Item No. 01 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

(By Hybrid Mode)

Original Application No. 606/2018

(**In respect of State of Gujarat**)

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

Date of hearing: 23.02.2023

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER

Present: Shri Raj Kumar, Chief Secretary, GoG
Shri Mukesh Kumar, Principal Secretary, Urban Housing and Urban Department
Shri Rakesh Shankar, Secretary (Housing), Urban Housing and Urban Department
Shri Rajkumar Beniwal, Commissioner of Municipalities Administration, Urban Housing and Urban Department
Shri Milind Torwane, Commissioner of Rural Development
Shri Sandip Kumar, Development Commissioner
Shri R B Barad, Chairperson, Gujarat Pollution Control Board with Mr. Parth H Bhatt, Adv for the State of Gujarat

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,

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 Court[1]are:

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

[1] (2004) 13 SCC 538

and in M.P. from NIL to 34%. No affidavits at all have been received from the 24 other States/UTs for which CPCB reported NIL or less than 3% authorisations in February 2004. All these States and their SPCBs can study and learn from Karnataka, Maharashtra and Gujarat's successes.

2. ***All States/UTs and their SPCBs/PCCs have totally ignored the improvement of existing open dumps, due by 31-12-2001****, let alone identifying and monitoring the existing sites. Simple steps can be taken immediately at almost no cost by every single ULB to prevent monsoon water percolation through the heaps, which produces highly polluting black run-off (leachate). Waste heaps can be made convex to eliminate standing water, upslope diversion drains can prevent water inflow, downslope diversion drains can capture leachate for recirculation onto the heaps, and disused heaps can be given soil cover for vegetative healing.*

3. ***Lack of funds is no excuse for inaction. Smaller towns in every State should go and learn from Suryapet in A.P. (population 103,000) and Namakkal in T.N. (population 53,000) which have both seen dustbin-free 'zero garbage towns' complying with the MSW Rules since 2003 with no financial input from the State or the Centre, just good management and a sense of commitment.***

4. ***States seem to use the Rules as an excuse to milk funds from the Centre, by making that a precondition for action and inflating waste processing costs 2-3 fold.*** *The Supreme Court Committee recommended 1/3 contribution each from the city, State and Centre. Before seeking 70-80% Centre's contribution, every State should first ensure that each city first spends its own share to immediately make its wastes non-polluting by simple sanitising/stabilising, which is always the first step in composting viz. inoculate the waste with cow dung solution or bio culture and placing it in windrows (long heaps) which are turned at least once or twice over a period of 45 to 60 days.*

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

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

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…….
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> ***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 eight years as far as solid waste management is concerned and more than five years as far as liquid waste management is concerned. 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 Gujarat appeared on 09.04.2019 and following directions were issued:

> *"41. In view of above, after discussion with the Chief Secretary, following further directions are issued:*
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> *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.*
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> *ii. Atleast three major cities and three towns in the State and atleast three Panchayats in every District may be notified on the website within two weeks from today as model cities/towns/villages which will be made fully compliant within next six months.*
>
> *iii. The remaining cities, towns and Village Panchayats of the State 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 July 10, 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."*

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. It was this target for the State by setting up of 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 28[5] even***

[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

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 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:*

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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.

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
(1)	*(2)*	*(3)*
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

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

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)***	***Information provided by 29 States/UTs*** *(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)*	• ***Total Quantity of MSW generated: 150858.951 TPD*** • *Maximum waste generation is in five (7) States/UTs (>10000 TPD)-* ➢ *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)***	***Information provided by 29 States/UTs*** *(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)*	• ***Total quantity of MSW processed: 94435.318 TPD*** • *100% MSW is processing reported in two (2) States:* ➢ *Chhattisgarh* ➢ *Himachal Pradesh*
2I	***Xxx***	***xxx***	***xxx***
2(f)	***Gap in Solid Waste Management UTs (TPD) [2(a)- 2(d)- 2(e)]***	***Information provided by 29 States/UTs*** *(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)*	• *Gap in Solid Waste Management: 44651.1792 TPD*
xxx	***Xxx***	***xxx***	***xxx***
6	***Legacy Waste management***		
6(a)	***Number of dumpsites (No.)***	***Information provided by 28 States/UTs*** *(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)* ***Information not provided by 1 State/UTs:*** *(Chandigarh)*	• ***Total Number of dumpsites: 2129*** • ***Max in MP: 378***

