

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

(By Hybrid Mode)

Original Application No. 606/2018

(In respect of Govt. of Delhi)

In re: **Compliance of Municipal Solid Waste Management Rules,
2016 and other environmental issues**

Date of hearing: 16.02.2023

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

Present: Mr. Naresh Kumar, Chief Secretary
Mr. Gyanesh Bharti, Commissioner, MCD
Mr. Anil Kumar Singh, Principal Secretary (Environment)
Dr. K.S. Jayachandran, Special Secretary (Environment)
Mr. Ajay Gupta, DJB with Ms. Jyoti Mendiratta, Advocate for GNCTD

ORDER

**The Issue – Monitoring of compliance of waste in terms of orders of
Hon'ble Supreme Court dated 02.09.2014 and 22.02.2017**

1. The issues of solid as well as liquid waste management are being monitored by this Tribunal as per orders of the Hon'ble Supreme Court order dated 02.09.2014 in *Writ Petition No. 888/1996, Almitra H. Patel vs. Union of India & Ors.*, with regard to solid waste management and order dated 22.02.2017 in W.P. No. 375/2012, reported in (2017) 5 SCC 326, *Paryavaran Suraksha vs. Union of India*, with regard to liquid waste management. Other related issues include pollution of 351 river stretches, (which includes Yamuna in Delhi), 124 non-attainment cities in terms of

air quality, 100 polluted industrial clusters, illegal sand mining etc. have also been dealt with separately. We propose to limit the proceedings in the present matter to **two issues of solid waste and sewage management.**

ORDERS OF THE HON'BLE SUPREME COURT TRANSFERRING THE ISSUE OF SOLID WASTE MANAGEMENT AND LIQUID WASTE MANAGEMENT TO THIS TRIBUNAL:

Solid Waste Management

2. While transferring the issue of solid waste management vide Order dated 02.09.2014 in *Writ Petition No. 888/1996, Almitra H. Patel Vs. Union of India & Ors.*, the Hon'ble Supreme Court observed **“handling of solid municipal waste is a perennial challenge and would require constant efforts and monitoring with a view to making the municipal authorities concerned accountable, taking note of dereliction, if any, issuing suitable directions consistent with the said Rules and direction incidental to the purpose underlying the Rules such as upgradation of technology wherever possible. All these matters can, in our opinion, be best left to be handled by the National Green Tribunal established under the National Green Tribunal Act, 2010. The Tribunal, it is common ground, is not only equipped with the necessary expertise to examine and deal with the environment related issues but is also competent to issue in appropriate cases directions considered necessary for enforcing the statutory provisions.”**

3. Before transferring the said proceedings, matter was monitored by Hon'ble Supreme Court for about eighteen years and orders passed include *(2000) 2 SCC 679* and *(2004) 13 SCC 538*, directing scientific disposal of waste by setting up of compost plants/processing 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, 2000 (now replaced by SWM Rules, 2016). **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 has 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. Further observations in the judgment of the Hon’ble Supreme Court¹are:

“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

¹ (2004) 13 SCC 538

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."

4. In this regard, reference may also be made to orders of Hon'ble Supreme Court in *Municipal Council, Ratlam vs. Vardhichand*² and *B.L. Wadhera v. Union of India and Ors.*³ 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.** We note that even after 26 years of monitoring, 18 years by Hon'ble Supreme Court and eight years by this Tribunal, ground situation remains unsatisfactory.

Liquid Waste Management

5. Hon'ble Supreme Court in *Paryavaran Suraksha vs. Union of India*⁴ required this Tribunal to monitor directions for proper treatment of sewage to prevent untreated sewage and other effluents being discharged in water bodies by directing "We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down. We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional "primary effluent treatment plants", and the setting up of functional "common effluent treatment plants" within the timelines, expressed above, shall be enforced by the Member Secretaries of the Pollution Control Boards concerned. The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. **The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board**

² (1980) 4 SCC 162

³ (1996) 2 SCC 594

⁴ (2017) 5 SCC 326

concerned, as may be required, for the implementation of the above directions. They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which shall evaluate the data and shall furnish the same to the Bench of the jurisdictional National Green Tribunal. To supervise complaints of non-implementation of the instant directions, the Benches concerned of the National Green Tribunal, will maintain running and numbered case files, by dividing the jurisdictional area into units. The abovementioned case files will be listed periodically. The Pollution Control Board concerned is also hereby directed to initiate such civil or criminal action, as may be permissible in law, against all or any of the defaulters.”

6. Extracts from the judgement of the Hon’ble Supreme Court in *Paryavaran Suraksha Samiti Vs. Union of India* are as follows:

“7. Having effectuated the directions recorded in the foregoing paragraphs, the next step would be, to set up common effluent treatment plants. **We are informed, that for the aforesaid purpose, the financial contribution of the Central Government is to the extent of 50%, that of the State Government concerned (including the Union Territory concerned) is 25%. The balance 25%, is to be arranged by way of loans from banks.** The above loans, are to be repaid, by the industrial areas, and/or industrial clusters. We are also informed that the setting up of a common effluent treatment plant, would ordinarily take approximately two years (in cases where the process has yet to be commenced). The reason for the above prolonged period, for setting up “common effluent treatment plants”, according to the learned counsel, is not only financial, but also, the requirement of land acquisition, for the same.

X.....X.....X.....

10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and

solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. **In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the “common effluent treatment plant” shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.**

11. Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge **industrial pollutants and sewer, directly into rivers and water bodies.**
12. We are of the view that in the manner suggested above, **the malady of sewer treatment, should also be dealt with simultaneously. We, therefore, hereby direct that “sewage treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.”**

7. Expression “Common Effluent Treatment Plants” in para 7 may infact refer to the STPs, as the context shows.

8. On this subject, inspite of deadline of 31.3.2018 fixed by Hon'ble Supreme Court for finalizing funding arrangements and February 2020 for all arrangements for preventing discharge of pollutants and rigorous monitoring by this Tribunal for the last five years, ground situation remains unsatisfactory.

Procedural History of present proceedings before this Tribunal

9. In the light of above, the Tribunal has considered the matter in the last more than eight years as far as solid waste management is concerned and more than five years as far as liquid waste management is concerned. Yamuna pollution is being considered and monitored by the Tribunal for more than 10 years. Main orders on the subject include orders dated 22.12.2016, 31.08.2018, 16.01.2019, 28.8.2019, 12.09.2019, 6.12.2019, 07.01.2020, 28.02.2020, 02.07.2020, 14.12.2020, 22.2.2021, 30.11.2021, 14.12.2020 and 31.05.2022. First two orders - dated 22.12.2016 and 31.08.2018 deal only with solid waste management. Orders dated 28.8.2019, 6.12.2019 and 22.2.2021 deal with only liquid waste management while the remaining orders deal with solid waste as well as liquid waste management. Issue of liquid waste has also been separately dealt with in OA No. 593/2017 which was finally disposed of on 22.02.2021 with direction that further monitoring be undertaken by Central Monitoring Committee constituted by the said order. It was held that monitoring by the Tribunal cannot be for indefinite time and State authorities are primarily responsible for such monitoring after adequate monitoring by the Tribunal. By the same order, the Tribunal also dealt with the issue of 351 identified polluted river stretches in OA 673/2018. This is apart from individual cases dealing with solid and liquid waste management. A brief reference of these orders will be made hereafter.

Orders dated 22.12.2016 and 31.08.2018

10. Vide order dated 22.12.2016, (2016) SCC Online NGT 2981, the issue of Solid Waste Management was disposed of requiring strict compliance of Solid Waste Management Rules, 2016 by all the States/UTs making it clear that if violations continue, the State will be liable to pay compensation. Later, matter was taken up to ascertain compliance status and finding that all the States/UTs were still non-compliant in the matter, the matter was again taken up and fresh directions issued for monitoring by the Tribunal constituted Monitoring Committees vide order dated 31.08.2018. Later, continuance of the committees was left to discretion of the States, depending on their own monitoring mechanism.

Order dated 16.01.2019 requiring personal presence of Chief Secretaries of all States and UTs to explore remedial action after interaction with them and further orders

11. In view of continuing non-compliances, vide order dated 16.01.2019, the Tribunal directed personal presence of Chief Secretaries of all States and UTs for interaction to ensure compliance. The Tribunal held that large scale non-compliance of environmental norms was resulting in deaths and diseases and irreversible damage to the environment, without accountability for such failures. Though violation of the Rules as well as orders of this Tribunal is criminal offence, still there was rampant violation by State authorities practically with no accountability and for which unhappy situation was required to be remedied by involvement of highest functionaries of the State in the interest of public health and to uphold rule of law.

12. In terms of order dated 16.1.2019, the Chief Secretaries of all the States/UTs appeared on different dates till 18.07.2019 and the Tribunal, after reviewing the status of noncompliance on most of the issues, directed

further effective steps to be taken for compliance of the Rules and the environmental norms. The Chief Secretary of Delhi appeared on 11.03.2019 and following directions were issued:

“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.”*

13. In short, the Tribunal expected three model cities, towns and villages to be made compliant in six months and the remaining State with one year. In respect of Delhi, villages and wards were to be in this category. It was for achieving this target that the States were

directed to set up environmental cells directly under the Chief Secretaries, regular periodical monitoring by the Chief Secretaries at the State level and by the District Magistrates at the District level.

Further direction also was to take action for non-compliance by recovery of compensation and recording adverse ACRs against erring officers. The Tribunal also directed filing of quarterly reports by the Chief Secretaries. Based on such reports, CPCB was to file consolidated status reports. The Chief Secretaries were to appear again after six months with updated status of compliance.

14. The Tribunal has been receiving progress reports from States as well as monitoring Committees wherever functioning which have been considered by further orders.

Further Review after completing round of interaction with all Chief Secretaries by order dated 12.9.2019

15. The matter was then reviewed on 12.09.2019 in the light of report of the CPCB dated 09.09.2019 **showing wide gaps in compliance of solid waste, plastic waste, bio-medical waste management, rejuvenation of identified polluted river stretches, polluted industrial clusters and non-attainment cities.** A fresh schedule for appearance of the Chief Secretaries was issued. Vide order dated 07.01.2020, the Tribunal directed CPCB to ascertain Compliance of Solid Waste Management Rules, 2016 in terms of MSW generated, segregated and treated, gaps in the waste processing, enforcement of statutory timelines and orders of this Tribunal, number of sites remediated, and quantity of legacy waste therein and timelines for completing remediation. It was further directed that on the subject of sewage treatment, CPCB has to ascertain quantity of sewage generated and treated in the State, gap in the sewage treatment and timelines to bridge the gap, including strategy for use of treated water for

secondary purpose. CPCB was accordingly directed to redesign its formats for securing relevant quantifiable information.

Order dated 28.02.2020

16. Accordingly, the Chief Secretaries of 18 States/UTs appeared and filed updated status reports. Since there still existed huge gaps in compliance, further directions were issued by way of different orders. Last such order is of 28.2.2020. Other orders are on same pattern. The direction part of the said order is reproduced below:

“41. In view of above, consistent with the directions referred to in Para 29 issued on 10.01.2020 in the case of UP, Punjab and Chandigarh which have also been repeated for other States in matters already dealt with, we 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, **interim 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. Final compensation may be assessed and recovered by the State PCBs/PCCs in the light of Para 33 above within six months from today. CPCB may prepare a template and issue an appropriate direction to the State PCBs/PCCs for undertaking such an assessment in the light thereof within one month.***

- 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 28⁵ 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 and delay in clearing legacy waste is causing huge damage to environment in monetary terms as noted in para 33 above, pending assessment and recovery of such damage by the concerned State PCB within four months from today, 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. Final compensation may be assessed and recovered by the State PCBs/PCCs in the light of Para 33 above within six months from today.**
- 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

⁵ 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.

Public Health/In-charge Department to take action for treatment of sewage in terms of observations in Para 36 above will result in liability to pay compensation as already noted above which are reproduced for ready reference:

- i. Interim measures for phytoremediation/ bioremediation etc. in respect of 100% sewage to reduce the pollution load on recipient water bodies – 31.03.2020. Compensation is payable for failure to do so at the rate of Rs. 5 lakh per month per drain by concerned Local Bodies/States (in terms of orders dated 28.08.2019 in O.A. No. 593/2017 and 06.12.2019 in O.A. No. 673/2018) w.e.f. 01.04.2020.**
 - ii. Commencement of setting up of STPs – 31.03.2020. Compensation is payable for failure to do so at the rate of Rs. 5 lakh per month per STP by concerned Local Bodies/States (in terms of orders dated 28.08.2019 in O.A. No. 593/2017 and 06.12.2019 in O.A. No. 673/2018) w.e.f. 01.04.2020.**
 - iii. Commissioning of STPs – 31.03.2021. Compensation is payable for failure to do so at the rate of Rs. 10 lakh per month per STP by concerned Local Bodies/States (in terms of orders dated 28.08.2019 in O.A. No. 593/2017 and 06.12.2019 in O.A. No. 673/2018) w.e.f. 01.04.2021.**
- 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."

17. Timelines under the Rules referred to in sub para (a) above are :

“22. Time frame for implementation:- Necessary infrastructure for implementation of these rules shall be created by the local bodies and

other concerned authorities, as the case may be, on their own, by directly or engaging agencies within the time frame specified below:

Sl. No.	Activity	Time limit from the date of notification of rules
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1.	Identification of suitable sites for setting up solid waste processing facilities.	1 year
2.	Identification of suitable sites for setting up common regional sanitary landfill facilities for suitable clusters of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities or stand alone sanitary landfill facilities by all local authorities having a population of 0.5 million or more.	1 year
3.	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities.	2 years
4.	Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source.	2 years
5.	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	2 years
6.	ensure separate storage, collection and transportation of construction and demolition wastes.	2 years
7.	setting up solid waste processing facilities by all Local Bodies having 100000 or more population.	2 years
8.	Setting up solid waste processing facilities by Local Bodies and census towns below 100000 population.	3 years
9.	setting up common or stand alone sanitary landfills by or for all Local Bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as untreatable inert wastes as permitted under the Rules.	3 years
10.	setting up common or regional sanitary landfills by 3 years all Local Bodies and census towns under 0.5 million population for the disposal of permitted waste under the rules.	3 years
11.	bio-remediation or capping of old and abandoned dump sites.	5 years

Order dated 02.07.2020

18. The matter was then considered on 02.07.2020. Having regard to the pandemic, appearance of remaining Chief Secretaries was deferred.

Order dated 14.12.2020

19. The matter was further considered on 14.12.2020 for review of progress. Scheduled appearance of remaining Chief Secretaries was dispensed with but it was directed that monitoring at the level of Chief Secretaries may continue and quarterly status reports be filed with CPCB so that CPCB may file a consolidated report every six months before the Tribunal. It was further directed that compensation in terms of earlier orders be recovered and credited to a separate account with the Environment Department of concerned State to be used for restoration of environment. It was also observed that in these proceedings Solid Waste Management also will be monitored, other issues being considered in separate proceedings.

