

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

(By Video Conferencing)

Original Application No. 606/2018

(In respect of State of Kerala)

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

**(Arising out of directions of the Hon'ble Supreme Court
in W.P. No. 888/1996 and W.P. No. 375/2012)**

Date of hearing: 07.07.2022

**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**

Respondent(s): Dr. V.P. Joy, Chief Secretary, State of Kerala
Dr. Venu V., Additional Chief Secretary, Home
Ms. Sarada G. Muraleedharan, Additional Chief Secretary, Local
Self Government
Mr. Nishe Rajen Shonker, Advocate for the State of Kerala
Mr. Jogy Scaria, Advocate for KSPCB

ORDER

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

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,

122 non-attainment cities in terms of air quality, 100 polluted industrial clusters, illegal sand mining etc. have also been dealt with earlier but 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 have multiplied significantly occupying large areas of public land. Promise of free land attracts more land grabbers. **Instead of "slum clearance" there is "slum creation" in cities which is further aggravating the problem of domestic waste being strewn in the open.** Accordingly, the Court directed that provisions pertaining to sanitation and public health be complied with, streets and public premises be cleaned daily, **statutory authorities levy and recover charges from any person violating laws and ensure scientific disposal of waste**, landfill sites be identified keeping in mind requirement of the city for next 20 years and environmental considerations, sites be identified for setting up of compost plants, steps be taken to prevent fresh encroachments and compliance report be submitted within eight weeks. Further observations in the judgment of the Hon'ble Supreme Court¹are:

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

"1. As a result of the Hon'ble Supreme Court's orders on 26-7-2004, in Maharashtra the number of authorisations granted for solid waste management (SWM) has increased from 32% to 98%, in Gujarat from 58% to 92%

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 of 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 concerned, as may be**

² (1980) 4 SCC 162

³ (1996) 2 SCC 594

⁴ (2017) 5 SCC 326

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

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

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

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

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

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

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

7. It appears that expression ‘Common Effluent Treatment Plants’ in para 7 above 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 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 and 30.11.2021. 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. 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 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, Kerala appeared on 25.04.2019 and following directions were issued:

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

- i. At least three cities and three towns in the State and at least three Villages in every District of the State may be identified within two weeks and earnest and demonstrable endeavor be made to make them fully compliant in respect of environmental norms within six months. Remaining State may be made fully compliant within one year.*
- ii. A quarterly report be furnished by the Chief Secretary, every three months. First such report shall be furnished by July 30, 2019.*
- iii. The Chief Secretary may personally monitor the progress, at least once in a month, with all the District Magistrates.*
- iv. The District Magistrates may monitor the status of compliance of environmental norms, at least once in two weeks.*
- v. The District Magistrates or other Officers may be imparted requisite training.*
- vi. Estimate of value of environmental degradation and cost of restoration be prepared and compensation be planned and recovered from polluters for environmental restoration and restitution on that basis.*
- vii. Performance audit of functioning of all regulatory bodies may be got conducted and remedial measures be taken, within six months.*
- viii. Introduction of a policy of giving ranking, based on performance on the subject of environment and giving of rewards or other incentives on that basis to individual areas, localities, institutions or individuals may be considered. This may also include encouraging students or other citizens significantly contributing to the cause of environment. The best practices may be evolved, if necessary, in the light of experiences on the subject. This may help in educating and involving public at large which may help in enhancing of environmental laws.*
- ix. The Chief Secretary may remain present in person before the Tribunal with the status of compliance in respect of various issues mentioned in para 22 as well as any other issues discussed in the above order on 06.11.2019. It is made clear that Chief Secretary may not delegate the above function and the further requirement of appearance before this Tribunal to anyone else. However, it will be open to him to change the date, by advance intimation by e-mail at ngt.filing@gmail.com to adjust their convenience.”*

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. **It is difficult to hold that the State has taken directions of the Tribunal seriously or even endeavoured to go this mandate. Even after three years, neither there is adequate compliance nor the same projected in immediate future. No accountability no performance audit, no entries in ACRs. The State assumes that none is responsible for such gross violations of law and directions of Hon'ble Supreme Court and this Tribunal. It is difficult to say how rule of law will be achieved. We thus record our disappointment with the attitude of the State and hope the State makes amends in compliance now.**