6(b)	***Quantity of Waste dumped at dumpsites (Tons)***	***Information provided by 27 States/UTs*** *(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)* ***Information not provided by 2 State/UTs:*** *(Chandigarh, Madhya Pradesh)*	• ***Quantity of Waste dumped at dumpsites (Tons): 185558287.3 Tons*** • *Max in Maharashtra – 41683186 Tonnes*
6I	***Number of dumpsites cleared (No.)***	***Information provided by 25 States/UTs*** *(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)* ***Information not provided by 4 State/UTs:*** *(Chandigarh, Meghalaya, Odisha, Puducherry)*	• *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.)***	***Information provided by 26 States/UTs*** *(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)* ***Information not provided by 3 State/UTs:*** *(Chandigarh, Odisha, Puducherry)*	• *Number of dumpsites in which biomining has commenced (No.): 496* *Tamil Nadu – 117* *Maharastra-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***	***Information provided by 24 States/UTs*** *(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)* ***Information not provided by 5 State/UT:*** *(Bihar, Chandigarh, Meghalaya, Nagaland, Telangana)*	• *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. xxx ……xxx……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. 673/2018[7], 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, Gujarat to ascertain compliance status and way forward

Compliance status in Gujarat presented

25. The presentation filed by the Chief Secretary, Gujarat on 22.02.2023 shows following data:

SUMMARY OF STATUS

A: Solid Waste Management			
Quantity of waste generation in the State (in TPD)	Waste Processed (in TPD)	Gap in generation and Processing (in TPD)	Quantity of Legacy waste in the State (Tones)
9542	8090	1452 (Unprocessed waste)	Total 255 lakh MT Remediated: 142 lakh MT Unremediated: 113 lakh MT No. of sites: 165 (14 cleared) 1452 TPD is added per day as legacy waste

B): Sewage Management					
Quantity of sewage generation in the State (in MLD)	Utilization of Treatment capacity (in MLD)	Current Gap in treatment (in MLD)	Utilization of treated sewage in		
			Agriculture/ Horticulture purpose	Industrial purpose	Any other purpose
4414	Installed capacity: 4754 Treatment: 3409	1005	800 MLD		

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. Such gap has increased after last consideration. Thus, there is no benefit of considering mere future promises which have been breached in the past. Current violations are actionable as damage to the victims as a result of pollution is irreversible for which accountability cannot be avoided. Entirety of current solid waste generated is not being processed which requires continuing additions being added to the data of legacy waste. The Chief Secretary, Gujarat submits that there is improved governance on the subject and further initiatives are planned which will soon result in bridging the existing gaps in solid and liquid waste management. He submits that adequate funds are going to be allocated for the purpose, in the light of rate of compensation awarded in such cases. Without commenting of promised improvement in future, on the pattern of compensation awarded in respect of other States, compensation of Rs. 2100 crores may be liable to be levied for the past violations - Rs. 2010 crores for discharge of untreated sewage, Rs. 80 crores for legacy waste shown by data and Rs. 10 crores for continuing unprocessed waste to be also factored in as legacy waste till gap is addressed, hopefully soon. However, in view of statement of the Chief Secretary that a sum of Rs. 2100 crores will be voluntarily credited forthwith to a ringfenced account for being spent within one year to bridge the gaps in waste management as per specific action plan, it may not be necessary to direct levy of compensation on polluter pays principle.

27. If necessary, the State 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.

Solid Waste Management

28. 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. 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 de-centralized 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.

29. Though as per above data solid waste generated in urban areas is being processed through Composting Facilities (CFs) 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 in any ULB site in the State.

30. We note that waste to energy plant of 450 TPD is in operation at Jamnagar and four more plants at Ahmedabad (2), Rajkot (1) and Vadodara (1) are under construction. Corporations and other Municipalities (156)

need to provide required waste processing and utilization facilities with proper recycling/reuse of rejects to remedy the situation.

31. In case of rural waste, management of waste has to be ensured for all 18346 villages. Community compost pits as proposed numbering 15725 need to be properly maintained and compost produced as per standards and fully utilized.

32. Legacy waste sites are said to be 165 which must be maintained free from fires and other hazards till remediation. 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.

33. The data shows that out of 255 lakh MT of legacy waste, 142 lakh MT has been remediated leaving 113 lakh MT is yet to be remedied. On one of such sites at *pirana,* Ahmedabad, we observe that out of 84 acres of land 38 acres has been reclaimed by clearing 76 out of 125 lakh MT of waste. 24.88 lakh MT of rejects (which are reported to be inert) have been used for landfill and in building developmental projects like riverfront and Gandhi Ashram redevelopment etc. Further, waste having some calorific value like plastics – with potential for use as Refused Derived Fuel (RDF) have been used in industries like cement production etc. The State may need to have strategy on these aspects for all legacy waste sites.