Further review on 30.11.2021 – huge gaps still found and hence, another round of interaction with Chief Secretaries proposed

20. The matter was thereafter taken up on 30.11.2021 to consider the report of CPCB dated 25.10.2020 giving compliance status in 32 States/UTs as follows:-

“3.0 SOLID WASTE MANAGEMENT STATUS

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Table:1 Overview of quarterly report on SWM submitted by 29 States/UTs

Sl. No.	ITEM	Status	Remarks
1	xxx	xxx	xxx
2	Over all waste management status in Arunachal Pradesh		

2(a)	Quantity of MSW generated (TPD)	<u>Information provided by 29 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal)	<ul style="list-style-type: none"> • Total Quantity of MSW generated: 150858.951 TPD • Maximum waste generation is in five (7) States/UTs (>10000 TPD)- <ul style="list-style-type: none"> ➤ Maharashtra ➤ Uttar Pradesh ➤ West Bengal ➤ Tamil Nadu ➤ Karnataka ➤ Delhi ➤ Telangana
2(b)	Xxx	xxx	xxx
2I	Xxx	xxx	xxx
2(d)	Quantity of MSW processed (TPD)	<u>Information provided by 29 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal)	<ul style="list-style-type: none"> • Total quantity of MSW processed: 94435.318 TPD • 100% MSW is processing reported in two (2) States: <ul style="list-style-type: none"> ➤ Chhattisgarh ➤ Himachal Pradesh
2I	Xxx	xxx	xxx
2(f)	Gap in Solid Waste Management UTs (TPD) [2(a)- 2(d)- 2(e)]	<u>Information provided by 29 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal)	<ul style="list-style-type: none"> • Gap in Solid Waste Management: 44651.1792 TPD
xxx	Xxx	xxx	xxx
6	Legacy Waste management		
6(a)	Number of dumpsites (No.)	<u>Information provided by 28 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal) <u>Information not provided by 1 State/UTs:</u> (Chandigarh)	<ul style="list-style-type: none"> • Total Number of dumpsites: 2129 • Max in MP: 378

6(b)	Quantity of Waste dumped at dumpsites (Tons)	<p><u>Information provided by 27 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Maharashtra, Meghalaya, Nagaland, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal)</p> <p><u>Information not provided by 2 State/UTs:</u> (Chandigarh, Madhya Pradesh)</p>	<ul style="list-style-type: none"> • Quantity of Waste dumped at dumpsites (Tons): 185558287.3 Tons • Max in Maharashtra – 41683186 Tonnes
6I	Number of dumpsites cleared (No.)	<p><u>Information provided by 25 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Nagaland, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal)</p> <p><u>Information not provided by 4 State/UTs:</u> (Chandigarh, Meghalaya, Odisha, Puducherry)</p>	<ul style="list-style-type: none"> • Number of dumpsites cleared (No.): 498 Chhattisgarh- 160 Maharashtra- 134 Uttarakhand – 60 M.P.-50 Tamil Nadu – 27 H.P-17 Gujarat- 16
6(d)	Number of dumpsites in which biomining has commenced (No.)	<p><u>Information provided by 26 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal)</p> <p><u>Information not provided by 3 State/UTs:</u> (Chandigarh, Odisha, Puducherry)</p>	<ul style="list-style-type: none"> • Number of dumpsites in which biomining has commenced (No.): 496 Tamil Nadu – 117 Maharashtra-76 M.P-73 West Bengal – 64 Telangana – 52 T.N-117 Rajasthan – 23 Haryana – 16 Karnataka – 15 Uttarakhand – 12 HP – 10
6I	Time frame for clearing all dumpsites	<p><u>Information provided by 24 States/UTs</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand, and West Bengal)</p> <p><u>Information not provided by 5 State/UT:</u> (Bihar, Chandigarh, Meghalaya, Nagaland, Telangana)</p>	<ul style="list-style-type: none"> • Timeline exceeding December, 2022 in following States/UTs: Delhi, Goa, J&K, Karnataka, Puducherry and Tamil Nadu

xxx.....xxx.....xxx

Solid Waste Management

4.0 SUMMARY & CONCLUSIONS

a. Total No. of ULBs in 29 States/UTs is 4186.

- b. As per information provided by 29 States/UTs – total waste generated is 150858.951 TPD of which 94435.318 TPD is processed, which is 62.6% of the total waste generated in these States/UT. 11772.4538 TPD (7.8%) of the waste is landfilled and the gap in Solid waste management in 29 States is 45071.771 TPD which is 29.8% of the waste generated in these States/UTs.**
- c. Information on MRF has been provided for 28 States/UTs covering 77% of ULBs in these States/UTs.
- d. Information on Recycling facilities have been provided for 22 States/UTs covering 39% of ULBs in these States/UTs
- e. Information on Composting facilities has been provided for all 29 States/UTs covering 70% of ULBs in these States/UTs
- f. Information on WtE has been provided for 25 out of 29 States/UTs covering 1.9% of ULBs in these States/UTs.
- g. Information on RDF has been provided for 24 out of 29 States/UTs covering 12.4% of ULBs in these States/UTs.
- h. Information on Bio-methanation has been provided for 27 out of 29 States/UTs covering 7.1% of ULBs in these States/UTs.
- i. Information on Landfills has been provided in 24 out of 29 States/UTs covering 18.9% of ULBs in the States.**
- j. 498 of 2111 (23%) dumpsites in 25 States/UTs have been cleared and Remediation has been initiated in 23% (496) of the dumpsites.
- k. Model Town/ Cities have been identified in 25 States/UTs.
- l. 16 States /UTs have established environmental cells.
- m. 15 States /UTs have standardized rates for procurement of services/equipment required for solid waste management.**
- n. In view of above, States/UTs need to develop of ULB wise action plan for collection, segregation, transportation and processing of waste and lay down an appropriate governance framework at state and district levels.”

12. xxxxxx.....xxx

13. Based on above data, the State-wise and city-wise summary is as follows:-

“State-wise summary

Sl. No.	States	Number of ULBs	Quantity of MSW generated (TPD)	Quantity of MSW collected (TPD)	Quantity of MSW Processed (TPD)	Quantity of MSW disposed in secured land fill site (TPD)	GAP in SWM UTs (TPD)
1.	Andhra Pradesh	124	6898	6830	2180	257.5	4460.5
2.	Arunachal Pradesh	02	67	61	8	55	04
3.	Assam	96	1178	1070	389	0	790
4.	Bihar	142	2240.20	2240.20	681	1559.2	0
5.	Chandigarh	01	512.6	512.6	104.5	442.3	0
6.	Chhattisgarh	166	1650	1650	1650	0	0
7.	Delhi	5	11038.335	11038.335	5262.335	400	5776
8.	Goa	14/ 191(RLBs)	226.67/ 317(RLBs)	218.67/ 258(RLBs)	196.67/ 258(RLBs)	NIL	30/ 59(RLBs)
9.	Gujarat	164	9567	9567	8514.63	1052.37	0
10.	Haryana	89	5523	5287 approx.	2696 approx.	30	2797
11.	Himachal Pradesh	54	370	370	370	0	0
12.	J&K	78	1389.1	1303.52	244	923.7	221.4
13.	Karnataka	316	11085	10198	6817	1250	3018
14.	Kerala	93	3472	1261	2502	Nil	970
15.	Lakshadweep	0 (10 Panchayats are existing)	35	10.48	10.48	Nil	24.52
16.	Madhya Pradesh	378	7980	7193	6431	762	787
17.	Maharashtra	396 ULBs + 07 CBs = 403	24410	23234	20319	1626	2465
18.	Meghalaya	7	229.18	191.19	9.64	50.96	168.58
19.	Nagaland	39	331.49	258.49	163.9	8	159.59
20.	Odisha	114	1951	1951	1569	-	382
21.	Puducherry	5	345	345	71	22.5	262
22.	Rajasthan	196	6523	6450	2718	GAP	3805
23.	Sikkim	7	74.7	74.6	12.56	62.032	0

24.	Tamil Nadu	664	13593	13185	9787	0	3806
25.	Telangana	142	10403	10403	7968	1001	1434
26.	Tripura	20	333.906	317.685	214.063	12.8918	106.951
27.	Uttar Pradesh	651	14468	14468	9705	1095	3668
28.	Uttarakhand	91	1255.77	1255.77	645.54	Landfill functional in Dehradun and Haridwar only	310.23
29.	West Bengal	125	13709	13356	2896	1187	9626

21. The data of sewage as per report dated 12.02.2021 filed by the Central Monitoring Committee, headed by Secretary Jal Shakti, Government of India, titled '**3rd QUARTERLY REPORT OF THE CENTRAL MONITORING COMMITTEE (CMC) IN COMPLIANCE OF THE ORDER DATED 21.09.2020**' in O.A. No. 593/2017, *Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors.* noted in order dated 22.02.2021 is reproduced below:

“Existing Sewage Infrastructure

48,004 MLD of sewage (from urban settlements) is being generated in 31 States/ UTs and 30,001 MLD capacity of STPs (1249 nos.) is existing which approximates to about 62% of sewage generation. Against the existing capacity, only 56% of the capacity is being utilized for treatment of municipal sewage. This leaves a gap of 17,027 MLD in treatment capacity. The details of sewage generation, existing sewage treatment capacity, its utilization and gap thereof is presented in Table-1.

Table-1: Details of Existing Sewage Infrastructure in the 31 States/ UTs

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present (in MLD)
1	Andhra Pradesh	1463.20	515.85 (43 STPs)	473.77 (91%)	947.35
2	Assam	435.53	0	0	435.53
3	Bihar	651.5	230 (6 STPs)	100 (44%)	421.5

4	Chhattisgarh	600	73.1 (3 STPs)	6 (8%)	526.9
5	Daman, Diu And Dadra Nagar Haveli	21.2	17.21 (2 STPs)	6.1 (35%)	3.9
6	Delhi	3273	2715 (35 STPs)	2432 (90%)	558
7	Goa	112.53	78.35 (9 STPs)	29 (37%)	34.18
8	Gujarat	4003	3485 (73 STPs)	2739 (78%)	518
9	Haryana	1267	1892 (155 STPs)	1189 (62%)	-
10	Himachal Pradesh	163.5	120.5 (65 STPs)	76.8 (64%)	43
11	Jammu & Kashmir	523	139 (15 STPs)	82.9 (60%)	383.08
12	Jharkhand	452	108 (14 STPs)	83%	343.8
13	Karnataka	3356.5	2242 (125 STPs)	1513.5 (67%)	1114
14	Kerala	317	124.15 (13 STPs)	91.12 (73%)	192
15	Madhya Pradesh	2183.65	618.23 (23 STPs)	472.6 (76%)	1565.4
16	Maharashtra	9758	7747 (142 STPs)	4207 (54%)	2011
17	Manipur	115	27 (1 STP)	9 (33%)	88
18	Meghalaya	75	1.85 (8 STPs)	1.82 (98%)	73
19	Mizoram	68	10 (1 STP)	0	58
20	Nagaland	44.3	25.4 (1 STP)	0	18.9
21	Odisha	367	91 (5 STPs)	70 (76%)	276
22	Puducherry	88	56 (5 STPs)	35 (62%)	32
23	Punjab	2111	1628.5 (116 STP)	80%	482.5
24	Rajasthan	1551	999 (80 STPs)	694.5 (69%)	552
25	Sikkim	47.68	19.5 (7 STPs)	60%	28
26	Tamil Nadu	3673.3	1616 (66 STPs)	919 (56%)	1320
27	Telangana	2613	888 (31 STPs)	735.8 (82%)	1724.45
28	Tripura	82.5	8 (1 STP)	3 (37%)	74.5
29	Uttarakhand	329.3	379 (63 STPs)	232.9 (61%)	-
30	Uttar Pradesh	5500	3370 (106 STPs)	2630.6 (78%)	2130

31	West Bengal	2758	776.32 (47 STPs) + 910 MLD addl treatment through EKW	289.89 (37%)	1071.68
Total		48,003.69	30,000.96 (1261 STPs)	55.9%	17,026.58

22. From the above, it is seen that there was gap in generation and processing of solid waste to the extent of about 56400 TPD (about 60,000 TPD) and legacy waste figure was mentioned at 18.55 crore tones. On the issue of liquid waste management, the gap shown was 17,026 (above 20,000). The data was however found to be not conclusive requiring further verification. The Tribunal in its order dated 30.11.2021 observed:-

“1to14....xxx.....xxx.....xxx

15. We also find that the report does not capture the entire data and correctness of data is not free from doubt. The same needs to be cross-checked. In particular, data for States of Bihar, Chhattisgarh, Himachal Pradesh, Sikkim and UT of Chandigarh, showing zero gap needs verification. The information is not available for all the million plus and State capital cities, as was required in terms of earlier orders. Information needs to be verified particularly with regard to Aizawl, Kalyan Dombivali, Nagpur, Nasik, Navi Mumbai and Pune where the gap is shown to be zero, which does not prima facie appear to be correct.

16 & 17. Xxx.....xxx.....xxx

18. We are of the view that hence forthwith proceedings in this matter need to cover Solid Waste Management and Sewage Management, these issues being crucial and required to be monitored by this Tribunal by the Hon’ble Supreme Court. Absence of management of waste results in adding to air and water pollution in a big way. All the legacy waste dump sites in the country need to be remediated to reduce methane gas, foul smell and leachate and also to release valuable land occupied by such sites which can be used for waste management/plantation or raising funds. Waste collected must be scientifically processed and disposed at the earliest in the interest of hygiene and public health. It needs to be ensured that instead of remediating the legacy waste sites, the garbage is not shifted to new sites which is not a solution to the problem. It only results in shifting the problem from one place to the other without any advancement of environment protection. What is necessary is that the garbage must be finally disposed of and land reclaimed. The authorities must

move towards zero garbage at the end of the day by ensuring that instead of garbage being collected and dumped, it is taken to destination where it is finally processed scientifically and appropriately, except for reused/recycling of such residues as is possible. This is also the mandate of Swachh Bharat Mission, initiated by the Central Government. Similarly, sewage has to be scientifically treated to give effect to the mandate of Water (Prevention and Control of Pollution) Act, 1974 in the interest of availability of clean water in rivers and other waterbodies. Central Governments programmes also provide for initiatives on these subjects. On both aspects, compensation regime has been laid down which is necessary to enforce the rule of law and for protection of environment and public health. The compensation laid down has to be duly collected and utilized for restoration of environment, by being kept in a separate account. Accountability for the failures needs to be fixed by way of ACRs and departmental action as such failures result in crimes under the law of land and damage to public health. Such failure is also breach of Constitutional obligation to uphold the Right to Life. The country is committed to Sustainable Development Goals of providing clean air and safe drinking water.

19. In view of above, continued failure of Rule of Law must be remedied in terms of mandate of orders of the Hon'ble Supreme Court in Writ Petition No. 888/1996, Almitra H. Patel Vs. Union of India & Ors. and Paryavaran Suraksha vs. Union of India,⁶ followed by orders of this Tribunal. It is necessary that Chief Secretaries continue the monitoring and interact with this Tribunal periodically by video conferencing. Accordingly, we lay down following further schedule for personal appearance of the Chief Secretaries, by Video Conferencing, with the status of compliance in respect of each of the States/UTs on the subject of Solid Waste Management and Sewage Management. The data to be furnished should cover all categories of areas in the State – big cities, towns and villages.

