MUNICIPAL CORPORATION OF GREATER MUMBAI

CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT.

No.Dy, ch. Eng/1678/SWM/ Project, DJ. 23/8/2019
Office of the Chief Engineer (SWM)

Office of the Chief Engineer (SWM) Municipal Khatav Market building, 3rd floor, Khatav Wadi Sleater Road, Grant Road (W), Mumbai-400007

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

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

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

The Member Secretary,

Maharashtra Pollution Control Board,
Kalpataru Point, 2nd, 3rd, & 4th 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.) dtd. 05.12.2014 accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kaniur, Mumbai.

And

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 (XXI) & (XXIV) including results of monitored data as stipulated in the Environmental clearance (E.C.) dtd. 29.10.2018 accorded for scientific processing of MSW in 52.45 ha. area which is in CRZ—III area other than CRZ—I at Kanjur MSW Processing facility, Mumbai.

Ref:

- Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.
- Environment Clearance issued by State Level Environment Impact Assessment Authority (SEIAA) vide no. SEIAA-EC-0000000475, dtd. 29.10.2018.
- 3) Half yearly compliance report submitted by MCGM vide letter U/No. No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.

Sir,

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This has reference to the conditions of Environmental Clearances issued for scientific processing of MSW in 65.96 ha. non CRZ area and 52.45 ha. CRZ –III area at Kanjur MSW Processing facility, Mumbai vide reference No-1 & 2 respectively.

In this context, MCGM is hereby submitting the hard copy of half yearly compliance reports in respect of the respective stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the respective General Conditions including results of monitored data as stipulated in the referred Environmental clearances accorded for Kanjur MSW Processing facility, Mumbai.

Half Yearly EC Compliance Report till 1st June -2019

The half yearly compliance report on Environmental Clearance issued via letter Ref: SEAC-2014/CR-162/TC2, dated 5/12/2014 is as below:-

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
1.	The proposal under consideration has to be restricted within the area 65.96 ha. Outside the CRZ area. The PP shall maintain a buffer zone of 500 meters around the project perimeter which shall be incorporated as 'No Development Zone' in the Development Plan of MCGM.	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

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
2.	The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped/concretized 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 GH gas, Methane generated in BLF Cells is captured and flared through flaring stations installed at the site. Also, GH and Methane gas liberated from UAR at leachate treatment plant is flared off. Arrangements for gas collection and its utilization for power generation are installed and electricity generation from landfill gases generated from BLF Cells is used for captive power generation.
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.	Arrangements for leachate collection in impervious HDPE lined ponds from BLF-Cells are already operational. Leachate Treatment Plant is operational. Leachate treatment comprises of two stage biological treatment anaerobic &, aerobic followed by clarification & filtration. At present leachate collected is re-circulated in BLF Cells under controlled condition.
5.	The PP shall take all out efforts to control odor nuisance. PP should take steps to measure odor levels using instruments which are currently available. The measurement of odor 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 odor levels are within the acceptable limits and remedial measures like applying odor controlling bacterial consortium to the garbage are taken up as and when necessary.	On the basis of details of wind direction & wind speed from Wind Rose Diagrams of this project site, locations for monitoring odor levels in windward and leeward directions in nearby residential colonies are finalized and monitoring has been carried out for odor giving compounds like VOC, Mercaptans, ammonia, hydrogen sulfide etc by the operator through MoEF approved laboratory. Wind balloon system for guiding wind directions have been installed at BLF Cells and other noticeable places, so that wind direction can be seen easily by the operating staff and necessary arrangement for remedial measures like applying odor controlling bacterial consortium to the garbage and misting of deodorant are taken up as and when necessary.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
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.	Arrangement for ingress & egress of tidal water from creek through the culverts is already in place and significant growth of healthy mangroves is visible. The Forest Officers through visits to project site are monitoring the protection & preservation of mangrove forest.
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 closed body vehicles are received to achieve zero spillage of garbage and training is given to staff—for handling the Solid Waste. It is strictly observed that no tail gates of vehicles will be opened before reaching to the MSW processing site. Arrangements are in place for Washing/cleaning of incoming waste collection trucks tyres if found with muck and dirt. Regular cleaning of roads is undertaken to collect spilled garbage if observed and cleanliness is maintained.
9	No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	Noted.
10	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	Noted.
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.	The said condition is not applicable to this project as the project involves processing of MSW.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
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 as well as SWM Rules 2016 and the provisions for landfill design & execution of Biogas capturing & flaring arrangement, Leachate collection, treatment, leachate recirculation is taken into consideration. The provisions for HW(M&H) Rules 2003 are not applicable as site is not accepting any Hazardous Waste.
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 area 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 and treatment facility is provided and is in operation. However, at present the Leachate is re-circulated at BLF Cells for enhancing the Bio-degradation process for generation of Methane gas. The Leachate Treatment Plant with arrangement of primary, Secondary with tertiary treatment is provided.
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 EC.
15	The depth of the landfill should be decided based on the ground water level at site.	While deciding the depth of landfill in design, ground water level data is taken into consideration. This condition is complied while designing the project & is being complied in execution.
16	Project Proponent should prepare and implement an onsite emergency management plan.	Emergency Management Plan is complied as per the EIA report (Chapter 6). On site "Emergency Plan and Disaster Management Plan" is prepared and is under implementation.
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	Monthly ground water quality monitoring through Piezo-metric wells water samples locations are provided in drawing. Periodical ground water /soil monitoring in and around the site is carried out at intervals set out in the MSW(M&H) Rules, 2000/ SWM Rules, 2016 through the agency approved by MoEF. As regards to TCLP test the parameters which are
		necessary as per MSW rules are analyzed with the help of MoEF approved Lab.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
18	Project Proponent shall carryout periodical air quality monitoring in and around the site including VOC, HC.	Monthly air monitoring is being carried out in and around the site as per the parameters stipulated in the Authorization granted and the results are displayed on website of the operator. Special parameters of 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 in green belt development is being done or progressive basis and majority plantation is already done. Healthy growth of mangroves forest is developed on three side of buffering zone.
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 stored/processed.	The said condition is not applicable to this project as the project involves processing of MSW Only. No HW/H Chemicals are received to this site. Adequate firefighting 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 as a wind barrier. The arrangement of water sprinkling on roads through tankers is in practice and water sprinkling operation is carried out regularly in summer & winter.
23	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	The said condition is not applicable to this project as the project involves processing of MSW only. There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is already deployed to ensure the good housekeeping & cleanliness.
25	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable)	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height. To operate MRF/Compost units on continuous power supply, application is made to the appropriate

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	Arrangement shall be made that effluent and storm water does not get mixed.	authority. However, continuous power supply is stil awaited & at present to run MRF/Compost units arrangement of captive gas power generation unit is made. Also provision for DG set on temporary basis is also made.
		Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate treatment plant and it is not allowed to mix with storm water. Storm water drainage galleries around the BLF Cells have been constructed for the management of rain water.
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.	Monthly Ground water quality is monitored as prescribed in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The results analyzed indicate that the quality of ground water is found same as compared to previous year. The results are regularly submitted to MPCB by the operator. The sampling & analysis is carried out with the help of Accredited laboratory and having MoEF approval.
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.	Due care is taken to avoid noise nuisance.
28	The overall noise levels in and around the plant 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. These machineries are fitted with silencer for noise control. All efforts as per EIA are 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.	MPC Board has granted Authorization under MSW (M&H) Rules-2000 as per the decision in Consent Appraisal Committee meeting issued & issued letter for non-requirement of separate Consent to Establishment/ operate for this activity.
31	All required sanitary and hygienic	All required sanitation arrangements such as

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	measures should be in place before starting construction activities and to be maintained throughout the construction phase.	available at site. Also safe, filtered, disinfected drinking water is provided to staff/ workers. Required
Report	on compliance of General Condition	ns 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 arrangements such as housing, sanitation & safe drinking water requirements are in place. Medical checkup has been taken to check the health of workers.
	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. 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 guide lines shall be followed for disposa 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 waster water and storm water is mixed. Storm water drainage galleries have been constructed for the

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
		management of rain water.
(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 site (to the extent possible) so that natural drainage system of the area is protected and improved.	There is no additional soil filling 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 for Green Belt development is already undertaken & it is under progressive 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.	HDPE Liners are spread at landfill base as per design & provisions of MSW (M&H) Rules,2000 and MSW, Rules 2016 to prohibit percolation of leachate into the ground/soil. Ground water and surface water samples are tested regularly through laboratory, approved by the MoEF and the results show that there is no contamination due to heavy metals and toxic contaminants.
(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 for not accepting such hazardous material at site.
(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.	No hazardous waste is generated during construction phase.
(xii)	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should confirm to Environment (Protection) Rules prescribed for air and noise	Diesel generator sets are not used during construction phase, as regular electricity is available at site. DG set at site as standby unit and temporarily used is confirming noise & air emissions standards under EP Rules.

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

Action plan for compliance to General Conditions for Post Construction/Operation Phase of Environment Clearance.

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 forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	We are having qualified staff for environment monitoring at site as per MSW rules and as per our concession agreement. Environment cell as per EC has been formed.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with itemwise breaks-up. These costs shall be included as part of the project	Cost of environmental monitoring and management is included in tipping fees & which are being paid to the operator of the project.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	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.	
	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashta.gov.in.	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 th June & 15 th 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.	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	Noted.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	the desired efficiency has been achieve.	
(x)	Regular monitoring of the air quality including SPM & SO ₂ levels both in work zone and ambient air shall be carried out in and around the power plant and record 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.	Currently air monitoring at locations identified in EIA is being carried out as per the frequency defined in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The reports are submitted to MPCB by the operator.
(xi)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM, SO ₂ and NOx (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Air monitoring data is displayed on operator's Website as per requirement of the said clause. Monitoring results are sent to the said Departments as required in the said clause. Latest Monitoring results are displayed at the location within the site at the main entrance of the project site.
(xii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.
(xiii)	The environmental statement for each financial year ending 31 st March in Form V as is mandated to be	Complied. Environment Statement is submitted, and the same report is displayed on operator's website.

