done to



Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	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.

Report on compliance of General Conditions stipulated in Environment Clearance.		
Sr. No	General Conditions for Construction Phase	Proposed action plan
(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, crèche 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 collected and segregated.	All required provisions are in place.

	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 shall 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 drainage is made to ensure that no waste water and storm water is mixed.
(vi)	All the top soil 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 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 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 construction phase should be low	Complied

	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.

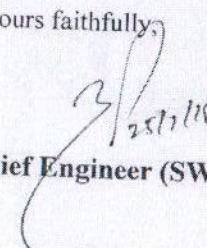
General Conditions for post – construction /operation phase		
Sr.No	General Condition for Post Construction/Operation Phase	Proposed Action Plan
(i)	Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority 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 for warded 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 afresh 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.	Operator of the MSW processing facility having qualified staff for environment monitoring at site. The said condition is being implemented while carrying out the project activities. NEERI is also 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 <a href="http://ec.maharashtra.gov.in">http://ec.maharashtra.gov.in</a> .	Complied.
(vii)	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 <sup>th</sup> June & 15 <sup>th</sup> December of each calendar year.	Complied.
(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.	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 restored until the desired efficiency has been achieved.	Noted
(x)	Regular monitoring of the air quality including SOM & SO <sub>2</sub> 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 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	Air monitoring data is displayed on Company's website. Periodic Monitoring results are being sent to the said departments. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.

	Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely;SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (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.	
(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 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-mail.	Environment Statement is submitted and the same is displayed on operator's website.

Submitted please.

Yours faithfully,

 25/1/16  
Chief Engineer (SWM)

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 at ISWM Project site, Kanjur, are as follows.

Sr. No	Parameters	Permissible Limits	Values recorded May-2015	Values recorded Jul-2015	Values Recorded Sep-2015	Values Recorded Oct-2015	Values Recorded Nov-2015	Values Recorded Dec-2015	Values Recorded Dec-2015
1	Sulphur Dioxide (SO <sub>2</sub> )*	80 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	BDL [DL=10 µg/m <sup>3</sup> ]	12 µg/m <sup>3</sup> (24 hrs)	22 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	Within limits
2	Suspended Particulate Matter*	500 µg/m <sup>3</sup> (24 hrs)	108 µg/m <sup>3</sup> (24 hrs)	46 µg/m <sup>3</sup> (24 hrs)	195 µg/m <sup>3</sup> (24 hrs)	296 µg/m <sup>3</sup> (24 hrs)	219 µg/m <sup>3</sup> (24 hrs)	391 µg/m <sup>3</sup> (24 hrs)	Within limits
3	PM <sub>10</sub> **	-	79 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	96 µg/m <sup>3</sup> (24 hrs)	246 µg/m <sup>3</sup> (24 hrs)	-
4	PM <sub>2.5</sub> **	-	24 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	28 µg/m <sup>3</sup> (24 hrs)	58 µg/m <sup>3</sup> (24 hrs)	49 µg/m <sup>3</sup> (24 hrs)	82 µg/m <sup>3</sup> (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m <sup>3</sup> )	BDL [DL=0.3 mg/m <sup>3</sup> ]	BDL	1.6 mg/m <sup>3</sup>	2.1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	6.1 mg/m <sup>3</sup>	Within limits
6	Ammonia*	0.4 mg/m <sup>3</sup> (400 µg/m <sup>3</sup> 24 hrs)	79 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	2 µg/m <sup>3</sup> (24 hrs)	20 µg/m <sup>3</sup> (24 hrs)	17 µg/m <sup>3</sup> (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: : 0.6 mg/m <sup>3</sup>	1 hour average: 1.4 mg/m <sup>3</sup>	1 hour average: 0.8 mg/m <sup>3</sup>	1 hour average: 1.0 mg/m <sup>3</sup>	Within limits
8	Nitrogen Dioxide (NO <sub>x</sub> )*	-	34 µg/m <sup>3</sup> (24 hrs)	11 µg/m <sup>3</sup> (24 hrs)	28 µg/m <sup>3</sup> (24 hrs)	34 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	44 µg/m <sup>3</sup> (24 hrs)	-

\* As per Authorisation dated 30/03/2012

\*\* As per EC dated 05/12/2014. Permissible limits for PM<sub>10</sub>, PM<sub>2.5</sub> & NO<sub>x</sub> are not prescribed for Landfill site.