20. The hearing on each of above dates will commence at 10:30 a.m. sharp. The Chief Secretaries may not delegate the responsibility. As far as possible, they may adjust other work for which long advance notice is being given. In case adjustment is found difficult for any unforeseen reason, request for change of date may be mailed by e-mail at judicial-ngt@gov.in.

21. All the States/CPCB may undertake process of verification of data after having interaction on video conferencing with the concerned States/UTs within one month. The Secretaries, Environment, Urban Development Department and Irrigation Department may also coordinate with the Member Secretaries of State Legal Services Authorities in all State/UTs in the light of background mentioned in paras 3 and 4 above for the awareness programmes on the subject."

⁶ (2017) 5 SCC 326

Separate orders dated 28.8.2019, 12.9.2019, 6.12.2019 and 22.02.2021 on the subject of Liquid Waste Management

23. Issue of liquid waste management was separately dealt with in OA 593/2017 on directions of Hon'ble Supreme Court and in suo motu proceedings for restoration of 351 identified polluted river stretches in OA 673/2018. Vide order dated 28.08.2019, the Tribunal directed that 100% sewage treatment must be ensured by all local bodies. Vide further order dated 06.12.2019 in O.A. No. 673/2018⁷, the Tribunal directed that for failure to commence in-situ remediation, compensation will be payable at the rate of Rs. 5 lakh per month per drain after 31.03.2020 and for failure to commence setting up of STPs after 31.03.2020 compensation is to be paid at the rate of Rs. 5 lakh per month per STP. For failure to complete the project, compensation has to be paid at the rate of Rs. 10 lakh per STP per month after 31.03.2021. Relevant part of the order is quoted below:

***“47. (i) 100% treatment of sewage may be ensured as directed by this Tribunal vide order dated 28.08.2019 in O.A. No. 593/2017 by 31.03.2020 atleast to the extent of in-situ remediation and before the said date, commencement of setting up of STPs and the work of connecting all the drains and other sources of generation of sewage to the STPs must be ensured. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as already directed vide order dated 22.08.2019 in the case of river Ganga i.e. Rs. 5 lakhs per month per drain, for default in in-situ remediation and Rs. 5 lakhs per STP for default in commencement of setting up of the STP.*”**

ii. Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In default, compensation will be liable to be paid at the scale laid down in the order of this Tribunal dated 22.08.2019 in the case of river Ganga i.e. **Rs. 10 lakhs per month per STP.”**

⁷ News item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB"

24. Both the matters were disposed of vide order dated 22.02.2021 with a direction that further monitoring be continued at the level of the Chief Secretaries in States and Central Monitoring Committee headed by Secretary, Ministry of Jal Shakti at the national level.

Today's hearing in the presence of Chief Secretary, Delhi to ascertain compliance status and way forward

Compliance status in Delhi presented

25. The presentation filed by the Chief Secretary, Delhi on 16.02.2023 shows following data:

SUMMARY OF STATUS

A: Solid Waste Management			
Quantity of Waste generation (in TPD)	Waste Processed (in TPD) (Installed and used capacities)	Gap in generation and Processing (in TPD)	Quantity of Legacy waste in the State (Tones)
11,332	6972	4360	280 lakhs MT (As in July 2019)

Note: Figures of generation, processing and gap have been taken from slide no. 16 of the presentation
Figure of legacy waste has been taken from slide no. 21 of the presentation.

B): Sewage Management					
Quantity of sewage generation in the State	Utilization of Treatment capacity	Current Gap in treatment	Utilization of treated sewage in		
			Agriculture/ Horticulture purpose	Industrial purpose	Any other purpose
768 MGD	Installed treatment capacity: 632 MGD (35 STPs) Utilized capacity in the existing STPs with earlier designed parameters: 530 MGD	238 MGD* (with existing STPs) 768-160= 608 MGD *for calculation of EC, gap of 238 MGD is taken	530 MGD		

	Present treatment to the level of prescribed standards (stringent 10:10): 160 MGD		
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Note: Data in first three columns has been taken from slide 31 of the presentation. Data in column 4 has been taken from slide no. 53.

Our analysis, findings and Directions

26. It is seen from the data presented by the Chief Secretary that there still exist gaps in management of solid and liquid waste. The data with regard to solid waste management is incomplete as quantity of legacy waste is mentioned as 280 lakhs MT in July 2019 which does not mention the current data. Since current processing is less than generation, there is addition to legacy waste. Considering the gap of 4360 TPD, the legacy waste added in the last three years can be taken roughly as 50 lakh MT. Thus, the total legacy waste is more than 330 lakh MT. With regard to sewage management, the treatment being 530 MGD, gap in generation and treatment, as per the data given, is 238 MGD which comes to 1071 MLD. On pattern of compensation awarded in respect of other States (@ Rs.2 crore per MLD of untreated sewage and Rs.300 per Tonne of untreated legacy waste), compensation of Rs. 3132 crore is liable to be levied on Delhi Govt – 990 crores for solid waste and 2142 crore for solid waste. Deducting compensation for solid waste already levied at 900 crore, the remaining amount of Rs. 2232 crore has to be paid by the Delhi Government on polluter pays principle to used for tackling the emergent situation prevailing in Delhi posing danger to the safety of the citizens, apart from continuing damage to the environment which cannot be ignored. This payment will be responsibility of the Chief Secretary, Delhi. The payment be made within one month and credited to a separate ring fenced account from which amount can be withdrawn only for waste management to

eliminate existing gaps mentioned above. It may be noted here that this Tribunal has recently passed orders on this pattern in respect of 25 States/UTs except where the Chief Secretaries filed undertakings to pay such or more amounts voluntarily. In the present case, no such undertaking having been filed, we have no option but to direct such payment in exercise of our jurisdiction under section 15 of the NGT Act.

27. The issue of emergency situation of failure to tackle legacy waste as per SWM Rules, 2016 was earlier considered by this Tribunal dated 11.10.2022 in OA No. 300/2022, *In re: News item published in News 18 dated 26.04.2022 titled “Delhi: Massive Fire at Bhalswa Dump Yard, Fourth This Year; 13 Fire Tenders on Spot”* and connected matter, whereby liability for compensation for failure to scientifically handle solid waste was determined at Rs. 900 crores which does not appear to have been paid so far as review applications have been file which are being disposed of by separate orders today. The amount may now be paid with additional amount of Rs. 2232/- crores, as per above observations. Total amount liable to be paid is Rs. 3132 crores. Deposited in separate account may be on the pattern of deposit by the State of West Bengal in pursuance of order dated 1.9.2022 in OA No. 606/2022 (In respect of State of West Bengal) as follows:

“3. Document annexed to the report are also reproduced below:

**“Government of West Bengal
Finance Department
Group N - Budget Branch**

File No.: UDMA-13014(99)/100/2022 (FD Computer No. 605523)	
New Head of Account	
1. 8448-00-120-159-07-R - Solid and Liquid Waste Management Fund	
2. 8448-00-120-159-23-D - Solid and Liquid Waste Management Fund	

I. We may agree to open following Heads of Account in the Public Account as separate ring-faced account for depositing Rs. 3500 Crore in pursuance of the Order passed by the Hon'ble National Green Tribunal on 01.09.2022 as the compensation for damage to the environment due to violation of relevant Sections of NGT Act by the State. The said account to be operated as per directions of the Chief Secretary and utilized for restoration measures, including preventing discharge of untreated sewage and solid waste treatment/processing facilities, as per appropriate mechanism for planning and execution in pursuance of aforesaid Order of the Hon'ble NGT:

- (i) 8448-00-120-Other Funds-159-Solid and Liquid Waste Management Fund-07-Deposits [Receipt Side]
(ii) 8448-00-120-Other Funds-159-Solid and Liquid Waste Management Fund-23-Withdrawal [Disbursement Side]

II. Fund of Rs. 3500 Crore has been released vide U.O. No. 3407 dated 28.10.2022 for transfer of same to the aforesaid ring-faced account.

III. We may have no objection towards operating of the captioned by State Urban Development Authority (SUDA), subject to the concurrence of Group-T.

IV. Considering the urgency to comply the Court Order, the aforesaid fund has been opened in Public Account. The UD&MA Department may be requested to approach the office of the Pr. Accountant General (A&E), West Bengal for post-facto approval.

Sd/- S. Hasan, Assistant Secretary 20.10.2022
Sd/- A. K. Mondal, Special Secretary 20.10.2022
Sd/- S. Gourisaria, Senior Special Secretary 20.10.2022
Sd/- Manoj Pant, Additional Chief Secretary 21.10.2022

U.O. No. : 3406
U.O. Date : 28/10/2022

Sd/-
Chandrima Bhattacharya
(Minister-Of-State)
28/10/2022

SECTION OFFICER
(Finance (Budget) Department)

**Finance Department
Group N - Budget Branch**

**File No. : UDMA-13014(99)/100/2022-BDG-MA SEC-Dept. of UDMA/FIN-30014/344/2022-
GROUP R SEC-Dept. of FIN [Urban Development and Municipal Affairs Department]**

Sl	Heads of Account	Earmark	Budget Amount (₹)	Re-App Amount (₹)	Augment Amount (₹)	Surrender Amount (₹)	Current Ceiling (₹)	Cumulative Ceiling (₹)
1	UM-72-2215-01-101-005-31-02-V	--	21,21,00,000	0	0	-10,00,00,000	-2,40,11,080	8,20,38,920
2	UM-72-2217-01-193-008-31-02-V	--	42,45,00,000	0	0	-10,00,00,000	-7,20,350	14,52,90,858
3	UM-72-2217-01-193-008-35-00-V	--	140,00,00,000	0	0	-70,00,00,000	-5,01,426	37,07,65,557
4	UM-72-2217-03-191-003-31-02-V	--	126,00,00,000	0	1318,87,67,000	0	1419,67,67,000	1444,87,67,000
5	UM-72-2217-03-192-002-31-02-V	--	185,85,00,000	0	1910,11,51,000	0	2058,79,51,000	2095,96,51,000
6	UM-72-2217-05-191-001-35-00-V	--	61,95,00,000	0	0	-39,00,00,000	-6,79,10,334	5,59,89,666
7	UM-72-2217-05-191-005-31-02-V	--	10,50,00,000	0	0	-5,00,00,000	-39,13,000	1,70,87,000
8	UM-72-2217-05-191-019-36-00-V	--	940,00,00,000	0	0	-90,00,00,000	-90,00,00,000	850,00,00,000
9	UM-72-2217-05-191-020-36-00-V	--	39,00,00,000	0	0	-3,00,00,000	-3,00,00,000	36,00,00,000
10	UM-72-2217-05-191-043-35-00-V	--	45,00,00,000	0	0	-5,00,00,000	-514	29,21,35,652
11	UM-72-2217-05-191-062-31-02-V	--	140,00,00,000	0	0	-49,00,00,000	0	77,77,66,000

12	UM-72-2217-05-192-007-36-00-V	--	679,00,00,000	0	0	-100,00,00,000	-100,00,00,000	579,00,00,000
13	UM-72-2217-05-192-008-36-00-V	--	25,00,00,000	0	0	-3,00,00,000	-3,00,00,000	22,00,00,000
14	UM-72-2217-05-192-016-31-02-V	--	180,00,00,000	0	0	-71,00,00,000	0	108,53,94,000
15	UM-72-2217-05-192-051-35-00-V	--	52,50,00,000	0	0	-25,00,00,000	0	18,98,03,000
16	UM-72-2217-05-193-007-35-00-V	--	10,50,00,000	0	0	-5,00,00,000	-1,88,97,000	21,03,000
17	UM-72-2217-05-193-079-35-00-V	--	10,50,00,000	0	0	-7,00,00,000	-1,88,62,235	21,37,765
18	UM-72-2217-05-789-009-35-00-V	--	21,00,00,000	0	0	-8,00,00,000	0	12,35,71,000
19	UM-72-2217-05-789-025-31-02-V	--	100,00,00,000	0	0	-25,00,00,000	0	57,40,89,000
20	UM-72-2217-05-796-013-31-02-V	--	27,00,00,000	0	0	-5,00,00,000	0	15,58,36,000
21	UM-72-2235-60-200-097-31-02-V	--	115,00,00,000	0	0	-25,00,00,000	-8,51,00,000	14,49,00,000
22	UM-72-4216-02-101-021-53-00-V	--	9,90,00,000	0	0	-3,00,00,000	-53,11,051	5,44,12,281
23	UM-72-4217-01-051-011-53-00-V	--	328,16,25,000	0	0	-102,00,00,000	0	201,12,39,619
24	UM-72-4217-60-001-004-53-00-V	--	250,00,00,000	0	0	-150,00,00,000	-9,89,943	49,90,10,057
25	UM-72-4217-60-050-002-53-00-V	--	52,50,00,000	0	0	-30,00,00,000	-10,50,00,000	0
26	UM-72-4217-60-051-014-53-00-V	--	790,62,50,000	0	0	-390,00,00,000	0	192,34,25,767
27	UM-72-4217-60-051-018-53-00-V	--	367,50,00,000	0	0	-187,30,30,000	-6,57,09,648	80,82,01,540
28	UM-72-4217-60-051-022-53-00-V	--	70,00,00,000	0	0	-40,00,00,000	-2,23,80,321	11,76,19,679
29	UM-72-4217-60-191-002-53-00-V	--	350,00,00,000	0	0	-200,00,00,000	-1,63,92,052	83,64,87,948
30	UM-72-4217-60-192-001-53-00-V	--	341,25,00,000	0	0	-220,00,00,000	-297	68,24,99,703
31	UM-72-4217-60-193-002-53-00-V	--	620,00,00,000	0	0	-370,00,00,000	-27,10,82,774	131,89,17,226
32	UM-72-4217-60-789-004-53-00-V	--	173,25,00,000	0	0	-103,11,79,000	-2,60,49,170	37,47,02,155
Total			6325,64,75,000	0	3228,99,18,000	-2350,42,09,000	3209,18,86,805	6292,38,41,393

I. In accordance with the Order passed by Hon'ble NGT' on 01.09.2022 in the case O.A. 606 of 2018 in respect of State of WB- compliance of SWM Rule 2016 & other environment issues, we may agree to release the total amount of Rs. 3478,47,18,000/- under the heads of account "72-2217-03-192-00-00231-02-V" [Rs. 2058,79,51,000/-] and "72-2217-03-191-00-003-31-02-V" [Rs. 1419,67,67,000/-] and request the Admn Dept. to utilize e-Bantan Balance of Rs. 21,52,82,000/-, out of which Rs. 12,95,49,000/- under the H/A "72-2217-03-192-00-002-31-02-V" & Rs. 8,57,33,000/- under the WA "72-2217-03191-00-003-31-02-V" to meet the total requirement of Rs. 3500,00,00,000/- relating to Solid & Liquid Waste Management, to enable the UD&MA Department to deposit the said amount in a separate ring-faced account under the H/A "8448-00-120-Other Funds-159-Solid and Liquid Waste Management Fund-07-Deposits/23-Withdrawal" opened vide U.O. No. 3406 dated 28.10.2022.