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

The half yearly compliance report on Environmental Clearance issued vide no. SEIAA-EC-0000000475, dtd. 29.10.2018 is as below:-

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
1	PP to submit their plan for segregation of waste in the city.	In this context, MCGM had already submitted the Compliance of these conditions to SEIAA vide No.
11	PP to submit copy of compliance of issues raised during the public hearing.	Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexure —A in the half yearly compliance report submitted by
III	Earlier SEAC-I observation compliance to be submitted: Since the extended cell does compromise the shallow water body on eastern side of premises, proper drainage plan to ensure that storm water will properly led away so as not to stagnate low line areas shall be prepared and included in the EIA report.	MCGM to you vide letter U/No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.
IV	PP to ensure the compliance of points raised by earlier SEAC in their meetings and site visit report dated 17.02.2016.	
V	PP to ensure compliance of the conditions stipulated by MCZMA and CRZ clearance.	
VI	PP to prepare comprehensive drainage plan to ensure proper carrying and disposal of storm water with out contamination.	
VII	PP to take utmost precautions	

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance		
	to prevent the nuisance to nearby public from the activities carried out on site.			
VIII	PP to make traffic plan in such a way that no traffic congestion shall happen on the nearby roads which can affect traffic flow.			
IX	No burning is allowed on site; PP to take adequate precautions to prevent the fire incidents by way of administrative and safety controls like prevention of unauthorized entry, smoking etc.			
X	PP to ensure that it will process waste generated from CRZ area only.	ea		
XI	PP shall ensure compliance of MCZMA conditions.	In this context, MCGM had already submitted the Compliance of MCZMA conditions to SEIAA vide No. Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexure –A in the half yearly compliance report submitted by MCGM to you vide letter U/No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.		
SR. NO.	General conditions	Status of compliance/ planning for compliance		
Discharge; PP shall ensure that there is no increase in the effluent load to CETP As per the technology Leachate into the BLF Cells under controll operator. Leachate Treatment Plant is of treatment comprises of two stages anaerobic &, aerobic followed filtration. The excess Leachate visiting pipeline into HDPE lined ponds operator. As per the technology Leachate into the BLF Cells under controll operator. Leachate Treatment Plant is of treatment comprises of two stages anaerobic &, aerobic followed filtration. The excess Leachate visiting pipeline into HDPE lined ponds operator.		As per the technology Leachate will be re-circulated into the BLF Cells under controlled conditions by the		
II	No additional land shall be used /acquired for any activity of the Project without obtaining proper permission.	As per the directions of Hon. Supreme Court the land admeasuring 141.77 ha. was handed over to MCGM by GoM. However, the mangroves land admeasuring 23.36 ha. was retained by GoM. vide notification dtd. 02.04.2012.		

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
		SEIAA issued Environment Clearance for processing of MSW in 65.96 ha. non CRZ area on 05.12.2014. SEIAA issued Environment Clearance for processing of MSW in further 52.45 ha. CRZ –III area (adjacent to 65.96 ha non CRZ area) on 29.10.2018. In case any additional land apart from above is to be used/ acquired for any activity of the project, the due procedure as per law will be followed.
Ш	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.	The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
IV	Proper Housekeeping programmers shall be implemented.	Dedicated team of trained workers is already deployed by the operator to ensure the good housekeeping & cleanliness. The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
V	In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.	The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.
VI	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height.
VII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.	The compliance of the said condition will be ensured by the operator.
VIII	Arrangement shall be made that effluent and storm water does not get mixed.	Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate treatment plant and it is not allowed to mix with storm water. Storm water drainage galleries around the BLF Cells have been constructed for the management of rain water.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance		
IX	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.	Monthly Ground water quality is being monitored as prescribed in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The results are submitted to MPCB by the operator. The sampling & analysis is being carried out by the operator with the help of laboratory approved by MoEF.		
X	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 as per MSW Rules is being done by operator. The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.		
XI	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 of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.	operator. The compliance of the said condition will be ensure by the operator while carrying out day to day operation at site. s, e e e e e		
XII		Plantation along the periphery of the site is being done on progressive basis by the operator. Dy. Conservator of Forest is requested by MCGM for guidance regarding development & maintenance of Green Belt around the plant periphery and regarding selection of plant species as per guidelines of CPCB in that behalf. After receipt of guidance the operator will be informed to implement the same during development & maintenance of Green belt around the plant periphery.		
XIII	Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.	The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.		
XIV	Occupational health surveillance of the workers shall	The compliance of the said condition is being ensured by the operator while carrying out day to day		

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance	
	be done on a regular basis and record maintained as per Factories Act.	operation at site.	
XV	The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.	
XVI	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes	The said condition is not applicable to this project as the project involves processing of MSW.	
XVII	Regular mock drills for the on- site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.	by the operator while carrying out day to day operation at site.	
XVIII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Operator already has the Environment Health & Safety Cell and the compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.	
XIX	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	included in tipping fees which are being paid to to operator of the project. hot e s t t t s e	

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
XX	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	The said condition is complied.
XXI	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 1st June & 1st December of each calendar year.	The said condition is complied.
XXII	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	The said condition is complied.
XX III	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria	Air monitoring data is being displayed on operator's Website as per requirement of the said condition. Monitoring results are being sent to the said Departments as per requirement of the said condition. Latest Monitoring results are being displayed at the main entrance of the project site.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
	pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sectoral 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.	
XXIV	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 e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	The said condition is complied.
XXV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Noted.

Submitted please.

Yours faithfully,

Chief Engineer (Solid Waste Management) As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded July 2019	Remarks for the values recorded July 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	21.26 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.43 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.94 µg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	44.28 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 22.60 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.22 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	<2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded June 2019	Remarks for the values recorded June 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	20.57 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	21.46 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.86 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	44.82 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 21.65 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.54 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	< 0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded May 2019	Remarks for the values recorded May 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.63 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	23.09 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.70 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	41.87 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 23.26 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 µg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	1-hour average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.23 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during April 2019	Remarks for the values recorded during April 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	21.12 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.14 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	48.33 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average : 21.93 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 µg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.09 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during March 2019	Remarks for the values recorded during March 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	23.30 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	24.22 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	48.33μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 21.17 μg/m3	Within limit
6	Lead	1.0 µg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.78 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	<2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during February 2019	Remarks for the values recorded during February 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.35 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.84 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.59 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	45.21 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 21.66 μg/m3	Within limit
6	Lead	1.0 µg/m3 (24 hrs) <0.01 µg/m3 (24 hrs)		Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.85 μg/m3 (24 hrs)		Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual) <0.5 ng/m³		Within limit
13	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³) Not to exceed 25% of the 40.5 μg/m		<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 3rd October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during January 2019	Remarks for the values recorded during January 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.59 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	23.60 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	69.00 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	47.71 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average : 22.43 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.96 μg/m3 (24 hrs)		Within limit
9	Benzene	5 μg/m3 (annual) <2.1 μg/m3		Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

MUNICIPAL CORPORATION OF GREATER MUMBAI

CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT.

No. Dy, ch. Englig78/SWM/ Project, DJ. 23/8/2019 Office of the Chief Engineer (SWM)

Office of the Chief Engineer (SWM)
Municipal Khatav Market building,
3rd floor, Khatav Wadi
Sleater Road, Grant Road (W),
Mumbai-400007

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

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

Additional Principal Chief Conservator of Forests (C), L 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

The Member Secretary,
Maharashtra Pollution Control Board,
Kalpataru Point, 2nd, 3rd, & 4th 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.) dtd. 05.12.2014 accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kanjur, Mumbai.

And

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 (XXI) & (XXIV) including results of monitored data as stipulated in the Environmental clearance (E.C.) dtd. 29.10.2018 accorded for scientific processing of MSW in 52.45 ha. area which is in CRZ –III area other than CRZ – I at Kanjur MSW Processing facility, 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) Environment Clearance issued by State Level Environment Impact Assessment Authority (SEIAA) vide no. SEIAA-EC-0000000475, dtd. 29.10.2018.
- 3) Half yearly compliance report submitted by MCGM vide letter U/No. No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.

Sir,

This has reference to the conditions of Environmental Clearances issued for scientific processing of MSW in 65.96 ha. non CRZ area and 52.45 ha. CRZ –III area at Kanjur MSW Processing facility, Mumbai vide reference No+1 & 2 respectively.

In this context, MCGM is hereby submitting the hard copy of half yearly compliance reports in respect of the respective stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the respective General Conditions including results of monitored data as stipulated in the referred Environmental clearances accorded for Kanjur MSW Processing facility, Mumbai.