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

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

15. The matter was then reviewed on 12.09.2019 in the light of report of the CPCB dated 09.09.2019 **showing wide gaps in compliance of solid waste, plastic waste, bio-medical waste management, rejuvenation of**

identified polluted river stretches, polluted industrial clusters and non-attainment cities. A fresh schedule for appearance of the Chief Secretaries was issued. Vide order dated 07.01.2020, the Tribunal directed CPCB to ascertain Compliance of Solid Waste Management Rules, 2016 in terms of MSW generated, segregated and treated, gaps in the waste processing, enforcement of statutory timelines and orders of this Tribunal, number of sites remediated, and quantity of legacy waste therein and timelines for completing remediation. It was further directed that on the subject of sewage treatment, CPCB has to ascertain quantity of sewage generated and treated in the State, gap in the sewage treatment and timelines to bridge the gap, including strategy for use of treated water for secondary purpose. CPCB was accordingly directed to redesign its formats for securing relevant quantifiable information.

Order dated 28.02.2020

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

“41. In view of above, consistent with the directions referred to in Para 29 issued on 10.01.2020 in the case of UP, Punjab and Chandigarh which have also been repeated for other States in matters already dealt with, we direct:

- a.** *In view of the fact that most of the statutory timelines have expired and directions of the Hon’ble Supreme Court and this Tribunal to comply with Solid Waste Management Rules, 2016 remain unexecuted, **interim compensation scale is hereby laid down for continued failure after 31.03.2020. The compliance of the Rules requires taking of several steps mentioned in Rule 22 from Serial No. 1 to 10 (mentioned in para 12 above). Any such continued failure will result in liability of every Local Body to pay compensation at the rate of Rs. 10 lakh per***

month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body from 01.04.2020 till compliance. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban Development etc. who are responsible for compliance of order of this Tribunal. Final compensation may be assessed and recovered by the State PCBs/PCCs in the light of Para 33 above within six months from today. CPCB may prepare a template and issue an appropriate direction to the State PCBs/PCCs for undertaking such an assessment in the light thereof within one month.

- b. **Legacy waste remediation was to ‘commence’ from 01.11.2019 in terms of order of this Tribunal dated 17.07.2019 in O.A. No. 519/2019 para 28⁵ even though statutory timeline for ‘completing’ the said step is till 07.04.2021 (as per serial no. 11 in Rule 22), which direction remains unexecuted at most of the places and delay in clearing legacy waste is causing huge damage to environment in monetary terms as noted in para 33 above, pending assessment and recovery of such damage by the concerned State PCB within four months from today, continued failure of every Local Body on the subject of commencing the work of legacy waste sites remediation from 01.04.2020 till compliance will result in liability to pay compensation at the rate of Rs. 10 lakh per month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban**

⁵ The Chief Secretaries may ensure allocation of funds for processing of legacy waste and its disposal and in their respective next reports, give the progress relating to management of all the legacy waste dumpsites. Remediation work on all other dumpsites may commence from 01.11.2019 and completed preferably within six months and in no case beyond one year. Substantial progress be made within six months. We are conscious that the SWM Rules provide for a maximum period of upto five years for the purpose, however there is no reason why the same should not happen earlier, in view of serious implications on the environment and public health.

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

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

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

“22. Time frame for implementation:- *Necessary infrastructure for implementation of these rules shall be created by the local bodies and other concerned authorities, as the case may be, on their own, by directly or engaging agencies within the time frame specified below:*

Sl. No.	Activity	Time limit from the date of notification of rules
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1.	<i>Identification of suitable sites for setting up solid waste processing facilities.</i>	<i>1 year</i>
2.	<i>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.</i>	<i>1 year</i>
3.	<i>Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities.</i>	<i>2 years</i>
4.	<i>Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source.</i>	<i>2 years</i>
5.	<i>Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.</i>	<i>2 years</i>
6.	<i>ensure separate storage, collection and transportation of construction and demolition wastes.</i>	<i>2 years</i>
7.	<i>setting up solid waste processing facilities by all Local Bodies having 100000 or more population.</i>	<i>2 years</i>

8.	<i>Setting up solid waste processing facilities by Local Bodies and census towns below 100000 population.</i>	3 years
9.	<i>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.</i>	3 years
10.	<i>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.</i>	3 years
11.	<i>bio-remediation or capping of old and abandoned dump sites.</i>	5 years

18. **Our comments with regard to compliance of directions dated 28.2.2020 remain the same as in para 13 above.**

Order dated 02.07.2020

19. 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

20. 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.

