Item No. 01 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 606/2018

Compliance of Municipal Solid Waste Management Rules, 2016
(States of Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya)

Date of hearing: 28.02.2020

CORAM: **HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON**
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER
HON'BLE MR. SIDDHANTA DAS, EXPERT MEMBER

For Respondent(s): Mr. Naresh Kumar, Chief Secretary, State of Arunachal Pradesh
Mr. Arvind Kumar Shukla, Chairman, ASPCB

Mr. Temjen Toy, Chief Secretary, State of Nagaland
Mr. Himato Zhimomi, Principal Secretary, U.D.
Dr. Kenei Miachieo, Member Secretary, PCB
Mr. Y. Atsase Thongtsar, O.S.D. (EE&CC) Dept

Dr. Suresh Babu, Chief Secretary, State of Manipur
Th. Harikuwar Singh, Director, MAHUD, Manipur
Dr. T. Braja Kumar Singh, Deputy Director, Environment Directorate, Manipur
T. Mansi Singh, Member Secretary, Manipur PCB

Mr. Lalnunmawia Chuaungo, Chief Secretary, State of Mizoram
Dr. C.H. Muralidhar Rao, Principal Secretary, EF&CC
Ms. C. Ladhawana, Member Secretary, Mizoram PCB
Mr. Ajay Chaudhry, Resident Commissioner, Mizoram

Mr. Manoj Kumar, Chief Secretary, State of Tripura
Mr. Shailendra Singh, Special Secretary, Department of Science, Technology & Environment
Dr. Shailesh Kr. Yadav, Director, Urban Development, Tripura
Mr. Bishu Karmakar, Member Secretary, Tripura PCB

Mr. M.S. Rao, Chief Secretary, State of Meghalaya
Mr. E. Kharmalki, Director, Urban Affairs
Mr. W. Kharkrang, Environment Engineer, MSPCB
Mr. E. Shullai, Asstt. Urban Planner, Urban Affairs

Mr. P. Gargava, Member Secretary, CPCB

ORDER

I. PREFACE:

1. The matter has been put up today in continuation of proceedings on the subject of monitoring execution of orders of this Tribunal on the subject of compliance of waste management (solid and liquid) and other environmental issues, particularly air pollution, in the States of Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya in terms of earlier orders of this Tribunal and orders of the Hon'ble Supreme Court.

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

2. It is necessary to set out brief background of the proceedings. The Hon'ble Supreme Court vide order dated 02.09.2014 in *Writ Petition No. 888/1996, Almitra H. Patel Vs. Union of India & Ors.*, transferred proceedings pending before it on the subject of solid waste management[1].

[1] Operative part of the order of the Hon'ble Supreme Court reads:

3. The matter was earlier considered by the Hon'ble Supreme Court *inter-alia* vide judgments reported in *(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, 2016 (SWM Rules, 2016) on urgent basis. **It was observed that the local authorities constituted for providing services to the citizens are lethargic and insufficient in their functioning which is impermissible. Non-accountability has led to lack of effort on the part of the employees.** Domestic garbage and sewage along with poor drainage system in an unplanned manner contribute heavily to the problem of solid waste. The number of slums have multiplied significantly occupying large areas of public land. Promise of free land attracts more land grabbers. **Instead of "slum clearance" there is "slum creation" in cities which is further aggravating the problem of domestic waste being strewn in the open**. Accordingly, the Court directed that provisions pertaining to sanitation and public health be complied with, streets and public premises be cleaned daily, **statutory authorities levy and recover charges from any person violating laws and ensure scientific disposal of waste**, landfill sites be identified keeping in mind requirement of the city for next 20 years

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"Enforcement of the Rules and efforts to upgrade the technology relevant to the 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."

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.