Half Yearly EC Compliance Report till 1st June -2019

The half yearly compliance report on Environmental Clearance issued via letter Ref: SEAC-2014/CR-162/TC2, dated 5/12/2014 is as below:-

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
1.		incorporation of the said buffer zone as 'No Development Zone' in the Development Plan of MCGM and the same will be incorporated after

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
2.	The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped/concretized 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 GH gas, Methane generated in BLF Cells is captured and flared through flaring stations installed at the site. Also, GH and Methane gas liberated from UAR at leachate treatment plant is flared off. Arrangements for gas collection and its utilization for power generation are installed and electricity generation from landfill gases generated from BLF Cells is used for captive power generation.
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.	Arrangements for leachate collection in impervious HDPE lined ponds from BLF-Cells are already operational. Leachate Treatment Plant is operational. Leachate treatment comprises of two stage biological treatment anaerobic &, aerobic followed by clarification & filtration. At present leachate collected is re-circulated in BLF Cells under controlled condition.
5.	The PP shall take all out efforts to control odor nuisance. PP should take steps to measure odor levels using instruments which are currently available. The measurement of odor 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 odor levels are within the acceptable limits and remedial measures like applying odor controlling bacterial consortium to the garbage are taken up as and when necessary.	On the basis of details of wind direction & wind speed from Wind Rose Diagrams of this project site, locations for monitoring odor levels in windward and leeward directions in nearby residential colonies are finalized and monitoring has been carried out for odor giving compounds like VOC, Mercaptans, ammonia, hydrogen sulfide etc by the operator through MoEF approved laboratory. Wind balloon system for guiding wind directions have been installed at BLF Cells and other noticeable places, so that wind direction can be seen easily by the operating staff and necessary arrangement for remedial measures like applying odor controlling bacterial consortium to the garbage and misting of deodorant are taken up as and when necessary.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
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.	Arrangement for ingress & egress of tidal water from creek through the culverts is already in place and significant growth of healthy mangroves is visible. The Forest Officers through visits to project site are monitoring the protection & preservation of mangrove forest.
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 closed body vehicles are received to achieve zero spillage of garbage and training is given to staff—for handling the Solid Waste. It is strictly observed that no tail gates of vehicles will be opened before reaching to the MSW processing site. Arrangements are in place for Washing/cleaning of incoming waste collection trucks tyres if found with muck and dirt. Regular cleaning of roads is undertaken to collect spilled garbage if observed and cleanliness is maintained.
9	No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	Noted.
10	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	Noted.
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.	The said condition is not applicable to this project as the project involves processing of MSW.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
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 as well as SWM Rules 2016 and the provisions for landfill design & execution of Biogas capturing & flaring arrangement, Leachate collection, treatment, leachate recirculation is taken into consideration. The provisions for HW(M&H) Rules 2003 are not applicable as site is not accepting any Hazardous Waste.
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 area 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 and treatment facility is provided and is in operation. However, at present the Leachate is re-circulated at BLF Cells for enhancing the Bio-degradation process for generation of Methane gas. The Leachate Treatment Plant with arrangement of primary, Secondary with tertiary treatment is provided.
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 EC.
15	The depth of the landfill should be decided based on the ground water level at site.	While deciding the depth of landfill in design, ground water level data is taken into consideration. This condition is complied while designing the project & is being complied in execution.
16	Project Proponent should prepare and implement an onsite emergency management plan.	Emergency Management Plan is complied as per the EIA report (Chapter 6). On site "Emergency Plan and Disaster Management Plan" is prepared and is under implementation.
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	Monthly ground water quality monitoring through Piezo-metric wells water samples locations are provided in drawing. Periodical ground water /soil monitoring in and around the site is carried out at intervals set out in the MSW(M&H) Rules, 2000/ SWM Rules, 2016 through the agency approved by MoEF. As regards to TCLP test the parameters which are necessary as per MSW rules are analyzed with the help of MoEF approved Lab.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
18	Project Proponent shall carryout periodical air quality monitoring in and around the site including VOC, HC.	Monthly air monitoring is being carried out in and around the site as per the parameters stipulated in the Authorization granted and the results are displayed on website of the operator. Special parameters of 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 fo treatment of Municipal Solid Waste (MSW). Plantation in green belt development is being done or progressive basis and majority plantation is already done. Healthy growth of mangroves forest is developed on three side of buffering zone.
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 no arise.
21	Adequate firefighting facilities should be installed to handle the fire arising from hazardous chemicals/waste that are stored/processed.	The said condition is not applicable to this project at the project involves processing of MSW Only. No HW/H Chemicals are received to this site. Adequate firefighting system is in place, comprising of water tankers and fire extinguishers which are placed at strategic locations for prevention of any firefincidence.
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 as a wind barrier. The arrangement of water sprinkling on roads through tankers is in practice and water sprinkling operation is carried out regularly in summer & winter.
23	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	The said condition is not applicable to this project as the project involves processing of MSW only. There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is already deployed to ensure the good housekeeping & cleanliness.
25	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable)	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height. To operate MRF/Compost units on continuous power supply, application is made to the appropriate

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	Arrangement shall be made that effluent and storm water does not get mixed.	authority. However, continuous power supply is still awaited & at present to run MRF/Compost units arrangement of captive gas power generation unit is made. Also provision for DG set on temporary basis is also made.
		Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate treatment plant and it is not allowed to mix with storm water. Storm water drainage galleries around the BLF Cells have been constructed for the management of rain water.
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.	Monthly Ground water quality is monitored as prescribed in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The results analyzed indicate that the quality of ground water is found same as compared to previous year. The results are regularly submitted to MPCB by the operator. The sampling & analysis is carried out with the help of Accredited laboratory and having MoEF approval.
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.	Due care is taken to avoid noise nuisance.
28	The overall noise levels in and around the plant 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. These machineries are fitted with silencer for noise control. All efforts as per EIA are 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.	MPC Board has granted Authorization under MSW (M&H) Rules-2000 as per the decision in Consent Appraisal Committee meeting issued & issued letter for non-requirement of separate Consent to Establishment/ operate for this activity.
31	All required sanitary and hygienic	All required sanitation arrangements such as

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	measures should be in place before starting construction activities and to be maintained throughout the construction phase.	available at site. Also safe, filtered, disinfected drinking water is provided to staff/ workers. Required
Report	on compliance of General Condition	ns 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 arrangements such as housing, sanitation & safe drinking water requirements are in place. Medical checkup has been taken to check the health of workers.
	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. 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 guide lines 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. Storm water drainage galleries have been constructed for the

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
		management of rain water.
(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 site (to the extent possible) so that natural drainage system of the area is protected and improved.	There is no additional soil filling 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 for Green Belt development is already undertaken & it is under progressive 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.	HDPE Liners are spread at landfill base as per design & provisions of MSW (M&H) Rules,2000 and MSW, Rules 2016 to prohibit percolation of leachate into the ground/soil. Ground water and surface water samples are tested regularly through laboratory, approved by the MoEF and the results show that there is no contamination due to heavy metals and toxic contaminants.
(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 for not accepting such
(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.	No hazardous waste is generated during construction phase.
(xii)	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should confirm to Environment (Protection) Rules prescribed for air and noise	Diesel generator sets are not used during construction phase, as regular electricity is available at site. DG set at site as standby unit and temporarily used is confirming noise & air emissions standards under EP Rules.

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

Action plan for compliance to General Conditions for Post Construction/Operation Phase of Environment Clearance.

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 forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	We are having qualified staff for environment monitoring at site as per MSW rules and as per our concession agreement. Environment cell as per EC has been formed.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with itemwise breaks-up. These costs shall be included as part of the project	Cost of environmental monitoring and management is included in tipping fees & which are being paid to the operator of the project.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	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.	
	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 htttp://ec.maharashta.gov.in.	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 th June & 15 th 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.	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	Noted.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.	
	the desired efficiency has been achieve.		
(x)	Regular monitoring of the air quality including SPM & SO ₂ levels both in work zone and ambient air shall be carried out in and around the power plant and record 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.	Currently air monitoring at locations identified in EIA is being carried out as per the frequency defined in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The reports are submitted to MPCB by the operator.	
(xi)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM, SO ₂ and NOx (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Air monitoring data is displayed on operator's Website as per requirement of the said clause. Monitoring results are sent to the said Departments as required in the said clause. Latest Monitoring results are displayed at the location within the site at the main entrance of the project site.	
(xii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.	
(xiii)	The environmental statement for each financial year ending 31 st March in Form V as is mandated to be	Complied. Environment Statement is submitted, and the same report is displayed on operator's website.	

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

The half yearly compliance report on Environmental Clearance issued vide no. SEIAA-EC-0000000475, dtd. 29.10.2018 is as below:-

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
1	PP to submit their plan for segregation of waste in the city.	In this context, MCGM had already submitted the Compliance of these conditions to SEIAA vide No.
Ü	PP to submit copy of compliance of issues raised during the public hearing.	Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexure —A in the half yearly compliance report submitted by
III	Earlier SEAC-I observation compliance to be submitted: Since the extended cell does compromise the shallow water body on eastern side of premises, proper drainage plan to ensure that storm water will properly led away so as not to stagnate low line areas shall be prepared and included in the EIA report.	MCGM to you vide letter U/No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019 .
IV	PP to ensure the compliance of points raised by earlier SEAC in their meetings and site visit report dated 17.02.2016.	
V	PP to ensure compliance of the conditions stipulated by MCZMA and CRZ clearance.	
VI	PP to prepare comprehensive drainage plan to ensure proper carrying and disposal of storm water with out contamination.	
VII	PP to take utmost precautions	

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance	
	to prevent the nuisance to nearby public from the activities carried out on site.		
VIII	PP to make traffic plan in such a way that no traffic congestion shall happen on the nearby roads which can affect traffic flow.		
IX	No burning is allowed on site; PP to take adequate precautions to prevent the fire incidents by way of administrative and safety controls like prevention of unauthorized entry, smoking etc.		
X	PP to ensure that it will process waste generated from CRZ area only.		
ΧI	PP shall ensure compliance of MCZMA conditions.	In this context, MCGM had already submitted the Compliance of MCZMA conditions to SEIAA vide No. Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexure—A in the half yearly compliance report submitted by MCGM to you vide letter U/No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.	
SR. NO.	General conditions	Status of compliance/ planning for compliance	
l	PP to achieve Zero Liquid Discharge; PP shall ensure that there is no increase in the effluent load to CETP	Arrangement of Leachate collection through HDPE pipeline into HDPE lined ponds is provided by the operator. As per the technology Leachate will be re-circulated into the BLF Cells under controlled conditions by the operator. Leachate Treatment Plant is operational. Leachate treatment comprises of two stage biological treatment anaerobic &, aerobic followed by clarification & filtration. The excess Leachate will be treated in the said Leachate Treatment Plant.	
II.	No additional land shall be used /acquired for any activity of the Project without obtaining proper permission.	As per the directions of Hon. Supreme Court the land admeasuring 141.77 ha. was handed over to MCGM by GoM. However, the mangroves land admeasuring 23.36 ha. was retained by GoM. vide notification dtd. 02.04.2012.	

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance	
		SEIAA issued Environment Clearance for processing of MSW in 65.96 ha. non CRZ area on 05.12.2014. SEIAA issued Environment Clearance for processing of MSW in further 52.45 ha. CRZ —III area (adjacent to 65.96 ha non CRZ area) on 29.10.2018. In case any additional land apart from above is to be used/ acquired for any activity of the project, the due procedure as per law will be followed.	
Ш	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.	The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.	
IV	Proper Housekeeping programmers shall be implemented.		
V	In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.	The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.	
VI	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height.	
VII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.	by the operator.	
VIII	Arrangement shall be made that effluent and storm water does not get mixed.	Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate treatment plant and it is not allowed to mix with storm water. Storm water drainage galleries around the BLF Cells have been constructed for the management of rain water.	

