

#### STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department, Room No. 217, 2nd floor, Mantralaya, Annexe, Mumbai- 400 032. Date:October 29, 2018

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Municipal Corporation of Greater Mumba at --

Subject:Environment Clearance for Scientific processing of MSW in 52.45 ha area which is in CRZ III area other than<br/>CRZ-I at Kanjur MSW processing site in Mumbai.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 139 th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 140th meetings.

2. It is noted that the proposal is considered by SEAC-I under screening category Not Applicable as per EIA Notification 2006.

#### Brief Information of the project submitted by you is as below :-

1.Name of Project	Scientific processing of MSW in 52.45 ha area which is in CRZ III area other than CRZ-I at Kanjur MSW processing site in Mumbai.				
2.Type of institution	Government				
<b>3.Name of Project Proponent</b>	Municipal Corporation of Greater Mumbai				
4.Name of Consultant	Fine Envirotech Engineers				
5.Type of project	others Scientific MSW Processing Facility				
6.New project/expansion in existing project/modernization/diversification in existing project	Expansion in existing project in terms of land use without enhancing the capacity				
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not Applicable				
8.Location of the project	-				
9.Taluka	Mumbai				
10.Village	Kanjurmarg				
11.Area of the project	Municipal Corporation of Greater Mumbai				
	Not Applicable				
12.10D/10A/Concession/Plan Approval Number	IOD/IOA/Concession/Plan Approval Number: Not Applicable				
**	Approved Built-up Area:				
13.Note on the initiated work (If applicable)	Not Applicable				
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Not Applicable				
15.Total Plot Area (sq. m.)	52.45 ha				
16.Deductions	Not applicable				
17 Net Plot area	Not applicable				

STATEMENT-0000000502 ) SEIAA-MINUTES-0000000672 Shri. Anil Digg   SEIAA-EC-0000000475 Page 1 of 11 SEIAA)
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	FSI area (sq. m.): Not applicable				
18 (a).Proposed Built-up Area (FSI & Non-FSI)	Ion FSI area (sq. m.): Not applicable				
,	Total BUA area (sq. m.):				
	Approved FSI area (sq. m.):				
18 (b).Approved Built up area as per DCR	Approved Non FSI area (sq. m.):				
2.011	Date of Approval:				
19.Total ground coverage (m2)	Not applicable				
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	Not applicable				
21.Estimated cost of the project	50000000				



### Government of Maharashtra

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	22.Production Details								
Serial Number	Product	Existing	(MT/M)	Proposed (MT/M)	Total (MT/M)				
1	(		0	0	0				
		23.Tota	l Water Requirement						
	Source of	f water	Not applicable						
	Fresh wa	Fresh water (CMD):		ble					
	Recycled Flushing	water - (CMD):	Not applica	ble					
	Recycled Gardenin	water - g (CMD):	Not applica	ble					
	Swimmin make up	g pool (Cum):	Not applica	ble					
Dry season:	: Total Wa Requiren :	Total Water Requirement (CMD) :		ble	2				
	Fire fight Undergro tank(CM	Fire fighting - Underground water tank(CMD):		Not applicable					
	Fire fight Overhead tank(CM	Fire fighting - Overhead water tank(CMD):		Not applicable					
	Excess tr	eated water	Not applicable						
	Source o	f water	Not applicable						
	Fresh wa	ter (CMD):	Not applicable						
	Recycled Flushing	Recycled water - Flushing (CMD):		Not applicable					
	Recycled Gardenin	Recycled water - Gardening (CMD):		Not applicable					
	Swimmin make up	g pool (Cum):	Not applicable						
Wet season:	n: Total Wa Requiren :	Total Water Requirement (CMD)		Not applicable					
	Fire fight Undergro tank(CM	cing - ound water D):	Not applicable						
	Fire fight Overhead tank(CM	ting - l water D):	Not applica	Not applicable					
	Excess tr	eated water	Not applica	ble					
Details of S pool (If any	Swimming (y) Not Applie	cable							

