



TRIALS FOR ODOUR CONTROL AT HADAPSAR GARBAGE DEPOT (08.02.2017 TO 14.02.2017)

LEMMOX

Aim:

To give a better solution to the burning concern for the Cantonment Board with the paradigm shift in approach to the traditional practice of masking odour to removing stench from its source of the garbage, reduction of foul odour from the Garbage Vans moving in the Wards with a hygienic environment in the Van, less annoying smell to Public on the Roads / Wards and Reducing the fly menace from the dump site.

Concerns:

Dump sites are always opposed by the local residents because of the foul odour in the air, continued movement of garbage vehicles, again giving out foul smell which is health hazard for the people surrounding these areas.

A Better programme can be worked out jointly for odour control from the dump sites and for the vehicles transporting wet garbage to and fro from the city to dump site to arrive at a logical solution which could be a win-win situation for the corporation, keeping citizens less complaining and carrying out important solid waste management activity on.

The solution shall be economical, when the overall benefits are considered as mentioned under the observation parameters. Public opposition for the odour surrounding the dump site will be overcome, stench from the air will be reduced and importantly, Solid Waste Management activity can be carried out smoothly.

Present Status:

The dumping site receives garbage continuously from morning 6.00 am till 4.00 pm daily. The site is in the vicinity of the PMC and surrounded by industries and residential areas. The incoming garbage is leveled with JCB's and Bull Dozers. The odour control is consistent and it is a persistent problem of all the Dump Sites.



M/s R

A/01, MANTRI MEMORIES, 410, KOREGAON PARK, PUNE – 411 001

Tel: 020-26151431 / +91 9370096939



Garbage Dump Site:



Proposal:

A proposal was put forward to the CEO, Dr. Yadav of Pune Cantonment Board to foster trials from M/s S R, Pune to for odour control with Biocide (a green chemical) namely LEMMOX – DuPont Proprietary Compound on the collected mixed garbage.

Permission:

A Work Order was issued to M/s S R, Pune and offered to conduct trials between 08.02.2017 to 14.02.2017. The said quantity was supplied and the experiment was initiated on the agreed date at Hadapsar Garbage Depot. Pune Cantonment Board had arranged 2 -3 Vehicle mounted Jet Pressure Machines of 500 litres each for spraying the mentioned Product.

Trials and Monitoring Team:

Mr. Sameer Rupani & Mr. Hiren Pancholi representing M/s S R were present all these days along with Mr. Zende and Mr. Rahul Darade from Pune Cantonment Board witnessed the trials. It was planned to spray on the accumulated Mixed Garbage and Fresh Mixed Garbage with the Jet Machines.

The trial was decided to be administered and monitored by Mr. Rahul Darade and Mr. Chalgire.

Observation Parameters:

1. Reduction of odour from Mixed Garbage
2. Reduction of odour from Wet Waste collected at the Vermi-Compost Area.
3. Reduction of flies



Treatment:

A Biocide – Green Chemical was offered, which is **The Paradigm Shift in Approach** for strong Reduction of Foul Odour from the Mixed Garbage Waste, Wet Waste.

1. 08.02.2017 – Mixed Garbage Waste
 - a. Main Dump Site – Vehicle mounted Jet Sprayer system used – It was effectively executed with the assistance of the personnel on Jet Sprayers – 1 litter of LEMMOX in 500 litres of Water Tank – **50 – 80 tons.**
 - b. Similarly, 4 Vehicles trips of Vehicle mounted Jet Sprayers were arranged, hence consumption per day was 4 litres of Lemmox to cover around 200 tons of Garbage.

Preparation of the Mixture to Spray on Garbage Dump Yard – Day 1







2. 09.02.2017 – Mixed Garbage Waste
 - a. Main Dump Site – Vehicle mounted Jet Sprayer system used – It was effectively executed with the assistance of the personnel on Jet Sprayers – 1 litter of LEMMOX in 500 litres of Water Tank – **50 – 80 tons. Total 3 trips were arranged.**
 - b. One Vehicle mounted Jet Sprayer was arranged to spray on the Fresh Wet Garbage dumped at the Vermi-Compost Area.