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

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,**  
Maharashtra Pollution Control Board,  
Kalpataru Point, 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> floor,  
Opp. Cine Planet,  
Near Sion Circle,  
Sion (East),  
**Mumbai- 400 022.**

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: 1) Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.  
2) Half yearly compliance report submitted by MCGM vide letter U/No. Dy.Ch.E./1805/SWM/Project dtd. 01.08.2015.

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 methane generated if fully utilized for power generation/flaring and not let into atmosphere.	Complied. 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 hence flaring up under control conditions is carried out.
4.	The leachate generating from the cells will have to be systematically collected and treated to reduce BOD levels to allowable limits. Under no circumstances should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the south western and eastern side of the cell.	Arrangement for leachate collection from BLF-Cell-No1 is completed. Civil construction, erection of LTP is completed. Presently leachate collected is re-circulated in BLF Cell. The leachate Treatment Plant partly commissioned and is in operation.
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	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. As regards measurement of odour levels by



Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	be ensured that the odour levels are within the acceptable limits and remedial measures like applying odour controlling bacterial consortium to the garbage are taken up as and when necessary.	instrumental method, the work is being carried out through NEERI, Mumbai. NEERI is 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 section in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.	For protection and conservation of mangroves, proposal is under finalization with Chief Conservator of Forests( Mangrove Cell)
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.	
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 dumpsite.	The vehicles carrying MSW are having closed body system. Training for handling the Solid Waste is given to the staff. 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 waste to the TSDF conforms to the norms laid down in the Hazardous Waste (Management & Handling) Rules 2013.	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

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
		this project as the project involves processing of MSW only.
12	The proponent should ensure that TSDF fulfills all the provision of Hazardous Waste (Management & Handling) Rules 2003 & the design of landfill is as per guidelines of CPCB with proper leachate collection arrangement.	The site is designed as per the guide lines of MSW (M&H) Rules-2000. However the provision of Hazardous waste (M&H)Rules 2003 for landfill design with Leachate collection, treatment & disposal is 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 leachate 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 in operation 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 landfill should be decided based on the ground water level at site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition is also being observed during the execution of project.
16	Project Proponent should prepare and implement an onsite 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 shall carryout periodical air quality monitoring in and around the site including VOC, HC.	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	It is revealed that said condition is not applicable

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	green belt all along the periphery of the TSDF with plant species that are significant and used for the pollution abatement.	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 firefighting facilities should be installed to handle the fire arising from hazardous chemicals/waste that are store/processed.	Adequate fire fighting system is in place, comprising of water tankers and fire extinguishers which are placed at strategic locations 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.	There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is 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 <sup>st</sup> 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	Noise monitoring is being done as per MSW Rules and all efforts as per EIA is being done to

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	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.

Report on compliance of General Conditions stipulated in Environment Clearance.		
Sr. No	General Conditions for Construction Phase	Proposed action plan
(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, crèche 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 collected and segregated.	All required provisions are in place.

	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 shall 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 drainage is made to ensure that no waste water and storm water is mixed.
(vi)	All the top soil 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 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 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 construction phase should be low	Complied

	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.

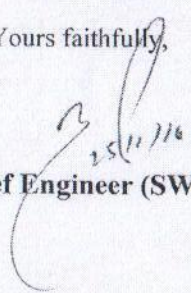
General Conditions for post – construction /operation phase		
Sr.No	General Condition for Post Construction/Operation Phase	Proposed Action Plan
(i)	Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority 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 for warded 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 afresh 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.	Operator of the MSW processing facility having qualified staff for environment monitoring at site. The said condition is being implemented while carrying out the project activities. NEERI is also 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 <a href="http://ec.maharashtra.gov.in">http://ec.maharashtra.gov.in</a> .	Complied.
(vii)	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 <sup>th</sup> June & 15 <sup>th</sup> December of each calendar year.	Complied.
(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.	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 restored until the desired efficiency has been achieved.	Noted
(x)	Regular monitoring of the air quality including SO <sub>2</sub> & SO <sub>2</sub> 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 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	Air monitoring data is displayed on Company's website. Periodic Monitoring results are being sent to the said departments. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.

	Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely;SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (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.	
(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 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-mail.	Environment Statement is submitted and the same is displayed on operator's website.

Submitted please.

Yours faithfully,

  
Chief Engineer (SWM)



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 at ISWM Project site, Kanjur, are as follows.									
Sr. No	Parameters	Permissible Limits	Values recorded May-2015	Values recorded Jul-2015	Values Recorded Sep-2015	Values Recorded Oct-2015	Values Recorded Nov-2015	Values Recorded Dec-2015	Values Recorded Dec-2015
1	Sulphur Dioxide (SO <sub>2</sub> )*	80 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	BDL [DL=10 µg/m <sup>3</sup> ]	12 µg/m <sup>3</sup> (24 hrs)	22 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	Within limits
2	Suspended Particulate Matter**	500 µg/m <sup>3</sup> (24 hrs)	108 µg/m <sup>3</sup> (24 hrs)	46 µg/m <sup>3</sup> (24 hrs)	195 µg/m <sup>3</sup> (24 hrs)	296 µg/m <sup>3</sup> (24 hrs)	219 µg/m <sup>3</sup> (24 hrs)	391 µg/m <sup>3</sup> (24 hrs)	Within limits
3	PM <sub>10</sub> **	-	79 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	96 µg/m <sup>3</sup> (24 hrs)	246 µg/m <sup>3</sup> (24 hrs)	-
4	PM <sub>2.5</sub> **	-	24 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	28 µg/m <sup>3</sup> (24 hrs)	58 µg/m <sup>3</sup> (24 hrs)	49 µg/m <sup>3</sup> (24 hrs)	82 µg/m <sup>3</sup> (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m <sup>3</sup> )	BDL [DL=0.3 mg/m <sup>3</sup> ]	BDL [DL=0.3 mg/m <sup>3</sup> ]	1.6 mg/m <sup>3</sup> (24 hrs)	2.1 mg/m <sup>3</sup> (24 hrs)	2 mg/m <sup>3</sup> (24 hrs)	6.1 mg/m <sup>3</sup> (24 hrs)	Within limits
6	Ammonia*	0.4 mg/m <sup>3</sup> (400 µg/m <sup>3</sup> 24 hrs)	79 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	2 µg/m <sup>3</sup> (24 hrs)	20 µg/m <sup>3</sup> (24 hrs)	17 µg/m <sup>3</sup> (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: :0.6 mg/m <sup>3</sup>	1 hour average: 1.4 mg/m <sup>3</sup>	1 hour average: 0.8 mg/m <sup>3</sup>	1 hour average: 1.0 mg/m <sup>3</sup>	Within limits
8	Nitrogen Dioxide (NO <sub>x</sub> )*	-	34 µg/m <sup>3</sup> (24 hrs)	11 µg/m <sup>3</sup> (24 hrs)	28 µg/m <sup>3</sup> (24 hrs)	34 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	44 µg/m <sup>3</sup> (24 hrs)	-

\* As per Authorisation dated 30/03/2012

\*\* As per EC dated 05/12/2014. Permissible limits for PM<sub>10</sub>, PM<sub>2.5</sub> & NO<sub>x</sub> are not prescribed for Landfill site.

क्र. उपप्र.प्र./ 3855/च.क.व्य./प्रकल्प/दिनांक 28/1/16

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

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: 1) Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.  
2) Half yearly compliance report submitted by MCGM vide letter U/No. Dy.Ch.E./1805/SWM/Project dtd. 01.08.2015.