II. To provide the aforesaid fund, we may agree to (A) surrender total amount of Rs. 2400,00,00,000/-, out of which the (i) Rs. 2350,00,00,000/- vide instant U.O. No. under 30 above mentioned Heads of Account of which Rs.


269,28,31,195/- from revised balance of Budget Provision, 2022-23 and Rs. 2080,71,68,805/- from available e-Bantan Balance with Admn Dept. and (ii) Rs. 50,00,00,000/- under the H/A "72-4217-01-051-010-53-00-V" from revised balance of Budget Provision, 2022-23 vide U.O. No. 3405 dated 28.10.2022 and (B) also agree to provide additional fund of Rs. 1910,11,51,000/-under the H/A "72-2217-03-192-002-31-02-V" & Rs. 1318,87,67,000/- under the H/A "72-2217-03-191-003-31-02-V" to enhance the total available ceiling to Rs. 3500 Crore.

III. The UD&MA Department may take appropriate action to transfer the fund of Rs. 3500 Crore to the separate ring-faced account as stated in Para-I above in pursuance of the Order of Hon'ble NGT.

Sd/- S. Hasan, Assistant Secretary 20.10.2022
Sd/- A. K. Mondal, Special Secretary 20.10.2022
Sd/- S. Gourisaria, Senior Special Secretary 20.10.2022
Sd/- Manoj Pant, Additional Chief Secretary 21.10.2022

U.O. No. : 3405
U.O. Date :2811012022

sd/-
Chandrima Bhattacharya
(Minister-Of-State)

	To Urban Development and Municipal Affairs Department (Section Officer) Finance Department, Budget Branch
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28. If necessary, Govt. of Delhi may lay down mechanism for raising funds such as by way of user charges by households/contribution of corporate, business sectors, commercial establishments and the tourists who contribute to waste. Further steps have to be taken in a mission mode to comply with MSW Rules without further delay.

Further consideration of issue of Solid Waste Management

29. Apart from collection, segregation and transportation of waste, scientifically handling of waste (processing and disposal) as per SWM Rules 2016 is required. Thus, while addressing the issue of bridging the gap in management of MSW, segregation of the solid waste at source and its

earliest processing nearest to the point of generation with defined destination is imperative. Capacity of segregation in 29 wards where segregation level is only upto 20% needs to be further increased. At other places, segregated waste should not be mixed again. In particular, adequate composting/vermicomposting/bio-methanation centers need to be set up and upgraded nearest to the source of generation of wet solid waste, listing people's involvement. This may also require establishing decentralized and centralized waste processing facilities. Waste generators can themselves be required to process the waste under guidance and handholding by the Administration, with the assistance of identified empaneled service providers and such details may be posted on State's/Center's GeM portal. This may perhaps reduce planned expenditure. MCD, NDMC and DCB need to identify bulk waste generators and require them to reduce waste and set up waste processing plants. Inventories of such generators and their plan of action be prepared in two months.

30. Though as per above data, out of 11332 TPD solid waste generated in Delhi, 6972 TPD of waste is being processed through Waste to Energy, Composting and Material Recovery Facilities (MRFs), end-users of the compost and the rejects are not given. If adequate waste processing facilities exist, one can expect that no further deposition of fresh waste will take place. There are four waste to energy plants. These plants should be run effectively and not cause pollution.

31. Three landfill sites - Ghazipur, Bhalswa and Okhla must be maintained free from fires. Safety of workers engaged should be ensured. Such sites may be fenced with row of trees or wall, as may be viable, for aesthetics, preventing foul smell and safety. Provisions of Schedule-I of the

SWM Rules, 2016 may be strictly followed. Water quality in the vicinity of legacy waste dump sites may be periodically monitored. If any contamination is found, remedial action may be taken. Environmental safety aspects associated with legacy waste dump sites be complied with as specified in Schedule I of MSW Rules, 2016. During forthcoming summer season, the dump sites be kept under strict vigil so that no fire incidents take place. Preventive and precautionary steps be taken well in advance and vigilant teams deployed.

32. Dump sites in operation as well as the legacy waste dump sites occupy huge area of valuable public lands. They remain source of air, water and land pollution resulting in damage to environment and public health. They emit intolerable smell and cause hazardous and unsafe environment for inhabitants in the vicinity. Their life is hell which is denial of their constitutional and human rights. In terms of money also, huge loss is caused to public health and environment. This situation is not acceptable in a civilized society governed by rule of law. For victims of situation, there is no governance. In recent order of the Tribunal dated 18.08.2022 in RA No. 21/2022 in OA No. 286/2022, (relating to Ludhiana in Punjab), two scientific studies on the subject of extent of environmental damage have been referred to, one of which was in respect of Delhi. These are reproduced below:

“7. ...Legacy waste dumpsites are serious threat to public health and also source of generation of greenhouse gases. The Tribunal considered the issue of quantification of loss to environment by legacy waste dump sites inter alia in OA 514/2018 and OA 519/2019. Orders passed show that as per expert studies, loss for such failure, 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., is huge running in hundreds of crores. Some of the orders showing this are quoted below:

Order dated 23.03.2020 in O.A. No. 519/2019

“xxxx.....xxx.....xxx

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.”**

Order dated 29.01.2021 in O.A. No. 519/2019

“6. Accordingly, status report dated 28.01.2021 has been filed by the CPCB as follows:-

“2.0 Action Taken :-

In compliance of Para 19 of aforesaid Hon'ble NGT's Order, Joint committee comprising of following members has been formed:

- Dr. S. K. Goyal, Chief Scientist and Head, NEERI Delhi Zonal Center
- Dr. G .V .Ramanna, Professor, Department. of Civil Engg., IIT-Delhi
- Ms D. Sinha, DH- UPC-II, CPCB
- Mr. P. Agarwal, Scientist-E, CPCB

Report on "**Assessment of amount of damage to environment on account of dumpsites in Delhi**" as prepared by Joint committee is placed at **Annexure-A**. Amount of Damage to Environment due to three dumpsites of Delhi to be levied on Municipal Corporations of Delhi is given in the following table:

S. No.	Name of Municipal Corporation	Name of Dumpsite	Damage Cost assessed, (Rupees)
1.	NDMC (North Delhi Municipal Corp.)	Bhalswa	155.9 Crore
2.	EDMC (East Delhi Municipal Corp.)	Ghazipur	142.5 Crore
3.	SDMC (SouthDelhi Municipal Corp.)	Okhla	151.1 Crore

xxx.....xxx.....xxx

7. Report of inspection conducted by the joint Committee comprising of the CPCB, NEERI and IIT Delhi is filed with following summary and conclusion:

“5.0 SUMMARY & CONCLUSION :

- i. Hon'ble NGT in OA No. 519/2019 constituted a Committee comprising of CPCB, NEERI & IIT Delhi to assessment of damage to environment due of dump sites in Delhi within two months.
- ii. Baseline information was collected by Committee through Questionnaire sent to three concerned Municipal Corporations (MCs). As per the information provided by the MCs, bio mining is being carried out at all three sites. **However, about 6% of waste has been bio-remediated at the three sites.** Further, fresh waste is being dumped at all three dumpsites.

- iii. *Potential sources of air pollution at the sites include handling of fresh waste, Bio mining of legacy waste, Methane and other Green House gases from the Dumpsite, transportation of fresh waste & screened fractions, Odour & Fire accidents. Potential sources of water pollution at the sites includes Leachate which is being generated at all the three dumpsites*
- iv. *Air Pollution control measures taken at site includes mainly includes sprinkling of water. It has been informed by the authorities that smog guns are being procured for control of air pollution. **No concrete measures for leachate collection and treatment have being taken at the three dumpsites. Leachate is partially being recirculated for stabilization of waste and the remaining is being discharged into nearby surface water drains. Actual details regarding quantity of leachate used/ discharged not provided by the concerned authorities***
- v. *Concentration of TDS, TSS, COD & BOD in leachate exceeds the stipulated norms at all the three dumpsites. Concentration of Heavy metals is within the stipulated norms with the exception of lead which has marginally exceeded the permissible limits at Ghazipur. Assessment of Ambient Air, Surface & Ground Water quality is based on monitoring data of CPCB for the past three years. Zone of impact has been considered to be 5 km and information related to monitored stations located within and beyond this radius has been compiled and analysed. In addition, information provided by Delhi Pollution Control Committee regarding ground water monitoring has been taken into consideration.*
- vii. ***As per air quality monitoring data, PM₁₀ & PM_{2.5} concentrations exceeded the prescribed values at all monitored stations upto 5 km distance & beyond from the Dumpsite sites. SO₂ & NH₃ concentrations are within the prescribed values at all monitored stations. Benzene has exceeded the stipulated limited at one station and NO_x has exceeded the permissible limit at 7 monitored stations.***

viii. As per the water quality monitoring data, concentration value of Arsenic, Chromium, Copper, Chloride, TDS, Fluoride, Cadmium and Iron exceeded the permissible limits at specified locations of Surface & Ground Water locations. Besides COD was detected at several stations monitored. As heavy metals (except iron) concentration in leachate was within specified norms and Chloride and TDS were within the permissible drinking water limits (BIS 10500) at most stations monitored, further analysis was done in terms of COD & Fe concentration levels and following are the observations:

- *High level of COD & Fe reported in Ground water at all three sites in Ground water which may be due to leachate from the dumpsite*
- *Very High level of COD, Chloride, TDS, TSS, Turbidity reported in surface water body (Bhalswa lake) located within a radius of 0-1 km from Bhalswa site, which may be due to leachate from the dumpsite*
- *High COD values reported in surface water body (Sanjay Lake) located at a distance of 3-5 km from Ghazipur site. Owing to the distance from the site, actual impact due to dumpsite can be confirmed based on the hydrogeology of the region and contaminant transport modelling*
- *Fluctuating trend in Iron & COD concentration in ground water observed within 5 km radius at the three sites. Overall increase in Iron and COD levels observed with increase in distance from the dumpsites, indicating, marginal impact on ground water quality due to dumpsite within 5 km distance from dumpsite*
- *Ground water outside 5 km radius have reported higher value of COD & Fe than stations located within 5 km radius, indicating minimal impact of dumpsite on ground water quality. Local factors are contributing in deterioration in water quality at these stations*
- *As several sources of water pollution including open drains observed in these regions, actual impact of the*

local sources as well as that of the dumpsite can be confirmed based on the hydrogeology of the region and contaminant transport modelling

- ix. There are currently 37 Continuous Air Quality monitoring locations in Delhi, of which 10 are located within a distance of 5 km from the dumpsites.
- x. Range in variation in PM_{2.5} & PM₁₀, NO_x & Benzene concentration levels within 5 km overlaps the range observed for stations located at distance greater than 5 km from dumpsites. Fluctuating trend is observed in NO_x /Benzene concentration levels vis-a-vis distance from the dumpsite.
- xi. Several local factors such as drains, road dust, vehicular pollution, C&D waste etc. also contribute towards air & water pollution in the region.
As per analysis of air and water quality carried out, deterioration in environmental quality cannot be attributed directly to the various activities happening at the dumpsites. **As further detailed investigations are required to assess actual impact of the dumpsite related activities on the environment (air, water & soil quality), interim cost of damage to environment is based on the Environmental Compensation to be levied for violation of Solid Waste Management Rules, 2016. Cost of damage to environment has been calculated based on the Environmental Compensation to be levied for violation of Solid Waste Management Rules and has been assessed as Rs.155.9 Crore (for Bhalswa), Rs. 142.5 Crore (for Ghazipur) and Rs. 151.1 Crore (for Okhla).**
- xii. Source apportionment studies are required to assess the actual impact of air pollution sources at dumpsite on air quality in the region.
- xiii. Detailed hydrogeological investigations and containment transport modelling is required to assess the impact of dumpsites on surface / ground water.”

8. As shown above, in O.A. No. 514/2018, damage to the environment was assessed at Rs. 148.46 crores for Air pollution, Water pollution, Soil pollution, Climatic (GHG emissions) and Aesthetics has been taken into consideration in the report and damage cost to environment is estimated at Rs 148.46 crores. The report has following conclusions:-

“7. Results & Conclusion

The report focuses on identifying and estimating monetary losses (in 2019 Rupees) on the environment due to the operation of Bandhwari municipal dumpsite. The damage was assessed with a consideration that there is no major polluting industries existing in nearby vicinity other than the dumpsite. The study estimates a total incurred damage of about ₹ 148.46 Crore due to externalities from Bandhwari dumpsite. The breakup is shown in Table 22. The cost for damages includes drivers of externalities like greenhouse gas emissions, air pollution, water pollution, soil pollution and aesthetic loss.

Table 22: Break Up of Monetary Estimation of Damages (reported in 2019 values)

Environment	Estimated Damage Cost in Lakhs, INR
Air	Nil
Water	2900
Soil	31*
Climatic (for last 5 years)	7,000
Aesthetic	4,946
Total	14,846

*Soil value is not considered in total, to avoid double-counting, as it based on total quantum of heavy metal from leachate which is considered in water as well.

The valuation of damages is done for greenhouse gas emissions using social cost of carbon approach recommended by USEPA. The social cost of carbon is indirect measure of loss in economy due to emission of CO₂ and is contributing by 73% of total damage due to Bandhwari municipal dumpsite. Air pollution damages are not valued as the emissions hardly breach the limits and the area in which emissions are higher, no population exposure is there. Further, the leachate contaminated groundwater and soil damages are valued using cost transfer method and Extern report valuations. Groundwater sample analysis shows lead and nickel exceeding the BIS standards at sampling locations near the dumpsite. Groundwater beneath the dumpsite showed high contamination due to heavy metals such as Cr, Cu, Pb & Ni. Physiochemical characteristics such as BOD, COD, SS,

N, P of the treated leachate showed higher concentration and have contributed to half of the total damage cost in water environment. The leachate is valued for the damages which it can cause due to contamination of soil and water. The damages to water are considered as overall damages. The total quantum of heavy metals due to leachate is fixed and is used for valuation for both soil and water, however, higher damages are seen for water and hence considered in total. Aesthetic losses due to dumpsite are valued using hedonic pricing method. GHG emissions are a part and parcel of any dumpsite. If proper control systems are kept in place these emissions can be controlled and may be utilized as well and hence maximum damages can be averted. Leachate also should be controlled and treated scientifically.”

