

MUNICIPAL CORPORATION OF GREATER MUMBAI

Dy.Chief Engineer (Solid Waste Management) Project

No. Dy.Ch.E./1562/SWM/Project, Dt. 20.06.2016.

Office of the

Dy. Chief Engineer (SWM) Project

2nd, 3rd & 4th floor,

Bai Padmabai Thakkar Marg,

Kotwadi, Mahim (Shivaji Park),

Mumbai-400016.

Tel. No.: 022-24320665

To,

M/s. Antony Lara Enviro Solutions Pvt. Ltd.

Kanjur Integrated Solid Waste Management Facility,

MCGM Project Office, off Eastern Express Highway,

Opp. JVLR Bridge (East Side),

Near Kannamwar Nagar,

Mumbai - 400 042.

Sub: Uploading of Environmental Statement form –V Compliance reports in respect of the terms & conditions stipulated in the revised Environmental clearance (E.C.) accorded for modernization of MSW processing & disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai

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

Gentleman,

With reference above subject, MCGM has submitted the hard copy of Environmental Statement form –V compliance report to the concern authorities in respect of the stipulated prior Environment Clearance terms & conditions in the revised environmental clearance (E.C) accorded for the modernization of MSW processing & disposal facility of capacity 4000 TPD -7500TPD at Kanjur ,Mumbai. Submitted copies are attached herewith.

You are therefore, instructed to upload the same on your web site at the earliest.

Thanking you.

Encl:- as above .

Yours faithfully,

Badwe
20-6-16

Ex.Eng.(SWM)Project –Kanjur etc

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

Office of the Chief Engineer (SWM)
Love Grove Complex,
89, Dr. Annie Besant Road,
Worli,
Mumbai-400018.
Tel. No.: 022-24945186 / 24955436

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

- Sub: Submission of hard copy of Environmental Statement form V in respect of the stipulated prior environment clearance terms and conditions in the revised environment clearance (E.C) accorded for the modernization of MSW processing and disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai.
- Ref: Revised Environmental Clearance issued by State Level Environmental Impact Assessment Authority (SEIAA) vide no. SEAC-2014/CR-162/TC2 dtd 05.12.2014.

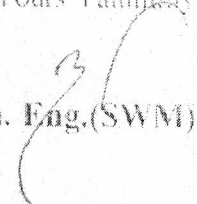
Sir,

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

In this context, the MCGM is hereby submitting the hard copy of Environmental Statement V in respect of the stipulated prior environment clearance terms and conditions in the revised environment clearance (E.C) accorded for the modernization of MSW and disposal facility of capacity 4000 TPD- 7500 TPD at Kanjur, Mumbai.

Submitted please.

Yours Faithfully,


Ch. Eng. (SWM)

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

Office of the Chief Engineer (SWM)
Love Grove Complex,
89, Dr. Annie Besant Road,
Worli,
Mumbai-400018.
Tel. No.: 022-24945186 / 24955436

ANNEXURE

ENVIRONMENTAL STATEMENT FORM-V
(See rule 14)

Environmental Statement for the financial year ending with 31st March 2016

PART-A

- i. Name and address of the owner/
occupier of the industry operation
or process. **Municipal Corporation of Greater Mumbai**
Integrated Solid Waste Management Site,
Off Eastern Express Highway, Near Kannamwar Nagar,
Kanjur (E), Mumbai 400 042.
- Operator- M/s Antony Lara Enviro Solutions Pvt. Ltd.
- ii. Industry category Primary-(STC Code) Secondary- (STC Code) - NA
- iii. Production category – **Municipal Solid Waste Processing**
Total capacity up to 7,500 Tons /Day
up to 6,500Tonns/day by Bioreactor landfill technique
& up to 1,000 Tons /day by Windrows Composting
- iv. Year of establishment -**2009**
- v. Date of the last environmental statement submitted. - **01.08.2015 for Year 2014-15.**

PART -B

Water and River Material Consumption

i. Water consumption in m³/day

Process : i) 8.0 m³/day (Spraying of Bio-Wish and Pitan to minimize the odor nuisance)
 ii) 40.0 m³/day for Leachate Treatment Plant
 iii) 30.0 m³/day for Dust Suppression

Cooling : Nil

Domestic : 151 Nos. of staff and workers × 80 Liters /day= 12.08 m³ /day

i) Name of Products	Process water consumption per unit of products	
	During the Previous financial year April 2014-March 2015	During the current financial year April 2015- March 2016
I. Composted Material (Soil conditioner)	Not applicable (Process of Bio-degradation is not completed hence bio-mining for finished goods is not done.)	Not applicable (Process of Bio-degradation is not completed hence bio-mining for finished goods is not done.)