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 methane generated if fully utilized for power generation/flaring and not let into atmosphere.	Complied. 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 hence flaring up under control conditions is carried out.
4.	The leachate generating from the cells will have to be systematically collected and treated to reduce BOD levels to allowable limits. Under no circumstances should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the south western and eastern side of the cell.	Arrangement for leachate collection from BLF-Cell-No1 is completed. Civil construction, erection of LTP is completed. Presently leachate collected is re-circulated in BLF Cell. The leachate Treatment Plant partly commissioned and is in operation.
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	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

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	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 consortium to the garbage are taken up as and when necessary.	data, locations for monitoring odour levels in windward and leeward directions along with nearby residential zones are finalized. As regards measurement of odour levels by instrumental method, the work is being carried out through NEERI, Mumbai. NEERI is 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 section in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.	For protection and conservation of mangroves, proposal is under finalization with Chief Conservator of Forests( Mangrove Cell)
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.	
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 dumpsite.	The vehicles carrying MSW are having closed body system. Training for handling the Solid Waste is given to the staff. 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 waste to the TSDF	Hazardous Waste storage, handling, transportation to the authorized site for the treatment and disposal is monitored by statutory

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	conforms to the norms laid down in the Hazardous Waste (Management & Handling) Rules 2013.	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 TSDF fulfills all the provision of Hazardous Waste (Management & Handling) Rules 2003 & the design of landfill is as per guidelines of CPCB with proper leachate collection arrangement.	The site is designed as per the guide lines of MSW (M&H) Rules-2000. However the provision of Hazardous waste (M&H)Rules 2003 for landfill design with Leachate collection, treatment & disposal is 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 leachate 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 in operation 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 landfill should be decided based on the ground water level at site.	While deciding the depth of landfill, ground water level data is taken into consideration. This condition is also being observed during the execution of project.
16	Project Proponent should prepare and implement an onsite 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 shall carryout periodical air quality monitoring in and around the site including VOC,	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

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
	HC.	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 firefighting facilities should be installed to handle the fire arising from hazardous chemicals/waste that ate store/processed.	Adequate fire fighting system is in place, comprising of water tankers and fire extinguishers which are placed at strategic locations 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.	There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is 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 <sup>st</sup> 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

Sr. No	Conditions Under Environmental Clearance	Status of Compliance.
		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 nose 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.

Report on compliance of General Conditions stipulated in Environment Clearance.		
Sr. No	General Conditions for Construction Phase	Proposed action plan
(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, crèche 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	All required provisions are in place.

	and solid wastes generated during the construction phase should be ensured	
(iii)	The solid waste generated should be properly collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material	All required provisions are in place.
(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 shall 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 drainage is made to ensure that no waste water and storm water is mixed.
(vi)	All the top soil 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 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 taken.
(xi)	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms	Noted



	with necessary approvals of the Maharashtra Pollution Control Board.	
(xii)	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.	Complied
(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.

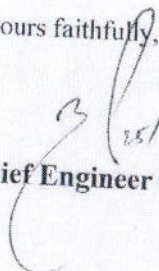
General Conditions for post – construction /operation phase		
Sr.No	General Condition for Post Construction/Operation Phase	Proposed Action Plan
(i)	Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority 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 for warded 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 afresh 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.	Operator of the MSW processing facility having qualified staff for environment monitoring at site. The said condition is being implemented while carrying out the project activities. NEERI is also 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	Cost of environmental monitoring and management is included in the tipping fees which are being paid to the operator of the project.

	protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.	
(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 <a href="http://ec.maharashtra.gov.in">http://ec.maharashtra.gov.in</a> .	Complied.
(vii)	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 15 <sup>th</sup> June & 15 <sup>th</sup> December of each calendar year.	Complied.
(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.	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 restored until the desired efficiency has been achieve.	Noted
(x)	Regular monitoring of the air quality including SOM & s02 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 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	Air monitoring data is displayed on Company's website. Periodic Monitoring results are being

	<p>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<sub>2</sub>, NO<sub>x</sub> (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.</p>	<p>sent to the said departments. Latest Monitoring results are displayed for the location within the site at the main entrance of the project site.</p>
(xii)	<p>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.</p>	<p>Complied.</p>
(xiii)	<p>The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by-mail.</p>	<p>Environment Statement is submitted and the same is displayed on operator's website.</p>

Submitted please.

