

BEFORE HON'BLE NATIONAL GREEN TRIBUNAL

WESTERN ZONE AT PUNE

Execution Application No. 2/2021

In

Original Application No. 52/2015 (WZ)



Bhagwan Bhadale & Others

.....Applicants

V/s

Pune Municipal Corporation & Others

.....Respondents

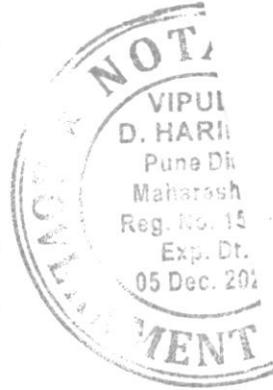
STATUS REPORT

I, Ajeet Deshmukh, Age 48 years, the Deputy Municipal Commissioner (Solid Waste Management Department), Pune Municipal Corporation do state on solemn affirmation as under:

1. That I am working as the Deputy Municipal Commissioner in Pune Municipal Corporation (Henceforth referred to as 'PMC' for the sake of brevity) and I am authorized to file affidavit before the Hon'ble National Green Tribunal on behalf of PMC.
2. This affidavit is filed in continuation with the earlier Affidavit filed on 20th August 2018 and 19 Sept 2018 as Interim report on the progress and status of the work as per the orders of the

Hon. NGT dated 19th July 2018. Also the PMC has filed status report on 6 February 2020 giving status of the work at Uruli depot as well as details of existing MSW processing plants and new MSW processing plants, Bio Remediation / Bio Mining and Scientific Land Fill.

3. The Hon. NGT directed Pune Municipal Corporation to give bank guarantee of Rs. 2,00,00,000 (Rupees Two Crore) to the Maharashtra Pollution Control Board (Henceforth referred to as 'MPCB' for the sake of brevity) as a performance guarantee till the next hearing which took place on 19th September 2019. The same has been issued with Standing Committee resolution no.720, dated 24th July 2018 and the said bank guarantee was submitted to the MPCB on 16th August 2018.
4. The Hon'ble NGT vide order dated 21 June 2021 directed PMC to carry out Environment restoration activities by encashing the Bank Guarantee of Rs. 2 Crores with necessary approvals from the state Pollution Control Board, and to file the status report about the following activities before 26 October 2021:-
 - a) The extent of legacy waste still remaining at the site.
 - b) The timeline by which it will be finally cleared.
 - c) The status of establishment of waste processing plants and their performance in terms of management of rejects arising of waste processing plants.



d) Avoiding dumping as sanitary land filling (SLF).

5. The PMC has taken number of tangible steps as mentioned in interim report and status report submitted earlier in the present case and has made progress on following aspects adhering to the activities scheduled as per action plan submitted to the Hon'ble Tribunal earlier. The PMC has completely stopped dumping of MSW since 2 January 2020 at Uruli Fursungi site and PMC is processing 100% MSW generated within the city

The Details about the above points are as follows:-

(A) **Bio Mining/Bio remediation:-**

- a) The work order of Bio Mining/Bio Remediation was issued to M/s Bhumi Green Energy on dt.1/11/2018 for phase I of Bio Mining. This tender was Design Built own and operate (DBO) basis in which infrastructure and machinery provided by the agency with its own expenditure. The PMC has provided 2 acre land for setting up the plant and tipping fee (processing charges) is paid by the PMC, and electricity bill is paid by the agency. After the plants erection was completed in all respect, the processing of existing legacy waste at Uruli Devachi was started from 18 April 2019. The authorization for Biomining was received from MPCB On 3/03/2020. The PMC has appointed the NEERI (National Environmental Engineering Research Institute)

as the project consultant for the Bio Mining project. The NEERI has taken regular samples of Bio Soil, RDF, Legacy waste, Inert on regular basis to ascertain if all parameters are within the limit and till date all the samples and analysis reports found satisfactory. (The extract of letter showing the analysis by the NEERI is annexed herewith and marked under 'Annexure A')