21. **There is nothing to show compliance by the State of Kerala on the issue of deposit of compensation and its utilisation as directed.**

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

22. 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 in March, 2021 as follows:-

“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 Biomethanation 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 standardised 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.”*

23. The Tribunal in its order dated 30.11.2021 observed:-

“1to17....xxxx.....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.”

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

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

⁶ (2017) 5 SCC 326

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

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.”**

25. 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, Kerala to ascertain compliance status and way forward

Compliance status in Kerala as presented

26. The presentation filed by the Chief Secretary, Kerala during the hearing shows following data:

Solid Waste Management		
Generation	Processing	Gap
3472 TPD	2691 TPD	781 TPD

Liquid Waste Management		
Generation	Treatment	GAP
1192 MLD sewage and 2783 MLD sullage	Common STP: 129.476 MLD FSTPs: 0.21 MLD Individual STPs: 69 MLD Septic tanks/ soakpit: 935.4 MLD	51.3 MLD

27. Apart from above presentation, we may also refer to the report of the State level monitoring Committee headed by Justice A.V. Ramakrishna Pillai, former judge of the Kerala High Court dated 04.07.2022. Conclusion and suggestions in the said report are:

CONCLUSION AND SUGGESTIONS

In spite of the efforts taken so far the Solid Waste Management in the State has not achieved the level of standard expected by the Environmental Laws.

Segregation and door-to-door collection of solid waste is not effectively done in many of the local bodies. The achievement by the District of Pathanamthitta, Idukki and Kottayam is far below average. The available statistics would reveal that a sizable percentage of waste generated in the households and commercial establishments are left unattended and therefore are disposed of in unscientific manner.

Though bio-mining of legacy waste dumped at 41 sites out of which 10 are large is going on various stages, the same has not attained the pace which is expected. The bio-mining at the major dump sites are inversely proportional to the inflow of solid waste to those dumping yards.

On an inspection of the dumping yard at Brahmapuram in Ernakulam District on 03.03.2021, it was found that the waste materials at the yard was not in the segregated form. Waste materials now being brought from the local limits of different local bodies were seen dumped over the existing legacy waste. The non-acceleration of the speed of the bio-mining process coupled with the delay in establishing the proposed waste to energy plant would make the legacy waste clearing an unending process.

I would like re-iterate the following course of action which I have specified in my earlier report, for an effective Solid Waste Management System.

The stake holders should consider the reduction of waste as the primary object of waste management. Therefore, the first step to be

followed is the reduction of the waste inflow into the waste management system. Aware programs for the benefit of waste generators can be undertaken by the local bodies under the supervision of District Magistrate and with the assistance of District Legal Services Authority, Suchithwa Mission (SM) as well as Haritha Kerala Mission (HKM).

All the local bodies should strictly implement, on a war footing under the disaster management protocol, the standard waste management protocols prescribed by HKM. Installation of Material collection facilities in every ward (for municipalities and corporation) and for every Panchayath shall be insisted upon. There should be compulsory segregation of waste by all doors. Door to door collection of segregated waste and secondary segregation of NBD in MRF and forward linkage shall be promoted. Source level composting as well as partially centralized composting facilities in market and similar bulk generator premises shall be adhered to.

There shall be a consistent effort for implementation of reduction of waste generation adopting alternative methods for waste management like re-use system.

Segregation of bio-degradable waste and non-biodegradable waste at source is inevitable because bio-degradable waste which contains 80% moisture is unviable for being used in Waste to Energy (WTE) Plants due to the huge expenditure involved to dehydrate the same. There should be secondary segregation of Non-degradable Waste (NBD) at MRF as Solid Waste Management Rule prescribe for recycling of valuable and reusable NBD waste. Only those NBD waste having no recyclable value need be processed in WTE plants.

All the bulk generators including industries, apartment complexes, gated communities, commercial establishments, etc. should establish compulsory in-house biodegradable waste management systems with technical assistance of agencies like Haritha Kerala Mission, Suchithwa Mission etc. and under the supervision of State Pollution

While promoting bio-degradable waste at source, proper records regarding the quantity of waste treated at source and its final disposal should be insisted upon.