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
IX	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.	prescribed in MSW (M&H) Rules, 2000/ SWM Rules 2016. The results are submitted to MPCB by thoperator. The sampling & analysis is being monitored as a prescribed in MSW (M&H) Rules, 2000/ SWM Rules are submitted to MPCB by the operator.
X	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 as per MSW Rules is being done by
XI	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 of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.	Noise monitoring as per MSW Rules is being done by operator. The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.
XII	periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept	Plantation along the periphery of the site is being done on progressive basis by the operator. Dy. Conservator of Forest is requested by MCGM for guidance regarding development & maintenance of Green Belt around the plant periphery and regarding selection of plant species as per guidelines of CPCB in that behalf. After receipt of guidance the operator will be informed to implement the same during development & maintenance of Green balt.
i	be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.	maintenance of Green belt around the plant periphery. The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
IV (Occupational health T	he compliance of the said condition is being ensured y the operator while carrying out day to day

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Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance		
	be done on a regular basis and record maintained as per Factories Act.	operation at site.		
XV	The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.			
XVI	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes	the project involves processing of MSW.		
XVII	Regular mock drills for the on- site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.	by the operator while carrying out day to da operation at site.		
XVIII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	ensured by the operator while carrying out day to day operation at site.		
XIX	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	included in tipping fees which are being paid to to operator of the project.		

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance		
XX	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	The said condition is complied.		
XXI	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 1 st June & 1 st December of each calendar year.	The said condition is complied. nce the ent ons the a 1 st		
XXII	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	The said condition is complied.		
XX III	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria	Air monitoring data is being displayed on operator's Website as per requirement of the said condition. Monitoring results are being sent to the said Departments as per requirement of the said condition. Latest Monitoring results are being displayed at the main entrance of the project site.		

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
	pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sectoral 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.	
XXIV	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 e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	The said condition is complied.
XXV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Noted.

Submitted please.

Yours faithfully,

Chief Engineer (Solid Waste Management) As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded July 2019	Remarks for the values recorded July 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	21.26 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.43 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.94 µg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	44.28 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 22.60 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.22 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	<2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded June 2019	Remarks for the values recorded June 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	20.57 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	21.46 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.86 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	44.82 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 21.65 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.54 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	< 0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded May 2019	Remarks for the values recorded May 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs) 22.63 μg/m3 (24 hrs) \		Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	23.09 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.70 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	41.87 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 23.26 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs) <0.01 μg/m3 (24 hrs)		Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	1-hour average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.23 μg/m3 (24 h		Within limit
9	Benzene	5 μg/m3 (annual) <2.1 μg/m3		Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual) <0.5 ng/m³		Within limit
Lower Explosive Limit (equivalent to 650			<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during April 2019	Remarks for the values recorded during April 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	21.12 µg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.14 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 µg/m3 (24 hrs)	48.33 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 21.93 μg/m3	Within limit
6	Lead	1.0 µg/m3 (24 hrs) <0.01 µg/m3 (24 hrs)		Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3		Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.09 μg/m3 (24 hrs)		Within limit
9	Benzene	5 μg/m3 (annual) <2.1 μg/m3		Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)		<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during March 2019	Remarks for the values recorded during March 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	23.30 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	24.22 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 µg/m3 (24 hrs)	48.33μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3		
6	Lead	1.0 μg/m3 (24 hrs) <0.01 μg/m3 (24 hrs)		Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.78 μg/m3 (24 hrs)		Within limit
9	Benzene	5 μg/m3 (annual) <2.1 μg/m3		Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)		<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during February 2019	Remarks for the values recorded during February 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.35 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.84 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.59 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	45.21 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 8 hours average: 100 μg/m3 21.66 μg/m3		Within limit
6	Lead	1.0 μg/m3 (24 hrs) <0.01 μg/m3 (24 hrs)		Within limit
7	Carbon Monoxide 1 hour average : 4 mg/m3		1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.85 μg/m3 (24 hrs)		Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)		<0.5 μg/m³	Within limit	

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 3rd October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during January 2019	Remarks for the values recorded during January 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.59 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	23.60 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	69.00 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	47.71 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 22.43 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs) <0.01 μg/m3 (24 hrs)		Within limit
7	Carbon Monoxide	1 hour average: 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.96 μg/m3 (24 hrs)		Within limit
9	Benzene	5 μg/m3 (annual) <2.1 μg/m3		Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)		Limit(equivalent to 650	<0.5 μg/m³ Withi	

MUNICIPAL CORPORATION OF GREATER MUMBAI

CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT.

No. Dy, ch. Engli678/SWM/ Project, DJ. 23/8/2019 Office of the Chief Engineer (SWM)

Office of the Chief Engineer (SWM) Municipal Khatav Market building, 3rd floor, Khatav Wadi Sleater Road, Grant Road (W), Mumbai-400007

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

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

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

The Member Secretary,
Maharashtra Pollution Control Board,
Kalpataru Point, 2nd, 3rd, & 4th 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.) dtd. 05.12.2014 accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kanjur, Mumbai.

And

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 (XXI) & (XXIV) including results of monitored data as stipulated in the Environmental clearance (E.C.) dtd. 29.10.2018 accorded for scientific processing of MSW in 52.45 ha. area which is in CRZ –III area other than CRZ –I at Kanjur MSW Processing facility, 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) Environment Clearance issued by State Level Environment Impact Assessment Authority (SEIAA) vide no. SEIAA-EC-0000000475, dtd. 29.10.2018.
- 3) Half yearly compliance report submitted by MCGM vide letter U/No. No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.

Sir,

This has reference to the conditions of Environmental Clearances issued for scientific processing of MSW in 65.96 ha. non CRZ area and 52.45 ha. CRZ –III area at Kanjur MSW Processing facility, Mumbai vide reference No-1 & 2 respectively.

In this context, MCGM is hereby submitting the hard copy of half yearly compliance reports in respect of the respective stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the respective General Conditions including results of monitored data as stipulated in the referred Environmental clearances accorded for Kanjur MSW Processing facility, Mumbai.

Half Yearly EC Compliance Report till 1st June -2019

The half yearly compliance report on Environmental Clearance issued via letter Ref: SEAC-2014/CR-162/TC2, dated 5/12/2014 is as below:-

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
1.	The proposal under consideration has to be restricted within the area 65.96 ha. Outside the CRZ area. The PP shall maintain a buffer zone of 500 meters around the project perimeter which shall be incorporated as 'No Development Zone' in the Development Plan of MCGM.	MCGM has 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 and the same will be incorporated after approval of Appropriate Authorities.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
2.	The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped/concretized 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 GH gas, Methane generated in BLF Cells is captured and flared through flaring stations installed at the site. Also, GH and Methane gas liberated from UAR at leachate treatment plant is flared off. Arrangements for gas collection and its utilization for power generation are installed and electricity generation from landfill gases generated from BLF Cells is used for captive power generation.
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.	Leachate Treatment Plant is operational. Leachate treatment comprises of two stage biological treatment anaerobic &, aerobic followed by clarification & filtration. At present leachate collected is re-circulated in BLF
5.	The PP shall take all out efforts to control odor nuisance. PP should take steps to measure odor levels using instruments which are currently available. The measurement of odor levels shall be taken at strategic locations depending on the wind direction and situation of habitats. Through regular monitoring is should be ensured that the odo levels are within the acceptabl limits and remedial measures like applying odor controlling bacterial consortium to the garbage are taken up as an when necessary.	On the basis of details of wind direction & wind speed from Wind Rose Diagrams of this project site, locations for monitoring odor levels in windward and leeward directions in nearby residential colonies are finalized and monitoring has been carried out for odor giving compounds like VOC, Mercaptans, ammonia, hydrogen sulfide etc by the operator through MoEF approved laboratory. Wind balloon system for guiding wind directions have been installed at BLF Cells and other noticeable places, so that wind direction can be seen easily by the operating staff and necessary arrangement for

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
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.	from creek through the culverts is already in place and significant growth of healthy mangroves is visible. The Forest Officers through visits to project site are monitoring the protection & preservation of mangrove forest.
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.	spillage of garbage and training is given to staff for handling the Solid Waste. It is strictly observed that no tail gates of vehicles will be opened before
9	No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	Noted.
	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	Noted.
	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.	The said condition is not applicable to this project as the project involves processing of MSW.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
12	The proponent should ensure	The site is designed as per the guide lines of MSW (M&H) Rules-2000 as well as SWM Rules 2016 and the provisions for landfill design & execution of Biogas capturing & flaring arrangement, Leachate collection, treatment, leachate recirculation is taken into consideration. The provisions for HW(M&H) Rules 2003 are not applicable as site is not accepting any Hazardous Waste.
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 area 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 and treatment facility is provided and is in operation. However, at present the Leachate is re-circulated at BLF Cells for enhancing the Bio-degradation process for generation of Methane gas. The Leachate Treatment Plant with arrangement of primary, Secondary with tertiary treatment is provided.
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 EC.
15	The depth of the landfill should be decided based on the ground water level at site.	While deciding the depth of landfill in design, ground water level data is taken into consideration. This condition is complied while designing the project & is being complied in execution.
16	Project Proponent should prepare and implement an onsite emergency management plan.	Emergency Management Plan is complied as per the
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	Piezo-metric wells water samples locations are provided in drawing. Periodical ground water /soil monitoring in and around the site is carried out at