4. Further observations in the judgment of the Hon'ble Supreme Court[2]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% 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.*
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> *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.*
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> ***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.***
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> ***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***

[2] (2004) 13 SCC 538

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."*

5. In this regard, reference may also be made to orders of Hon'ble Supreme Court in *Municipal Council, Ratlam vs. Vardhichand*[3] and *B.L. Wadhera v. Union of India and Ors.*[4] 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.**

6. The Hon'ble Supreme Court also dealt with the issue of liquid waste management and after issuing requisite directions, required this Tribunal to monitor the compliance. Directions of the Hon'ble Supreme Court include steps for liquid waste management by setting

[3] (1980) 4 SCC 162
[4] (1996) 2 SCC 594

up requisite treatment plants for which funds are to be generated by the local bodies and the States as per constitutional provisions.[5]

III. PROCEEDINGS BEFORE THIS TRIBUNAL IN PURSUANCE OF ORDERS OF THE HON'BLE SUPREME COURT TILL DATE:

Solid Waste Management:

Order dated 22.12.2016:

7. This Tribunal considered the matter of solid waste management after notifying all the concerned States/Regulatory Bodies and finally disposed of the same on 22.12.2016[6] requiring all the States/UTs to follow the SWM Rules, 2016 after preparing requisite action plans in a time bound manner with further direction that **any State/UT**

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[5] "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.**

13. We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down. …. 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.

14. **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] O.A. No. 199/2014 (2016) SCC Online NGT 2981

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

8. **Execution of above directions has been subject matter of further proceedings in the last more than three years after the said order and after almost 20 years after the orders of the Hon'ble Supreme Court.**

Order dated 20.08.2018:

9. Reference may be now made to some further significant orders. Vide order dated 20.08.2018[7], after referring to earlier proceedings and a

[7] O.A. No. 606/2018

chamber meeting with all the concerned stakeholders, the Tribunal considered the following questions:

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

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

Sewage Management:

10. Apart from the issue of SWM, the Tribunal also dealt with the issue of sewage management in pursuance of order of the Hon'ble Supreme Court in *Paryavaran Suraksha vs. Union of India*[8] requiring this Tribunal to monitor directions for proper treatment of sewage to

[8] (2017) 5 SCC 326

prevent untreated sewage and other effluents being discharged in water bodies. On 28.08.2019, it was 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[9], 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.***
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> 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."**

Other issues:

11. Apart from solid waste management and sewage management, the Tribunal is seized of other significant environmental issues in separate proceedings including 351 polluted river stretches[10], 122

[9] News item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB"
[10] Vide order dated 06.12.2019, O.A. No. 673/2018

non-attainment cities[11], 100 polluted industrial clusters[12], illegal sand mining[13], reuse of treated water[14], restoration of water bodies[15], compliance of Plastic Waste, Bio-medical waste etc.[16], carrying capacity study[17], remediation of legacy waste sites[18], preparation of District Environment Plans[19], Hazardous Waste Management Rules[20], depletion of ground water in over-exploited, critical and semi-critical areas[21]. However, for today's consideration, as directed vide order dated 07.01.2020, primary monitoring is focused at:

(i) Solid waste management including legacy waste.

(ii) Sewage management and 351 polluted river stretches.

(iii) Air quality management in 122 non-attainment cities.

Order dated 16.01.2019:

12. Vide order dated 16.01.2019, after noticing that statutory timelines under Rule 22 had expired for various steps and failure of the statutory authorities was punishable criminal offence under the provisions of the EP Act as well as under the provisions of the National Green Tribunal Act, 2010 (NGT Act), this Tribunal required presence of Chief Secretaries of all States/UTs. The timelines in the said Rule are as follows:

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Sl. No.	***Activity***	***Time limit from the date of notification of rules***

[11] Vide order dated 20.11.2019, O.A. No. 681/2018
[12] Vide order dated 14.11.2019, O.A. No. 1038/2018
[13] Vide order dated 26.07.2019, O. A. No. 360/2015
[14] Vide order dated 10.05.2019, O.A. No. 148/2016
[15] Vide order dated 10.05.2019, O.A. No. 325/2015
[16] Vide order dated 24.04.2019, O.A. No. 606/2018 – Karnataka
[17] Vide order dated 11.02.2019, Appeal No. 122/2018
[18] Vide order dated 17.07.2019, O.A. No. 519/2019 with O.A. No. 386/2019
[19] Vide order dated 25.07.2019, O.A. No. 710/2017
[20] Vide order dated 26.08.2019, O.A. No. 804/2017
[21] Vide order dated 10.10.2019, O.A. No. 176/2015

(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*

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13. It was noted that apart from failure of solid waste management, there was also failure of liquid waste management. Such failure had resulted in 351 identified polluted river stretches, 102 (now 122) non-attainment cities in terms of air quality, 100 polluted industrial clusters and other serious environmental consequences, threatening life and health of citizens, water and air quality and the climate. The Chief Secretaries of all States/UTs were required to acquaint

themselves with specific issues mentioned in the said order and coordinate with all the concerned authorities in their respective States/UTs and appear before this Tribunal with their respective status reports. Other directions included constitution of special task force in each district for awareness by involving educational, religious and social organizations, including local Eco-clubs.

