

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 519/2019  
WITH  
Original Application No. 386/2019

News item published in "The Times of India" Authored by Jasjeev  
Gandhiok & Paras Singh Titled "Below mountains of trash lie  
poison lakes"

With

Centre for Wildlife and Environment Litigation

Applicant

Versus

Union of India & Ors.

Respondent

Date of hearing: 16.03.2020

Date of uploading of order: 23.03.2020

**CORAM:**

**HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

**ORDER**

1. This order is being passed in continuation of order dated 19.11.2019. The issue for consideration is the disposal of 'legacy' waste dumped at Bhalswa, Ghazipur and Okhla dumpsites in Delhi where huge garbage has accumulated over the period of time adversely impacting public health and environment, which requires expeditious scientific and environmentally safe disposal as per applicable rules.
2. We may note the earlier proceedings in the matter. O.A. No. 519/2019 was taken up in view of a news item published in "The Times of India" authored by Mr. Jasjeev Gandhiok & Paras Singh and titled "Below Mountains of Trash lies Poison Lakes" reporting that the

said dumpsites were resulting in huge water contamination. The same were not being scientifically managed. The leachate was getting discharged into soil and also slipping to the River Yamuna, affecting its water quality. Accumulation of huge waste at the said sites posed a serious danger to the environment, life and public health in the area. The Solid Waste Management Rules, 2016 (SWM Rules) lay down statutory mandate for the manner of disposal of such old dumpsites but the same was not being done. Vide order dated 30.05.2019, this Tribunal directed North, East and South Delhi Municipal Corporations to furnish their respective action taken reports. The Commissioners of the said Municipal Corporations were required to remain present in person.

3. Vide order dated 17.07.2019 it was observed:-

“.....5. The action taken report of the North Delhi Municipal Corporation (North MCD) is that detailed project report (DPR) has been prepared on 08.03.2019 which has three options. One of the options is “leaving the site as it is”, which is completely out of question. Second option, bio-mining for 8.8 million cubic meter waste which is said to require a period of 15 years and cost of Rs. 1178 crores. The third option is of capping. Clause-J of Schedule-I of the SWM Rules provides for reduction of waste by bio-mining and waste processing followed by placement of residues in new landfills or capping with appropriate measures. According to the Commissioner of North MCD, closure and capping of the dumpsites, without bio-mining/bio-remediation is a better option to save money and to protect environment. The report relies upon a review of the DPR by a professor from the IIT, Delhi with regard to *Bhalswa* landfill.

6. According to the report dated 09.07.2017 of East Delhi Municipal Corporation (EDMC), it is stated that there was a proposal to utilize the inert material as filling material in the widening of national highways. Some of the dumpsite gas has been extracted and flared in association with GAIL. A pilot project was conducted for bioremediation of 100 TPD for both fresh and legacy waste. Experts were consulted in regard to slope stabilization and treatment of leachate. EDMC has started decentralized waste management processes with the help of urban development fund from the Govt. of India to the tune of Rs. 70 Crores.

7. The Counsel appearing for South Delhi Municipal Corporation (SDMC) has handed over, during the hearing, their copy of action taken report. According to the action taken report furnished by the SDMC, it consulted experts and executed some work of sterilizing the legacy waste at *Okhla* Phase-I.

8. In O.A. No. 386/2019, the grievance raised was that unscientific capping process of the *Bhalswa* legacy waste dumpsites was against the SWM Rules and not conducive to the environment. This Tribunal, vide order dated 04.04.2019, sought opinion from a Committee comprising CPCB and Dr. G.K. Pandey, former Expert Member of this Tribunal, who is known to have expertise in the subject. Report dated 31.05.2019 has been submitted by the said Committee after visit to the *Bhalswa* site, visit to Bawana Waste Processing Plant and meeting with the North Delhi MC officers. Presentation was made before the said Committee by concerned officers of the North MCD as well as experts hired by the said Corporation. Some of the observations of the said Committee are as follows:

*“3.5 The Cost indicated in the DPR for bioremediation is Rs.1178 Crores. However, as per CPCB Guidelines for Disposal of Legacy Waste, the cost of bioremediation and bio-mining of dumpsite is in the range of Rs.400-700/Cum which works out in the range of Rs.440 - 560 Crore. The actual cost shall be further reduced, if cost of land recovered by means of bio-mining/ bioremediation is factored in. Hence the cost indicated by NDMC seems to be very much on the higher side.*

*Similarly, the other issues raised by NDMC need detailed assessment.*

**3.6 As per CPCB Guidelines, capping of dumpsites is not advisable as it would lead to generation of more leachates and methane/landfill gas generation which would further contaminate the already heavily contaminated Groundwater (Ground/surface water reports at Annexure VIII to X).** Further as per CPCB Guidelines, gas extraction is very difficult and inefficient when attempts are made to insert suction pipes into dumped waste instead of before dumping begins. Poor success at Gorai capping led to the forced refund by Mumbai city of Rs.15 crore advance carbon credits. Taking into consideration the present height (65 m) of the landfill, extraction of leachate & gas will be even more difficult.