34. 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, two scientific studies on the subject of extent of environmental damage have been referred to. 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, PMio & PM25 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 NOx 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 PM2.5 & PM10, NOx & 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 NOx /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 CO_2 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

35. 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. Legacy waste clearance has to be in minimum further time as laid down statutory timelines have already expired and serious damage is taking place. It may be noted that remediation of legacy sites may 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 CPCB[8] and the residues/rejects arising out of such processes are to be properly utilized and managed with well-defined destinations. Having regard to the fact that significant quantity of rejects is generated out of biomining processes, CPCB in consultation with other concerned agencies, including some of the States PCBs and Municipal Corporations may work out environmentally safe methods/options for their use. It may elaborate para 4.3 of its guidelines and issue operative directions particularly for such cities having significant quantities of legacy

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

waste. Once remediation is done at one site, repeated tendering may be avoided and instead standardized rates be worked out for the execution of similar remediation to same time or such execution be done Departmentally. Use for land to be reclaimed 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:-

> *"xxx ……xxx……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 places[9] 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 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.*

[9] such as Indore and Ahmedabad

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."

36. Thus, execution plan relating to management of municipal solid waste for both Urban and Rural areas may include setting up of new facilities and augmentation of existing waste processing plants (centralized and decentralized) for un-processed waste. 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 be put to use through authorized dealers/handlers /users instead of unorganized disposal. Further, instead of creating more dumping sites for waste generated on day-to-day basis, waste processing plants already set up be fully utilized so that no further legacy waste is generated. Simultaneously, plastic waste and construction and demolition

waste processing plants be also set up 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]

Sewage Management

37. The data presented shows gap of about 1005 MLD in generation and treatment of sewage. Appropriate treatment of such waste has to be undertaken ensuring that no fecal contaminants are discharged into water streams/ponds/rivers or in coastal or estuarine areas. 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. Immediate efforts need to be made for ensuring connectivity with STPs having treatment capacity of 4754 MLD.

38. 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.

39. 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

[10] http://cpheeo.gov.in/upload/5abc86de40012WastetoWealth2Oct.pdf

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. Free ship or other policies involving State resources cannot take priority over basic need for hygiene and pollution free environment.

40. 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.

41. In this context, the draft Notification of MoEF&CC dated 25.02.2022[11] etc. and the relevant part of the draft Notification in context of sewage and solid waste management is reproduced below:

> ***"xxx .....xxx.....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.*

[11] http://www.indiaenvironmentportal.org.in/files/file/Building%20Construction%20Environment%20Regulations%202022.pdf

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

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 Affair, on Sewerage and Sewage Treatment Systems.

19. Where Common Sewage Treatment Plan 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

42. 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.

43. 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 exist[12]. The State may contemplate with prospective plan to

[12] 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/

utilize treated sewage extensively rather than discharging into natural water courses which are very precious.

44. 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 Model[13], 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.***

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

[13] https://www.civilsdaily.com/news/seechewal-model-of-wastewater-management/

- *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 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 stabile 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"[14] in September 2022.

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

Utilisation of already set up STPs

46. We find that while STPs of 4754 MLD capacity are available, only 3409 MLD is being treated out of 4414 MLD being generated. Further, STPs of 133 MLD installed capacity be made compliant with the prescribed standards. This aspect needs to be looked into on continuous basis by a centralised mechanism which may be set up within a month.

47. 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

[14] https://sbmurban.org/storage/app/media/rr-final-signed.pdf

48. 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.

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

50. 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.

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

52. 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 the State of Gujarat District Environment Plans have been prepared for all the 33 Districts which are to be duly implemented by the District Magistrates through District Level Committees. Waste management is major component of the said plans for all the towns and villages. 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."

53. In order to facilitate expeditious execution of sewage and solid waste management projects, the Chief Secretary may consider suitable orientation/interaction programmes for District Magistrates or other concerned officers to improve environmental governance.

Adhering to the timelines

54. 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

55. 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.