14. The issues specified were as follows:

"a. Status of compliance of SWM Rule, 2016, Plastic Waste Management Rules, 2016 and Bio-Medical Waste Management Rules, 2016 in their respective areas.

b. Status of functioning of Committees constituted by this order.

c. Status of the Action Plan in compliance vide order dated 20.09.2018 in the News Item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB (Original Application No. 673/2018).

d. Status of functioning of Committees constituted in News Item Published in "The Times of India' Authored by Shri Vishwa Mohan Titled "NCAP with Multiple timelines to Clear Air in 102 Cities to be released around August 15" dated 08.10.2018 (O.A. No. 681/2018).

e. Status of Action Plan with regard to identification of polluted industrial clusters in O.A. No. 1038/2018, News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels" dated 13.12.2018.

f. Status of the work in compliance of the directions passed in O.A. No. 173 of 2018, Sudarsan Das v. State of West Bengal & Ors. Order dated 04.09.2018.

g. Total amount collected from erring industries on the basis of 'Polluter Pays' principle, 'Precautionary principle' and details of utilization of funds collected.

h. Status of the identification and development of Model Cities and Towns in the State in the first phase which can be replicated later for other cities and towns of the State."

15. Accordingly, the Chief Secretaries of the States/UTs appeared and interacted with this Tribunal. The Tribunal noted unsatisfactory state of affairs on the subject of environmental governance in the country and serious non-compliance of statutory mandate, need to ensure that statutory regulators performed their duty and are manned by credible persons. Failure in this regard had potential for public health and environment and sustainable development goals. It was noted that SOP had been prepared for clearance of legacy waste and circulated to the SPCBs/PCCs which had been successfully implemented at some places like Indore.

16. After interaction with the Chief Secretaries on several dates, further directions were issued which were by and large on same pattern as non-compliance was found by all the States/UTs. It will be suffice to refer to the observations and directions issued vide order dated 18.07.2019 in respect of State of J&K, which was the last State in the series of interactions:

Observations:

> *"36. Needless to say that improvement in environment is not only inalienable duty of the State, but is also necessary for sustainable development which is essential for the health and well-being of citizens as well as for intergenerational equity. These principles require that all human activities should be conducted in such a way that the rights of future generations to access clean air and potable water are not taken away.* ***At the cost of repetition, it may be mentioned that water is being polluted because of discharge of untreated sewage and effluents. Air pollution is result of failure to manage solid waste and to prevent other causes leading to air pollution****. There are also other issues like deterioration in groundwater level, damage to forests and wild life, unscientific and uncontrolled sand mining etc. Unsatisfactory implementation of law is clear from the fact that in spite of severe damage, there is no report of any convictions being recorded against the polluters, nor adequate compensation has been recovered for damage caused to the environment. Steps for community involvement are not adequate. There is reluctance even to declare some major cities as fully compliant with the environment norms.* ***The authorities have not been able to***

evolve simplified and standard procedure for preparing project reports and giving of contracts. There is no satisfactory plan for reuse of the treated water or use of treated sewage or waste and for segregation and collection of solid waste, for managing the legacy waste or other wastes, etc.