3.7 In addition, in the present tender documents, there is no provision for onsite treatment of leachates and utilization of gas generated as also decontamination of ground water/bio-remediation have not been envisaged in spite of the fact that ground and surface water are heavily polluted as reflected by analysis of ground water



and surface water reports given in the DPR. The details of analysis reports are given below:

(a) Table-I (Annexure-VIII) pertains to ground water sampling report of hand pumps which has indicated that average levels of BOD (2.4 mg/ l), COD (28.0 mg/ l), TDS (2783 mg/ l) are more than the prescribed acceptable limit of zero for BOD, zero for COD and 500 mg/ l for TDS. Besides, the average high level of Residual Free Chlorine of 208.7 mg/ l (limit 0.2mg/l), Chlorides 769.7 mg/ l (limit 250 mg/ l), Sulphate 228.2 mg/ l (limit 200mg/l), Alkalinity 508.7 mg/ l (limit 200 mg/ l), Lead 0.2 mg/ l (limit 0.01 mg/ l) and Nickel 0.1 mg/ l (limit 0.02mg/l) indicates that drinking water from the hand pumps has been significantly polluted and is not drinkable.

(b) Table-2 (Annexure-IX) reflects ground water analysis report pertaining to 18 boreholes. The average levels of BOD (93.11 mg/ l), COD (783.72 mg/ l) and TDS (6841.83 mg/ l) were found more as against the acceptable limit of zero for BOD, zero for COD and 500 mg/ l for TDS indicating that ground water has been significantly contaminated due to percolation of leachates from the landfill.

(c) Table-3 (Annexure-X) pertains to analysis of surface water taken from Bhalsawa drain and Bhalsawa lake. The analysis report indicates that the average levels of BOD (68.40 mg/ l), COD (547.51 mg/ l) and TDS (4465.23 mg/ l) were found higher as against the permissible limit for drinking water for BOD (0), COD (0) and TDS (500 mg/ l) respectively indicating that surface water is significantly polluted due to discharge of untreated leachates. Besides, the average levels of residual free chlorine (179.60 mg/ l, limit 0.2 mg/ l), Iron (0.53 mg/ l, limit 0.3), Chlorides (13119.04 mg/ l, limit 250), Calcium (188.99 mg/ l, limit 75), Alkalinity (1285.96 mg/ l, limit 200), phenolic compound (0.07 mg/ l, limit 0.001), Lead (0.15 mg/ l, limit 0.01), Mercury ( 3.75 mg/ l, limit 0.001) and Nickel (0.15 mg/ l, limit 0.02) were found high indicating that surface water is very polluted and Bhalswa lake is not meeting the criteria for drinking water as toxic elements like phenolic compounds including heavy metals are present in the lake water. It is quite possible that the animals (buffalos, cows etc.) may be drinking lake water and as such the possibility of toxic chemicals and heavy metals entering the food chain cannot be over ruled. Therefore, lake water should not be used for drinking purposes by the human beings and the animals.

(d) Table-4(Annexure-XI) leachate emanating from the BLF indicates that BOD (500 mg/ l), COD (2279 mg/ l) & TDS (19000 mg/ l) levels are higher in comparison to leachate standards of BOD (30 mg/ l), COD (250 mg/ l) & TDS (2100 mg/ l) as prescribed in SWM Rules, 2016.

**3.8 There are various technologies available for treatment of MSW such as composting, bio-methanation, incineration coupled with power generation, gasification, pyrolysis, plasma arc gasification, molten salt oxidation (non-flame thermal process for destroying organic materials) etc.**

#### **4.0 Recommendations**

i. NDMC should do a detailed assessment of the alternative technological options including Bio-mining / Bio-remediation for Bhalswa dumpsite.

ii. Niti Aayog has constituted a Committee to identify the technologies in Solid Waste Management for Cleaning up of Delhi (Annexure XII). NDMC may consider the outcome of this committee's report in assessing options for Remediation of Bhalswa dumpsite.

iii. In case, capping of Bhalswa Dumpsite (which is not advisable as per CPCB Guidelines as mentioned at point 3.6 above) is proposed as the only option due to time and space constraints as also technoeconomic reasons, the DPR should be revisited especially to look into the following conditions:

(a) Bio-mining should be undertaken to the maximum extent possible without having significant adverse environmental impacts on the adjoining population.