Further observations to explore implementation mechanism

56. In the light of above observations, it appears that there is need for paradigm shift in handling of the situation. The nagging problem of waste management stares the administration in the face and remains unresolved to the detriment of environment and public health. First change required is to set up a **centralized single window mechanism for planning, capacity building and monitoring of waste management at the State level**. Of course, local authorities have to do their duty and stocktaking at the district levels may continue but subject to supervision and control of such mechanism. **It should be headed by an officer of the rank of Additional Chief Secretary with representation from concerned departments – Urban Development, Rural Development, Environment**

and Forest, Agriculture, Water Resources, Fisheries and Industries. The mechanism should be working on fulltime basis. Its functions should include preparing a comprehensive blue print, periodic review of progress in bridging the gaps in sewage and solid waste management and establishing, continuous interaction with the stakeholders, including experts and institutions, concerned departments, community members and all other stakeholders. There must be a continuous training programme for those involved in execution of waste management projects. In this regard reference is made to recent order of the Tribunal dated 23.01.2023 in M.A. No. 98/2022 in OA No. 180/2021, *Mukul Kumar vs. State of Uttar Pradesh & Ors*. It was held that training must be planned for probationers and in service officers, particularly those who have to serve as District Magistrates to implement DEPs including sewage and solid waste management. The operative part of the order is reproduced below:

> *"17. The Tribunal noted that while DEPs have been prepared and uploaded on websites in about 640 out of 738 districts (about 90%), execution thereof remains a challenge. There are huge gaps in compliance of environmental norms to the detriment of environment and public health. District Magistrates have to provide leadership on the subject at grassroot level. We are not sure whether the subject is part of training imparted in academies for probationers and in-house officers such as LBS National Academy of Administration, Mussoorie, IIPA, New Delhi and other State Academies. It may be desirable that need for such training is considered. National Judicial Academy at Bhopal has included the subject as part of its training to judicial officers. On that pattern, with such further modifications as found necessary, syllabus of Administrative Training Institutes may need to include the subject. We request the Secretary, DoPT, GoI and Chief Secretaries of all States/UTs to consider this aspect in coordination with the Directors of the Academies in question. Such training programs may include not only academic discussion but also undertaking field visits to places where successful environmental compliance models exist. Infact such training may be required in Police Academies/Public Prosecutors also. In the first instance, training may be imparted to all existing District Magistrates and thereafter to others who may have potential to work as District Magistrates or other positions where they may have to deal with such issues.*
>
> *18. Let the Secretary, DoPT, GoI and Chief Secretaries of all States/UTs consider the issue and file their respective action taken reports with the Tribunal within two months 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. CMC may continue its monitoring and file its further report of compliance status as on 31.03.2023 by April 15, 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."

Service Providers

57. Best practices be evolved and followed for selecting service providers and simplifying procedures for fixing terms of engagement. Mechanism be considered to engage service providers by due diligent process who may execute work relating to solid and sewage management simultaneously throughout the State – all districts, cities and towns. 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.

58. "Integrated Solid Waste Management for local Governments a practical guide"[15] 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 State of Gujarat may look into and consider this report to handle solid waste generated, particularly the cost effective technologies mentioned in the report.

[15] https://www.adb.org/sites/default/files/institutional-document/324101/tool-kit-solid-waste-management.pdf

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

59. 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.

60. Based on interaction with 26 States/UTs extensively on the issue of solid and sewage waste management, we are of the view that Central Ministries and Departments need to facilitate States/UTs to effectively execute centrally sponsored projects. This will include utilization of waste for defined purposes involving components of central funding. Some such aspects include (i) utilisation of installed STPs are fully utilized remaining unutilised due to lack of connectivity which can be overseen by MoUD. Utilization for treated sewage should be taken as an integral part of the sewage treatment planning with STPs. (ii) looking into applicability of standards for sewage treatment in Urban and Rural areas, considering the usage of treated sewage and mode of disposal under the Water (Prevention and Control of Pollution) Act. 1974. This can be done by MoUD, MoEF&CC and CPCB under the coordination of MoUD; (iii) maximizing use of treated sewage and the compost made out of municipal solid waste as full or partial substitute of fertilizer and ultimately reviewing subsidy issue which may

be done under joint coordination of MoUD and Ministry of Agriculture and Ministry of Chemical and Fertilizer (iv) process of setting up of waste to energy projects as per applicability in cities and towns with specified technologies and ensuring compliance with environmental norms by Ministry of Power and Ministry of Non-Renewal Energy (MNRE). We have already cleared that such projects may be kept out of the scope of environmental clearances but taking due care based on siting and preventing human health damages (v) specific directions on management of rejects out of biomining processes of legacy waste to avoid haphazard disposal/dumping by CPCB and MoEF&CC.