37. Since we have found huge gap in steps taken and steps required to be taken to remedy the unsatisfactory state of environment, we had an interaction with the Chief Secretary about the way forward. The gap in the mandate of law on the one hand and actual compliance with law on the other has manifested itself in the form of polluted water, air and land. Its actual measurement in terms of monetary value or the loss on account of adverse impact on public health and environment or otherwise in terms of number of deaths or diseases does not appear to have been duly and exhaustively undertaken by the official machinery so far for the country or for any particular area. The private reports mention diseases by pollution in the state of J&K, as already noted in the para 33 above. There are also various studies reporting about number of deaths and diseases in India by pollution.[22] Death by pollution may be comparable to an offence of homicide and any disease on that account may be likewise comparable to attempt to murder or grievous hurt. Polluter is, thus, liable to be dealt with in the same manner as a person committing any other heinous crime as per law of the land. Mere fact that such polluter creates wealth or employment does not make the offence less serious. The statutory framework prohibits polluting activity and provides for penal consequences. Further, the 'Polluter Pays' principle requires compensation to be recovered to meet the cost of remedying the adverse impact of pollution. Governance of such laws can be held to be satisfactory if the magnitude of punishment of law violators corresponds to the extent of violation of law and the compensation recovered is adequate to meet the cost of damage. There is enough evidence of pollution but no data is shown of corresponding convictions or recovery of adequate compensation for restoration of environment. This calls for authentic study of the extent of damage to the environment and to the public health so that policy makers and law enforcers can bridge the gap.

38. In case extent of convictions for the environment related offences do not correspond to the extent of crime, paradigm shift in policies and strategies for implementation of law may need to be considered. Similarly, the mechanism for recovery of compensation may need to be revised on that pattern. Such review of policy cannot be left to the local bodies or the Pollution Control Boards but has to be at highest level in the State and further review at the national level. As noted in some of the studies, the ranking of the country in compliance of environmental norms needs to be brought to respectable higher position which may be possible only if there

[22] https://www.healtheffects.org/publication/gbd-air-pollution-india

To the effect that 3283 Indians died per day due to outdoor air pollution in India in 2015, making the potential number of deaths due to outdoor air pollution in India in 2015 to 11.98 lakh.

is change in policies and strategies for implementation of necessary norms at every level in right direction. ***The scale of compensation needs to be suitably revised so that the same is deterrent and adequate to meet the cost of reversing the pollution.***

39. Authentic data is required to be compiled which is necessary for proper policy making. The Rules provide for such data to be collected at the state level as well as at the national level. If such data is not furnished timely from ground level with all the requisite details, the policy making remains deficient. ***Since none of the States is fully compliant with the mandate of statutory waste management rules under various headings, as already noted, remedial measures are necessary.*** *We consider it necessary to observe that at least some major cities/towns/villages be first developed as model and thereafter successful experiment replicated in remaining cities/towns/villages.*

40. Though environment is priceless and no amount of compensation may be sufficient for real restoration of environment to its pristine glory, the 'Polluter Pays' principle requires cost of restoration to be recovered which should be deterrent and also include Net Present Value (NPV) for environmental services forgone forever. ***Though such compensation is to be primarily recovered from polluters, where authorities fail to implement law and recover compensation on account of collusion or inaction, such authorities can also be made accountable and required to pay compensation.*** *Strong central mechanism of auditing the compliance of environmental laws by the States and the Union Territories (UTs) is necessary. We are also of the view that to encourage enforcement of environmental laws, cognizance of performance or otherwise need to be taken by authorities allocating funds. Incentives can be given to encourage compliance and those deficient in compliance may be required to comply as a condition for getting grants or part of such grants. Such a policy may be a step in the right direction for achieving sustainable development goals. We take note of discussion on the subject in the minutes of National Development Council held on 01.10.1990.[23] Therein a formula called "Gadgil – Mukerjee" formula is referred to envisaging grants to meet environmental problems. We may add that while such grants may be necessary, there may be a condition requiring measurable and demonstrable improvement in time bound manner as a condition for the grant. Accordingly, vide order dated 24.04.2019 a copy of this order has been sent to Niti Aayog, Finance Commission and MoEF&CC to consider the observations, particularly in this para.*

41. One major hurdle in compliance of the Rules is lack of institutional training mechanism. Scheme of Rules and strategies for implementation, including technology to be used, best practices to be employed need to be identified. Resource persons, target group of persons to be trained, location at which training is to be undertaken need to be worked out.