Use of reclaimed land occupied by legacy waste sites

33. As already mentioned earlier, legacy waste dump sites have resulted in huge damage to the environment and population in the vicinity of such dump sites who have suffered in safety, health and comfort. For compensating them for such damage, one third of land occupied by legacy dump sites (on reclamation) needs to be reserved for dense forest and in the process of afforestation, Campa Funds can be utilized in accordance with the provisions of Compensatory Afforestation Fund Management and Planning Authority Act, 2016 (CAMPA Act). One third of reclaimed land out of the said dump site needs to be reserved for integrated waste management facilities. Remaining one third can be used for any other purpose, consistent with the above purposes, including a part of it being utilized for monetizing, if funding is required for tackling the legacy waste. It may not be necessary to search for new lands for waste processing facilities if facilities are set up at on reclaimed land. Legacy waste clearance has to be in minimum further time as laid down statutory timelines have already expired and serious damage is taking place. Time for clearing legacy waste by May 2024 be shortened. Remediation of legacy sites be one-time affair and such situations should not arise in future. Bio-remediation followed by bio-mining has to be executed in accordance with

the Guidelines/SoP laid down by CPCB⁸ and the residues/rejects arising out of such processes are to be properly utilized and managed with well-defined destinations. Inerts may go for road constructions. RDF may go to WTE plants and cement industries. Remediation be executed simultaneously at three sites and demonstrated at national level as success story of the Capital of India. Repeated tendering may be avoided. Execution of remediation may be done preferably at standard rates to save time. Execution can also be done through Departmental efforts. User of land, to be reclaimed, needs to be declared in advance so that further steps can be taken in that direction. This is in line with order of this Tribunal dated 11.10.2022 in OA No. 300/2022, *In re: News item published in News 18 dated 26.04.2022 titled "Delhi: Massive Fire at Bhalswa Dump Yard, Fourth This Year; 13 Fire Tenders on Spot"*. Relevant part thereof is quoted below:-

“xxxxxx.....xxx

37. Restoration measures will include scientific disposal of the accumulated garbage as per statutory Rules and environmental norms, fire control and mitigation measures, construction of boundary wall/bio-fencing by trees and shrubs/ afforestation, plantation, leachate treatment facility. Course of action planned and executed at other places⁹ where legacy waste dumpsites are reported to have been remediated may also be studied. Ground Water Authority may examine the extent of leachate flow into the ground water on which remedial action may be taken.

38. It is to be ensured that current waste is not added to legacy waste dumpsites. After collection, the same be taken to the destination such as Integrated Waste Management Facility or stand alone Waste Management Facilities such as Composting Centres, C&D Waste Centres and RDF Units, Waste to Energy Units, Cement Factories, Road Construction and filling up identified low lying areas, as per norms. This requires careful planning and execution with the involvement of senior level officers instead of leaving the task to junior officers as appears to be currently happening. Precautions in light of report of the Committee headed by Justice S.P. Garg, retired Judge, Delhi High Court need to be taken forthwith. To control foul smell and improve aesthetics, turfing of

⁸ <https://mpcb.mizoram.gov.in/uploads/attachments/6e7c1548449702807cb534c7cf89aafe/pages-207-guidelines-for-disposal-of-legacy-waste.pdf>

⁹ such as Indore and Ahmedabad

landfill sites must be done forthwith either in the form of a boundary walls with necessary entry and exit gates or fencing by plantations of at least three rows of native fast growing and tall native trees requiring minimum water in the periphery of landfill sites as well as complying with other criteria for development of facilities at such sites following the provisions under the Schedule I of MSW Rules, 2016. A clear action plan with defined course of action needs to be drawn up after brain storming and studying the remediation processes adopted at other places. Consequences of overshooting timeline against identified officers/ service providers may be specified and enforced. The Committee may consider undertaking visits to appropriate sites.

39. One of the crucial links in management of remediation work based on bio-mining and bio-remediation is the utilization and disposal of rejects like inert, RDF, stabilized bio-earth. Segregated fractions and components which are in high quantity be safely utilized and disposed. Bulk users of RDF, three waste to energy projects should utilize the RDF and if required enhance their capacity without compromising environmental norms and public safety.

40. To compensate the affected citizens of the area, the authorities are under obligation to develop dense forest in at least on one third of the land occupied by the dumpsite, after the sites are cleared. One third can be utilized for setting up Integrated Waste Management Facilities or other like infrastructure. The remaining one-third can be utilized for any other purpose, including raising of funds consistent with environment concerns without affecting the use of the two-third, as earlier mentioned. The authorities may explore setting up a tourism and recreational centre with the involvement of an appropriate agency on PPP or Hybrid Annuity Model or other mechanism so that investment is made which is allowed to be recovered from the tourists visiting such centres. Creation of an appropriate water body may be considered as part of such recreational centre. Possibility of setting up an Interpretation Centres at all the three sites to facilitate study for creating awareness for the citizens may also be considered.

41. Community involvement including the Welfare Associations, Educational Institutions, Volunteers, corporates, charitable and other social organisations and individuals may be explored. Such involvement may be explored for plantation drives also. There is also need to strengthen the Control Room and set up Grievance Redressal Mechanism accessible to the citizens to extend immediate help in emergencies within a month.”

34. Thus, execution plan relating to management of municipal solid waste may include setting up of new facilities in the form of WTE plants, composting, Bio-CNG and others and augmentation of existing waste processing plants (centralized and decentralized) for un-processed waste, if any. Bio-remediation/bio-mining process need to be executed as per CPCB guidelines and the stabilized organic waste from biomining as well

as from compost plants need to comply with laid down specifications. Other material recovered during such processes is to be put to use through authorized dealers/handlers /users. Instead of creating more dumping sites for waste generated on day-to-day basis, waste processing plants of adequate capacity which are set up should be fully utilized so that no further legacy waste is generated. Simultaneously, plastic waste and construction and demolition processing plants may also set up and further ensuring that bio-medical, hazardous and E-waste are not co-mingled and treated with solid waste. It may be worthwhile to take into consideration guidelines on the subject issued by the Ministry of Urban Development, GoI titled “Waste to Wealth” on 2.10.2017 under Swachh Bharat Mission.¹⁰

35. In view of the fact that there is continued failure of the authorities in handling solid waste inspite of repeated orders including last order dated 11.10.2022 in OA No. 300/2022, even after monitoring of the matter by the Hon’ble Supreme Court and this Tribunal in the last 27 years, paradigm shift in approach is required. Need for taking urgent measures to ensure that entirety of solid waste generated is simultaneously processed and legacy waste is remediated without any further delay. Emergent measures are required to be taken. The un-remediated solid waste is hazard to environment and public health and also contributes to climate change.

36. One reason noted earlier for failure in Delhi in tackling solid waste is lack of coordination between multiple authorities, leading to shifting of blames. This issue received attention of Hon’ble Supreme Court in the context of Delhi garbage inter-alia in SMW (C) No(s). 1/2015, *IN RE:*

¹⁰ <http://cpheeo.gov.in/upload/5abc86de40012WastetoWealth2Oct.pdf>

OUTRAGE AS PARENTS END LIFE AFTER CHILDS DENGUE. Vide order dated 10.07.2018, it was observed:

“NCT of Delhi

There is a mountain loads of garbage in Delhi, particularly in Bhalswa, Okhla and Ghazipur.

We would like to know who is responsible for clearing the garbage – those answerable to the Lt. Governor or those answerable to the Chief Minister.

The affidavit in this regard should be filed by the concerned officer of both the functionaries by tomorrow.

For this purpose, list the matter on 12th July, 2018.”

37. Vide order dated 12.07.2018, it was observed:

“On 10th July, 2018, we had observed that there are mountains of garbage in Delhi. We had required to know who is responsible for clearing the garbage – those answerable to the Lt. Governor or those answerable to the Chief Minister of Delhi. Affidavits were directed to be filed in this regard.

We have been shown the affidavits filed on behalf of Lt. Governor and NCT of Delhi.

1. On reading the affidavits, it is clear that both the office of the Lt. Governor as well as the Government of NCT of Delhi are in agreement that the question of solid waste management in Delhi is the responsibility of the Municipal Corporations and that the Lt. Governor has the responsibility under the Act to issue directions in this regard in appropriate cases under Section 487 of the Delhi Municipal Corporation Act, 1957.

We have not been told of any such directions issued by the Lt. Governor in spite of the grave situation of mountains of garbage in Bhalswa, Okhla and Ghazipur. There is obviously dereliction of duty by the Municipal Corporations and the Lt. Governor.

The magnitude of the problem caused by these three sites is clear from a chart handed over in Court by learned Additional Solicitor General. The chart speaks for itself. It indicates that the maximum dump height in these three mountains/dumpsites has been exceeded by almost three times in some cases. This is a clear indication of the inaction or the so-called action taken by the office of the Lt. Governor or the

Lt. Governor, as the case may be, to remove solid waste from the dumpsites in Delhi.

To compound the problems, the chart placed by learned Additional Solicitor General indicates that so far as the East Delhi Municipal Corporation and the North Delhi Municipal Corporation are concerned, the gap in waste processing in tons per day is more than the waste processing proposed in tons per days. In other words, as far as the future is concerned, the proposed waste processing is less than the waste that is going to be dumped. Therefore, the dumpsites in Ghazipur and Bhalswa will go on increasing relentlessly. Fortunately, as far as South Delhi Municipal Corporation is concerned, there has been some application of mind and waste processing is more than waste dumping. Hopefully, the height of the dumpsite will reduce at Okhla.

The chart given by learned Additional Solicitor General also gives some construction and demolition of waste, legacy waste and decentralised waste management which contains certain time-lines and action that is taken or likely to be taken in the near future. **We would like to have all this information on affidavit from the office of the Lt. Governor.** The affidavit be filed on or before the next date of hearing, i.e., 16th July, 2018.

We have been told by Mr. Dilip Ramnani, Chief Engineer, South Delhi Municipal Corporation that height of the dump in Okhla on 1/5th of the dumpsite has been reduced by about 10 meters in about last six months. He has informed us that by March, 2019 probably the height of the dumpsite in Okhla would be reduced by 7 meters over the entire dumpsite which is 32 acres. This should be stated on affidavit. The affidavit be filed on or before the next date of hearing.

2. We have been informed by learned Additional Solicitor General that there are no funds available with the East and North Delhi Municipal Corporations and that is one of the problems why solid waste management problems are not being attended to. **We find this to be rather surprising that because of the shortage of funds Delhi should be converted into a dump – this is the condition of the capital of the country.**

3. It has been brought to our notice by Mr. Colin Gonsalves, learned amicus curiae that certain steps have been taken by the Gurugram Municipal Corporation which have been very successful in managing solid waste, particularly at a dumpsite.

Since Gurugram is not so far away, it will be worthwhile if the office of the Lt. Governor takes the advice of the Commissioner of Gurugram Municipal Corporation in this regard.

To confirm the availability of the expertise in Gurugram Municipal Corporation, we require the presence of the Commissioner of the Gurugram Municipal Corporation in Court on 16th July, 2018. The Registry will ensure that a communication is sent to him/her at the earliest along with a copy of the order passed today.

4. *The State Policy and Solid Waste Management Strategy (for Delhi) has been framed by the Lt. Governor on 3rd November, 2017. This has been framed in apparent compliance with Rule 11 of the Solid Waste Management Rules, 2016. We have gone through some parts of the Strategy and find that it is utopian in certain respects and perhaps it would be impossible to implement, particularly since at least the East and North Delhi Municipal Corporations have no funds at all to even carry out their day to day activities. However, **we leave the matter at that because it is entirely for the Lt. Governor to take a decision in this regard so that dumpsites are cleared and solid waste management is attended to as per his statutory responsibility with all due seriousness so that at least Delhi can become a clean city.***

Learned Additional Solicitor General says that it has been stated on affidavit that the Lt. Governor has taken four steps over the last so many years. The steps taken are as follows:

- (i). The Lt. Governor has convened 25 meetings and made 7 field visits relating to the important issue of solid waste management. What has happened in the meetings and in the field visits is a mystery and is anybody's guess. The fact of the matter is that in spite of these multiple meetings and field visits, there are mountains of garbage in Delhi and Delhi continues to be a city which requires serious attention with regard to a huge waste management problem.*
- (ii). 15 land parcels were allotted for the purpose of solid waste management/ sanitary landfill/ construction and demolition waste plant by DDA to the three municipal corporations. The details of the sites are at Annexure 'A' to the affidavit. We make no comment with regard to this because the situation of solid waste management is for everybody to see, provided they keep their eyes open.*
- (iii). The Solid Waste Management Bye-Laws were notified on 15.01.2018.*
- (iv). On the intervention of the Lt. Governor, the Department of Science and Technology, Government of India constituted a Scientific Advisory Committee for landfill reclamation under the chairmanship of Dr. Manoj Dutta, Professor IIT, delhi. The office order in this regard was issued on 22nd September, 2017.*

We are told that the Report has been given by the Scientific Advisory Committee and some action has been taken in accordance with the Report.”

38. On 16.07.2018, it was observed:

“An affidavit dated 16.07.2018 has been filed on behalf of the Lieutenant Governor of Delhi. The affidavit is sworn by Mr. Sandeep Mishra, Special Secretary, Urban Development, GNCT of Delhi.

We have been taken through the affidavit by the learned ASG. The affidavit deals with the sanitary landfill sites in operation at Okhla, Ghazipur and Bhalswa.

A Scientific Advisory Committee was constituted by an Office Order dated 22.09.2017. We have been told that on 31.01.2018, the Scientific Advisory Committee has given its recommendation for Ghazipur Landfill Reclamation; on 27.10.2017, the Scientific Advisory Committee has given its recommendation for Bhalswa Landfill Reclamation and an undated note has been prepared by the Project Team at IIT Delhi providing technical advice to the three Municipalities of Delhi for stabilization and closure / rehabilitation of Okhla, Ghazipur and Bhalswa landfills.

These reports and the note have been read over to us as if they are final reports of the Scientific Advisory Committee or any other Committee that has been set up apparently under the directions of the Lieutenant Governor of Delhi.

On going through these reports, it appears to us that the primary recommendation is merely of capping the landfill sites. The result of this capping is that garbage is not removed but compacted. The consequence is that if there is some unwanted garbage such as plastic etc. at the depth of 30-40 mts, it will remain over there and will not be taken out at least in the immediate future.

Prima facie, in our opinion this hardly serves any purpose. The learned Amicus says that there are other experts in the field and he is in touch with them. He says that they will be able to give site specific reports in respect of Okhla, Ghazipur and Bhalswa keeping in mind the land available, the amount of garbage that is present at the site, time-lines for an appropriate and workable solution and the approximate costs. He says that this will be possible within two weeks from today. We expect three separate reports to be given one for each site.”

39. On 06.08.2018, it was observed:

“It appears after hearing all the parties that there are four kinds of waste that are generated in houses / households:

(1) Wet Waste which is compostable and includes items like vegetables, food items etc.

(2) Dry Waste which can be segregated into two:

(i) Non-biodegradable items which includes plastic, glass, aluminium foil etc.

(ii) Biodegradable items which includes paper etc.

(3) Hazardous Waste which includes broken tube-lights, LeD bulbs, sanitary napkins etc.

(4) Construction and Building Waste which includes debris etc.

It appears that these four kinds of waste need to be segregated for a proper management of solid waste in the city.

It is stated by the officers who are present in the Court today that some sort of a pilot project has been launched in Green Park, Defence Colony, Maharani Bagh and Lajpat Nagar.