Yours faithfully,

25/11/16  
  
**Chief Engineer (SWM)**

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 at ISWM Project site, Kanjur, are as follows.

Sr. No	Parameters	Permissible Limits	Values recorded May-2015	Values recorded Jul-2015	Values Recorded Sep-2015	Values Recorded Oct-2015	Values Recorded Nov-2015	Values Recorded Dec-2015	Values Recorded Dec-2015
1	Sulphur Dioxide (SO <sub>2</sub> )*	80 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	BDL [DL=10 µg/m <sup>3</sup> ]	12 µg/m <sup>3</sup> (24 hrs)	22 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	Within limits
2	Suspended Particulate Matter**	500 µg/m <sup>3</sup> (24 hrs)	108 µg/m <sup>3</sup> (24 hrs)	46 µg/m <sup>3</sup> (24 hrs)	195 µg/m <sup>3</sup> (24 hrs)	296 µg/m <sup>3</sup> (24 hrs)	219 µg/m <sup>3</sup> (24 hrs)	391 µg/m <sup>3</sup> (24 hrs)	Within limits
3	PM <sub>10</sub> **	-	79 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	95 µg/m <sup>3</sup> (24 hrs)	96 µg/m <sup>3</sup> (24 hrs)	246 µg/m <sup>3</sup> (24 hrs)	-
4	PM <sub>2.5</sub> **	-	24 µg/m <sup>3</sup> (24 hrs)	BDL [DL=10 µg/m <sup>3</sup> ]	28 µg/m <sup>3</sup> (24 hrs)	58 µg/m <sup>3</sup> (24 hrs)	49 µg/m <sup>3</sup> (24 hrs)	82 µg/m <sup>3</sup> (24 hrs)	-
5	Methane*	Not to exceed 25% of the lower explosive limit (equivalent to 650 mg/m <sup>3</sup> )	BDL [DL=0.3 mg/m <sup>3</sup> ]	BDL [DL=0.3 mg/m <sup>3</sup> ]	1.6 mg/m <sup>3</sup> (24 hrs)	2.1 mg/m <sup>3</sup> (24 hrs)	2 mg/m <sup>3</sup> (24 hrs)	6.1 mg/m <sup>3</sup> (24 hrs)	Within limits
6	Ammonia*	0.4 mg/m <sup>3</sup> (400 µg/m <sup>3</sup> 24 hrs)	79 µg/m <sup>3</sup> (24 hrs)	15 µg/m <sup>3</sup> (24 hrs)	12 µg/m <sup>3</sup> (24 hrs)	2 µg/m <sup>3</sup> (24 hrs)	20 µg/m <sup>3</sup> (24 hrs)	17 µg/m <sup>3</sup> (24 hrs)	Within limits
7	Carbon Monoxide*	1 hour average: 2 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: 0.9 mg/m <sup>3</sup>	1 hour average: 0.6 mg/m <sup>3</sup>	1 hour average: 1.4 mg/m <sup>3</sup>	1 hour average: 0.8 mg/m <sup>3</sup>	1 hour average: 1.0 mg/m <sup>3</sup>	Within limits
8	Nitrogen Dioxide (NO <sub>x</sub> )*	-	34 µg/m <sup>3</sup> (24 hrs)	11 µg/m <sup>3</sup> (24 hrs)	28 µg/m <sup>3</sup> (24 hrs)	34 µg/m <sup>3</sup> (24 hrs)	31 µg/m <sup>3</sup> (24 hrs)	44 µg/m <sup>3</sup> (24 hrs)	-

\* As per Authorisation dated 30/03/2012

\*\* As per EC dated 05/12/2014. Permissible limits for PM<sub>10</sub>, PM<sub>2.5</sub> & NO<sub>x</sub> are not prescribed for Landfill site.