Unauthorized disposal methods under the pretext of treating waste at source shall not happen under any eventuality.

Once the aforesaid steps are completed, expression of interest (EOI) can be invited for establishing innovative legacy waste management systems in the various treatment plants including the Brahmapuram plant at Ernakulam and also in the other proposed WTE plants in the State.

Plastic to fuel, RDF to cement factory Kiln co-processing, plastic brick manufacturing, modular WTE plant, compost to garden, compressed burial etc. are already established processes. These can be developed with the help of enterprises, CSR funds, Department of Science and Technology etc.”

Our Observations about way forward

28. It is seen from the data presented by the Chief Secretary and the conclusion of the State level monitoring Committee that there is still huge gap in management of solid as well as liquid waste. As noted in paras 13,16 and 20 above, no accountability has been fixed for continuing failure which is a matter of regret.

29. In solid waste management, there is a gap of 781 TPD. Waste processing facilities are grossly inadequate and even cities like Thiruvananthapuram and Kochi lack adequate processing facilities. Compost produced at individual levels and their usage and linkages of MCFs with end users/processors have not been duly explained. Timelines indicated are too sketchy and in violation of directions of the Hon'ble Supreme Court, Tribunal and the statutory mandate. With regard to liquid waste management, the gap in treatment is reported to be 51.3 MLD. Distinction between sewage and sullage and their treatment by way of segregation and existing facilities and contemplated plan has no definite execution plan. Cities like Thiruvananthapuram, Kochi and others do not have requisite facilities. Reliance is on Septic tanks and Soak pits which also needs to be examined in context of ground water safety.

30. Till this gap is bridged, unprocessed solid waste and untreated liquid waste will continue to remain source of degradation of environment and damage to public health, including deaths and diseases which the society can ill afford. Hence the urgency of the situation for good governance ensuring emergent measures in public interest to protect the environment and public health and discharge of Constitutional obligation.

31. It is a matter of concern that even after 48 years of enactment of Water (Prevention and Control of Pollution) Act, 1974 and expiry of

timelines for taking necessary steps for solid waste management in terms of Solid Waste Management Rules, 2016 and binding direction in the judgment of the Hon'ble Supreme Court and this Tribunal in *Almitra H. Patel vs. Union of India & Ors.* and *Paryavaran Suraksha vs. Union of India*, supra, huge gaps still exist. Are there insurmountable difficulties for State authorities or lack of will and determination? We find it difficult to believe the first. In our view, it is lack of good governance and determination responsible for the situation which needs to be remedied soonest.

32. We have suggested change in approach in realizing that remedial action cannot wait for indefinite period as is being proposed by the Administration. Action cannot be linked to outside funds nor delayed on that pretext. Sources of funding are laid down in the orders of the Hon'ble Supreme Court. Responsibility of the State is not merely to plan utilisation of Central funds or funds from World Bank, as appears to be happening, but having comprehensive plan to control pollution which is its absolute liability, which is not being unfortunately understood. If there is deficit in budgetary allocations, it is for the State and state alone to have suitable planning by reducing cost or augmenting resources. By way of suggestion, one may consider harnessing traditional knowledge and community involvement. 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 which, breach of which is established from the track record of last several decades, is not convincing solution. There is no accountability for the past breaches. It is poor substitute for compliance. 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. Claimed success by some local bodies in setting up waste processing plants and harnessing benefits of bio-CNG/power energy⁸ may need to be looked into and if found useful the same need to be followed with suitable modifications.

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

34. 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. 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. This may perhaps reduce planned expenditure.

35. Similarly, sewage can be required to be processed by conventional cost-effective methods atleast at several identified locations with least expenses. Decentralized 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. Such establishments include malls, industrial estates, automobile establishments, power plants etc. Treated water can also be

⁸ Indore's Waste to Energy model leads the world, 72 countries set to follow! : <https://www.financialexpress.com/lifestyle/indores-waste-to-energy-model-leads-the-world-72-countries-set-to-follow/1695816/>

India's cleanest city Indore turns waste into bio-CNG, money : <https://energy.economictimes.indiatimes.com/amp/news/oil-and-gas/indias-cleanest-city-indore-turns-waste-into-bio-cng-money/87826232>

used by 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. Several such models reportedly exist⁹.