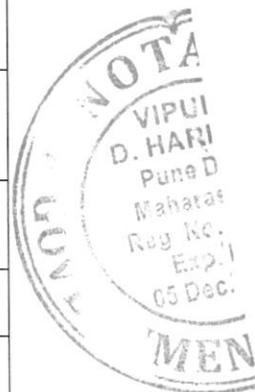


- b) For Bio Mining /Bio remediation process, the area of legacy waste is divided into cells, around 2/3 cells are converted into heap of around 8000-10000 square feet through excavator, Bio Culture is spread over these heaps to contain foul odour and it is turned using excavator after 7/8 days for aeration and after around 15 days the stable legacy waste is taken to processing plant by trucks. In the processing plant legacy waste is separated in size through different size Trommels mills (Size and Density separation) to separate different by products and then it is further processed in the shredders (Reduction of size) to obtain RDF, Bio Soil and other parts.
- c) As per phase I of Bio Mining work, around 9 Lakh MT of legacy waste was considered for processing and till 30 Sept 2021 around 7.80 Lakh MT of legacy waste was processed on war footing. Even during monsoon also the Bio Mining plant was kept operational so as to complete

the phase I in time. Remaining 1.2 lakh will be processed within next 4 months, and Phase I of Bio Mining will be completed. It was anticipated that Phase I Bio Mining period will be complete by September 2024. However phase I is likely to be completed by Feb 2022 well before two years by M/s Bhumi Green Energy.

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- d) For remaining quantity of legacy waste for Bio Mining phase II, the PMC has carried out Contour Survey of total dumpsite where legacy waste was dumped. Total area was ascertained and quantity of legacy waste was estimated, so that exact time frame could be finalized for processing in Phase II. It is pertinent to mention that the legacy waste which will be processed in phase II is already covered with soil to avoid any nuisance to the local citizens and also green grass growth is there on top. Also the Pune Municipal Corporation is regularly spraying pesticides at site. The Lechate is properly collected and treated.
- e) The findings of the contour survey, density of legacy waste, area of remaining legacy waste is as follows:-

Total Area on which legacy waste is yet to be processed and lying at site	25.17 Acres.
Total Volume of legacy waste	12,82,078 Cubic meter
Density of 4 Samples	0.9 to 1.1 Ton per Meter Cube.
Quantum of legacy waste	13,24,911 Lakh MT
Actual quantity of legacy waste	Around 10,50,911 (As the PMC has given soil cover of around 2.74 Lakh MT in between layers and on top Cover)
Time required to process	Around 2.6 Years (From Feb 2022 to Aug 2024)



- f) For remaining quantity legacy waste of Around 10.50 Lakh MT, if processing capacity of around 1400-1500 per day is considered, options will be worked out if fresh tender needs to be called or present working agency will be continued as there is no place remaining for setting up another plant, to process the remaining quantity of legacy waste before Aug 2024. The authorization given by the State Pollution Control Board (MPCB) to M/s Bhumi Green Energy is valid upto Sept 2024. After completion of Phase II Bio Mining, there will not be any legacy waste lying at disposal site.

(B) The status of establishment of waste processing plants:-

a) Presently total generation of MSW in Pune City with newly added 23 villages on 30 June 2021 is around 2100 - 2200 MT per day, which is processed in existing MSW Processing plants/Home composting/ Bulk Waste Generators. And only the Inerts/rejects are taken to the scientific Landfill. The summary of waste generation is as follows:-

Population of Pune City	45 - 50 Lakh
Area of Pune City	516 Sq. KM
Generation of Waste per Day	2100-2200 MT
Total Dry(Inorganic Waste)-	1100-1200 MT
Total Wet (Organic Waste)	900 MT
Total Processing	Around 2100 MT