[23]http://planningcommission.gov.in/aboutus/committee/wrkgrp12/wg_state_finan0106.pdf

42. ***It is also necessary to have an Environment Plan for the country as well as for the States which may identify and publish gaps in compliance of environmental law and indicate action plan to remedy the same****. Compliance of environmental norms also requires carrying capacity study not only of eco-sensitive areas but also areas where violation of environmental laws has clearly surfaced out based on scientific data published by CPCB such as non-attainment cities in terms of air quality, critically polluted industrial clusters on account of air/water pollution, polluted river stretches etc. Drastic remedial measures may be necessary to deal with the same which should not merely be responsive but proactive by way of planning population density, vehicle numbers, nature and quality of vehicles, nature and quality of activity to be allowed.* ***Absence of such measures may render it difficult to meaningfully implement the accepted norms of 'Sustainable Development' or 'Intergenerational Equity'. Such planning is part of 'Precautionary' principle. 'Polluter Pays' principle can be meaningfully implemented only when assessment of damage is realistic and compensation recovered matches the extent of damage.*** *As per census of India 2011, there are 475 places with 981 overgrowths (OGs) have been identified as Urban Agglomeration (UA). The number of total towns in India is 7,935 (Statutory Towns 4,041 + Census Towns 3,894). There are total 6,166 Urban Agglomeration/towns which constitutes the urban frame of the country. During FY 2017-2018, out of 35 SPCBs/PCCs only 16 SPCBs/ PCCs reported the status of Solid Waste Management Rules, 2016.*[24] ***In view of these statistics, emergent and stringent measures are required for compliance of environmental norms.***

43. We discussed with the Chief Secretary the above unsatisfactory situation of environment and about ***need for having an effective monitoring cell directly attached to the office of the Chief Secretary*** *with experts in environment and related issues to assist the Chief Secretary.*

44. The presence of Chief Secretary before this Tribunal was directed with an expectation that there will be realization of seriousness at the highest level which may percolate in the administration."

Directions:

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

i. Apart from three towns said to have been notified as proposed models for compliance of Environmental norms, atleast three villages in every District of the State may be

[24] Annual report of CPCB for the year 2017-18 accessible at: http://cpcb.nic.in/uploads/hwmd/MSW_AnnualReport_2017-18.pdf

notified on the website of the State within two weeks from today which will be made fully compliant with environmental norms within the next six months. Remaining cities, towns and villages of the State may be made fully compliant in respect of environmental norms within one year.

ii. *A quarterly report be furnished by the Chief Secretary, every three months. First such report shall be furnished by October, 10, 2019.*

iii. *The Chief Secretary may personally monitor the progress, atleast once in a month, with all the District Magistrates.*

iv. *The District Magistrates may monitor the status of compliance of environmental norms, atleast 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 10.02.2020 at 2.p.m. 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.*

A copy of the compliance report furnished by the Chief Secretary be sent to CPCB as already directed vide order dated 24.04.2019 for the State of Karnataka (supra).”

17. It was further directed that compliance reports be furnished by the States/UTs to CPCB. Reference may also be made to some further

orders on the subject being dated 08.04.2019[25], 22.04.2019[26], 23.04.2019[27], 24.04.2019[28], 11.02.2019[29], 08.03.2019[30], *02.11.2018*[31], 10.05.2019[32], 10.05.2019[33], 17.07.2019[34], 22.07.2019[35], 25.07.2019[36], 26.07.2019[37], 26.08.2019[38], 28.08.2019[39], 11.09.2019[40], 11.09.2019[41], 10.10.2019[42], 14.11.2019[43], 19.11.2019[44], 20.11.2019[45], 06.12.2019[46] and 18.12.2019[47].

18. The Registry was directed to forward quarterly reports received from the Chief Secretaries as and when received to the CPCB so that CPCB

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[25] O.A. No. 673/2018, News item published in 'The Hindu' authored by Shri Jacob Koshy Titled 26 "More river stretches are now critically polluted: CPCB" (**directing effective steps for remediation of the polluted river stretches**.)