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	24.Details of Total water consumed										
Particula rs	Cons	umption (CM	D)	Loss (CMD)			Efi	Effluent (CMD)			
Water Require ment	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total		
Domestic	0	100	0	0	100	0	0	0	0		
Level of the Ground water table:				Not Applicable							
		Size and no o tank(s) and Quantity:	f RWH	Not Applical	ole						
		Location of the tank(s):	he RWH	Not Applical	ole	Jan					
25.Rain Water Harvesting (RWH)		Quantity of ropits:	echarge	Not Applical	ple VA	S.C	Z				
		Size of recha:	rge pits	Not Applicable							
		Budgetary al (Capital cost)	location ) :	Not Applicable							
		Budgetary al (O & M cost)	location :	Not Applicable							
		Details of UG if any :	T tanks	Not Applicable							
		TA			27	2	$\Theta$				
Natural water drainage pattern:		r t <b>ern</b> :	2	ale	5	×,					
26.Storm drainage	water	Quantity of s water:	torm	्रेष्यस्य	मुद्रा	Ser.	7				
		Size of SWD:	K	~~( )))H(( ))H~~~~							
				Wi	W.						
		Sewage gene in KLD:	ration	Not Applicable							
		STP technolo	gy:	Not Applicable							
27 Sowa	hre an	Capacity of S (CMD):	TP	Not Applicable							
Waste w	ater	Location & an the STP:	rea of	Not Applicable							
		Budgetary al (Capital cost)	location ):	Not Applical	ole						
		Budgetary al (O & M cost)	location	Not Applicable							

	28.Solid waste Management						
Waste generation in	Waste generation:	Not Applicable					
the Pre Construction and Construction phase:	Disposal of the construction waste debris:	Not Applicable					
	Dry waste:	Not Applicable					
	Wet waste:	Leachate					
Waste generation	Hazardous waste:	Not Applicable					
in the operation Phase:	Biomedical waste (If applicable):	Not Applicable					
	STP Sludge (Dry sludge):	Not Applicable					
	Others if any:	Not Applicable					
	Dry waste:	Not Applicable					
	Wet waste:	Leachate generated from bioreactor landfill will be collected separately through internal pipeline networks and treated on-site via ETP to meet the CPCB guidelines for effluent disposal					
Mode of Disposal	Hazardous waste:	Not Applicable					
of waste:	Biomedical waste (If applicable):	Not Applicable					
	STP Sludge (Dry sludge):	Not Applicable					
	Others if any:	Not Applicable					
	Location(s):	52.45					
Area requirement:	Area for the storage of waste & other material:						
	Area for machinery:	- प्यस्य मुद्र'					
Budgetary allocation	Capital cost:						
O&M cost):	O & M cost:	-4/AAU/AF					

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29.Effluent Charecterestics									
Serial Number	Parameters	Unit	Effluent discharge standards (MPCB)						
1									
Amount of e (CMD):	effluent generation	Not Applicable							
Capacity of	the ETP:	Not Applicable							
Amount of t recycled :	reated effluent	Not Applicable							
Amount of v	vater send to the CETP:	Not Applicable							
Membershi	p of CETP (if require):	Not Applicable							
Note on ET	P technology to be used	Not Applicable							
Disposal of	the ETP sludge	Not Applica	ble	7 17					