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
18	Project Proponent shall carryout periodical air quality monitoring in and around the site including VOC, HC.	Monthly air monitoring is being carried out in and around the site as per the parameters stipulated in the Authorization granted and the results are displayed on website of the operator. Special parameters of 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 in green belt development is being done on progressive basis and majority plantation is already done. Healthy growth of mangroves forest is developed on three side of buffering zone.
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 stored/processed.	The said condition is not applicable to this project as the project involves processing of MSW Only. No HW /H Chemicals are received to this site. Adequate firefighting 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 as a wind barrier. The arrangement of water sprinkling on roads through tankers is in practice and water sprinkling operation is carried out regularly in summer & winter.
23	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	The said condition is not applicable to this project as the project involves processing of MSW only. There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is already deployed to ensure the good housekeeping & cleanliness.
25	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable)	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height. To operate MRF/Compost units on continuous power supply, application is made to the appropriate

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	Arrangement shall be made that effluent and storm water does not get mixed.	authority. However, continuous power supply is still awaited & at present to run MRF/Compost units arrangement of captive gas power generation unit is made. Also provision for DG set on temporary basis is also made.
		Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate treatment plant and it is not allowed to mix with storm water. Storm water drainage galleries around the BLF Cells have been constructed for the management of rain water.
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.	Monthly Ground water quality is monitored as prescribed in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The results analyzed indicate that the quality of ground water is found same as compared to previous year. The results are regularly submitted to MPCB by the operator. The sampling & analysis is carried out with the help of Accredited laboratory and having MoEF approval.
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.	Due care is taken to avoid noise nuisance.
28	The overall noise levels in and around the plant 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. These machineries are fitted with silencer for noise control. All efforts as per EIA are 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.	MPC Board has granted Authorization under MSW (M&H) Rules-2000 as per the decision in Consent Appraisal Committee meeting issued & issued letter for non-requirement of separate Consent to Establishment/ operate for this activity.
31	All required sanitary and hygienic	All required sanitation arrangements such as

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	measures should be in place before starting construction activities and to be maintained throughout the construction phase.	facilities are being maintained throughout the construction period.
Report	t on compliance of General Conditio	ns 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.	Medical checkup has been taken to check the health
	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. 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 guide lines 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 waster water and storm water is mixed. Storm water drainage galleries have been constructed for the

Sr.I	No Conditions Under Environment Clearance	Status of Compliance.
(vi	All the top soil excavated during construction activities should be stored for use in horticulture landscape development with the project site.	involves filling & compaction of soil and no
(vii	Additional soil for leveling of the proposed site shall be generate within the site (to the exter possible) so that natural drainage system of the area is protected and improved.	the present site, as the site is situated in low lying area. As per the technical requirement, soil from
(viii)	carried out considering CPCE guidelines including selection or plant species and in consultation with the local DFO/Agriculture Dept.	is already undertaken & it is under progressive 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.	provisions of MSW (M&H) Rules,2000 and MSW, Rules 2016 to prohibit percolation of leachate into the
(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 for not accepting such hazardous material at site.
(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.	No hazardous waste is generated during construction phase.
xii)	should be low Sulphur diesel type and should confirm to	Diesel generator sets are not used during construction phase, as regular electricity is available at site. DG set at site as standby unit and temporarily used is confirming noise & air emissions standards under EP Rules.

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

Action plan for compliance to General Conditions for Post Construction/Operation Phase of Environment Clearance.

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 forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	We are having qualified staff for environment monitoring at site as per MSW rules and as per our concession agreement. Environment cell as per EC has been formed.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with itemwise breaks-up. These costs shall be included as part of the project	Cost of environmental monitoring and management is included in tipping fees & which are being paid to the operator of the project.

Sr.No.	Conditions Under Environmental Clearance	Status of Compliance.
	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.	
	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashta.gov.in.	
(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 th June & 15 th 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.	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	Noted.

	the desired efficiency has been achieve. Regular monitoring of the acquality including SPM & SO ₂ level both in work zone and ambien air shall be carried out in an around the power plant an record shall be arrest to the same arecord shall be arrest to the same accord shall be arrest to the same arecord shall be arrest to the same are same ar	ir Currently air monitoring at locations identified in Elastic is being carried out as per the frequency defined in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The
	both in work zone and ambier air shall be carried out in an around the power plant an	is being carried out as per the frequency defined in Election MSW (M&H) Rules, 2000/ SWM Rules, 2016, The
I I	record shall be maintained. Th location of monitoring station and frequency of monitoring shabe decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit reportaccordingly to MPCB.	d reports are submitted to MPCB by the operator.
(xi) S S S S S S S S S S S S S S S S S S S	The proponent shall upload the status of compliance of the status of compliance of the stipulated EC conditions, including results of monitored lata on their website and shall sphate the same periodically. It hall simultaneously be sent to be Regional Office of MoEF, the espective Zonal Office of CPCB and the SPCB. The criteria collutant levels namely SPM, SPM, SO ₂ and NOx (ambient vels as well as stack emissions) of critical sector parameters, dicated for the project shall be conitored and displayed at a nivenient location near the lain gate of the company in the blic domain.	Website as per requirement of the said clause. Monitoring results are sent to the said Departments as required in the said clause. Latest Monitoring results are displayed at the location within the site at the main entrance of the project
sub star stip resu hard the Mol	e project proponent shall also omit six monthly reports on the tus of compliance of the pulated EC conditions including ults of monitored data (both in d copies as well as by-mail) to respective Regional Office of EF, the respective Zonal ce of CPCB and the SPCB.	Complied.
The each Mar	environmental statement for (n financial year ending 31st	nvironment Statement is submitted, and the same

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

The half yearly compliance report on Environmental Clearance issued vide no. SEIAA-EC-0000000475, dtd. 29.10.2018 is as below:-

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
1	PP to submit their plan for segregation of waste in the city.	In this context, MCGM had already submitted the Compliance of these conditions to SEIAA vide No
II	PP to submit copy of compliance of issues raised during the public hearing.	Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexu—A in the half yearly compliance report submitted
III	Earlier SEAC-I observation compliance to be submitted: Since the extended cell does compromise the shallow water body on eastern side of premises, proper drainage plan to ensure that storm water will properly led away so as not to stagnate low line areas shall be prepared and included in the EIA report.	MCGM to you vide letter 11/No.
IV	PP to ensure the compliance of points raised by earlier SEAC in their meetings and site visit report dated 17.02.2016.	
V	PP to ensure compliance of the conditions stipulated by MCZMA and CRZ clearance.	
VI	PP to prepare comprehensive drainage plan to ensure proper carrying and disposal of storm water with out contamination.	
/11	PP to take utmost precautions	

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
	to prevent the nuisance to nearby public from the activities carried out on site.	
VIII	PP to make traffic plan in such a way that no traffic congestion shall happen on the nearby roads which can affect traffic flow.	
IX	No burning is allowed on site; PP to take adequate precautions to prevent the fire incidents by way of administrative and safety controls like prevention of unauthorized entry, smoking etc.	
X	PP to ensure that it will process waste generated from CRZ area only.	Noted
ΧI	PP shall ensure compliance of MCZMA conditions.	In this context, MCGM had already submitted the Compliance of MCZMA conditions to SEIAA vide No Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexure—A in the half yearly compliance report submitted by MCGM to you vide letter U/No Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.
SR. NO.	General conditions	Status of compliance/ planning for compliance
I	PP to achieve Zero Liquid Discharge; PP shall ensure that there is no increase in the effluent load to CETP	Arrangement of Leachate collection through HDPE pipeline into HDPE lined ponds is provided by the operator. As per the technology Leachate will be re-circulated into the BLF Cells under controlled conditions by the operator. Leachate Treatment Plant is operational. Leachate treatment comprises of two stage biological treatment anaerobic &, aerobic followed by clarification & filtration. The excess Leachate will be treated in the said Leachate Treatment Plant.
I -	Project without obtaining proper permission.	As per the directions of Hon. Supreme Court the land admeasuring 141.77 ha. was handed over to MCGM by GoM. However, the mangroves land admeasuring 23.36 ha. was retained by GoM. vide notification dtd. 02.04.2012.

	Sr. No.	Specific Conditions	Status of compliance /
1	NO.		Status of compliance/ action plan for compliance
			SEIAA issued Environment Clearance for processing MSW in 65.96 ha. non CRZ area on 05.12.2014. SEIAA issued Environment Clearance for processing MSW in further 52.45 ha. CRZ –III area (adjacent 65.96 ha non CRZ area) on 29.10.2018. In case any additional land apart from above is to be used/acquired for any activity of the project, the diprocedure as per law will be followed.
П	fo pe als en	to take utmost precaution the health and safety of the ople working in the unit and for protecting the vironment.	by the operator while carrying out day to day operation at site.
IV	pro	pper Housekeepin ogrammers shall be plemented.	by the operator to ensure the good housekeeping & cleanliness. The compliance of the said condition is being ensured by the operator while carrying out day to day
V	adop shall oper resta effici	ency has been achieve	The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.
VI	based be p disperset. (I	ack of adequate height on DG set capacity shall rovided for control and rsion of pollutant from DG fapplicable).	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height.
/111	and ir	water.	The compliance of the said condition will be ensured by the operator.
/111	mar e	ti w	Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate reatment plant and it is not allowed to mix with storm water. It water drainage galleries around the BLF Cells ave been constructed for the management of rain later.