[26] OA No. 606/2018 - Meghalaya (**directing training and capacity building at National and State Level**)

[27] O.A. No. 606/2018 – Tamil Nadu (**directing preparation of Annual Environment Plan giving status of compliance to environmental norms and gaps therein including assessment of damage to the environment in monetary terms**)

[28] O.A. No. 606/2018 – Karnataka (**directing monitoring of compliance of Plastic Waste, Bio-medical waste, Sewage Waste and air pollution**)

[29] Appeal No. 122/2018, Anil Tharthare Vs. The Secretary, Envt. Dept. Govt. of Maharashtra & Ors. Para 33 of the order wherein the Tribunal directed constitution of a five Members Expert Committee to carry out **carrying capacity study** of the area for relevant environment parameters and impact of such expansion on already congested and stressed areas.

[30] O.A. No. 568/2016, Ajay Khera Vs. Container Corporation of India Limited & Ors, the Tribunal directed the Container Corporation of India (CONCOR) to phase out diesel vehicles, used for transportation by the Inland Container Depot (ICD) Tughlakabad, within six months.

[31] O.A. No. 400/2017, Westend Green Farms Society Vs. Union of India & Ors. Para 28 of the order wherein the Tribunal directed carrying capacity assessment to regulate activities violating environmental laws.

[32] O.A. No. 148/2016, Mahesh Chandra Saxena Vs. South Delhi Municipal Corporation & Ors. (**Reuse of treated water**)

[33] O.A. No. 325/2015, Lt. Col. Sarvadaman Singh Oberoi Vs. Union of India & Ors. (**restoration of water bodies**)

[34] Original Application No. 519/2019 WITH Original Application No. 386/2019 (**remediation of legacy waste sites**)

[35] Execution Application No. 13/2019 (**Plastic Waste Management**)

[36] O.A. No. 710/2017 (**preparation of District Environment Plans**)

[37] O. A. No. 360/2015 (**Illegal sand mining**)

[38] O.A. No. 804/2017 (**Hazardous Waste Management Rules**)

[39] O.A. No. 593/2017 (**requirement of 100% treatment of sewage and effluents**)

[40] O.A. No. 148/2016 (**utilization of treated waste water**)

[41] O.A. No. 496/2016 (**ground water management, rain water harvesting**)

[42] O.A. No. 176/2015 (**depletion of ground water in over-exploited, critical and semi-critical areas**)

[43] O.A. No. 1038/2018 (**polluted industrial clusters**)

[44] O.A. No. 519/2019 (**legacy waste dump sites**)

[45] O.A. No. 681/2018 (**non-attainment cities in terms of air quality and also control of noise pollution**)

[46] O.A. No. 673/2018 (**351 polluted river stretches**)

[47] O.A. No. 200/2014 (**pollution of river Ganga**)

may prepare a gap analysis report and present the same to this Tribunal.

19. Accordingly, the CPCB filed following reports:

"i. Report dated 09.09.2019 enclosing Annual Environment Plan for the country giving compliance of environment norms and gaps.
ii. Report dated 09.09.2019 annexing Preliminary Framework for Imposing Environmental Damage Compensation.
iii. Report dated 09.09.2019 on the subject of Methodology of Assessment of Environment Carrying Capacity.
iv. Gap Analysis report filed on 06.09.2019 on the subject of compliance of solid waste, plastic waste, bio-medical waste management, rejuvenation of identified polluted river stretches, polluted industrial clusters, non-attainment cities.
v. Report dated 24.07.2019 on Framework on national environmental training program.
vi. Status report dated 09.08.2019 on Information, Education & Communication (IEC) activities."

Order dated 12.09.2019:

20. The Tribunal vide order dated 12.09.2019 considered the above and directed all the States/UTs to furnish information to the CPCB as follows:

"3. We have heard learned Counsel for the CPCB for future course of action and further directions required on the above subjects. He submitted that the above reports are incomplete for want of information from the States/UTs. It was elaborated during the course of hearing that information is required to be submitted in terms of following thematic areas viz.