(23 New Villages are added in PMC Limit vide Government of Maharashtra GR dated 30 Jun 2021, which added around 150 MT of MSW)

b) The status of New MSW processing plants which was submitted before Hon. NGT Court in the affidavit dated 20 Aug 2018 in which PMC submitted the processing capacity of existing plants was 1135 MT per day and the PMC submitted that processing capacity will be increased by another 1750 MT per day by setting up additional processing plants and till date the PMC has increased MSW processing by another 800 MT per day within last two years.. The status of new plants is as follows:-

Sr. No.	New Processing Plant			Operational Capacity (MT per day)
	Location	Capacity (MT per day)	Scheduled Date Of Commissioning	
1	Vadgaon sheri	25	Operational (May-2019)	25
2	Adarsh,Ramtekadi	25	Operational (Oct-2018)	25
3	Keshav nagar	50	Operational (Dec-2019)	50
4	Sukhsagar Nagar	50	Operational (Nov-2020)	50
5	Keshav Nagar	100	June 2019 (Oct-2020)	100
6	Disha Ramtekadi	350	Work of Erection is in Progress	0
7	Ambegaon (Proposed plant at Lohegaon and Ambegaon with 100 MT capacity erected at Ambegaon with 200 MT per day Capacity	200	Plant was operational from 1 Sept 2020 but it was burnt by local citizens on 1 Nov 2020	0

8	Uruli Depo	200	Operational (July-2021)	250
9	Pune Bio Energy Ramtekadi Hadpasar	750	Operational as MRF with Capacity of 300 MT (Jun- 2021)	300
	Total	1750		800
			Old Processing plants Capacity	1135
Total Processing of MSW by the PMC				2135

c) The Pune Municipal Corporation has stopped dumping of untreated waste at Uruli depo from 2 January 2020. The PMC also considered MSW generation within the Pune City limits for next 10 Years.

The Summary of MSW processing is as follows:-

Type of Processing	Quantity in MT per day	Remarks
Wet Waste Processing	400	Processed with in wet waste plants.
Dry Waste Processing	1100	Processed with in Dry waste plants.
Bulk waste Generator Processing (Wet)	150	Big society, big hotels and other firms producing more than 100 KG wet waste are processing their wet waste within their premises
Home Composting (Wet)	75	Single house, row house, bungalows.

Recycled through SWACHH (Dry)	110	Around 4000 swach rag pickers are collecting segregated recyclable material
Farmers (Wet)	300	Temporarily segregated wet waste is given to Farmers free of cost without plastic, till the proposed plants are operational/ capacity of existing plants enhanced. Also PUNE MUNICIPAL CORPORATION has called EOI for setting up 150 MT Wet waste plants. Composting is done at the farmers respective farm site, through Pits ,Bio Culture Spraying etc.
Total	2135	

(C) Scientific Landfill:-

The Inerts / Rejects generated within the MSW Processing plants of around 300 -350 MT per day are taken into the scientific Land Fill site Location - Survey Number 191 to 195, Uruli/Fursungi Pune.

- 1) Size in Acre - 8 Acres
- 2) Quantity of Reject disposed per day - around 400- 500 MT per day
- 3) Operational Since - From 23 Nov 2020
- 4) Till Aug 2021 around 90,000 MT Rejects were disposed in SLF
- 5) Capacity of SLF - 3,65,000 MT

The PMC has stopped dumping of untreated MSW at site since 2 Jan 2020.