	Specific Conditions	Chil
No.		Status of compliance/ action plan for compliance
-		, and for compliance
IX	Periodic monitoring of ground	
	water shall be undertaken and	Monthly Ground water quality is to
	results analyzed to ascertain	Monthly Ground water quality is being monitored prescribed in MSW (M&H) Rules, 2000/ SWM Rul 2016. The results are submitted to the contract of the contract o
	any change in the	2016. The results are submitted to MPCB by to operator.
	any change in the quality of	operator. are submitted to MPCB by t
	water. Results shall be regularly	The sampling & analysis
	submitted to the Maharashtra	The sampling & analysis is being carried out by to operator with the help of laborate.
X		operator with the help of laboratory approved MoEF.
	Noise level shall be maintained	Noise monitori
	as per standards for me	Noise monitoring as per MSW Rules is being done be
	working in the high noise area,	operator.
1		The compliance of the said condition will be ensure
1 1		by the operator while carrying out day to da operation at site.
-	shall be provided.	peration at site.
XI -	The overall point	
	round the plant are shall be or	oise monitoring as per MSW Rules is being done by perator.
k	ept well within the standards Th	perator.
l l	v providing	ne compliance of the
n	y providing noise control by	the operator while carrying out day to day deration at site.
h		peration at site.
	pods, silencers, enclosures,	au de site.
	c. oil all sources of	
1 80	ileration. The ambient	
1.0	veis shall confirm to	
310	mudras prescribed und	
-11	vironment	
(Pr	otection) Act, 1986 Rules,	
	55.	
(II Gre	en belt shall be developed & Plan	
ma	III alliell around it	rogressive basis by the operator
per	iphery. Green Belt Die	progressive basis by the operator.
Dev	elonment of the	Conservator of Formal i
	elopment shall be carried guida	Conservator of Forest is requested by MCGM for ance regarding development & maintenance of n Belt around the plant peripher
out	considering CPCB guidelines Gree	n Belt around the
	Selection of plant solar	
inclu	ioc and . Maint Selec	tion of plant and periphery and regarding
inclu	ies and in consultation with that h	n Belt around the plant periphery and regarding tion of plant species as per guidelines of CPCB in
inclu	ocal DEO/A : that b	tion of plant species as per guidelines of CPCB in
inclu	ocal DFO/ Agriculture Dept After	tion of plant species as per guidelines of CPCB in receipt of guidence the
inclusped the I	ocal DFO/ Agriculture Dept After to im	tion of plant species as per guidelines of CPCB in receipt of guidance the operator will be informed
inclusped the I	ocal DFO/ Agriculture Dept After to immaint	tion of plant species as per guidelines of CPCB in pehalf. receipt of guidance the operator will be informed applement the same during development &
inclusped the l	ocal DFO/ Agriculture Dept After to im maint uate safety measures shall The co	receipt of guidance the operator will be informed applement the same during development & cenance of Green belt around the plant periphery.
inclusped the l	ocal DFO/ Agriculture Dept After to im maint uate safety measures shall rovided to limit the risk by th	receipt of guidance the operator will be informed applement the same during development & cenance of Green belt around the plant periphery.
inclusped the l	ocal DFO/ Agriculture Dept After to im maint rovided to limit the risk within the plant boundary, se of an accident	receipt of guidance the operator will be informed applement the same during development & cenance of Green belt around the plant periphery.
inclusped the l	ocal DFO/ Agriculture Dept After to im maint rovided to limit the risk within the plant boundary, se of an accident	tion of plant species as per guidelines of CPCB in pehalf. receipt of guidance the operator will be informed applement the same during development &
inclusped the l	ocal DFO/ Agriculture Dept After to im maint rovided to limit the risk within the plant boundary, se of an accident. Leak tion devices shall also	receipt of guidance the operator will be informed applement the same during development & cenance of Green belt around the plant periphery.
inclusped the l	ocal DFO/ Agriculture Dept After to im maint rovided to limit the risk within the plant boundary, se of an accident. Leak cion devices shall also be ed at strategic places for	receipt of guidance the operator will be informed applement the same during development & enance of Green belt around the plant periphery.
inclusped the last and last all early of the last all inclusions.	ocal DFO/ Agriculture Dept After to immaint uate safety measures shall rovided to limit the risk within the plant boundary, se of an accident. Leak cion devices shall also be ed at strategic places for letection and warning	receipt of guidance the operator will be informed applement the same during development & enance of Green belt around the plant periphery.
inclusped the last last last last last last last last	ocal DFO/ Agriculture Dept After to immaint uate safety measures shall rovided to limit the risk within the plant boundary, se of an accident. Leak cion devices shall also be ed at strategic places for letection and warning.	receipt of guidance the operator will be informed applement the same during development & enance of Green belt around the plant periphery.

Sr.	Specific Collditions	Status of compliance/ action plan for compliance
	be done on a regular basis and record maintained as per Factories Act.	operation at site.
XV	arrangement for protection of possible fire hazards during manufacturing process in material handling.	The compliance of the said condition is being ensure by the operator while carrying out day to da operation at site.
XVII	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes Regular mock drills for the onsite emergency management be	The said condition is not applicable to this project as the project involves processing of MSW. The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
XVIII	staff shall be set up for er implementation of the op stipulated environmental safeguards.	perator already has the Environment Health & Safety ell and the compliance of the said condition is being assured by the operator while carrying out day to day peration at site.
I I I I I I I	anviron manual I	st of environmental monitoring and management is cluded in tipping fees which are being paid to the erator of the project.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
XX	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	
XXI	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 1 st June & 1 st December of each calendar year.	The said condition is complied.
XXII	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	The said condition is complied.
XX III	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria	Air monitoring data is being displayed on operator's Website as per requirement of the said condition. Monitoring results are being sent to the said Departments as per requirement of the said condition. Latest Monitoring results are being displayed at the main entrance of the project site.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
	pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sectoral 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.	
XXIV	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 e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	The said condition is complied.
XXV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Noted.

Submitted please.

Yours faithfully,

Chief Engineer (Solid Waste Management) As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 29 October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded July 2019	Remarks for the values recorded July 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	21.26 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.43 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.94 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	44.28 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 22.60 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.22 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded June 2019	Remarks for the values recorded June 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	20.57 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	21.46 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.86 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	44.82 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 21.65 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs) <0.01 μg/m3 (24 hrs)		Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs) 4.54 μg/m3 (24		Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Methane Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)		<0.5 μg/m³	Within limit

^{*} As per Authorization Dated 19.08.2017

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded May 2019	Remarks for the values recorded May 2019	
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.63 μg/m3 (24 hrs)	Within limit	
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	23.09 μg/m3 (24 hrs)	Within limit	
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.70 μg/m3 (24 hrs)	Within limit	
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	41.87 μg/m3 (24 hrs)	Within limit	
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 23.26 μg/m3	Within limit	
6	Lead	1.0 µg/m3 (24 hrs)	<0.01 µg/m3 (24 hrs)	Within limit	
7	Carbon Monoxide 1-hour average: 4 mg/m3		1-hour average: <0.4 mg/m3	Within limit	
8	Ammonia	400 μg/m3 (24 hrs)	4.23 μg/m3 (24 hrs)	Within limit	
9	Benzene	5 μg/m3 (annual)	<2.1 μg/m3	Within limit	
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit	
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit	
12	Nickel	20 ng/m³ (annual) <0.5 ng/m³		Within limit	
13	Methane Not to exceed 25% Lower Explosive Lir (equivalent to 650 mg/m³)		<0.5 μg/m³	Within limit	

Sr. No	Paramotors *	Permissible levels as per SWM Rules, 2016	Values Recorded during April 2019	Remarks fo the values recorded during April
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	-	2019
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	21.12 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	22.14 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs) 48.33 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 21.93 µg/m3	Within limit
6	Lead 1.0 μg/m3 (24 hrs)		<0.01 µg/m3 (24 hrs)	Mariet to the second
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit Within limit
8	Ammonia	monia 400 μg/m3 (24 hrs)		Within limit
9	Benzene	5 μg/m3 (annual)	4.09 μg/m3 (24 hrs)	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Methane Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³) * As per Authorization Dated 19.08.2017		<0.5 μg/m³	Within limit Within limit

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded during March 2019	Remarks for the values recorded during March 2019	
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	23.30 μg/m3 (24 hrs)	Within limit	
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	24.22 μg/m3 (24 hrs)	Within limit	
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs)	Within limit	
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	48.33 μg/m3 (24 hrs)	Within limit	
5	Ozone	8 hours average : 8 hours 100 μg/m3 21.17 μ		Within limit	
6	Lead	1.0 µg/m3 (24 hrs) <0.01 µg/m3 (24 hrs)		Within limit	
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit	
8	Ammonia	400 μg/m3 (24 hrs) 4.78 μg/m3 (24 hrs)		Within limit	
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit	
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit	
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit	
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit	
13	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)		<0.5 μg/m³	Within limit	

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded during February 2019	Remarks for the values recorded during February 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.35 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.84 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.59 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	45.21 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 21.66 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs) <0.01 μg/m3 (24 hrs)		Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.85 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Methane Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)		<0.5 μg/m³	Within limit

As per the general conditions number (XXIII) stipulated in SEIAA-EC-0000000475 dated 3rd October 2018 and 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 levels as per SWM Rules, 2016	Values Recorded during January 2019	Remarks for the values recorded during January 2019	
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.59 μg/m3 (24 hrs)	Within limit	
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	23.60 μg/m3 (24 hrs)	Within limit	
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	69.00 μg/m3 (24 hrs)	Within limit	
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	47.71 μg/m3 (24 hrs)	Within limit	
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 22.43 μg/m3	Within limit	
6	Lead	1.0 μg/m3 (24 hrs) <0.01 μg/m3 (24 hrs)		Within limit	
7	Carbon Monoxide	1 hour average: 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit	
8	Ammonia	400 μg/m3 (24 hrs)	4.96 μg/m3 (24 hrs)	Within limit	
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit	
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit	
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit	
12	Nickel	20 ng/m³ (annual) <0.5 ng/m³		Within limit	
13	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)		<0.5 μg/m³,	Within limit	

MUNICIPAL CORPORATION OF GREATER MUMBAI

CHIEF ENGINEER (SOLID WASTE MANAGEMENT) DEPTT. No.Dy, ch. Eng/1678/Swm/ Project, DJ. 23/8/2019
Office of the Chief Engineer (SWM)

Municipal Khatav Market building, 3rd floor, Khatav Wadi Sleater Road, Grant Road (W), Mumbai-400007

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

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

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

The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 2nd, 3rd, & 4th floor, Opp. Cine Planet, Near Sion Circle, Sion (East), Mumbai- 400 022.

> Submission of hard copy of half yearly compliance reports in respect of Sub: 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.) dtd. 05.12.2014 accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD - 7500 TPD at Kanjur, Mumbai.