- *Compliance to Solid Waste Rules including Legacy Waste.*
- *Compliance to Bio-medical Waste Rules.*
- *Compliance to Construction & Demolition Waste.*
- *Compliance to Hazardous Waste Rules.*
- *Compliance to E-waste Rules.*
- *351 Polluter Stretches in the country.*
- *122 Non-attainment cities.*
- *100 industrial clusters.*
- *Status of STPs and re-use of treated water.*
- *Status of CETPs/ETPs including performance.*
- *Ground water extraction/contamination and re-charge.*
- *Air pollution including noise pollution.*
- *Illegal sand mining.*

- *Rejuvenation of water bodies.*

4. *The information with regard to above thematic areas needs to be submitted to CPCB by the Chief Secretaries of all the States and Union Territories in terms of following:*

   - *Current status*
   - *Desirable level of compliance in terms of statutes.*
   - *Gap between current status and desired levels.*
   - *Proposal of attending the gap with time lines.*
   - *Name and designation of designated officer for ensuring compliance to provisions under statute.*

5. *CPCB is permitted to file revised updated reports on the subject after collecting information from concerned States/UTs by 15.11.2019."*

Order dated 07.01.2020:

21. The status report dated 27.12.2019 with reference to the above thematic areas was considered on 07.01.2020 and it was observed:

"12. The reports give information about States who have given some information but the nature and extent of information which was required has not been furnished. Available information with regard to sewage generation and treatment shows huge gap. Grading made by the CPCB into 'good', 'average', 'poor' and 'no information' is not based on any qualitative analysis but extent of information furnished.

Instead, what is least expected is information on:

(i) solid waste management, including remediation of legacy waste in terms of earlier orders of this Tribunal,
(ii) sewage treatment and restoration of 351 polluted river stretches and
(iii) air quality management in 102 (122) non-attainment cities.

With respect to serial no. (i), the information is required with regard to the quantity of MSW generated, segregated and treated; gaps in the waste processing in terms of generation and treatment and enforcement of statutory timelines and orders of this Tribunal for bridging the gap; number of sites, and quantity of legacy waste therein and timelines for its remediation.

With respect to serial no. (ii), 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. Further, with regard to restoration of 351 polluted river stretches, the States need to furnish information about the compliance of directions including in-situ and ex-situ remediation by way of phyto-remediation/artificial wetlands, bio-

diversity parks or any other appropriate measure to supplement load reduction on recipient river systems.

With respect to serial no. (iii), the Chief Secretaries need to monitor and compile information on the subject of execution of action plans for containment of air pollution in terms of orders of this Tribunal and furnish the quantifiable progress/achievement to the CPCB.

13. In view of above, CPCB needs to redesign formats and secure relevant quantifiable information from the Chief Secretaries under different heads so that the Chief Secretaries are able to respond to the Tribunal on their appearance as per schedule of appearance already notified. Chairman and Member Secretary, CPCB may remain present on the dates of appearance of Chief Secretaries with relevant data.

14. The regime of compensation in terms of earlier directions will be considered after interaction with the Chief Secretaries."

IV. RECENT ORDERS OF THE HON'BLE SUPREME COURT DATED 25.11.2019 AND 13.01.2020 HAVING BEARING ON THE MATTER (M.C. Mehta vs. Union of India, W.P. No. 13029/1985):

22. The Hon'ble Supreme Court vide order dated 25.11.2019[48] while dealing with the pollution in Delhi and NCR held:

"4. We see Yamuna river virtually turned into a sullage. We take judicial notice of this situation. Similar is the position with Ganges. As it proceeds, industrial effluents are being poured in rivers. ***Sewage is also being directly put in rivers contributing to the river water pollution.*** *We direct the Pollution Control Boards of the various States as well as the Central Pollution Control Board and various Governments to place before us the data and material with respect to various rivers in the concerned States, and what steps they are taking to curb the pollution in such rivers and to management as to industrial effluents****, sewage, garbage, waste and air pollution, including the water management.*** *We club the pending case of water management with this matter.*

10. As we have noted that from last several years, the position of air pollution is worsening in spite of various orders passed by this Court. The reports and the scientific data indicating that large section of people are suffering from the dreaded diseases due to such air pollution such as Cancer, Asthma and various other diseases. Life span is adversely affected. ***Time has come that the various States recognise right to life is important right. Human life and health have been put in danger.*** *In such scenario, why they should not be required to pay compensation to such persons who are being affected by inadequate arrangement to*

[48] Writ Petition(s)(Civil) No(s). 13029/1985, M.C. Mehta Vs. Union of India & Ors.

check the ***air pollution, non-lifting of garbage, waste which add ultimately to the pollution.***

11. In this case we find that Delhi is lacking the capacity to the extent of 45% to even clean the garbage/waste which is being generated. Similar is the situation in various other places. We take note of the situation which is alarming and time has come to remind the State machineries as to their duties as all of us are meant to serve the people of this great country. Our Constitution has envisaged certain Directive Principles as they are more important rights at the discretion of the Government. The Courts are not to interfere in that, but dereliction cannot be to the extent that the very right to life is endangered by the inaction.