We would like to have full details of this pilot project including when it was conceived and how it is being managed. We would also require the following information with regard to the pilot project:-

- (i) actual implementation of the pilot project on the ground level including feed back that has been received;*
- (ii) the problems being faced in the implementation of the pilot project from different colonies;*
- (iii) what are the proposed solutions that the Municipal Corporations have for tackling the problems on a consideration of the feed back that has been received.*
- (iv) Whether an awareness campaign can be launched in these four colonies and indeed throughout the city to bring about awareness on the management of household solid waste.*
- (v) What is expected of the households for effective implementation of the segregation plan.*

All these details should be made ready within a week from today and in any case on or before 14th August, 2018.”

40. From the above, it is seen that the Hon'ble Supreme Court expected the LG Delhi, being Administrator of Delhi, to take final call on the issue. We have thus to consider this aspect.

41. Further, same approach has been adopted in relation to rejuvenation of Yamuna in our order dated 9.1.2023 in OA No. 21/2023, *Ashwani Yadav vs. Govt. of NCT of Delhi*. The observations of the Tribunal are:

“17. Having multiple authorities in Delhi may be one of the reasons for not achieving success so far. There appears to be lack of ownership and accountability. Huge amount has already spent without desired results. Judicial oversight has continued for almost 29 years. DDA has to take measures for protecting flood plain zones while drain owning agencies – DJB, Irrigation Department, Municipal Corporation etc. have to maintain drains free from pollution. IDMC was directed to be constituted with Chief Secretary as head to

coordinate with the concerned departments. In terms of directions of the Hon'ble Supreme Court, 'C' category water quality is to be achieved in Yamuna and all its connected drains. Mandate of Water Act requires preventing any industrial or domestic waste to be discharged or dumped into any stream or water body. Punishable offences are provided not only in Water Act but also under IPC. DPCC does not appear to be taking coercive measures against erring industries or even local authorities who rampantly continue to discharge pollution in Yamuna and the drains. There does not appear to be any meaningful penal action taken against the violators. There is also huge unauthorized dumping of septage and even solid waste at different locations in absence of satisfactory management of sewage from unauthorized colonies which have been set up and later regularised without requisite infrastructure for sewage treatment to the detriment of citizens. There appears to be reluctance in collecting necessary charges required for remedial measures and adopting effective methodology for prevention of pollution and availability of funds may be an excuse for not preventing pollution. Coercive and penal measures are not being taken against violators and erring officers. There is no meaningful engagement of citizens, who are the victims. While it is for authorities to devise strategies, available options may be business or other models with involvement of stake holders. Beautification of flood plain zones and dense plantations can add great value to the aesthetics of national capital which has international significance. Meaningful remedial action in Delhi can lead way to tackle polluted rivers in the country. One of the sources of funding is the NMCG. The Tribunal in the earlier orders entrusted monitoring to the Secretary, MoJS, DDA and the Chief Secretaries of concerned States. It does appear that the situation to a great extent remains unsatisfactory, in violation of judgment of the Hon'ble Supreme Court and orders of this Tribunal, fixing rigid timelines which are being defied at whims, without accountability and without visible improvement in ground situation. Thus, effective execution regime appears to be necessary with involvement of topmost administrative authorities with flexibility of procedures for award of works for execution of pollution prevention projects. Involvement of stake holders is also required. There may be need for relaxing procedural requirements like statutory clearances, without compromising on compliance of environmental norms. Only agencies with track record of performance in time bound manner instead of mere lowest bidders may have to be considered. DPR/tender processes need to be simplified and shortened. The service provider should be able to produce expected results within stipulated time. Accountability of the officers through whom the work is to be executed has to be ensured. Huge amount of public money has been already spent without much results and without accountability, as noted by Hon'ble Supreme Court in the context of Yamuna. Further expenditure has to be incurred with a sense of responsibility, ensuring tangible results. Comprehensive planning is required for taking suitable measures for reduction of pollution load by in-situ and ex-situ treatment strategies, prevention strategies and utilizing the treated water for non-potable purposes. There may be need to plant trees in coordination with the forest department on the flood plains of the river and buffer zones of the drains. There is need for comprehensive catchment area treatment plan and its execution which may include undertaking engineering, structural as well as

biological measures. There is also need to consider utilization of treated sewage water for agriculture or other purposes, discouraging the use of chemical fertilizer and insecticides, to the extent viable. For maintaining and restoring ecological integrity of river Yamuna, eco technology may be used involving Ministry of Fisheries and Animal Husbandry. All other specific points are already mentioned in the order of the Tribunal dated 27.01.2021.

18. In the light of above discussion, we constitute High Level Committee (HLC) of concerned authorities in Delhi where pollution of Yamuna is higher (about 75%), compared to other river basin States. We request the Lieutenant Governor, Delhi, who is Chairman DDA and Administrator of Delhi under Article 239 of the Constitution, to head the Committee. Other members of the Committee will be Chief Secretary, Delhi, who will act as Convener, Secretaries, Irrigation, Forest and Environment, Agriculture, and Finance, Govt. of Delhi, CEO, DJB, Vice Chairman, DDA, Secretary or his nominee (not below the rank of Additional Secretary), Ministry of Agriculture, GoI, D.G. Forest or his nominee (not below the rank of DDG), MoEF&CC, GoI, Secretary, MoJS or his nominee not below the rank of Additional Secretary, Secretary, MoEF&CC or his nominee not below the rank of Additional Secretary, DG NMCG and Chairman CPCB.

19. The Committee will deal with all issues as set out in order dated 27.1.2021 and other ancillary matters mentioned above. It may also coordinate with all other departments, to the extent necessary. It may meet physically within one week and take stock of the situation with regard to the directions of the Tribunal, extent of compliance, extent of non-compliance, proposed remedial action for compliance of law, updated plan for compliance of directions, sources of funding, accountability for past failures, methodology for execution of the projects, timelines consistent with the spirit of orders of the Hon'ble Supreme Court and this Tribunal. After its first meeting, the Committee may continue to meet atleast once in every week for next six months so as to achieve tangible results within the said period. The Committee may consider opening separate dedicated account, hire dedicated subject matter experts, coordinate with and take on board existing departments, agencies and stake holders, civil society, including voluntary organisations. It may also set up its website and place its proceedings on the said website for information of all concerned and also to enable public participation.

20. The Committee will also be free to interact with corporates interested in their duty to the society and not merely in commercial interest. The timelines prepared be adhered to with laid down penal consequences against violations. Officers of rank of Chief Engineers, given responsibility, be named for fixing responsibility. The Committee may compile data of pollution as on 1.1.1994, 1.1.2012, 1.1.2017, 1.1.2019, 1.1.2021 and 1.1.2023. Thereafter, pollution graph may be prepared on quarterly basis with goal of substantial reduction by 1.7.2023. As already observed, planning may include all action points as per last report of YMC, incorporated in order of this Tribunal dated 27.1.2021, including plan for using treated water for agriculture, horticulture or industrial purposes, preventing

discharge/dumping of any waste, protection of flood plain zones, maintaining e-flow, plantations, de-silting and dredging of drains and the river. MoJS and MoEF&CC may be consulted for norms for dredging and utilising dredged material for developing river front works. The Committee may explore provision for separate channels for carriage of sewage instead of mixing the same with storm water. Treated water may be used for non-potable purposes and not mixed with potable river water. The Committee may ensure that de-silt/de-sludged/dredged material is disposed of as per norms at the earliest, preventing re-entry in the river and damage to the flood plains.

21. Success of the Committee will be viewed by outcome in terms of reduction of pollution load and thus targets of the Committee should be measurable and identifiable. If experiment is successful at Delhi, it may help the country as a whole facing huge problem of water pollution. The Committee will be free to conduct proceedings online/hybrid as found necessary. It will also be free to undertake field visits.

22. The Committee may give its first report by 31.01.2023 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image/PDF.”

42. In the light of above, we are of the view that in the given situation when emergent situation remains untackled after monitoring at the level of Hon'ble Supreme Court for 18 years and at the level of this Tribunal for the last nine years, monitoring should now be at the highest level of Administration in Delhi with inclusion of all other concerned authorities – including Delhi Government, Municipal Corporation, DDA with strong monitoring mechanism envisaging weekly review with defined targets and accountability on the pattern of Yamuna monitoring Committee.

43. Accordingly, we constitute Solid Waste monitoring Committee to be headed by the Lt Governor, of Delhi. Other members of the Committee will be Chief Secretary, Delhi, who will act as Convener, Secretaries, Urban Development, Forest and Environment, Agriculture, and Finance, Delhi Government, Vice Chairman, DDA, Secretary or his nominee (not below the rank of Additional Secretary), Ministry of Agriculture, GoI, D.G. Forest or his nominee (not below the rank of DDG), MoEF&CC, GoI, Secretary, MoUD or his nominee not below the rank of Additional Secretary,

Secretary, MoEF&CC or his nominee not below the rank of Additional Secretary, Chairman CPCB, Commissioner, Municipal Corporation of Delhi and jurisdictional District Magistrates and DCPs. The Committee will deal with all issues relating to solid waste management including setting up of new waste processing facilities, augmenting existing waste processing facilities and remediation of legacy waste sites. It may also coordinate with all other departments, to the extent necessary. It may meet physically within one week and take stock of the situation with regard to the directions of the Tribunal, extent of compliance, extent of non-compliance, proposed remedial action for compliance of law, updated plan for compliance of directions, sources of funding, utilization of ring-fenced environment compensation and more as per need, accountability for past failures, methodology for execution of the projects, timelines consistent with the spirit of orders of the Hon'ble Supreme Court and this Tribunal. After its first meeting, the Committee may continue to meet atleast once in every week for next six months so as to achieve tangible results within the said period. The Committee may consider opening separate dedicated account (including ring-fenced account), hire dedicated subject matter experts, coordinate with and take on board existing departments, agencies and stake holders, civil society, including voluntary organizations. LG and CS may incur such expenditure as required for organizing awareness campaigns. It may also set up its website and place its proceedings on the said website for information of all concerned and also to enable public participation.

44. The Committee will also be free to interact with Corporates interested in their duty to the society and not merely in commercial interest. The timelines prepared be shortened and adhered to with laid down penal consequences against violations. Officers of rank of Chief Engineers, given

responsibility, be named for fixing responsibility for remediation of three sites as well as setting up of waste processing facilities. The Committee may compile data of solid waste remediated as on 31.3.2023 and thereafter, graphs may be prepared on quarterly basis with goal of substantial reduction of legacy waste and the gap in current processing by 1.7.2023. As already observed, planning may include all relevant action points.

45. Success of the Committee will be viewed by outcome in terms of reduction of existing legacy waste quantum, reclamation of land and addressing the current gap in generation and treatment of waste and thus targets of the Committee should be measurable and identifiable. In anticipation of successful efforts in Delhi, it may help the country as a whole facing huge problem of waste management. The Committee will be free to conduct proceedings online/hybrid as found necessary. It will also be free to undertake field visits.

46. The procedure relating to engagement of service providers should be simplified fixing well defined terms of engagement. Best practices are to be evolved and followed.

47. Mechanism be considered to engage service providers by due diligent process who may execute work relating to solid and sewage management. Selection of service providers may be done taking into account of his past performance and number of projects and capacity to handle successfully. There is also need for evolving key indicators and its monitoring by independent Social/Environmental Agencies about functioning of STP and solid waste management programs.

48. “Integrated Solid Waste Management for local Governments a practical guide”¹¹ brought out by Asian Development Bank published in 2017 details out solid waste management, planning and segregation of waste categories, waste collection methods, waste processing, waste to energy and diversion land fill development, operation and its management of landfill and also including contract issues by involving public private partnership. The document has been prepared based on the experience and the practices followed in several Asian Countries. The Govt. of Delhi may look into and consider this report to handle solid waste generated, particularly the cost effective technologies mentioned in the report.

49. The Committee may give its first report by 30.04.2023 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image/PDF.

50. Observations of this Tribunal in order dated 11.10.2022 in OA No. 300/2022 may be duly considered particularly the following:

“29. The above undisputed factual scenario presents a grim picture and environmental emergency in the national capital. There is continuous emission of methane and other harmful gasses adding to already polluted air quality of Delhi. It is also continuously resulting in leachate generation contaminating ground water of Delhi. Health and safety of huge population in the vicinity of dump sites is seriously threatened. Even chances of fires in future continue. Such serious environmental hazard needs to be dealt with on war footing by any responsible administration. Needless to repeat the hazardous consequences of accumulated and unscientifically stored huge quantum of garbage which are ‘mountains’. Even minimum safeguards against repeated fires are not adopted. To maintain aesthetics in the national capital and to avoid foul smell, garbage dumps need to be covered/fenced. The media has rightly reported that the dump sites are like ‘time bombs’. Lives and health of inhabitants in the vicinity is certainly at serious threat. Damage to the environment is real and serious. Thus, citizens living in close proximity of the three sites are exposed to health hazard. The smoke and foul smell from these sites results in poor visibility and asphyxiating the contiguous area. There are continuing media

¹¹ <https://www.adb.org/sites/default/files/institutional-document/324101/tool-kit-solid-waste-management.pdf>

reports about ill-effects of unscientific handling of the legacy waste dump sites to the detriment of environment and public health.¹²

30. Huge scarce and costly public land is occupied by the waste dump site. The area is 152 acres and its price even at conservative rate is more than Rs.10000 crores at applicable circle rate. However, the market value may be much more. There is thus urgency to retrieve the said public asset for the beneficial public use.

31. We, thus, conclude that there is serious violation of rights of citizens and failure of public trust doctrine to protect environment and public health by the concerned authorities, including the Delhi Government and the Municipal Corporation of Delhi. Steps taken so far do not meet the mandate of law and are not commensurate to the grim factual emergency situation constantly threatening safety and health of citizens and the environment with no accountability of officers entrusted the task. This is in breach of constitutional and human rights of citizens of Delhi who are forced to breathe polluted air, accept contaminated water and face other health and safety hazards. Emergency measures are called for to remedy the situation with a new and sensitive approach in a mission mode, reviewing the past failures in the entirety of situation and with involvement of higher level dedicated officers. The report shows that so far work has been delegated to lower rank officers who have not been adequately able to handle the situation. We answer questions (i) and (ii) accordingly.

XXXXXX.....XXX

37. Restoration measures will include scientific disposal of the accumulated garbage as per statutory Rules and environmental norms, fire control and mitigation measures, construction of boundary wall/bio-fencing by trees and shrubs/ afforestation, plantation, leachate treatment facility. Course of action planned and executed at other places¹³ where legacy waste dumpsites are reported to have been remediated may also be studied. Ground Water Authority may examine the extent of leachate flow into the ground water on which remedial action may be taken.