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 (XXI) & (XXIV) including results of monitored data as stipulated in the Environmental clearance (E.C.) dtd. 29.10.2018 accorded for scientific processing of MSW in 52.45 ha. area which is in CRZ –III area other than CRZ – I at Kanjur MSW Processing facility, 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) Environment Clearance issued by State Level Environment Impact Assessment Authority (SEIAA) vide no. SEIAA-EC-0000000475, dtd. 29.10.2018.
- 3) Half yearly compliance report submitted by MCGM vide letter U/No. No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.

Sir,

This has reference to the conditions of Environmental Clearances issued for scientific processing of MSW in 65.96 ha. non CRZ area and 52.45 ha. CRZ –III area at Kanjur MSW Processing facility, Mumbai vide reference No-1 & 2 respectively.

In this context, MCGM is hereby submitting the hard copy of half yearly compliance reports in respect of the respective stipulated prior environment clearance terms & conditions and six monthly reports on the status of compliance of the respective General Conditions including results of monitored data as stipulated in the referred Environmental clearances accorded for Kanjur MSW Processing facility, Mumbai.

Half Yearly EC Compliance Report till 1st June -2019

The half yearly compliance report on Environmental Clearance issued via letter Ref: SEAC-2014/CR-162/TC2, dated 5/12/2014 is as below:-

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
1.	The proposal under consideration has to be restricted within the area 65.96 ha. Outside the CRZ area. The PP shall maintain a buffer zone of 500 meters around the project perimeter which shall be incorporated as 'No Development Zone' in the Development Plan of MCGM.	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 and the same will be incorporated after

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
2.	The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped/concretized 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 GH gas, Methane generated in BLF Cells is captured and flared through flaring stations installed at the site. Also, GH and Methane gas liberated from UAR at leachate treatment plant is flared off. Arrangements for gas collection and its utilization for power generation are installed and electricity generation from landfill gases generated from BLF Cells is used for captive power generation.
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.	Arrangements for leachate collection in impervious HDPE lined ponds from BLF-Cells are already operational. Leachate Treatment Plant is operational. Leachate treatment comprises of two stage biological treatment anaerobic &, aerobic followed by clarification & filtration. At present leachate collected is re-circulated in BLF Cells under controlled condition.
5.	The PP shall take all out efforts to control odor nuisance. PP should take steps to measure odor levels using instruments which are currently available. The measurement of odor 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 odor levels are within the acceptable limits and remedial measures like applying odor controlling bacterial consortium to the garbage are taken up as and when necessary.	locations for monitoring odor levels in windward and leeward directions in nearby residential colonies are finalized and monitoring has been carried out for odor giving compounds like VOC, Mercaptans, ammonia, hydrogen sulfide etc by the operator through MoEF approved laboratory. Wind balloon system for guiding wind directions have been installed at BLF Cells and other noticeable places, so that wind direction can be seen easily by the operating staff and necessary arrangement for

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
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.	Arrangement for ingress & egress of tidal water from creek through the culverts is already in place and significant growth of healthy mangroves is visible. The Forest Officers through visits to project site are monitoring the protection & preservation of mangrove forest.
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 closed body vehicles are received to achieve zero spillage of garbage and training is given to staff for handling the Solid Waste. It is strictly observed that no tail gates of vehicles will be opened before reaching to the MSW processing site. Arrangements are in place for Washing/cleaning of incoming waste collection trucks tyres if found with muck and dirt. Regular cleaning of roads is undertaken to collect applied to the string of the s
		spilled garbage if observed and cleanliness is maintained.
9	No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	Noted.
10	No additional land shall be used / acquired for any activity of the project without obtaining proper permission.	Noted.
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.	The said condition is not applicable to this project as the project involves processing of MSW.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
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 as well as SWM Rules 2016 and the provisions for landfill design & execution of Biogas capturing & flaring arrangement, Leachate collection, treatment, leachate recirculation is taken into consideration. The provisions for HW(M&H) Rules 2003 are not applicable as site is not accepting any Hazardous Waste.
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 area 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 and treatment facility is provided and is in operation. However, at present the Leachate is re-circulated at BLF Cells for enhancing the Bio-degradation process for generation of Methane gas. The Leachate Treatment Plant with arrangement of primary, Secondary with tertiary treatment is provided.
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 EC.
15	The depth of the landfill should be decided based on the ground water level at site.	While deciding the depth of landfill in design, ground water level data is taken into consideration. This condition is complied while designing the project & is being complied in execution.
16	Project Proponent should prepare and implement an onsite emergency management plan.	Emergency Management Plan is complied as per the EIA report (Chapter 6). On site "Emergency Plan and Disaster Management Plan" is prepared and is under implementation.
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	Monthly ground water quality monitoring through Piezo-metric wells water samples locations are provided in drawing. Periodical ground water /soil monitoring in and around the site is carried out at intervals set out in the MSW(M&H) Rules, 2000/ SWM Rules, 2016 through the agency approved by MoEF. As regards to TCLP test the parameters which are necessary as per MSW rules are analyzed with the help of MoEF approved Lab.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
18	Project Proponent shall carryout periodical air quality monitoring in and around the site including VOC, HC.	Monthly air monitoring is being carried out in and around the site as per the parameters stipulated in the Authorization granted and the results are displayed on website of the operator. Special parameters of 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 in green belt development is being done or progressive basis and majority plantation is already done. Healthy growth of mangroves forest is developed on three side of buffering zone.
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 stored/processed.	The said condition is not applicable to this project as the project involves processing of MSW Only. No HW /H Chemicals are received to this site. Adequate firefighting 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 as a wind barrier. The arrangement of water sprinkling on roads through tankers is in practice and water sprinkling operation is carried out regularly in summer & winter.
23	Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.	The said condition is not applicable to this project as the project involves processing of MSW only. There is no furnace area in the current project plan.
24	Proper housekeeping programs shall be implemented.	Dedicated team of trained workers is already deployed to ensure the good housekeeping & cleanliness.
25	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable)	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height. To operate MRF/Compost units on continuous power supply, application is made to the appropriate

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	Arrangement shall be made that effluent and storm water does not get mixed.	authority. However, continuous power supply is still awaited & at present to run MRF/Compost units arrangement of captive gas power generation unit is made. Also provision for DG set on temporary basis is also made.
		Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate treatment plant and it is not allowed to mix with storm water. Storm water drainage galleries around the BLF Cells have been constructed for the management of rain water.
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.	Monthly Ground water quality is monitored as prescribed in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The results analyzed indicate that the quality of ground water is found same as compared to previous year. The results are regularly submitted to MPCB by the operator. The sampling & analysis is carried out with the help of Accredited laboratory and having MoEF approval.
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.	Due care is taken to avoid noise nuisance.
28	The overall noise levels in and around the plant 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. These machineries are fitted with silencer for noise control. All efforts as per EIA are 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.	MPC Board has granted Authorization under MSW (M&H) Rules-2000 as per the decision in Consent Appraisal Committee meeting issued & issued letter for non-requirement of separate Consent to Establishment/ operate for this activity.
31	All required sanitary and hygienic	All required sanitation arrangements such as

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	measures should be in place before starting construction activities and to be maintained throughout the construction phase.	WC/Urinals/Bathrooms with adequate water are available at site. Also safe, filtered, disinfected drinking water is provided to staff/ workers. Required facilities are being maintained throughout the construction period.
Report	on compliance of General Conditio	ns stipulated in Environment Clearance.
Sr.	General Conditions for	Proposed action plan
No (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.	
	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. 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 guide lines shall be followed for disposa 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. Storm wate drainage galleries have been constructed for the

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
		management of rain water.
(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 site (to the extent possible) so that natural drainage system of the area is protected and improved.	There is no additional soil filling 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 for Green Belt development is already undertaken & it is under progressive 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.	HDPE Liners are spread at landfill base as per design & provisions of MSW (M&H) Rules,2000 and MSW, Rules 2016 to prohibit percolation of leachate into the ground/soil. Ground water and surface water samples are tested regularly through laboratory, approved by the MoEF and the results show that there is no contamination due to heavy metals and toxic contaminants.
(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 for not accepting such hazardous material at site.
(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.	No hazardous waste is generated during construction phase.
(xii)	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should confirm to Environment (Protection) Rules prescribed for air and noise	Diesel generator sets are not used during construction phase, as regular electricity is available at site. DG set at site as standby unit and temporarily used is confirming noise & air emissions standards under EP Rules.

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

Action plan for compliance to General Conditions for Post Construction/Operation Phase of Environment Clearance.

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 forwarded to the Local authority and MPCB.	Complied.
(iii)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Noted.
(iv)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	We are having qualified staff for environment monitoring at site as per MSW rules and as per our concession agreement. Environment cell as per EC has been formed.
(v)	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with itemwise breaks-up. These costs shall be included as part of the project	Cost of environmental monitoring and management is included in tipping fees & which are being paid to the operator of the project.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	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.	
	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashta.gov.in.	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 th June & 15 th 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.	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	Noted.

Sr.No	Conditions Under Environmental Clearance	Status of Compliance.
	the desired efficiency has been achieve.	
(x)	Regular monitoring of the air quality including SPM & SO ₂ levels both in work zone and ambient air shall be carried out in and around the power plant and record 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.	Currently air monitoring at locations identified in EIA is being carried out as per the frequency defined in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The reports are submitted to MPCB by the operator.
(xi)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM, SO ₂ and NOx (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Air monitoring data is displayed on operator's Website as per requirement of the said clause. Monitoring results are sent to the said Departments as required in the said clause. Latest Monitoring results are displayed at the location within the site at the main entrance of the project site.
(xii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.
(xiii)	The environmental statement for each financial year ending 31 st March in	Complied. Environment Statement is submitted, and the same
	Form V as is mandated to be	report is displayed on operator's website.