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	30.Hazardous Waste Details								
Serial Number	Descr	iption	Cat	UOM	Existing	Proposed	Total	Method of Disposal	
1	Not Applicable		Not Applicable	Not Applicable	0	0 0		Not Applicable	
			31.St	tacks em	ission De	etails			
Serial Number	Serial Number Section & units Qu		Fuel Us Qua	Fuel Used with Quantity S		Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases	
1	Not Ap	plicable	(		0	0	0	0	
			32.De	tails of H	<sup>r</sup> uel to be	e used			
Serial Number	Тур	oe of Fuel	N	Existing	fefre	Prop	osed	Total	
1		Biogas	).Z	194 -	37	SX	2		
33.Source o	of Fuel	LAS IN	Bioga	as will be gen actor landfil	nerated as a l and sanitar	byproduct of v landfill	f degradation	n of waste from	
34.Mode of	Transportat	ion of fuel to	site Not A	pplicable		R	6		
		H	F A	. 0 9	30.	A B	E		
		$\langle 0 \rangle$	X	35.EI	nergy	4	B		
		Source of supply :	power	DG Set		た	H		
		During Construction Phase: (Demand Load)		50 kVA					
		DG set as Power back-up during construction phase		DG set					
Der		During Operation phase (Connected load):		402400744					
require	ement:	During Operation phase (Demand load):		<sup>2</sup> MW					
		Transformer:		Not Applica	Not Applicable				
		DG set as Power back-up during operation phase:							
		Fuel used:		Diesel					
Details tension through any:		Details of tension lin through th any:	high de passing de plot if	33 kV					
		Ener	gy saving	j by non-	-convent	ional me	thod:		
Not Applica	ble								
		3	6.Detail	calculati	ons & %	of savin	g:		
Serial Number	Е	nergy Cons	ervation Mo	easures		Saving %			
1		Not	Applicable				Not Applic	able	