38. It is to be ensured that current waste is not added to legacy waste dumpsites. After collection, the same be taken to the destination such as Integrated Waste Management Facility or stand alone Waste Management Facilities such as Composting Centres, C&D Waste Centres and RDF Units, Waste to Energy Units, Cement Factories, Road Construction and filling up identified low lying areas, as per norms. This requires careful planning and execution with the involvement of senior level officers instead of leaving the task to junior officers as appears to be currently happening. Precautions in light of report of the Committee headed by Justice S.P. Garg, retired

¹² <https://ndtv.in/delhi-ncr-news/when-will-the-government-be-serious-about-waste-management-mountains-of-garbage-are-being-built-in-delhi-3400137>

¹³ such as Indore and Ahmedabad

Judge, Delhi High Court need to be taken forthwith. To control foul smell and improve aesthetics, turfing of landfill sites must be done forthwith either in the form of a boundary walls with necessary entry and exit gates or fencing by plantations of at least three rows of native fast growing and tall native trees requiring minimum water in the periphery of landfill sites as well as complying with other criteria for development of facilities at such sites following the provisions under the Schedule I of MSW Rules, 2016. A clear action plan with defined course of action needs to be drawn up after brain storming and studying the remediation processes adopted at other places. Consequences of overshooting timeline against identified officers/service providers may be specified and enforced. The Committee may consider undertaking visits to appropriate sites.

39. One of the crucial links in management of remediation work based on bio-mining and bio-remediation is the utilization and disposal of rejects like inert, RDF, stabilized bio-earth. Segregated fractions and components which are in high quantity be safely utilized and disposed. Bulk users of RDF, three waste to energy projects should utilize the RDF and if required enhance their capacity without compromising environmental norms and public safety.

40. To compensate the affected citizens of the area, the authorities are under obligation to develop dense forest in at least on one third of the land occupied by the dumpsite, after the sites are cleared. One third can be utilized for setting up Integrated Waste Management Facilities or other like infrastructure. The remaining one-third can be utilized for any other purpose, including raising of funds consistent with environment concerns without affecting the use of the two-third, as earlier mentioned. The authorities may explore setting up a tourism and recreational centre with the involvement of an appropriate agency on PPP or Hybrid Annuity Model or other mechanism so that investment is made which is allowed to be recovered from the tourists visiting such centres. Creation of an appropriate water body may be considered as part of such recreational centre. Possibility of setting up an Interpretation Centres at all the three sites to facilitate study for creating awareness for the citizens may also be considered.

41. Community involvement including the Welfare Associations, Educational Institutions, Volunteers, corporates, charitable and other social organisations and individuals may be explored. Such involvement may be explored for plantation drives also. There is also need to strengthen the Control Room and set up Grievance Redressal Mechanism accessible to the citizens to extend immediate help in emergencies within a month.

42. Since one of the obstacles pointed out by the Chief Secretary is the delay in getting environmental clearance for expanding waste to energy plant, we direct that expansion of such project can proceed without such clearance but consistent with environment norms. We refer to similar view taken in recent order dated 23.09.2022 in O.A. 172/2021, Poonam Yadav v. M/s Ecogreen Energy Pvt. Ltd. & Ors. in handling legacy site at Gurgaon:-

“30. ...If any plant is required to be established which requires EC, since such plant will benefit the environment, grant of EC need not be awaited but all the environmental issues may be followed, including with regard to forest, wildlife and waterbodies. ...”

43. Identifying the end users of the legacy waste dumpsites may help timebound remediation. Since it is stated that the land belongs to DDA, this aspect be considered within two months by a joint Committee of Secretary, Urban Development, GoI and Vice Chairman, DDA or any other relevant authority to be identified by the said two officers. Vice Chairman, DDA will be the nodal agency for the purpose.”

51. Apart from above, we find it necessary to repeat that due priority has to be accorded to leachate management (treatment) and handling of RDF and inerts arising out of biomining process in coordination with the user agencies like NHAI, CPWD and PWD, Delhi. Having regard to high value of land under garbage dump sites, there should be no problem in bearing the cost of transportation of inert to appropriate sites as one of the unresolved issues reported is the bearing of cost of transportation. Such cost can certainly be borne by Delhi Govt, if necessary. Further, if inert is non-toxic, it can be used for other appropriate uses like recovery of waste lands, horticulture, etc. If inert is used in road construction as substitute of morrum, it may save top soil for meeting food security challenge in the county and also to prevent unscientific mining and degradation of land. RDF with requisite calorific value need to be used for existing and proposed WTE plants and cement industries.

Sewage Management

52. As already mentioned, data presented by the Chief Secretary shows huge gap in generation and treatment of sewage. Appropriate further treatment of such waste has to be undertaken ensuring that no fecal contaminants are discharged into water streams/ponds and the river. The STPs set up so far need to be properly operated and to remain compliant

with the standards. Treated sewage needs to be utilized for secondary purposes. As per CPCB report, out of 35 STPs, 23 STPs are not complying with the standards.

53. Gap in generation and treatment and utilisation of sewage has to be bridged. Compliance status of laid down standards at the outlets of STPs has to be ensured. Timeline for the establishing requisite treatment systems in terms of judgment of Hon'ble Supreme Court in *Paryavaran Suraksha vs. Union of India*, supra has long expired, speedy further action has to be ensured.

54. As already noted and also observed in the judgement of the Hon'ble Supreme Court in *Paryavaran Surakhsha*, supra, quoted earlier, the matter falls in 11th and 12th Schedules to the Constitution. It is constitutional responsibility of the State and the Local Bodies to provide pollution free environment and to arrange necessary funds from contributors or others. Being part of right to life, which is also basic human right and absolute liability of the State, lack of funds or other resources such as land (sites for waste management) cannot be plea to deny such right. Such resources have to be found by the State by its policies and according due priority to the subject. Further, while there may be no objection to any central funds being availed, the State cannot avoid its responsibility or delay its discharge on that pretext.

55. Sewage can be processed by cost-effective methods at least at several identified locations with least expenses. Decentralized and the prefabricated/modular treatment plants can be explored, apart from imposing condition of ZLD on industries, Group Housing Societies etc. Reduced load can be processed partly with the help of water using commercial establishments requiring water for their processes enforcing

consent conditions in CTEs and CTOs whereby State's financial burden can be reduced.

56. In this context, the draft Notification of MoEF&CC dated 25.02.2022¹⁴ etc. and the relevant part of the draft Notification in context of sewage and solid waste management is reproduced below:

“xxxxxx.....xxx

C. Management of sewage/waste water, Reuse and recycle of treated wastewater by dual plumbing system

10. Dual Plumbing System shall be implemented - one for supplying fresh water for drinking, cooking and bathing etc. and another for supply of treated water for flushing.

11. Only treated water shall be used for flushing.

12. In no case, sewage or untreated waste water generated within the project area shall be discharged through storm water drains or otherwise into water bodies nor discharged/injected into the ground water by any mode.

13. Subject to Clause (3) of this notification, the project authority may opt or avail to common off-site treatment facility, as feasible, for treatment with reuse & recycle of corresponding quantity of treated water through the dual plumbing system for flushing and other non-potable use.

A. For projects with built up area of 5,000 sq. mtrs. to 20,000 sq. mtrs. -

i. In areas where there is no municipal sewage network,

a. Either Onsite Sewage Treatment Systems with capacity to treat 100% waste water may be installed with appropriate tertiary treatment system with disinfection for black & grey water. Such treated water should be used with dual plumbing system for flushing and other non-potable use;

OR

¹⁴<http://www.indiaenvironmentportal.org.in/files/file/Building%20Construction%20Environment%20Regulations%202022.pdf>

- b. *In case of usage of septic tank, only black water shall be discharged in the septic tank. Grey water may be treated through natural treatment systems or other secondary treatment as feasible. Such treated water should be used with dual plumbing system for flushing and other non-potable use;*

The excess treated water should conform to the general discharge norms of CPCB/MoEF&CC.

ii. In areas where there is municipal sewage network

- a. *Either Onsite Sewage Treatment Systems with capacity to treat 100% waste water may be installed with appropriate tertiary treatment system with disinfection for black & grey water. Such treated water should be used with dual plumbing system for flushing and other non-potable use;*

OR

- b. *The project authority may opt to discharge only black water in such municipal sewage network subject to availability of trunk sewer line. For this purpose, two separate pipeline network– one for black water discharge and other for collection of grey water shall be installed. Grey water may be treated through natural treatment systems or other secondary treatment as feasible. Such treated water should be used with dual plumbing system for flushing and other non-potable use;*

B. For projects involving built-up area of 20,000 sq. mts. or more –

14. Subject to Clause (3) of this notification, Onsite Sewage Treatment Plant with capacity to treat 100% waste water generated within the project area through tertiary treatment shall be installed. Treated waste water shall be reused on site for landscape, flushing, HVAC, fire-fighting, and other end-uses.

15. The adequacy of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the authorized agency.

16. Discharge of excess treated wastewater outside the premises, after treatment in STP, should meet the discharge standards as notified by CPCB/MoEF&CC from time to time.

17. Wastewater and treated water quantification system through metering/ sub-metering shall be installed.

18. Sludge from the onsite sewage treatment shall be collected, conveyed and disposed as per the Central Public Health and Environmental Engineering Organization (CPHEEO) Manual, Ministry of Housing and Urban Affairs, on Sewerage and Sewage Treatment Systems.

19. Where Common Sewage Treatment Plant facility has been availed, it shall be ensured that treated waste water is recycled back to respective building for reuse.

D. Solid Waste Management

20. Subject to Clause (3) of this notification, onsite solid waste management facility should be developed and a formal contractual arrangement shall be ensured with authorized recyclers/concerned municipal agency for disposal of all non-biodegradable waste.

21. Subject to Clause (3) of this notification, where there is no alternate arrangement for disposal of biodegradable waste, Organic waste composter/Vermiculture pit with a minimum capacity of 1.0 kg/150 sqm. of built-up area/day shall be installed & operated.”

Maintaining sources of clean water (rivers, storm water drains and water bodies – lakes, wetlands etc.) free from treated or untreated sewage, channelizing treated sewage for non potable purposes

57. We also find that sanctity and significance of natural storm water drains needs to be maintained. Storm water drains, if left unpolluted, can be source of drinking water for humans, birds, animals or aquatic life and discharge of sewage or even treated water which is not of standard of drinking water, seriously affects such drinking water resource adversely affecting their health. They are not to serve as sewage carrier. The Tribunal has comprehensively dealt with this issue on 03.08.2022 in OA No. 1002/2018, *Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors.* Thus, in the State, rivers, streams, ponds and lakes should be maintained for their pristine quality.

58. Efforts are also required on utilization of treated sewage such as by establishments like malls, industrial estates, automobile establishments, power plants, playgrounds, railways, bus stands, local bodies, universities etc. to save potable water for drinking. The treated sewage can be utilized for industrial/agricultural/other non-drinking uses like washing railway wagons/yards, buses, roads, water sprinkling and several such models reportedly exist¹⁵. The UT may contemplate with prospective plan to utilize treated sewage extensively rather than discharging into natural water courses which are very precious.

59. With regard to utilization of sewage, it is mentioned that out 530 MGD treated sewage, 267 MGD is being returned to Yamuna. This water has to meet the water quality requirement of the river. There is need to enhance capacity for utilizing treated water. High Level Committee to monitor rejuvenation of Yamuna may explore possibility of hiring bulk users so that treated effluents can be utilized. With regard to converting 70 MGD of treated sewage from Coronation Pillar into 'C' class inland surface water by Ultra filtration process to be discharged in Yamuna or

¹⁵ <https://www.newindianexpress.com/cities/chennai/2019/jul/31/chennai-industries-to-now-use-treated-sewage-water-2011837.html>
<https://timesofindia.indiatimes.com/city/surat/surat-water-reuse-model-goes-global/articleshow/85668103.cms>
<https://www.aninews.in/news/national/general-news/surat-generating-massive-revenue-by-selling-treated-water-to-industries20201217051127/>
<https://swachhindia.ndtv.com/surat-generating-massive-revenue-by-selling-treated-water-of-river-tapi-to-industries-54411/>
https://m.timesofindia.com/city/ahmedabad/amc-offers-rs43/kl-treated-wastewater-for-industries/amp_articleshow/87169850.cms <https://theprint.in/india/governance/nagpur-to-become-the-first-indian-city-to-treat-and-reuse-90-of-its-sewage/180493/>
https://www.business-standard.com/content/press-releases-ani/india-s-1st-and-largest-ppp-on-waste-water-reuse-completed-in-record-time-during-pandemic-bags-ficci-water-award-2020-121022500841_1.html
https://mpcb.gov.in/sites/default/files/focus-area-reports-documents/NMC_%26_KTPS_success_story_28052019.pdf
<https://cpcb.nic.in/success-stories/upload/1501156301.pdf>
http://cpheeo.gov.in/upload/uploadfiles/files/engineering_chapter7.pdf

replicating such efforts in other STPs for utilizing treated water in constructed wetlands in the flood plain zone of Yamuna need to be expedited and taken up on priority.

60. As already observed, there is need for planning to prevent sewage (treated or untreated) entering the potable water resources. Instead, the same is to be suitably treated and channelized for non-potable purposes – agriculture, industrial or others. By way of illustration, we may refer to certain models which can be considered at appropriate locations. The same have been mentioned in order of this Tribunal dated 11.10.2022 in M.A. No. 43/2022 in OA No. 41/2020, *Pushpendra Kumar vs. Nagarpanchayat, Kadaura & Ors.*, as follows:

“5. In this regard, we have drawn their attention to Seechewal Model¹⁶, Karnal Technology of sewage treatment and zero discharge and manual on sewerage and sewage treatment systems- 2013 (chapter7), issued by the Central Public Health & Environmental Engineering Organisation (CPHEEO), Ministry of Urban Development, GoI, which provide for inexpensive and simple methods of treatment of waste water, its utilization for irrigation and other secondary purposes. The said models are briefly described as follows:-

Seechewal Model

- Provides for use of treated waste water for irrigation in order to conserve precious surface fresh water and ground water. The process involves passing waste water through four well for cleaning the waste water and thereafter use of such treated water for irrigation. The process can be undertaken by communities through collective approach.*

Karnal Technology Of Sewage Treatment & Zero Discharge.

- Involves growing trees/plants on ridges with one meter wide and 50 cm height and irrigated by treated effluent in furrow. The technique utilizes entire bio mass present in waste water and provides nutrient to soil and plants. By this method forest plants/trees can be grown which can be used for firewood and timber. By this technique no chance of pathogen, heavy metals or organic compounds enter the food chain. Tree species like*

¹⁶ <https://www.civildaily.com/news/seechewal-model-of-wastewater-management/>

Eucalyptus, Leucaena can be grown.