(b) Bio-remediation/decontamination of surface, ground water and soil should also be undertaken in the affected areas.

(c) No dumping of MSW/Garbage (about 2000 tons/day) shall be done at Bhalswa dumpsite and alternate arrangements for disposal of this waste to be made by NDMC on priority in accordance with S WM Rules, 2016.”

9. We may note that as per information furnished during the hearing, the extent of legacy waste and the land covered by the three dump sites are as follow:

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|-------------------------|--|
| <b>i. East Delhi</b>    | <b>Ghazipur dumpsite- 1.4 crore metric tonne approx. on 70 acres of land</b> |
| <b>ii. North Delhi</b>  | <b>Bhalswa dumpsite - 80 lakh metric tonne approx. on 36 acres of land</b>   |
| <b>iii. South Delhi</b> | <b>Okhla dumpsite – 55-60 lakh metric tonne approx. on 46 acres of land</b>  |

10. Information made available from Indore Municipal Corporation is as follows:



*“For screening purposes, trommels of 30 MT per hour capacities, are available in the market on rental basis. Necessary vehicles and equipments (like excavators, back-hoe loaders, dumpers, vibratory screens for dust removals and bundling machines for Refused Derived Fuel) are required for bio-mining and bio-remediation purposes. Normally, 20 trommels along with necessary machines and tools can process 5000 MT of legacy waste on daily basis in two shifts operation. Recently, Indore has successfully completed bio-mining/bio-remediation of 15 lakh MT legacy waste in 1 year. Rent for trommels paid by Indore to various machine manufacturers were in tune of Rs. 7.25 Lakh per trommel per month and bio-mining/bio-remediation process was followed as mentioned in the latest guidelines issued by the CPCB. Normally, the per metric ton cost of bio-remediation process of legacy waste will range between Rs. 300- 450 depending upon area to area.*

*In legacy waste sites where local bodies have space constraints can initially start the bio-mining/ bio-remediation options through mobile trommels.*

*Similarly, Ahmedabad Municipal Corporation has started the bio-mining/bio-remediation at Pirana dumping site and they are paying Rs. 6.40 Lakh per trommel per month.*

*The trommel machines are very simple in fabrication and can be fabricated as per the design mentioned in CPCB guidelines by local fabricators.*

*Instead of having multiple machines, it is advisable to have a single trommel of 16-20 MM bore size screen and reject conveyer should have blower. This will reduce the cost due to multiple trommeling. Also, to utilise the Refused Derived Fuel (‘RDF’) recovered from this process should be made free from dust. Thereafter RDF can be bundled and sent to waste-to-energy plant and cement industries for further utilisation.*

*The recovered soil from the bio-mining/bio-remediation process can be used in filling the dead mines so as afforestation in the area can take place. Secondly, it can be used by National Highway Authorities/ State Road construction agencies and local bodies in sub-base filling.*

*Local bodies can install number of trommels at bio-remediation site based on availability of land and with time they can increase the number so as to complete the process as soon as possible.*

*Once the bio-mining and bio-remediation process starts, dumping of fresh garbage should be stopped at the legacy waste dumpsites, local bodies may identify a separate piece of land to process the fresh garbage through various processes mentioned in Municipal Solid Waste Management Rules, 2016 and guidelines issued by the CPCB. ”*

11. In-Charge, Member Secretary, CPCB has similar view. Chief Secretary, Delhi suggests that a functional model may be preferred to any other option which has not been experienced on the ground.

12. We find merit in the model followed by Indore Municipal Corporation, the views of Member Secretary, CPCB and the Chief Secretary, Delhi. This opinion is also in consonance with the SWM Rules as well as the CPCB Guideline on Legacy Waste<sup>1</sup> and recent orders of this Tribunal. A conjoint reading of Rule 15 (zj), Rule 15(zk) and Clause J of Schedule I of the SWM Rules leaves room for capping of old dump sites, only in cases where there is “*absolute absence of potential of bio-mining and bio-remediation*” and not in cases of present nature where bio-mining and bio-remediation is possible. **In cases of present nature, both *ex-situ* and *in-situ* bio-mining options can be exercised according to Indore Municipal Corporation, which is not only environmentally safe but cost effective.** Though plea for capping legacy waste dumpsites is being raised frequently as a convenient mode, there may be hardly any situation when bio-remediation is not possible. **The option of capping of legacy wastes, which has huge environmental and health consequences, in practical terms is no option at all, except for inert waste, which again is to be disposed in a scientific secured landfill.** According to Indore Municipal Corporation, bio-mining as a treatment option is environmentally safe and does not require recurrent costs on account of leachate treatment in Effluent Treatment Plant (ETP). Furthermore, only peripheral leachate can be taken to the ETP and leachate percolating underneath the dumpsite contaminates ground water and water in subterranean space. Bio-mining as a treatment option in comparison to engineering capping of legacy wastes, is not only environmentally safe and holistic but also meets the yardstick of fiscal prudence and propriety.”