Spraying on Garbage Dump Yard & Vermi-Compost Area – Day 2





3. 10.02.2017 - Mixed Garbage Waste

- a. Main Dump Site – Vehicle mounted Jet Sprayer system used – It was effectively executed with the assistance of the personnel on Jet Sprayers – 1 litter of LEMMOX in 500 litres of Water Tank – **50 – 80 tons. Total 3 trips were arranged.** It was witnessed and expressed that the stench has considerably reduced from the Dump site.
- b. 2 Vehicle mounted Jet Sprayer was arranged to spray on the Fresh Wet Garbage dumped at the Vermi-Compost Area, thereby foul reduction was felt and reduction of fly menace also could be experienced.

Spraying on Garbage Dump Yard & Vermi-Compost Area – Day 3



M/s S R

A/01, MANTRI MEMORIES, 410, KOREGAON PARK, PUNE – 411 001

Tel: 020-26151431 / +91 9370096939



4. 11.02.2017 - Mixed Garbage Waste

- a. Main Dump Site – Vehicle mounted Jet Sprayer system used – It was effectively executed with the assistance of the personnel on Jet Sprayers – 1 litter of LEMMOX in 500 litres of Water Tank – **50 – 80 tons. Total 3 trips were arranged.** Officers from Pune Cantonment Board were satisfied with the reduction of foul odour from the Garbage Dump area and the fly menace was reduced as mentioned by the people working at this site.
- b. 2 Vehicle mounted Jet Sprayer was arranged to spray on the Fresh Wet Garbage dumped at the Vermi-Compost Area, thereby foul reduction was felt and reduction of fly menace also could be experienced.



M/s S R

A/01, MANTRI MEMORIES, 410, KOREGAON PARK, PUNE – 411 001

Tel: 020-26151431 / +91 9370096939



5. 12.02.2017 – Day Off the Work
 - a. It was decided to take a day off in mutual understanding.

6. 13.02.2017 - Mixed Garbage Waste & Vermi-Compost Area
 - a. It was found that no foul odour was experienced in the Garbage Dump site, though no spraying was carried out on the previous day as it was a Day Off. It was informed by the Workers at site, about there was good reduction in flies menace too.
 - b. Mixed Garbage was again sprayed with Lemmox as the Garbage shifting activity had been started. Although the Mixed Garbage was moved and leveled, there was no sign of stench experienced at the Site. The similar activity and dosage was continued at the Garbage Dump Site.
 - c. Vermi-Compost Area was filled with Fresh Wet Waste, which was brought from the Ward areas and had good amount of foul odour. Lemmox with same dilution was sprayed to remove the foul odour. It was successfully carried out and the foul odour was eliminated by the end of the day.

Spraying on the Garbage Dump





7. 14.02.2017 - Mixed Garbage Waste & Vermi-Compost Area

- a. It was noticed that there was no stench at the Garbage Dump Area as well as the Vermi-Compost Area, also witnessed by a Troubled Localite along with SRO from MPCB, Ms. Sanjan Jadhav. It was again experienced by the Workers and Officers at site, about reduction of flies menace.
- b. Trials were concluded at 5.00 pm

Vermi-Compost Area





Observations from S R:

A perceptible reduction in odour was reported within a few hours after application. The Officers and Supervisor of the dumping site had many years of experience of dump site, confirmed odour reduction within couple of hours, so agreed by the workers.

With the application of **LEMMOX** on the Garbage Waste, there was considerable and noticeable reduction of flies in the Work area.





Observations from Pune Cantonment Board officials:

Mr. Zende, Mr. Rahul Darade, and Mr. Chalgire also experienced significant reduction of foul odour from the Mixed Garbage Depot during their visits within the Trial period.

The observation was jointly monitored by Mr. Zende & Mr. Darade and our Team of Mr. Sameer Rupani & Mr. Hiren Pancholi, during the Trial period along with the Operations Staff of the Pune Cantonment Board.

Results:

The application of Lemmox for Odour Control was achieved to its best limit. Reduction of Flies menace created a better environment at Work Area. All the parameters set for trials were achieved to the best satisfaction of Cantonment Officials and Site Supervisors.



Relax Moments after Concluding the Trials – Day 7





Relax Moments with Effective and Successful Conclusion of Trials