ii. Raw material consumption

Name of Raw materials*	Name of Products	Consumption of Raw material per unit of output	
		During the Previous Financial Year April 2014 - March 2015	During the Current Financial Year April 2015-March2016
i)Municipal Solid Waste (un-segregated)	Composted Material (Soil conditioner)	16671.974 Tons	989194.599 Tons
ii)Soil for cover	Will be Reused after Bio-mining	795 Tons	74,955 Tons

* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART-C

Pollutants Discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants Discharged (mass/day)	Concentration of Pollutants Discharged mass/volume	Percentage of Variation from Prescribed Standards with Reasons.
(a) Water	Nil	Nil	Nil
(b) Air	Nil	Nil	Nil

PART-D

HAZARDOUS WASTES

(as specified under Hazardous Wastes (Management & Handling Rules, 1989).

Hazardous Wastes	Total Quantity (Kg)	
	During the Previous Financial Year April 2014-March 2015	During the Current Financial Year April 2015-March 2016
1. From Process	NIL	NIL
2. From Pollution Control Facilities	NIL	NIL

Solid Waste

PART - E

	Total Quantity (Kg/Tons)	
	During the previous financial year April 2014-March 2015	During the current financial year April 2015-March 2016
a. From process	NIL	NIL
b. From Pollution Control Facility	NIL	NIL
c. (1) Quantity recycled or re-utilized within the unit.	NIL	NIL
(2) Sold Plastics Non-ferrous	NIL	NIL
	NIL	NIL
(3) Disposed Land filled material	NIL	NIL

PART - F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Hazardous waste is not generated or received at this Integrated Solid Waste Management Site at Kanjur, Mumbai

The Municipal Solid waste is received for Bio-reactor Landfill having characteristics as below

Characteristics of solid waste:

Sr.No	Particulars	Percentage
1.	Debris-sand, silt, stone and bricks	14.93%
2.	Recyclables-Plastics, paper, thermocoal, rubber, leather, glass, metals	19.94%
3.	Wet Organic material- Vegetables market waste, canteen hotel waste, suitable for composting	52.12%
4.	Dry organic material	13.01%
5.	C:N ratio	30

PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

Conservation of natural resources-

Due to Scientific land filling, the emission of green house gases admeasuring 727.35 Tons/Year Methane i.e. equivalent CO₂ 18183.885 Tons /year is controlled and due to controlled flaring of land fill gas smell nuisance is minimized, thus adverse impact on air quality is minimized.

The use of BioWish, special culture for spraying on unloaded MSW at landfill site before spreading and compacting and blanketing with soil cover, the generation of smell nuisance is controlled and enhances the Bio-degradation.

The arrangement of Mist spraying, around MSW unloading area, leachate treatment plant by using diluted Piian solutions helps in minimizing odor nuisance from VOC/Mercaptans/H₂S etc.

Spreading of soil cover blanket on inactive area of MSW helps in controlling odor and enhances biological activity due to the controlled temperature inside MSW dump.

Leachate generated in Bio-composting is recycled and sprayed scientifically inside stacked material for effective, speedy bio-composting and increase in methane gas production.

The leachate is collected in impervious pond. There is fullflaged Leachate Treatment Plant installed on ISWM Project Site, Kanjur where Leachate collected in impervious pond is treated elaboriously. At present the Leachate Treatment Plant is fully working. This will help in conservation/ protection of surface water and ground water in surrounding area.

The peripheral plantation about 2000 numbers of plants along the boundary wall of the project in two rows has helped to minimize the odor problem during the winter season.

Impact of abatement measures on cost is as shown below.

Particular	Total
	Rs in Lac
Gas Flaring	2.61
Biowish	82.23
Misting	12.38
LTP	80.07
Air/Water	25.00
Dust suppression	5.33
Plantation	1.00
Total	203.30

PART - H

Additional measures/investment proposal for environmental protection including abatement of pollution.

Additional plantation of 335 plants is carried out in the periphery of the boundary wall.

Additional misting arrangement at active Bio-reactor landfill and Leachate collection pond is provided to help control odor.

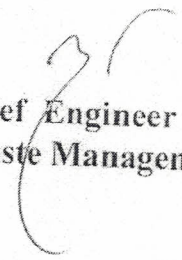
For proper controlled combustion of gases from landfill, arrangement of gases collection with flare system has been erected and started operating. The procurement of Gas Engine to generate 400 kW power is already in progress.

MISCELLANEOUS:

PART -I

Any other particulars in respect of environmental protection and abatement of pollution.

Green house gases emission control and smell nuisance control, recycle of carbon from solid waste in soil, will help in improving quality of the environment.


**Chief Engineer
(Solid Waste Management)**