4. The matter was thereafter considered on 19.11.2019 in the light of report dated 13.11.2019 filed by NCT of Delhi as follows:

“6. *As per the statistics furnished during the hearing, about 1500 tones per day (TPD) of garbage is being bio-mined as against addition of more than 5000 TPD in NCT Delhi.*

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<sup>1</sup> Guidelines for Disposal of Legacy Waste (Old Municipal Solid Waste), Central Pollution Control Board, February 2019



*Since the problem is continuing, there is need to increase the capacity suitably so that the garbage is cleared and land becomes available for a public purpose.*

7. *Since we are informed that at Bhalswa, capacity will be shortly increased to 3300 TPD. The capacity at Okhla and Ghazipur dumpsites also needs to be enhanced, the capacity for bio-mining may be further enhanced, at all the three sites. An action plan be prepared and implemented so as to clear the legacy waste in an expedited timeline but within one year as earlier directed. It needs to be ensured bio-remediation is carried out rather than mere mechanical separation. The CPCB may verify that waste clearance is as per norms and give a report. **The implementation of action plan be monitored by the Chief Secretary, Delhi. The Chief Secretary, NCT Delhi may undertake monthly monitoring of the progress and take action if there is default in terms of speed of progress. Failure to comply may result in coercive action, including stoppage of salaries and entries in ACRs of the concerned erring officers.***
8. *The administrative difficulties need to be resolved at the administrative level by coordination with the concerned authorities. The urgency in the matter is also with a view to prevent air pollution and adverse health impact.*

*The status as on 15.01.2020 may be placed on record by 20.01.2020. A copy of this order be sent to the CPCB by email.*

*List for further consideration on 05.02.2020.”*

5. In pursuance of the above, following reports/responses have been filed:
  - i. Report of CPCB filed on 31.01.2020 on bio-remediation of Bhalswa, Gazipur and Okhla dumpsites of Delhi in the matter of O.A No. 519 of 2019; titled news item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh titled "Below Mountains of Trash Lie Poison Lakes" with O.A No. 386/2019 Centre for Wildlife and Environment Litigation vs UOI & Ors.
  - ii. Compliance report on behalf of Department of Urban Development, GNCT Delhi in terms of order dated 19.11.2019 filed on 20.01.2020.



- iii. Status report regarding bio-mining/remediation of legacy waste at sanitary landfill Okhla (Dump Site) in South Delhi Municipal Corporation (SDMC) filed on 21.01.2020.
  - iv. Affidavit on behalf of the respondent North Delhi Municipal Corporation (NDMC) with respect to status report filed on 30.01.2020.
  - v. Affidavit filed on 13.03.2020 on behalf of the respondent North DMC with respect to status report.
6. We may consider the above seriatim.
7. The report of the CPCB, inter-alia, is as follows:

*“Table 1: Overview of the CPCB observations made during inspection of three Dumpsites in Delhi*

S. No	Name of the dumpsite	Status of legacy waste management	Quantity of legacy waste being processed (TPD)	Total quantity of legacy waste processed 14-1-2020	No. of trommels operational	Compliance to CPCB guidelines	Annexures of inspection report
1	Ghazipur	Under progress	600	25000 MT	2	Not complying	Annexure-B
2	Okhla	Under progress	250	19000 MT	1	Not complying	Annexure-C
3	Bhalsawa	Under progress	2200	65000 MT	9	Not complying	Annexure -D
Total			3050 T	1,09,000 MT	12		

i. **Stabilization of Waste:**

*Waste stabilization through bio-remediation is being practiced only at Okhla dumpsite. Windrow method has been adopted and bio culture is being sprayed over windrows to stabilize the waste prior to screening at this site.*

***However, fumes were being generated from waste being transferred to trommel, indicating that stabilization of waste was not complete. In the remaining two sites at Bhalsawa and Ghazipur, no waste stabilization is being done and the legacy***

**waste is just being excavated and spread for 2-3 days prior to screening. No bio culture used in this process at these two sites.**