61. 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)[16], AMRUT 2.0[17], Swachh Bharat Mission (Grameen)[18] 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 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

[16] https://sbmurban.org/storage/app/media/pdf/swachh-bharat-2.pdf
[17] https://mohua.gov.in/upload/uploadfiles/files/AMRUT-Operational-Guidelines.pdf
[18] https://jalshakti-ddws.gov.in/sites/default/files/sbm-ph-II-Guidelines_updated_0.pdf

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

62. **We hope in the light of interaction with the Chief Secretary, the State of Gujarat will take further measures in the matter by innovative approach and stringent monitoring, ensuring that 255 lakh MT of legacy waste as well as 1452 TPD of unprocessed waste and 1005 MLD 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 simultaneously in all districts/cities/ towns/ villages in a time bound manner without further delay with well laid monitoring mechanism at State and District level. District Magistrates must take ownership for monitoring of sewage and solid waste management and regularly providing report to Chief Secretary on monthly basis and overall compliance be ensured by Chief Secretary for which regular meetings be conducted.

63. 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.

64. 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****. F****or 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."*

Reasons for not levying compensation on State of Gujarat

65. The Chief Secretary, Gujarat fairly accepts that there is gap of about 1005 MLD in sewage generation and treatment and legacy waste of 255 Lakh MT as well as 1452 TPD of unprocessed waste. In normal circumstances, the State would be liable to pay compensation of about Rs.

2100 crore at the scale of compensation fixed in other States. However, it is stated that amount of Rs. 2100 crores will be credited to a separate ring-fenced account within a month for the purpose to utilize for sewage and solid waste management under the supervision of Chief Secretary.

66. In view of the above, we refrain from levying EC on the State of Gujarat for time being. Ring-fenced account may be kept as 'non- lapsable' fund.

Directions for further follow up

67. In view of above, we sum up directions as under:

i. Amount of Rs. 2100 crores be credited to a separate ring-fenced account within a month for utilizing for sewage and solid waste management under the supervision of Chief Secretary (paras 26 & 65).

ii. The State may work out strategy to utilise rejects (inerts, RDF, etc.) arising out of biomining of legacy waste for proper channelization within one month (para 33).

iii. Community compost pits (15725) be properly maintained, ensuring that compost produced is fully utilized (para 31).

iv. CPCB in consultation with some of the States PCBs and Municipal Corporations may work out environmentally safe methods/options for their use within one month (para 35).

v. Plastic waste and construction and demolition waste processing plants be set up ensuring that bio-medical, hazardous and E-waste are not co-mingled and treated with solid waste (para 36).

vi. Immediate efforts be made for ensuring connectivity with STPs having treatment capacity of 4754 MLD (para 37).

vii. The issues relating to compliance of STPs with standards and utilization of treated sewage be monitored and looked into by centralised mechanism at State level (para 46).

viii. Chief Secretary may immediately set up orientation programme on regular basis at appropriate institutional level to deal with environmental issues (para 53).

ix. MoUD may review utilisation of capacities of STPs established and utilisation of treated sewage (para 60).

x. MoUD with MoEF&CC and CPCB may look into applicability of standards for STPs based on mode of disposal (para 60).

xi. MoUD with Ministry of Agriculture and Ministry of Chemical and Fertilizer may maximize use of treated sewage and the compost and reviewing subsidy policy (para 60).

xii. Ministry of Power and Ministry of Non-Renewal Energy (MNRE) may hasten the process of setting up of waste to energy projects and lay down rolling plan (para 60).

xiii. CPCB and MoEF&CC may specifically issue directions on management of rejects out of biomining processes of legacy waste to avoid haphazard disposal/dumping (para 60).

xiv. Chief Secretary may set up a centralized single window mechanism for planning, capacity building and monitoring of waste management at the State level (para 56) and;

xv. State level Monitoring Mechanism be set up under Chief Secretary and District level Monitoring Mechanism under District Magistrate for monthly review starting from 1st March, 2023 (para 62).

68. Further, six monthly 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 State Government.

A copy of this order be forwarded for compliance to the Chief Secretary, Gujarat, Secretary, Ministry of Housing and Urban Development, MoEF&CC, GoI, Ministry of Power and Ministry of Non-Renewal Energy, National Mission for Clean Ganga, CPCB, Secretary, Ministry of Chemicals and Fertilizers, GoI, Ministry of Agriculture, GoI, CPHEEO of MoUD, GoI 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

Prof. A. Senthil Vel, EM

February 23, 2023
Original Application No. 606/2018