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37.Details of pollution control Systems										
Source	Ex	Existing pollution control system					Proposed to be installed			
Not Applicable		No	ot Applicable		Not Applicable					
Budgetary	allocation	Capital c	ost:	Not Ap	plicable					
O&M cost): 0 & M co			ost:	Not Ap	plicable					
38	.Envir	onmer	ntal Mar	nage	ment ]	plan Bı	udgetary	Alloca	ation	
	a) Construction phase (with Break-up):									
Serial Number	Attri	butes	Para	meter	THAT	Total	Cost per annu	m (Rs. In I	.acs)	
1	Environmental Monitoring SO2, No PM2.5, Ammo			Nox, PM10, , SPM, CO, 8 nonia etc.						
		~~~	b) Operat	ion Pl	nase (w	ith Breal	k-up):			
Serial Number	Component Description			Cap	pital cost Rs. In Operational and Maintenance Lacs cost (Rs. in Lacs/yr)					
1	Enviror Moni <sup>s</sup>	nvironmental Monitoring O2, Nox, PM10, PM2.5, SPM, CO, Ammonia etc.				20 8				
2	Odour	Control	2			- 25				
3	Land	scape	Tree Pla Mana	ntaion & gment	z –					
4	Enviroı Trai	nmental ning				15 6				
5	Miscell	laneous 🔾	2.13			15	<u> </u>	5		
39.S	torage	of ch	emicals	(infl	amab	le/expl	osive/haz	zardou	s/toxic	
			422	sub	stance	es)				
Description Status		Locatio	Location Storage Capacity in MT		Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation		
		11.4			0	0	0			
			<b>40</b> .A	ny Ot	her Info	ormation	<b>Tra</b>			
No Informa	tion Availab	le								

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Shri	Apil Diggikar (Mombor Socra

CRZ/ RRZ clearand obtain, if any:	e Not Applicable
Distance from Protected Areas / Critically Polluted areas / Eco-sensiti areas/ inter-State boundaries	<b>re</b> Not Applicable
Category as per schedule of EIA Notification sheet	Not Applicable
Court cases pendin if any	Yes
Other Relevant Informations	NACIACIAN
Have you previous submitted Application online on MOEF Website.	y No aalan
Date of online submission	

3. The proposal has been considered by SEIAA in its 140th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

Specific Conditions:	
Ι	PP to submit their plan for segregation of waste in the city.
II	PP to submit copy of compliance of issues raised during the public hearing.
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.
IV	PP to ensure the compliance of points raised by earlier SEAC in their meeting s 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 to prevent the nuisance to near by 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.
XI	PP shall ensure compliance of MCZMA conditions

**General Conditions:** 

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I	(i)PP to achieve Zero Liquid Discharge ; PP shall ensure that there is no increase in the effluent load to CETP.
п	No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
ш	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.
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.
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).

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VII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.				
VIII	Arrangement shall be made that effluent and storm water does not get mixed.				
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.				
Х	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.				
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.				
XII	Green belt shall be developed & maintained around the plant 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.				
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.				
XIV	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.				
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.				
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.				
XVIII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.				
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				
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 1st June & 1st December of each calendar year.				
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.				
XXIII	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sectorai 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.				
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.				

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- Jui-Page 10 of<br/>11Shri. Anil Diggikar (Member Secretary<br/>SEIAA) 4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune),New Administrative Building, 1stFloor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Shri. Anil Diggikar (Member Secretary SEIAA)

#### Copy to:

- 1. SHRI JOHNY JOSEPH, CHAIRMAN-SEIAA
- 2. SHRI UMAKANT DANGAT, CHAIRMAN-SEAC
- 3. SHRI M.M.ADTANI, CHAIRMAN-SEAC-II
- 4. SHRI ANIL .D. KALE. CHAIRMAN SEAC-III
- **5.** SECRETARY MOEF & CC
- **6.** IA- DIVISION MOEF & CC
- 7. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
- 8. REGIONAL OFFICE MOEF & CC NAGPUR
- 9. MUNICIPAL COMMISSIONER MUMBAI
- **10.** MUNICIPAL COMMISSIONER NAVI MUMBAI
- **11.** REGIONAL OFFICE MPCB MUMBAI
- **12.** REGIONAL OFFICE MPCB NAVI MUMBAI
- **13.** REGIONAL OFFICE MIDC ANDHERI
- **14.** REGIONAL OFFICE MIDC KOPER KHAIRANE NAVI MUMBAI
- 15. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
- **16.** COLLECTOR OFFICE MUMBAI
- **17.** COLLECTOR OFFICE MUMBAI SUB-URBAN



SEAC- 2014/CR-162/TC2 Environment department Room No. 217, 2<sup>nd</sup> floor, Mantralaya Annexe, Mumbai- 400 032. Dated: 5<sup>th</sup> December, 2014

To, Chief Engineer (SWM) 89, Love Grove Complex, Dr. Annie Besant Road, Worli, Mumbai