**ii. Screening of Waste:**

**The screening of waste is currently not as per the CPCB guidelines in all the three dumpsites. Only one screen size (30 mm), instead of at least 2 screen sizes (30 mm and 4-6 mm), is being used at these sites. It was observed that the under 30 mm fraction contained a lot of plastics and inerts (Photo 4c of Annexure B), which restricted its utilization for beneficial purpose, including its use as a soil enricher. A trommel of 6 mm screen size has been set up at Ghazipur site. As per the test report of the under 6 mm fraction (Photo 4d of Annexure B), the fractions complies with the limits for most of the parameters including limits specified for heavy metal, C/N ratio, Nitrogen, P2O5 and K2O specified for Organic Compost as specified in Schedule II of SWM Rules 2016. Further tests may be carried out for TOC and pH to confirm its usage as compost. It may alternatively be used as soil enricher as per CPCB Guidelines. It was informed by SDMC officials that they are also planning to install two trommels of 6 mm size.**

**iii. Disposal of Different Fractions:**

**RDF generated from Ghazipur dumpsite is being sent to Waste to Energy plant at Ghazipur. NDMC has webcasted a tender "Empanelment of contractors for removal of RDT2 recovered from bio mining process at Bhalswa dump site in Delhi" on 3<sup>rd</sup> January, 2020.**

**However, there is currently no plan for disposal for the remaining screened fractions, at all the three dumpsites, which are currently being dumped on — site. It is a major issue being faced at all the three dumpsites, specifically at Ghazipur site, where the screened fraction is precariously stored on berm.**

- iv. Proper arrangement for preparation of RDF as per MoHUA guidelines has not been made and only a fan has been provided. No process control measure implemented for improving quality of RDF. Information related to quality of RDF (moisture content/calorific value etc) for grading of RDF is not available at these sites.**
- v. Testing for specified parameters (RDF for calorific value parameters, moisture content etc; under 6 mm fraction for parameters specified in Schedule**

***II of SWM Rules,2016) to ensure its utilization for the intended use is not done.***

***vi. The records of generation & disposal of each fraction of materials recovered from the bio-mining process is not maintained.***

***vii. Leachate was being generated, however, leachate treatment is not being carried out at any of these dumpsites.***

***viii. Fresh waste is being dumped at all the 3 dumpsites.***

***ix. The bio-remediation is being carried out in the open. No shade has been provided in the bio-remediation area in absence of which work may be hampered during rain.***

***x. Work is being executed on piece meal basis and no comprehensive time bound action plan for bio-remediation, including timeframe for clearance of dumpsite, details of machinery to be set up, utilization of screened fractions has been prepared for bioremediation of the three dumpsites.”***

8. The report of Delhi Government merely refers to the reports filed by the Municipal Corporations. The reports of Municipal Corporations have already been overseen by the CPCB. It is not necessary to make reference to the said reports individually.

9. The report of CPCB clearly shows the work being executed is inadequate in terms of quantity as well as compliance of the environmental norms. Several untenable excuses are sought to be given which can hardly be taken as justification for failure of the constitutional mandate under Article 243 W read with Schedule XII and directions of the Hon'ble Supreme Court and this Tribunal, which have been dealt with in O.A. No. 606/2018, to which Delhi Government is a party.



10. In view of the above, stand of the Municipal Corporations and Delhi Government is found to be wholly unacceptable. Coercive steps appear to be necessary for upholding the rule of law and the concern for public health.
11. We may note that the matter was earlier considered by the Hon'ble Supreme Court *inter-alia* vide judgments reported in (2000) 2 SCC 678 and (2004) 13 SCC 538 directing scientific disposal of waste by setting up of compost plants, preventing water percolation through heaps of garbage, creating focused **'solid waste management cells'** in all States and complying with the Municipal Solid Waste Management Rules, 2016 (SWM Rules, 2016) on urgent basis. **It was observed that the local authorities constituted for providing services to the citizens are lethargic and insufficient in their functioning which is impermissible. Non-accountability has led to lack of effort on the part of the employees.** Domestic garbage and sewage along with poor drainage system in an unplanned manner contribute heavily to the problem of solid waste. The number of slums have multiplied significantly occupying large areas of public land. Promise of free land attracts more land grabbers. **Instead of "slum clearance" there is "slum creation" in cities which is further aggravating the problem of domestic waste being strewn in the open.** Accordingly, the Court directed that provisions pertaining to sanitation and public health be complied with, streets and public premises be cleaned daily, **statutory authorities levy and recover charges from any person violating laws and ensure scientific disposal of waste**, landfill sites be identified keeping in mind requirement of the city for next 20 years and environmental considerations, sites be identified for setting up

of compost plants, steps be taken to prevent fresh encroachments and compliance report be submitted within eight weeks.