36. We also observe that the issues in setting up of waste to energy plants in coastal areas on account of high humidity and unsegregated waste with low calorific value of the biodegradable waste need to be addressed. Suggestions and recommendations of the State Level Monitoring Committee also need to be addressed.

37. Thus, it may be necessary to brain storm with available experts and other stake holders in the State at different levels, evolve models 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.

⁹ <https://www.newindianexpress.com/cities/chennai/2019/jul/31/chennai-industries-to-now-use-treated-sewage-water-2011837.html>
<https://timesofindia.indiatimes.com/city/surat/surat-water-reuse-model-goes-global/articleshow/85668103.cms>
<https://www.aninews.in/news/national/general-news/surat-generating-massive-revenue-by-selling-treated-water-to-industries20201217051127/>
<https://swachhindia.ndtv.com/surat-generating-massive-revenue-by-selling-treated-water-of-river-tapi-to-industries-54411/>
https://m.timesofindia.com/city/ahmedabad/amc-offers-rs43/kl-treated-wastewater-for-industries/amp_articleshow/87169850.cms <https://theprint.in/india/governance/nagpur-to-become-the-first-indian-city-to-treat-and-reuse-90-of-its-sewage/180493/>
https://www.business-standard.com/content/press-releases-ani/india-s-1st-and-largest-ppp-on-waste-water-reuse-completed-in-record-time-during-pandemic-bags-ficci-water-award-2020-121022500841_1.html
https://mpcb.gov.in/sites/default/files/focus-area-reports-documents/NMC_%26_KTPS_success_story_28052019.pdf
<https://cpcb.nic.in/success-stories/upload/1501156301.pdf>
http://cpheeo.gov.in/upload/uploadfiles/files/engineering_chapter7.pdf

38. Compliance of environmental norms on the subject of waste management has to be on high on priority. Tribunal has come across cases of serious neglect and continuing damage to the environment in absence of inadequate steps for treatment of solid and liquid waste.¹⁰ We are of the view that issues have been identified and monitored by the Tribunal for along time. It is high time that the State realises its duty to law and to citizens and adopts further monitoring at its own level.

39. We hope in the light of interaction with the Chief Secretary, whom we find to be very responsive and positive, the State of Kerala will take further measures in the matter by innovative approach, stringent monitoring at appropriate levels, including at the level of the District Magistrates (who execute the District Environment Plans) and the Chief Secretary, ensuring that the gap in waste generation and treatment is bridged at the earliest, shortening the proposed timelines, adopting alternative/interim measures to the extent and wherever found viable. All laid down statutory norms need to be complied as per laid down timelines and directions in the judgments of Hon'ble Supreme Court and this Tribunal, including directions in orders dated 25.4.2019, 28.2.2020 and 14.12.2020 and other orders in individual cases. In the light of

¹⁰ OA No. 439 of 2013 (SZ), Chandran Pilla, Kollam and Anr. vs. Union of India and Ors. dated 21.04.2022 relating to solid waste management, Kollam.

OA No.147/2020, K. M. Sanjeev Vijayan vs. State of Kerala dated 07.10.2021 relating to solid waste management, Ottapalam Municipality.

OA No. 514/2019, In Re: Report received from State Level Monitoring Committee, Kerala, constituted by this Tribunal vide order dated 16.01.2019 in O.A. No. 606/2018, headed by Justice A.V.R. Pillai, former Judge of Kerala High Court, to oversee compliance of directions on the subject of Solid Waste Management dated 21.01.2021 relating to solid waste management, Brahmapuram.

OA No. 395/2013/SZ (THC), SUO MOTU proceedings initiated based on the representation received from Justice R. Bhaskaran, Former Judge vs. State of Kerala & Ors. dated 27.05.2022 relating to Periyar river.

OA No. 581/2018, The Edayar Resident's Association, Edayar vs. The Government of India & Ors. dated 29.06.2020 relating to Karmana river.

OA No. 582/2018, Alavikutty vs. The State of Kerala & Ors. dated 29.06.2020 relating to Tirur-Ponnai River.

observations in paras 13,18 and 21 above, accountability be fixed for erring officers and compensation collected and utilised, as already directed.

Present proceedings in relation to State of Kerala are closed but it will be open to aggrieved parties to take fresh remedies as per law, as and when situations so require.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Prof. A. Senthil Vel, EM

July 07, 2022
Original Application No. 606/2018
A