(D) Utilization of Bank Guaranty of Rs. 2 Crore for environmental Work:-

In accordance with the Hon. NGT order dated 21 June 2021, the Pune Municipal Corporation has drafted the plan for utilization of Rs. 2 Crore amount for restoring the environment and following works to be undertaken by the Pune Municipal Corporation :-

- 
- a) Extra arrangement for collection and treatment of leachate - Rs.80 Lakh.
 - i) Existing leachate Processing Capacity 100 Cum/day,
 - ii) In Rainy Season Need Extra Processing Capacity of 50 Cum/day
 - iii) For Extra Processing and Collection Network Required of Laying 600 mtr long leachate Line
 - b) Plantation of trees in remaining 4 Acre area and associated working arrangement for water storage tank, pumping and drip lines etc - 50 lakh
 - i) Existing Tree Plantation Area 12 Acre
 - ii) Proposed Tree Plantation Area 4 Acre
 - c) Solar Panels Work - 55 Lakh
 - i) Total Load Required at Uruli depo for Street Light & Office space is around 45-50 KW,
 - ii) Proposed Output From Solar Panels - 1 KW from 3 solar panels, for 50 KW around 150 solar panels will

be installed, and around 10,000 square feet land will be required for setting up of solar panels.

d) 1000 litre Sprinkler Van for Dust Management & Fogging - 15 Lakh.

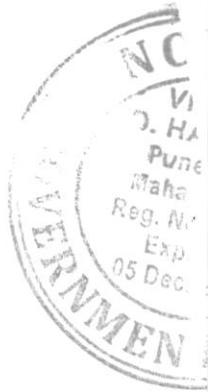
i) The Pune Municipal Corporation has send this work proposal for approval of the state pollution control board (MPCB) on 4 Aug 2021 , however the MPCB has asked for further details about works to be undertaken for restoring of the environment. The Pune Municipal Corporation has sent further details to the MPCB on 23 Sept 2021. However the reply of the MPCB is yet to be received.

iii) Notwithstanding the above, the Pune Municipal Corporation has already commenced following two works at the Uruli/ Fursungi disposal site:-

- a) Laying of another lechate line for collection of lechate.
- b) Commenced operations of lechate treatment plant.
- c) Plantation of around 4000 tress.

Once the approval of the MPCB is received, the other two works will be undertaken immediately.

6. I respectfully say that, from the above mentioned facts it is clear that Pune Municipal Corporation is implementing and expediting the conditions laid out in SWM Rules 2016



aggressively and most responsibly trying to complete the waste processing projects in a timely manner and rigorously following all directions issued from time to time by the Hon'ble NGT. Therefore, we humbly pray that the present Execution Application may please be disposed of.

Whatever stated above is true and correct to the best of knowledge, belief and information and hence I have signed on this 22. Oct 2021 at Pune.

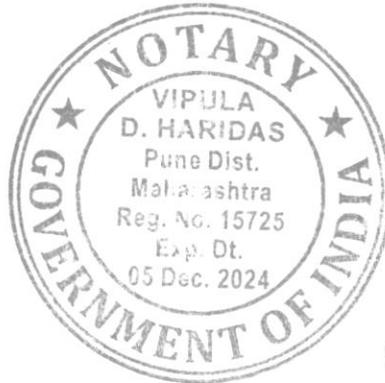
Ajeet Deshmukh

Ajeet Deshmukh
Deputy Municipal Commissioner
Solid Waste Management
Pune Municipal Corporation



I know the Affiant

Rajendra
Advocate

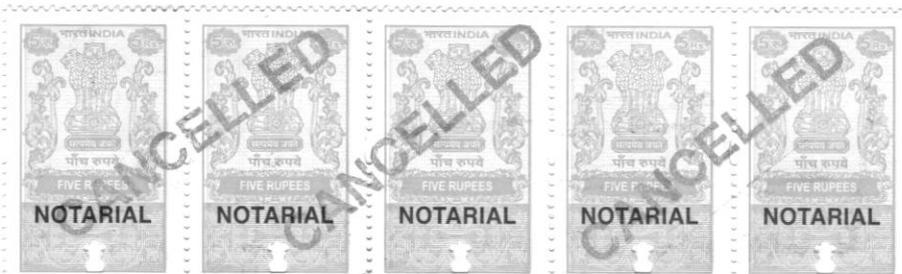


BEFORE ME

Vipula D. Haridas
VIPULA DHONDIRAM HARIDAS
ADVOCATE & NOTARY
GOVERNMENT OF INDIA
Ganajay Society, Kothrud, Pune-38.