12. Further observations in the judgment of the Hon'ble Supreme Court are:

*“3. The petitioner has handed over a note in the Court showing the progress that has been made in some of the States and also setting out some of the suggestions, including the suggestion for creation of solid waste management cell, so as to put a focus on the issue and also to provide incentives to those who perform well as was tried in some of the States. The said note states as under:*

- “1. As a result of the Hon'ble Supreme Court's orders on 26-7-2004, in Maharashtra the number of authorisations granted for solid waste management (SWM) has increased from 32% to 98%, in Gujarat from 58% to 92% and in M.P. from NIL to 34%. No affidavits at all have been received from the 24 other States/UTs for which CPCB reported NIL or less than 3% authorisations in February 2004. All these States and their SPCBs can study and learn from Karnataka, Maharashtra and Gujarat's successes.*
- 2. **All States/UTs and their SPCBs/PCCs have totally ignored the improvement of existing open dumps, due by 31-12-2001,** let alone identifying and monitoring the existing sites. Simple steps can be taken immediately at almost no cost by every single ULB to prevent monsoon water percolation through the heaps, which produces highly polluting black run-off (leachate). Waste heaps can be made convex to eliminate standing water, upslope diversion drains can prevent water inflow, downslope diversion drains can capture leachate for recirculation onto the heaps, and disused heaps can be given soil cover for vegetative healing.*
- 3. **Lack of funds is no excuse for inaction. Smaller towns in every State should go and learn from Suryapet in A.P. (population 103,000) and Namakkal in T.N. (population 53,000) which have both seen dustbin-free 'zero garbage towns' complying with the MSW Rules since 2003 with no financial input from the State or the Centre, just good management and a sense of commitment.***
- 4. **States seem to use the Rules as an excuse to milk funds from the Centre, by making that a precondition for action and inflating waste processing costs 2-3 fold. The Supreme Court Committee recommended 1/3 contribution each from the city, State and Centre. Before seeking 70-***

**80% Centre's contribution, every State should first ensure that each city first spends its own share to immediately make its wastes non-polluting by simple sanitising/stabilising, which is always the first step in composting viz. inoculate the waste with cow dung solution or bio culture and placing it in windrows (long heaps) which are turned at least once or twice over a period of 45 to 60 days.**

5. Unless each State creates a focussed '**solid waste management cell**' and rewards its cities for good performance, both of which Maharashtra has done, compliance with the MSW Rules seems to be an illusion.

6. **The admitted position is that the MSW Rules have not been complied with even after four years.** None of the functionaries have bothered or discharged their duties to ensure compliance. **Even existing dumps have not been improved.** Thus deeper thought and urgent and immediate action is necessary to ensure compliance in future."

13. In this regard, reference may also be made to orders of Hon'ble Supreme Court in Municipal Council, Ratlam vs. Vardhichand<sup>2</sup> and B.L. Wadhera v. Union of India and Ors.<sup>3</sup> laying down that **clean environment is fundamental right of citizens under Article 21** and it is for the local bodies as well as the State to ensure that public health is preserved by taking all possible steps. **For doing so, financial inability cannot be pleaded.**

14. The matter has also been considered by this Tribunal in pursuance of orders of the Hon'ble Supreme Court. This Tribunal considered the matter of solid waste management after notifying all the concerned States/Regulatory Bodies and finally disposed of the same on 22.12.2016<sup>4</sup> requiring all the States/UTs to follow the SWM Rules, 2016 after preparing requisite action plans in a time bound manner with further direction that **any State/UT which failed to**

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<sup>2</sup> (1980) 4 SCC 162

<sup>3</sup> (1996) 2 SCC 594

<sup>4</sup> O.A. No. 199/2014 (2016) SCC Online NGT 2981



**comply with the Rules shall be liable to be proceeded against under Section 15 of the Environment (Protection) Act, 1986 (EP Act), apart from being required to pay environmental compensation and senior most officers of the States/Local Bodies being personally liable.** The directions also include requirement for segregation of waste, providing buffer zone around plants and landfill sites and due monitoring. The States/Local Bodies were also to create market for consumption of RDF. Tipping fee was to include the efficient and regular monitoring of waste processing plant, segregation of inert and C&D material and its transportation. Landfill sites were required to be bio-stabilized preventing leachate and generation of Methane, enforcement of Extended Producer Responsibility, rights and liabilities under contracts being made consistent with the Rules, creating public awareness about the facilities available at regular intervals. **Copy of the judgment was circulated to all the Chief Secretaries/Advisors of States/UTs.**

15. Vide order dated 20.08.2018<sup>5</sup>, after referring to earlier proceedings and a chamber meeting with all the concerned stakeholders, the Tribunal considered the following questions:

- “i. Whether State-wise Action Plan with timelines and budgetary support/provision for management of MSW has been prepared?*
- ii. Whether each city/town/urban local body is covered under the said Plan and individual Action Plan has timelines with budgetary provisions?*
- iii. What time has been fixed to completely comply with the provisions of the Rules, 2016?*
- iv. What are the main constraints of non-compliance of Rules, 2016?”*