### Subject: Environment clearance for proposed Modernization of MSW processing and disposal facility of capacity 4000 TPD – 7500 TPD at Kanjur, Mumbai by M/s. Deputy Municipal Commissioner (SWM) MCGM.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 81<sup>st</sup>, 83<sup>rd</sup>, 84<sup>th</sup>, 85<sup>th</sup>, 86<sup>th</sup> meetings and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 61<sup>st</sup> & 76<sup>th</sup> meetings.

2. It is noted that the proposal is for grant of Environmental Clearance for proposed Modernization of MSW processing and disposal facility of capacity 4000 TPD – 7500 TPD at Kanjur, Mumbai. SEAC-I considered the project under screening category 8(b) B1 as per EIA Notification 2006.

Name of the project	Proposed Integrated Solid Waste Management				
	Plant at Kanjur, Mumbai				
Project Proponent	Office of Chief Engineer (SWM)				
Consultant	M/s. Fine Envirotech Engineers				
Accreditation of	QCI NABET List for the proposed category of the project				
consultant (NABET					
Accreditation)					
New Project / Expansion	Modernization				
in existing project/ Modernization/ Diversification in exiting project	EC has already been issued vide letter No. 10-10/2007-IA- III dated 17th March, 2009. Original EC was for processing of 4000 TPD of MSW using windrow composting, construction of sanitary landfill including landfill gas collection system, leachate collection and treatment. Now the project proponent intends to have windrow composting for 1000 TPD and bioreactor landfill for 3000 TPD -6500 TPD. Technology clearance for bioreactor landfill from CPCB/MPCB has already been obtained.				

Brief Information of the	project submitted by	Project Proponent is as-
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If expansion/	Yes. EC dated	17th March,	2009 vide	e letter No. 10-				
Diversification, whether	10/2007 14 14							
environmental clearance	10/2007-1A-111							
has been obtained for								
existing project								
Activity schedule in the	7 (i), B1							
EIA Notification								
Area Details	l otal plot area (sq	. m.): 65.96 h	а					
Estimated conital cost of the	Built up area (Sq.	<u>m.): NA</u>						
Project (including cost	$\mathbf{RS}$ . 400 Crores (10	r next eight y	ears)					
for land building plant								
and machinery								
separately)								
Location details of	Latitude: 19° 7'29	.84"N						
the project :	Longitude: 72°56'	48.77"E						
	Location: Kanjur v	illage						
	Elevation above M	lean Sea Leve	l (metres):	1 m				
Process details /	1000 TPD to 7500	TPD waste w	ill be proc	essed on-site				
manufacturing details								
Note on ETP technology	Leachate generated	d from bioread	ctor landfill	l will be				
to be used	collected separatel	y through inte	rnal pipeli	ne networks and				
	treated on-site via	ETP to meet t	the CPCB g	guidelines for				
Colid mosts many suit	effluent disposal							
Solid waste management	Sr Source	Qty (TPM)	Form (	Composition				
	n		sludge /					
	0		ary /					
	1 Raw water		siurry)					
	treatment							
	plant							
	2 ETP							
	3 Process							
	4 Spent							
	catalyst							
	5 Oily sludge							
	6 Others like	Leachate	slurry					
	battery							
	waste, e-							
	waste etc							
	(please							
	specify)							
	<b>If</b>							
	• IT waste(s) contain any nazardous/toxic							
	then provide quantity disposal data and proposed							
	precautionary measures.							
	What are th	e possibilities	s of recover	v and recycling				
	of wastes?							
	Possible users of solid waste							

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	1									
	• M	ethod	d of di	sposal	of	solid v	vaste	2		
Atmospheric Emissions	Sr no		ollut	ollut Source		ce of E		ission	Concer	ntr
(Flue gas characteristics	-	ant		emis	emission		rate (kg /		ation ir	n
SPM, SO2, NOx, CO, etc.)							hr)		flue ga	.s
									$(g / m^3)$	)
	1	<u> </u>	PM	cons	truc	truction		rginal		
	2	<u> </u>	O <sub>2</sub>	cons	truc	ction	Ma	rginal		
	3	<u> </u>	IO <sub>x</sub>	cons	truc	ction	Ma	rginal		
	4	C	0	cons	truc	ction	Marginal			
	5		)thers							
Stack emission Details: (All	Plant	Sta	ck	Heigh	nt	Inter	nal	Emiss	i Tem	р.
the stacks attached to process	section	no.		from		diam	ete	on rate	e of	
units, oilers, captive power	& units			groun	nd	r top			exha	iust
plant, D.G.				level		(m)			gas	
Sets, Incinerator both for				(m)						
existing and proposed										
activity). Please indicate the										
specific section to which the	- -		<b>.</b>						<b>.</b>	T
e g · Process section DG	Power pla	ant (1	tor init	iial ): I	M	w and	i pot	ential o	t II MW	/
Set Boiler Power Plant	:									
incinerator etc. Emission rate										
(kg/hr.) for each										
pollutant (SPM, SO2, NOx										
etc. should be specified										
Emission standard	Pollutan	ts	Emis	ssion	Pr	opose	d	MPC	B conser	nt
	SPM, C	О,	stanc	lard	ard limit			(mg/	Nm <sup>3</sup> )	
	etc)		limit	t (m /Nm <sup>3</sup>		(mg/Nm <sup>3</sup> )				
			(mg/							
			)							
						-				
Ambient Air Quality Data	Pollutan	t	Pern	rmissible		Propo	osed		Remark	:s
			standa		dard		entra	tion		
					$(in \mu g/m^3)$		<u>g/m²</u>	<u>n')</u>		
	SPM		500	ug / m <sup>3</sup>   185 u		185 u	ıg / n	ท้		
	RPM		100	,				3		
	$ SO_2 $		120 ug / m <sup>3</sup>		$\frac{1}{25} \frac{25 \text{ ug}}{\text{m}^3}$		n			
	$NO_x$		400	$\frac{1000}{100}$ / m <sup>3</sup> $\frac{230}{100}$		23 ug	$\frac{\text{ug}}{\text{m}}$			
<b></b>		. 1	1-21	mg / m	1	< 0.4	mg	/ m		
