

2P

24.10.16

DA 199/2014

NOTE ON VISIT DATED 24.10.2016

BHALSWA

On 22 Oct 2016 , the Applicant submitted DVDs of bioremediation work at Nagpur, bringing down 6 lac tons of mixed old waste, covering 10 acres 40 ft high and forming it into 200 windrows within 6 weeks, with complete control of flies and smell and drastic reduction in leachate generation.

At the hearing on 24th October, the Applicant invited a visit to Gurgaon where similar bioremediation is going on. This Hon'ble Tribunal then asked if the Applicant could do the same for Bhalsawa and directed her to visit the dump and report next day 25th October.

On 24th afternoon, Applicant met four North DMC officials and described the work of Mrs Raagini Jaain, an expert waste services provider with 20 years experience of solid and liquid waste management, in bringing down to ground level in windrows the open dump at Nagpur of which a DVD video has been provided to this Hon'ble Tribunal. She invited them to visit Gurgaon where similar work is in progress since 13th October 2016 for control of leachate, flies, stink and height reduction of a high dump of 70 ft covering 13 acres. This waste mountain has been reduced to half its original height in 12 days and may take 2 months for completion. Work can proceed at double the pace, depending upon the number of earthmoving heavy vehicles deployed along with trained drivers and spraying of a powerful proven bioculture, which is the secret of success.

The North MCD officials said they were interested in a short-term solution and pilot demo but unfortunately expressed their inability to visit or to depute anyone to visit Gurgaon: at short notice to understand the Before and After situation while Raagini Jaain is available there upto 27 October 2016. They shared their longterm plans submitted to the hon Supreme Court in SMW (C) No 1 of 2015.

The applicant visited Bhalswa dump with Mr K P Raja, Executive Engineer. Compared to 6 lac tons waste bioremediated at Nagpur and 19 lac tons at Gurgaon, there are 140 lac tons at Bhalswa since 22 years.

Applicant is very confident of success at Bhalsawa and can definitely assure and monitor the expert services of Raagini Jaain for a pilot bioremediation project of say 8 lac cubic meters (about 4 lac tons) at any site of her choice for control of fire, smell, flies, leachate treatment and waste stabilizing to make place for a demo windrowing of upto 5% of the daily incoming fresh waste (about 150 tpd, depending on space) out of total 2800-3000 tons sent to Bhalswa.

However a precondition as at Gurgaon is for supply of drone videography of the entire site to enable selection of the best site to begin creating usable space.

Within a week thereafter, a site visit will be followed by a proposal submitted to NoMCD and the hon NGT for delivery of the following outcomes, only at the pilot location:

- 1, Control of smoke and fires, plus training to all staff to do the same everywhere.
- 2, Control of smell and flies at the selected site
- 3, Treatment of leachate at that site and also of all leachate at the final outflow point
- 4, Training of dumpsite staff and lorry drivers in good waste-management practices
- 5, Reduction of leachate and methane generation at the site by promoting aerobic decomposition in windrows
- 6, The resulting material, with or without screening out the fines, can be made available as low-moisture processed material eligible as feedstock for thermal waste to energy projects, unlike fresh waste which has 60-70% moisture. However its economic viability will depend on its calorific value and the amount of inerts which have been used over the years (and unfortunately planned even now) as cover material.
- 7, There will be a little volume reduction of old waste, but not as much as the 40% volume reduction which windrowing can achieve in fresh waste, mixed or otherwise.
- 8, What cannot be controlled by bioremediation is the enormous amount of fine dust at Bhalswa which is ten times more than the smoke which it resembles. It rises in dense white clouds from the flour-like road surface with every passing garbage truck. The cheapest solution may be to convert it to a soil-cement road or to cover it with coarse material gravity-screened out from the bioremediated waste or with malba free of fines.

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