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<sup>5</sup> O.A. No. 606/2018

**It was directed that action plans be finalized latest by 31.10.2018 and executed latest by 31.12.2019 which was to be overseen by the Principal Secretaries of Urban/Rural Development Departments of States/UTs.** States were directed to standardize technical specifications instead of leaving the same to individual local bodies. Further directions are for installing CCTV cameras at dump sites, installing GPS system in garbage collection vans, adopting best practices including control rooms where citizens can upload photos of garbage to be looked into by responsible officers, conducting performance audit with reference to source segregation, door to door collection, public sweeping, waste processing, grievance redressal mechanism and monitoring. This Tribunal also constituted Regional/Apex Committees for a limited period.

16. On 16.01.2019, in O.A. No. 606/2018, the Tribunal directed the Chief Secretary of all the States to review progress on important environmental issues and appear in person before the Tribunal. Accordingly, Chief Secretary, Delhi appeared before the Tribunal on 11.03.2019. This Tribunal passed following order:

*“32. In view of above, after discussion with the Chief Secretary, following further directions are issued:*

- i. Steps for compliance of Rules 22 and 24 of SWM Rules be now taken within six weeks to the extent not yet taken. Similar steps be taken with regard to Bio-Medical Waste Management Rules and Plastic Waste Management Rules.*
- ii. Atleast three wards/zones/circles in each Municipal Corporation/New Delhi Municipal Council/Delhi Cantonment Board may be notified on the website within two weeks from today as model wards/zones/circles which will be made fully compliant within next six months.*

- iii. *The remaining wards/zones/circles may be made fully compliant in respect of environmental norms within one year.*
- iv. *A quarterly report be furnished by the Chief Secretary, every three months. First such report shall be furnished by June 30, 2019.*
- v. *The Chief Secretary may personally monitor the progress, atleast once in a month, with all the District Magistrates.*
- vi. *The District Magistrates or other Officers may be imparted requisite training.*
- vii. *The District Magistrates may monitor the status of compliance of environmental norms, atleast once in two weeks.*
- viii. *Performance audit of functioning of all regulatory bodies may be got conducted and remedial measures be taken, within six months.*
- ix. *The Chief Secretary may remain present in person before the Tribunal with the status of compliance in respect of various issues mentioned in para 20 as well as any other issues discussed in the above order on 23.09.2019.”*

17. On 10.01.2020, after reviewing the earlier orders in O.A. No. 606/2018, this Tribunal directed:

**“VII. DIRECTIONS:**

36. We accordingly direct:

- a. *In view of the fact that most of the statutory timelines have expired and directions of the Hon’ble Supreme Court and this Tribunal to comply with Solid Waste Management Rules, 2016 remain unexecuted, compensation scale is hereby laid down for continued failure after 31.03.2020. The compliance of the Rules requires taking of several steps mentioned in Rule 22 from Serial No. 1 to 10 (mentioned in para 12 above). **Any such continued failure will result in liability of every Local Body to pay compensation at the rate of Rs. 10 lakh per month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body from 01.04.2020 till compliance. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in***



**the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban Development etc. who are responsible for compliance of order of this Tribunal.**

- b. Legacy waste remediation was to ‘commence’ from 01.11.2019 in terms of order of this Tribunal dated 17.07.2019 in O.A. No. 519/2019 para 28<sup>6</sup> even though statutory timeline for ‘completing’ the said step is till 07.04.2021 (as per serial no. 11 in Rule 22), which direction remains unexecuted at most of the places. Continued failure of every Local Body on the subject of commencing the work of legacy waste sites remediation from 01.04.2020 till compliance will result in liability to pay compensation at the rate of Rs. 10 lakh per month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban Development etc. who are responsible for compliance of order of this Tribunal.**
- c. Further, with regard to thematic areas listed above in para 20, steps be ensured by the Chief Secretaries in terms of directions of this Tribunal especially w.r.t. plastic waste, bio-medical waste, construction and demolition waste which are linked with solid waste treatment and disposal. Action may also be ensured by the Chief Secretaries of the States/UTs with respect to remaining thematic areas viz. hazardous waste, e-waste, polluted industrial clusters, reuse of treated water, performance of CETPs/ETPs, groundwater extraction, groundwater recharge, restoration of water bodies, noise pollution and illegal sand mining.
- d. The compensation regime already laid down for failure of the Local Bodies and/or Department of Irrigation and Public Health/In-charge Department to take action for treatment of sewage in terms of observations in para 31 above will result in liability to pay compensation as already noted above.