NOTED & REGISTERED
AT SR. NO.: 290/2021

23 OCT 2021



Verification

I, Ajeet Deshmukh, the above named affiant/deponent do hereby verify that the contents of the aforesaid paragraphs are true and correct to the best of my knowledge and belief and nothing is concealed there from. Verified at Pune on this22.....day of October 2021.

Rgarg

I know the deponent.



Ajeet Deshmukh

DEPONENT





Swm Admin <swmadmin@punecorporation.org>

Report

GANESH R. KALE <gr_kale@neeri.res.in>
 To: swmadmin@punecorporation.org
 Cc: Rajendra Tidke <rajendrat34@gmail.com>

Wed, Oct 20, 2021 at 1:12 PM

To,
 Head,
 Solid Waste Management Dept.
 Pune Municipal Corporation,
 Pune.

Subject: Biomining sample analysis

Dear Sir,

This letter is to give a status update of the project of "Characterization of bio-mining samples in Urali Devachi-Pune".

I have been making regular visits to the PMC Biomining facility in Urali Devachi-Pune for sample collection. The samples collected from the site are regularly analyzed for physical as well as chemical analysis. The results are sent to PMC. So far the characterization results are normal and hence the standard disposal techniques have been recommended for the bio-mining products generated. During COVID lock-down, Web-meetings were carried out and samples were collected by PMC engineers and sent.

It is observed that the Bio-mining process can separate different products such as:

1. Stones and C&D waste,
2. Glass and ceramic type material,
3. Metal (magnetic and non-magnetic),
4. Footware - shoes/ chappals, etc.
5. RDF type material,
6. Bio-soil,
7. Rejects.

The samples collected from the Biomining plant are good ensuring excellent separation of the Legacy waste. The Separation process is detailed which allows better separation of Legacy waste components. Process trouble-shooting is easy and few breakdowns were observed. The Legacy processing and disposal is scientific.

Further, the products such obtained are disposed regularly in proper order:

RDF is sent to Cement plants,
 Biosoil is used for filing barren land and some quantity for spraying in farms,
 Glass and ceramic type material, Metal (magnetic and non-magnetic), etc. is sent for respective recycling plants,
 Stones and C&D waste is sent to fill the low lying areas,
 All Rejects are sent to PMC's Landfill.

There is huge Leachate generation which is recommended to be collected and processed in the Leachate Treatment facility. If the present Leachate Treatment facility is not sufficient, the capacity of Leachate treatment can be increased immediately.

It was also observed that even though the rejects are below 10%, they can be further manually checked and rags can be removed, making the Bio-mining process better.

The overall Bio-mining and Land reclamation work is technically progressing well. However, during the site-visits, it was seen that there is still huge Legacy waste remaining. It is required that the work may be continued without any break, to ensure land reclamation at the earliest as per the NGT order. It is observed that the reclaimed land is being utilized by PMC for construction of new SLF and also MSW processing plants. These ventures will help Scientific Waste processing and help reduce the Solid Waste accumulation / pollution.

The sampling, analysis and recommendation work will continue till the end of the Bio-mining project.

Thanking you,

G R Kale

Dr. Ganesh R. Kale
Principal Scientist,
Chemical and Hazardous Waste Management Division (former SHWMD),
CSIR-National Environmental Engineering Research Institute,
Nehru Marg, Nagpur - 440020.
Ext. 393

On 31-08-2021 17:24, swmadmin@punecorporation.org wrote:

[Quoted text hidden]

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Dr. Ganesh R. Kale
Principal Scientist,
Chemical and Hazardous Waste Management Division (former SHWMD),
CSIR-National Environmental Engineering Research Institute,
Nehru Marg, Nagpur - 440020.
Ext. 393