Energy	Power sup	oply		•		15 IZVI				
	Existing p	nowe	r requi	iremen	11: /	OKV. OKAU	A I dur	ing Or	rational	
	proposed	powe	errequ	interne	m.	2 IVI W	aui	ing Ope	rational	
prase										
	DG sets									
	Number a	nd c	anacity	v DG s	sets	to be	used	(existi	ng and	
	pronosed		-ruen.	, 200				. (eniotii	-0	
	P. 0P0500)									
	Details of	the i	non-co	onvent	ion	al rene	wab	le eners	gy propo	sed
	to be used:									
	1 to be used	ι.								

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	nronose	ed nlot						
	Number and species of trees to be planted							
	Number size age and species of trees to be out trees to be							
	transplanted							
Details of Pollution Control	Sr Existing pollution Proposed to							
Systems:	no.		cont	rol measures	he installed			
	1	Air	Acr	Tor FLA				
		Water	7.2					
	2	Noise						
	3	Solid waste						
Environmental	4	Solid waste		1				
Management plan Budgeter		Capital cost (Wi	th bre	ak up):				
Allocation	•	O&M cost (With	brea	k up):				
Anocation	Sr.			Recurring	Capital cost			
	no			cost per				
				annum				
	1	Air pollution		As per EMP c	costing in EIA			
		control		4				
	2	Water pollution	n					
	3	Noise pollution						
	4	Environment			4			
		Monitoring &						
	5	Realemetion		-				
	5	horrow / minor	1					
		area (If applica	i hla)					
	6	Occupational	010)	•				
	0	Occupational						
	7	Croon holt						
	8	Solid wests		-				
	0	o Soliu waste						
	0	Other (Dis space	ifu	•				
	Total	Ouler (1 is spee	. <u></u>	133 laths	2455 bc			
	Total				2732113			

3. The SEIAA in its 76<sup>th</sup> meeting noted that the project proponent intends to have windrow composting for 1000 TPD and bioreactor landfill for 3000 TPD -6500 TPD. Technology clearance for bioreactor landfill from CPCB/MPCB has already been obtained. The SEIAA further noted that the SEAC-I has considered the proposal in its 81<sup>st</sup>, 83<sup>rd</sup>, 84<sup>th</sup>, 85<sup>th</sup>, 86<sup>th</sup> meetings and recommend the project for prior environmental clearance to SEIAA.

The Authority in its 76<sup>th</sup> meeting also noted the letter dated 18.11.2014 from Municipal Commissioner,MCGM in the context of directions passed by Hon'ble High Court,Bombay in Writ Petition NO 1720 of 2014 and others.

SEIAA in its 76<sup>th</sup> meeting decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

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.

- 2) The road leading to the dumping ground from the Eastern Express Highway shall be fully black topped /concretised so as to avoid generation of dust.
- 3) Generation of Green House Gases (GHG) like methane needs to be controlled so that it does not contaminate the atmosphere. It should be ensured that the methane generated is fully utilised for power generation/flaring and not let into atmosphere.
- 4) The leachate generating from the cells will have to be systematically collected and treated to reduce its BOD levels to allowable limits. Under no circumstance should the leachate be allowed to contaminate the surrounding areas, particularly the mangrove forest on the South Western and Eastern side of the cells.
- 5) The PP shall take all out efforts to control odour nuisance. PP should take steps to measure odour levels using instruments which are currently available. The measurement of odour levels shall be taken at strategic locations depending on the wind direction and situation of habitats. Through regular monitoring it should be ensured that the odour levels are within the acceptable limits and remedial measures like applying odour controlling bacterial consortium to the garbage are taken up as and when necessary.
- 6) To save the mangroves on the south western side of the property which is starved of supply of sea water, the PP should ensure openings of sufficient cross sections in the compound wall which are designed and provided in consultation with the Chief Conservator of Forests, Mangrove Cell.
- 7) Mangrove regeneration efforts should be undertaken at the costs of the PP once regular tidal flushing is assured through measures suggested in point 6 above.
- 8) The staff handling the solid waste should be trained to ensure zero spillage of the garbage during transport. The PP should ensure proper cleaning of the transport vehicles after unloading the garbage at the dumping site.
- 9) No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.
- 10) No additional land shall be used / acquired for any activity of the project without obtaining proper permission.
- 11) The project proponent should ensure that the transportation of the Hazardous wastes to the TSDF conforms to the norms laid down in the Hazardous Wastes (Management & Handling) Rules, 2003.

- 12) The proponent should ensure that the TSDF fulfills all the provisions of Harzardous Wastes (Management & Handling) Rules, 2003 & the design of landfill is as per the guidelines of CPCB with proper leachate collection arrangement.
- 13) The TSDF should only handle the waste generated from the member units. A leachate collection system should be provided to collect the leachates at a collection point. Treatment facility for the collected leachate should be provided. The treated water should be reused as far as possible in the project.
- 14) The proponent should obtained necessary clearance form the Ground Water Authority before initiating the project.
- 15) The depth of the land fill should be decided based on the ground water level at the site.