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<sup>6</sup> The Chief Secretaries may ensure allocation of funds for processing of legacy waste and its disposal and in their respective next reports, give the progress relating to management of all the legacy waste dumpsites. Remediation work on all other dumpsites may commence from 01.11.2019 and completed preferably within six months and in no case beyond one year. Substantial progress be made within six months. We are conscious that the SWM Rules provide for a maximum period of upto five years for the purpose, however there is no reason why the same should not happen earlier, in view of serious implications on the environment and public health.

- e. *Compensation in above terms may be deposited with the CPCB for being spent on restoration of environment which may be ensured by the Chief Secretaries' of the States/UTs.*
- f. *An 'Environment Monitoring Cell' may be set up in the office of Chief Secretaries of all the States/UTs within one month from today, if not already done for coordination and compliance of above directions which will be the responsibility of the Chief Secretaries of the States/UTs.*
- g. *Compliance reports in respect of significant environmental issues may be furnished in terms of order dated 07.01.2020 quarterly with a copy to CPCB.*

*The Chief Secretaries of UP, Punjab and UT Chandigarh may remain present in person for further review tentatively on 24.08.2020."*

18. We may observe that non-compliance of rules relating to waste disposal results in damage to the environment and public health. Any failure needs to be visited with assessment and recovery of compensation for such damage from the persons responsible for such failure. A study was recently got conducted by CPCB, under orders of this Tribunal requiring such a study by a joint Committee comprising CPCB, NEERI and IIT, Delhi about the monetary cost of damage caused to the environment on account of existence of legacy waste dump site at Gurgaon (Bandhewadi) vide order dated 05.03.2019 in O.A. No. 514/2018. **The report of the CPCB filed on 13.02.2020 is that damage on account of the said legacy waste dump site was Rs. 148.46 crore, on account of damage to the air quality, soil and water quality, climate change and disamenity (aesthetic).** The damage has been assessed in terms of impact on health due to release of pollutants in air atmosphere, release of leachate into ground /surface water and soil, due to pollution from the landfill site, damage cost associated with climate

change due to carbon di-oxide and methane, damage caused due to aesthetics loss, price depreciation due to disamenity cost etc.

- 19.** Thus, monetary cost of every legacy dump site is expected to be huge depending upon the location, quantity and quality of waste and area covered, its proximity to water body/ stream and human habitation etc. Needless to say that there is huge cost for non-compliance of provisions relating to waste management – Solid as well as Liquid. Loss to the environment and public health is taking place not only on account of delay in clearing legacy waste but also for not complying with other provisions of the Rules resulting in huge gap in generation and processing of waste. It may be necessary to determine such cost for delay in clearing legacy waste at every dump site as well as for delay in complying with other rules and failure to treat sewage and recover the same from the persons responsible for action in the matter. **Let the Committee comprising CPCB, NEERI & IIT Delhi carry out similar study as mentioned in Para 18 above to assess the amount of damage to environment on account of dump sites in Delhi within two months.**

- 20.** In view of above, we expect steps for effective implementation of the Rules failing which this Tribunal may have no option except to direct coercive action personally against the entire administrative chain in each Municipal Corporation of Delhi and NCT of Delhi who are responsible for management and supervision of municipal waste in NCT of Delhi.



21. Without prejudice to existing work being continued and expedited, taking into account the deficiencies pointed out by the CPCB, the Government of NCT Delhi may set up of an integrated Special Purpose Vehicle (SPV) for scientific management, processing and disposal of legacy waste dump sites at Ghazipur (East Delhi), Bhalswa (North Delhi ) and Okhla (South Delhi) headed by Chief Secretary, NCT of Delhi with a nominee of Lt. Governor and Commissioners of concerned Corporations, Secretary Urban Development, Delhi Govt., Shri Manish Singh, IAS (now Director Swachh Bharat, M.P., Bhopal) and Shri Vijay Nehra, IAS, Commissioner, Municipal Corporation, Ahmedabad as members with in specific time lines. The Integrated SPV may coopt other technical and administrative members as deemed necessary.
22. Let further action taken report be filed before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in). by the Chief Secretary, Delhi.
23. CPCB may also ascertain the achievement in next two months and give its independent report.

A copy of this order be sent to all the Municipal Commissioners of the concerned Municipal Corporations, Delhi, CPCB, Urban Development Department, Delhi, Chief Secretary, Delhi, Lieutenant Governor Delhi, Shri Manish Singh, IAS, Director Swachh Bharat, M.P., Bhopal and Shri Vijay Nehra, Commissioner, Municipal Corporation, Ahmedabad by e-mail.

List again on May 27, 2020.

Adarsh Kumar Goel, CP

Sheo Kumar Singh, JM

Dr. Nagin Nanda, EM

March 23, 2020  
Original Application No. 519/2019  
With O.A. No. 386/2019  
DV