Central Public Health & Environmental Engineering Organisation (CPHEEO)

Manual on Sewerage and Sewage Treatment Systems – 2013 (Chapter 7)

- *Provides various case studies of utilization of treated sewage and its reuse as cooling water in power plant, in airport, in petroleum refinery, fish culture (like at Mudiali, Kolkata), road washings, ground cooling, boilers and also in agriculture. In agriculture the suitability of treated sewage is dependent upon soil, salt tolerance of the crop, intake of minerals and climate conditions. Sewage conforming to specified norms can be applied to selected species of food crops into soil by strip, basin or furrow irrigation. Sprinkler irrigation could be used with treated sewage. During rainy and non irrigating seasons, the treated sewage can be held in lagoons or undertaking irrigation in additional land/waste land including resorting to artificial recharge of ground water.”*

We have also come across and low cost options for sewage/sullage treatment for less population at village Sultanpur and Village, Kurak Jagir in District Karnal. These grey water management projects based on waste stabilization and system have been executed under Swachh Bharat Mission Gramin and MG NREGA. These systems are designed for intake of waste water less than 100 KLD allowing waste to stabilize and using wet flow of ponds for irrigation. Such models may help for medium and small towns and the Rural areas as substitute for high cost technology. Central Public Health and Environment Engineering Organization (CPHEEO), Ministry of Housing and Urban Affairs dealt with the matter in its instructions titled “Municipal Used Water Treatment Technology for Medium and Small Towns”¹⁷ in September 2022.

61. Restoration measures with respect to sewage management need to include identification of sites for setting up of sewage treatment and

¹⁷ <https://sbmurban.org/storage/app/media/rr-final-signed.pdf>

utilization systems, upgrading systems/operations of existing sewage treatment facilities to ensure utilization of their full capacities, ensuring compliance of standards, including those of fecal coliform and setting up of proper fecal sewage and sludge management in rural areas. STPs need to have co-treatment facilities of septage rather than having isolated FSTPs. Guidelines of SBM - U 2.0 may be referred to in this respect. For urban areas, SBM-U 2.0 provides co-treatment of fecal sludge at STPs with sewage for which exclusive funding provisions are made under ringfenced accounts. Requisite land be provided for setting up of DSTPs.

Utilisation of already set up STPs

62. It is seen that utilised capacity of STPs of 632 MGD capacity is only 530 MGD. Standards of water quality are not always met. This aspect needs to be looked into on continuous basis by a centralised mechanism which may be set up preferably within a month.

63. Sewage treatment facilities adopted in terms of septic tank/soak pit/FSTP particularly for rural areas and villages may be reviewed in view of health, hygiene and the guidelines of MoUD.

Need to consider change in approach for administrative processes

64. We have suggested change in approach in realizing that remedial action cannot wait for indefinite period nor loose ended time lines without accountability can be a solution. Responsibility of the State is to have comprehensive time bound plan with tied up resources to control pollution which is its absolute liability. If there is deficit in budgetary allocations, it is for the State alone to have suitable planning by reducing cost or augmenting resources. People must be involved in the problem by appropriate awareness and strategies to encourage public participation

and contribution. At the cost of repetition, health issues cannot be deferred to long future. Long future dates breach of which has taken place frequently in the past without accountability is not a convincing solution. It is poor substitute for compliance within laid down timelines for long past. This approach may project lack of concern or not realizing the grim ground situation crying for emergent remedial measures on priority. There is no time for leisure, reflected in timelines proposed for bridging the acknowledged gaps.

65. It is the mindset and determination to act in a mission mode which can produce results.

66. Thus, it may be necessary to brain storm with available experts and other stake holders in the State at different levels, evolve models for both solid and sewage management which can be fast replicated, initiate special campaigns with community/media involvement in the larger interest of protecting environment and public health with determination for prompt action. Such brain storming sessions may enable capacity enhancement of the regulators and the processes. Campaigns and community involvement may result in reducing the financial and administrative load on the administration. The Chief Secretary may also entrust responsibility to Senior Secretaries to monitor waste management for establishments governed by non-municipal entities.

67. Compliance of environmental norms on the subject of waste management has to be on high on priority. It is high time that the UT realizes its duty to law and to citizens and adopts further monitoring at its own level.

68. While reviewing the progress in formulation and implementation of District Environment Plan (DEP), as per Articles 243 W and other provisions of the Constitution read with 11th and 12th Schedule, vide order dated 17.01.2023 in O.A No. 360/2018, *Shree Nath Sharma vs. Union of India & Ors.*, the Tribunal noted that in Delhi, District Environment Plans have been prepared for all the 15 Districts which are to be duly implemented by the District Magistrates through District Level Committees. Waste management is major component of the said plans. The operative part of the order is reproduced below:-

*“13. We have considered the reports. We are satisfied that further action needs to be taken by the concerned States/UTs in the light of observations and recommendations in the above report. **It is well known that there is urgent need for upgrading environmental standards in the country – air, water and land in the interest of public health and in the light of Constitutional goal and mandate. This is not possible without planning. Planning should be at all levels – Districts, States as well as national. This has to be part of ongoing exercise for discharge of State’s Constitutional obligation for providing pollution free environment and protection of natural environmental resources under public trust doctrine in the light of applicable statutory regime and earlier orders of the Tribunal. The District Environment plans must contain all relevant data on different thematic subjects, covering each city, town and village, with identified gaps in compliances and set out plan for remedial action in measurable terms with requisite budgetary support to meet estimated cost. It must provide for grievance redressal mechanism with review at higher levels. This can be basis for planning at higher level and also enable monitoring and measurement of progress with reference to baseline data. On that basis there can be further policy making and planning. One of the steps is to identify vulnerable districts with respect to specific environmental issues like sand mining, industrial pollution, stone crushers/brick kilns and mining, ground water depletion etc. so as to give due attention to monitor them. The plans may provide for awarding appreciation to best/ model districts/areas which may be then replicated at other places. Plans may also provide for taking on board civil society and creating awareness through educational, social and charitable institutions, including in coordination with Legal Services Authorities. The District Plans as on 31st December of the year must be finalized with respect to remaining 98 districts expeditiously, preferably within three months. CPCB may follow up with concerned States. Progress in implementation of the plan be placed on website by 31st January every year. Likewise, State***

Environment Plan, taking into account District Environment Plans or any other relevant data may be finalized by 28th February every year and placed on respective State websites. The CPCB may thereafter in coordination with any other Ministry or authority prepare a consolidated plan based on State Environmental Plans by 31st March every year and place the same on its website. Consolidated national plan may also be filed with the Registrar General of this Tribunal by April 30 every year. If found necessary, the same be placed for consideration before the Bench. Let District, State and National Environmental plans be prepared and updated accordingly on continuous basis annually. Subject to such plans being considered as and when necessary and any grievance being separately considered, the application is disposed of.”

Adhering to the timelines

69. Since the issue has been pending since long and there are adverse effects of continuing delay on environment and public health, it cannot be a matter of satisfaction that some steps are taken till the entirety of the problem is tackled on war footing. Planning has to be to resolve the problem without any further delay, in shortest possible time. Whatever timeline is laid down, it should not be breached. If breached, adverse consequences for such failures must follow on the designated accountable officers instead of loose-ended processes.

Community involvement

70. Another important subject is community involvement not only for IEC activities but also for planning and execution of waste management activities. Welfare associations, corporates, religious, educational and charitable institutions can play their role. The District Environment Plans must have authentic and updated database which can be helpful for policy making and execution of projects. Regularly monitor of bridging of gaps in sewage and solid waste management in districts is required by the Chief Secretary through a suitable nodal officer, preferably of the rank of Additional Chief Secretary. Status of sewage and solid waste management with respect to each city, town and village be placed on State's portal and

be made part of District environment Plan. This may be done in next two months.

Need for compliance of statutory duties by specified authorities under SWM Rules and monitoring by NMCG and MoUD for centrally assisted/sponsored schemes

71. Under the Solid Waste Management Rules, 2016, statutory authorities for various actions have been specified. **Under Rule 5**, a Central Monitoring Committee (CMC) is to be constituted headed by the Secretary, MoEF&CC with representation from Ministries of Urban Development, Rural Development, Chemicals and Fertilizers, Agriculture, CPCB, State PCBs/PCCs, Urban and Rural Development Departments, Urban Local Bodies and Towns from the of the States, FICCI, CII and subject experts. The CMC is to meet once in a year.

The Ministry of Urban Development has to coordinate with the States/UTs **under Rule 6** for periodic review and formulation of National Policy and strategies and taking other measures. **Under Rule 7**, the Department of Fertilizers, Ministry of Chemical and Fertilizers have to provide market development assistance for compost and promote marketing of such compost. **Under Rule 8**, Ministry of Agriculture has to evolve mechanism for utilization of compost. **Under Rule 9**, Ministry of Power has to decide compulsory purchase and tariff issues. **Under Rule 10**, Ministry of New and Renewable Energy Sources has to facilitate infrastructure creation and provide for subsidy. **Under Rule 11**, the concerned Secretaries of Urban Development have to prepare State Policy and Management strategies and the Town Planning Department has to ensure setting up waste processing and disposal facilities and take other enumerated actions. **Under Rule 12**, the District Magistrates have to identify suitable lands and review performance of local bodies. **Under Rule**

13, the Secretaries of Panchayats have also to perform similar duties. **Under Rule 14**, CPCB is to coordinate with State PCBs and formulate standards of ground water, ambient air quality, noise, etc. **Under rule 15**, local authorities have to prepare solid waste management plans, collection of waste and coordination with the other stakeholders for enumerated steps. **Under Rule 16**, the SPCBs/PCCs have to enforce the rules and monitor compliances. **Under Rule 17**, there are duties of private bodies, including the manufacturers to be monitored by the State Bodies. **The timelines are provided in Rule 22** for various steps. Last timeline of 5 years from the Rules expires on 7.4.2021. There is also provision for audit and submitting of annual report **under Rule 24**. Since there has been large scale non-compliances of the said rules, all the concerned authorities need to review the progress and perform their responsibility in accordance with law. The MoEF&CC has to finally monitor compliance, as already mentioned.

72. In view of continuing huge gap in solid and liquid waste generation and treatment, it is high time that Ministry of Housing and Urban Development (MoUD) and National Mission for Clean Ganga (NMCG) who have programmes like Swachh Bharat Mission (SBM – Urban 2.0)¹⁸, AMRUT 2.0¹⁹, Swachh Bharat Mission (Grameen)²⁰ and River Cleaning, appropriately monitor compliance of waste management norms by concerned States/UTs and take remedial action on their part. Central Funding and State budgetary provisions need to be adequately allocated and apportioned keeping in view of environment compensation which is based on the restoration work estimate. While granting/disbursing funds

¹⁸ <https://sbmurban.org/storage/app/media/pdf/swachh-bharat-2.pdf>

¹⁹ <https://mohua.gov.in/upload/uploadfiles/files/AMRUT-Operational-Guidelines.pdf>

²⁰ https://jalshakti-ddws.gov.in/sites/default/files/sbm-ph-II-Guidelines_updated_0.pdf

to States/UTs, execution mechanism for centralized tendering at the State level to overcome delays at each city/town level may be considered. This may facilitate timely utilization of funds. MoEF&CC and CPCB may continue monitoring as per MSW Rules and the Water Act. MoUD and NMCG may also note the gaps reported by the States and UTs in solid and liquid waste management. MoUD may further consider to render proper financial and technical support to States and UTs and also keeping in view of Environment Compensation (EC) either directed by the Tribunal or States having given statements to ringfenced EC at their own level.

Conclusion

73. **We hope in the light of interaction with the Chief Secretary, the Delhi Govt. will take further measures in the matter by innovative approach and stringent monitoring, ensuring liquid waste generation and treatment are bridged at the earliest, shortening the proposed timelines, adopting alternative/interim measures to the extent and wherever found viable.** Restoration plans need to be executed at the earliest without further delay. District Magistrates must take ownership for monitoring of sewage and solid waste management and providing report to Chief Secretary and overall compliance be ensured by Chief Secretary for which regular meetings be conducted.

74. As already observed, it will also be open to the State to plan raising of requisite funds from generators/contributors of waste or by any other legal means.

75. In our recent order dated 01.09.2022 in O.A No. 606/2018 (in respect of State of West Bengal), considering scale of compensation adopted in earlier cases including in OA No. 1002/2018, *Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors.*, compensation was determined @

Rs. 2 Crore per MLD for untreated liquid waste and in OA No. 286/2022 for unprocessed legacy waste compensation was fixed @ Rs. 300 per MT to be utilized for restoration measures, including preventing discharge of untreated sewage and solid waste treatment/processing facilities, as per appropriate mechanism for planning and execution that may be evolved, within three months. Operative part of the said order is reproduced below:-

“Conclusion about quantum of compensation

*49. In the light of above and considering damage to the recipient environment, we hold that apart from ensuring compliance at the earliest, compensation has to be paid by the State for past violations. The amount of compensation is fixed @ Rs. 2 crore per MLD (at which rate compensation has been levied against Noida and DJB in OA No. 1002/2018, Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors, referred to in para 48 above for detailed reasons mentioned therein). As noted earlier, **gap in generation and treatment in West Bengal, as per data furnished is 1490 MLD. Thus, under this head, liability of the State of West Bengal is to pay compensation of Rs. 2980 crores, rounded off to Rs. 3000 crore in view of continuing damage. For failure to process solid waste, unprocessed legacy waste being 1.20 crore MT, compensation is assessed @ Rs. 300 per MT (at which approximate rate compensation has been awarded in OA No. 286/2022 against Municipal Corporation, Ludhiana, for the reasons given therein). This works out to Rs. 366 crore but adding 134 crore for continuing addition of unprocessed waste @ 13469.19 TPD, the total amount is rounded off to Rs. 500 crore. Thus, final amount of compensation under the two heads (solid and liquid waste) is assessed at Rs. 3500 crores which may be deposited by the State of West Bengal in a separate ring-fenced account within two months, to be operated as per directions of the Chief Secretary and utilised for restoration measures, including preventing discharge of untreated sewage and solid waste treatment/processing facilities, as per appropriate mechanism for planning and execution that may be evolved, within three months. If violations continue, liability to pay additional compensation may have to be considered. Compliance will be the responsibility of the Chief Secretary.”***

Directions for further follow up

76. Further, periodical progress reports with verifiable progress may be filed by the Chief Secretary with a copy to the Registrar General of this Tribunal by e-mail at judicial-ngt@gov.in preferably in the form of

searchable PDF/OCR Support PDF and not in the form of Image PDF. Copies thereof may be furnished to the NMCG, MoUD, CPHEEO (MoUD) and CPCB and also be placed on the website of the Delhi Government.

No further order is necessary in IA No. 375/2019 filed by Delhi Cantonment Board which stands disposed of.

A copy of this order be forwarded for compliance to the Lieutenant Governor, Delhi, Chief Secretary, Delhi, Secretaries, Urban Development, Forest and Environment, Agriculture, and Finance, Delhi Government, Vice Chairman, DDA, Secretary, Ministry of Agriculture, GoI, D.G. Forest MoEF&CC, GoI, Secretary, MoUD, Secretary, MoEF&CC, Chairman CPCB, Commissioner, Municipal Corporation of Delhi and District Magistrates and DCPs, Delhi, NHAI, CPWD, PWD Delhi by e-mail.

On report being filed with the Registrar General of this Tribunal, the same may be placed before the Bench, if found necessary.

If any grievance survives, it will be open to the aggrieved parties to take further remedies as per law.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Arun Kumar Tyagi, JM

Prof. A. Senthil Vel, EM

Dr. Afroz Ahmad, EM

February 16, 2023
Original Application No. 606/2018