- 16) Project proponent should prepare and implement an on site emergency management plan.
- 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.
- Project proponent should carryout periodical air quality monitoring in and around the site including VOC, HC.
- 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.
- 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.
- 21) Adequate fire fighting facilities should be installed to handle the fire arising from hazardous chemicals / wastes that are store / processed.
- 22) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- 23) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.
- 24) Proper house keeping programmes shall be implemented.
- 25) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (if applicable) Arrangement shall be made that effluent and storm water does not get mixed.
- 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 Maharastra pollution control board.
- 27) Leq of noise level shall be maintained as per standards. for people working in the high nose area, requisite personal protective equipment like carplugs etc. shall be provided.

- 28) The overall noise levels in and around the plant are shall be kept well within the standards by providing nose control measures including acoustic hoods. silencers, enclosures, etc. on all sources
- 29) PP has to abide by the conditions stipulated by SEAC & SEIAA.
- 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.
- 31) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

#### General Conditions for Construction Phase-

- 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.
- (ii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- (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.
- (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.
- (v) Arrangement shall be made that waste water and storm water do not get mixed.
- (vi) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (vii) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- (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.
- (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.
- (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.
- (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.

- (xii) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- (xiii) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- (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.

#### General Conditions for Post- construction/operation phase-

- Project proponent shall ensure completion of green belt development prior to functioning of MSW processing. Prior certification from appropriate authority shall be obtained.
- (ii) A complete set of all the documents submitted to SEAC&SEIAA should be forwarded to the Local authority and MPCB.
- (iii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- (iv) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (v) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
- (vi) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <u>http://ec.maharashtra.gov.in</u>.
- (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 1<sup>st</sup> June & 1<sup>st</sup> December of each calendar year.
- (viii) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (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 restared until the desired efficiency has been achieve.
- (x) Regular monitoring of the air quality including SOM & so2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.

- (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<sub>2</sub>, 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.
- (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 e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- (xiii) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- 4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
- 5. In case of submission of false document and non compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environmental Clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.
- 6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
- 7. Validity of Environment Clearance: The environmental clearance accorded shall be valid for a period of 5 years.
- 8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
- 9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.
- 10. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1<sup>st</sup> Floor, D-, Wing,

Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

11. This Environment Clearance is issued for proposed Modernization of MSW processing and disposal facility of capacity 4000 TPD – 7500 TPD at Kanjur, Mumbai by M/s. Deputy Municipal Commissioner (SWM) MCGM.

(Medha Gadgil)

Additional Chief Secretary, Environment department & MS, SEIAA

#### Copy to:

- 1. Shri. R. C. Joshi, IAS (Retd.), Chairman, SEIAA, Flat No. 26, Belvedere, Bhulabhai desai road, Breach candy, Mumbai- 400026.
- 2. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune 411014.
- **3.** Additional Secretary, MOEF, 'MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
- **4.** Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
- 5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
- 6. Regional Office, MPCB, Mumbai.
- 7. Collector, Mumbai
- 8. Commissioner, Municipal Corporation Greater Mumbai (MCGM)
- 9. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.

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**10.** Select file (TC-3)

(EC uploaded on 6/12/14