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

The half yearly compliance report on Environmental Clearance issued vide no. SEIAA-EC-0000000475, dtd. 29.10.2018 is as below:-

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
l	PP to submit their plan for segregation of waste in the city.	In this context, MCGM had already submitted the Compliance of these conditions to SEIAA vide No.
11	PP to submit copy of compliance of issues raised during the public hearing.	Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexure —A in the half yearly compliance report submitted by
III	Earlier SEAC-I observation compliance to be submitted: Since the extended cell does compromise the shallow water body on eastern side of premises, proper drainage plan to ensure that storm water will properly led away so as not to stagnate low line areas shall be prepared and included in the EIA report.	MCGM to you vide letter U/No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.
IV	PP to ensure the compliance of points raised by earlier SEAC in their meetings and site visit report dated 17.02.2016.	
V	PP to ensure compliance of the conditions stipulated by MCZMA and CRZ clearance.	
VI	PP to prepare comprehensive drainage plan to ensure proper carrying and disposal of storm water with out contamination.	
VII	PP to take utmost precautions	

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
	to prevent the nuisance to nearby public from the activities carried out on site.	
VIII	PP to make traffic plan in such a way that no traffic congestion shall happen on the nearby roads which can affect traffic flow.	
IX	No burning is allowed on site; PP to take adequate precautions to prevent the fire incidents by way of administrative and safety controls like prevention of unauthorized entry, smoking etc.	
X	PP to ensure that it will process waste generated from CRZ area only.	Noted
XI	PP shall ensure compliance of MCZMA conditions.	In this context, MCGM had already submitted the Compliance of MCZMA conditions to SEIAA vide No. Dy.Ch.E./1722/SWM/Project dtd. 25.07.2017. The copy of the same was also enclosed as Annexure—A in the half yearly compliance report submitted by MCGM to you vide letter U/No. Dy.Ch.E./3770/SWM/Project, Dated 23.01.2019.
SR. NO.	General conditions	Status of compliance/ planning for compliance
J	PP to achieve Zero Liquid Discharge; PP shall ensure that there is no increase in the effluent load to CETP	Arrangement of Leachate collection through HDPE pipeline into HDPE lined ponds is provided by the operator. As per the technology Leachate will be re-circulated into the BLF Cells under controlled conditions by the operator. Leachate Treatment Plant is operational. Leachate treatment comprises of two stage biological treatment anaerobic &, aerobic followed by clarification & filtration. The excess Leachate will be treated in the said Leachate Treatment Plant.
II	No additional land shall be used /acquired for any activity of the Project without obtaining proper permission.	As per the directions of Hon. Supreme Court the land admeasuring 141.77 ha. was handed over to MCGM by GoM. However, the mangroves land admeasuring 23.36 ha. was retained by GoM. vide notification dtd. 02.04.2012.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
		SEIAA issued Environment Clearance for processing of MSW in 65.96 ha. non CRZ area on 05.12.2014. SEIAA issued Environment Clearance for processing of MSW in further 52.45 ha. CRZ –III area (adjacent to 65.96 ha non CRZ area) on 29.10.2018. In case any additional land apart from above is to be used/ acquired for any activity of the project, the due procedure as per law will be followed.
Ш	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.	The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
IV	Proper Housekeeping programmers shall be implemented.	Dedicated team of trained workers is already deployed by the operator to ensure the good housekeeping & cleanliness. The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
V	In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.	The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.
VI	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).	At present the plant electricity requirement is fulfilled with captive power generation unit with backup power supply from MSEDCL &. Standby DG set of 125 KVA with adequate stack height.
VII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.	The compliance of the said condition will be ensured by the operator.
VIII	Arrangement shall be made that effluent and storm water does not get mixed.	Arrangement of separate leachate collection through HDPE pipeline into HDPE lined ponds is provided. It is controlled by re-circulation into the landfill BLF Cells. The excess leachate is treated in the leachate treatment plant and it is not allowed to mix with storm water. Storm water drainage galleries around the BLF Cells have been constructed for the management of rain water.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
IX	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.	Monthly Ground water quality is being monitored as prescribed in MSW (M&H) Rules, 2000/ SWM Rules, 2016. The results are submitted to MPCB by the operator. The sampling & analysis is being carried out by the operator with the help of laboratory approved by MoEF.
X	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 as per MSW Rules is being done by operator. The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.
ΧI	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 of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.	Noise monitoring as per MSW Rules is being done by operator. The compliance of the said condition will be ensured by the operator while carrying out day to day operation at site.
XII		Plantation along the periphery of the site is being done on progressive basis by the operator. Dy. Conservator of Forest is requested by MCGM for guidance regarding development & maintenance of Green Belt around the plant periphery and regarding selection of plant species as per guidelines of CPCB in that behalf. After receipt of guidance the operator will be informed to implement the same during development & maintenance of Green belt around the plant periphery.
XIII	Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.	The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
XIV	Occupational health surveillance of the workers shall	The compliance of the said condition is being ensured by the operator while carrying out day to day

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
	be done on a regular basis and record maintained as per Factories Act.	operation at site.
XV	The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	
XVI	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/ disposal of hazardous wastes	The said condition is not applicable to this project as the project involves processing of MSW.
XVII	Regular mock drills for the on- site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.	The compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
XVIII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Operator already has the Environment Health & Safety Cell and the compliance of the said condition is being ensured by the operator while carrying out day to day operation at site.
XIX	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 tipping fees which are being paid to the operator of the project.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
XX	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in	The said condition is complied.
XXI	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 1st June & 1st December of each calendar year.	The said condition is complied.
XXII	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	The said condition is complied.
XX III	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria	Air monitoring data is being displayed on operator's Website as per requirement of the said condition. Monitoring results are being sent to the said Departments as per requirement of the said condition. Latest Monitoring results are being displayed at the main entrance of the project site.

Sr. No.	Specific Conditions	Status of compliance/ action plan for compliance
	pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sectoral 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.	
XXIV	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 e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	The said condition is complied.
XXV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Noted.

Submitted please.

Yours faithfully,

Chief Engineer (Solid Waste Management)

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded July 2019	Remarks for the values recorded July 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	21.26 µg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.43 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.94 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM ₂₅	60 μg/m3 (24 hrs)	44.28 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 22.60 μg/m3	Within limit
6	Lead	1.0 µg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.22 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded June 2019	Remarks for the values recorded June 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	20.57 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	21.46 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.86 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	44.82 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 21.65 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	24 hours 1-hourly average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.54 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	< 0.5 μg/m³	Within limit

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded May 2019	Remarks for the values recorded May 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.63 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	23.09 µg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	63.70 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	41.87 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average: 100 μg/m3	8 hours average: 23.26 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 µg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1-hour average: 4 mg/m3	1-hour average: <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.23 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit (equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

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Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded during April 2019	Remarks for the values recorded during April 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	21.12 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.14 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 µg/m3 (24 hrs)	48.33 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 21.93 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 μg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1 hour average: 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.09 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m ³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)	< 0.5 μg/m³	Within limit

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded during March 2019	Remarks for the values recorded during March 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	23.30 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	24.22 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.49 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	48.33μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 21.17 μg/m3	Within limit
6	Lead	1.0 µg/m3 (24 hrs)	<0.01 µg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1 hour average: 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.78 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

Sr. No.	Parameters *	Permissible levels as per SWM Rules, 2016	Values Recorded during February 2019	Remarks for the values recorded during February 2019
1	Sulphur Dioxide	80 μg/m3 (24 hrs)	22.35 μg/m3 (24 hrs)	Within limit
2	Nitrogen Dioxide	80 μg/m3 (24 hrs)	22.84 μg/m3 (24 hrs)	Within limit
3	Particulate matter, PM ₁₀	100 μg/m3 (24 hrs)	64.59 μg/m3 (24 hrs)	Within limit
4	Particulate matter, PM _{2.5}	60 μg/m3 (24 hrs)	45.21 μg/m3 (24 hrs)	Within limit
5	Ozone	8 hours average : 100 μg/m3	8 hours average : 21.66 μg/m3	Within limit
6	Lead	1.0 μg/m3 (24 hrs)	<0.01 µg/m3 (24 hrs)	Within limit
7	Carbon Monoxide	1 hour average : 4 mg/m3	1 hour average : <0.4 mg/m3	Within limit
8	Ammonia	400 μg/m3 (24 hrs)	4.85 μg/m3 (24 hrs)	Within limit
9	Benzene	5 μg/m3 (annual)	< 2.1 μg/m3	Within limit
10	Benzo(α)Pyrene	1 ng/m³ (annual)	<0.1 ng/m³	Within limit
11	Arsenic	6 ng/m³ (annual)	<0.5 ng/m ³	Within limit
12	Nickel	20 ng/m³ (annual)	<0.5 ng/m ³	Within limit
13	Methane	Not to exceed 25% of the Lower Explosive Limit(equivalent to 650 mg/m³)	<0.5 μg/m³	Within limit

Remarks for the values Values Recorded Sr. Permissible levels as recorded Parameters * during January No. per SWM Rules, 2016 during 2019 January 2019 Sulphur Dioxide 80 µg/m3 (24 hrs) 22.59 µg/m3 (24 hrs) Within limit Nitrogen Dioxide 80 µg/m3 (24 hrs) 23.60 µg/m3 (24 hrs) Within limit Particulate matter, 3 100 µg/m3 (24 hrs) 69.00 µg/m3 (24 hrs) Within limit Particulate matter, 4 60 µg/m3 (24 hrs) 47.71 µg/m3 (24 hrs) Within limit PM_{2.5} 8 hours average: 8 hours average: 5 Ozone Within limit 100 μg/m3 22.43 μg/m3 6 Lead 1.0 µg/m3 (24 hrs) <0.01 µg/m3 (24 hrs) Within limit 1 hour average : 1 hour average: 7 Carbon Monoxide Within limit 4 mg/m3 <0.4 mg/m3 Ammonia 400 µg/m3 (24 hrs) 4.96 µg/m3 (24 hrs) Within limit 9 Benzene 5 μg/m3 (annual) <2.1 µg/m3 Within limit 10 Benzo(α)Pyrene 1 ng/m³ (annual) <0.1 ng/m3 Within limit 11 Arsenic 6 ng/m³ (annual) <0.5 ng/m³ Within limit 12 Nickel 20 ng/m³ (annual) <0.5 ng/m3 Within limit Not to exceed 25% of the Lower Explosive 13 Methane <0.5 µg/m³ Within limit Limit(equivalent to 650 mg/m^3) * As per Authorization Dated 19.08.2017