13. Not only the basic Fundamental Rights are being ignored with respect to air and water, ***problem of governance are being projected, which cannot come into the way of the basic Fundamental Rights which a human enjoys,*** *much less to talk of the Fundamental Duties and Directive Principles contained in the State policy which have already found statutory expression in the form of Municipal laws, Prevention of Air Pollution and Water Acts and various schemes framed by the Central Government and State Governments, but we see neither the air quality has improved nor the water quality in several States, not to talk of Delhi only. We have called for the report from Delhi Government where the reports indicate that the contaminated water is being supplied and also from Bureau of Indian Standards to submit report in this regard.*

15. At the same time, as we find that in spite of various orders passed by this Court, we are not able to improve the situation of air quality which we can see at least in Delhi and NCR with certainty. ***Time has come to require the State Governments to explain why they should not be asked to compensate the persons who are being affected by bad air quality.*** *Obviously, the State is run by the administration, why liability should not be imposed for such a tort on the concerned machinery also of the various States which are failing to discharge their basic duties. This Court in Municipal Council, Ratlam Vs. Vardhichand & Ors., reported in (1980) 4 SCC 162 has held they have to take proper and positive action in this direction****. It is their bounden duty to provide civic amenities, and also to see that self-created bankruptcy does not come in the discharge of the statutory obligation which are necessary for existence of human life. We have seen during the course of the arguments that one State is passing the burden upon the Centre and then it is stated on behalf of the Central Government that they have framed scheme and it for the State Governments to implement it.*** *We expect not only the 'policy making' but also its 'implementation'. Let the States of Punjab, Haryana, Uttar Pradesh and the Government of NCT of Delhi respond, due to the air pollution, why the concerned Government and its concerned machinery, from top to bottom, should not be asked to compensate the citizens of Delhi and adjoining areas for various diseases which are being caused and sufferings and troubles which are being faced and the report indicates the life span is being shortened. Let show cause notice be issued to the various State Governments, and to the Chief*

Secretaries, to submit reply within six weeks. Let the matter be listed for consideration on 17.01.2020. The Chief Secretaries to the States of Punjab, Haryana, Uttar Pradesh and Government of NCT of Delhi be personally present on that date."

23. Again, in the above matter, the Hon'ble Supreme Court vide order dated 13.01.2020 observed:

"56 (F). With respect to waste burning ***compliance of Solid Waste Management Rules, 2016 is necessary****. The waste segregation and management is required, what are the existing facilities and deficit requirements have to be met by the Government of NCT of Delhi, Haryana, Uttar Pradesh, Rajasthan and Punjab.*

57. (xviii). Let the Government of NCT of Delhi work out the details with respect to 45% deficit capacity to lift the garbage and waste as there is only 55% capacity available with respect to garbage and waste generated in Delhi. ***Let it work out at a comprehensive plan within three months to have full (100%) capacity to deal with garbage and wastes*** *and place it before this Court, including the implements, tools, manpower and the expenditure required in that connection.*

(xxi). We direct the various State Governments through ***Chief Secretaries to inform this Court about the measures taken by them with respect to pouring of sewage*** *and untreated industrial effluents in various rivers and the plan prepared by them and arrangement of* ***funds made by them for the purpose of sewage treatment plants and existing facilities*** *and requirements be pointed out within eight weeks.*

(xxii). ***Let the Government of NCT of Delhi and Governments of Punjab, Haryana and UP show cause why they should not be saddled with the compensation for failure of their machinery and the concerned authorities in taking appropriate steps to prevent stubble burning and other pollution being caused."***

V. 25TH REPORT DATED 12.02.2019 OF THE STANDING COMMITTEE ON URBAN DEVELOPMENT, 16TH LOK SABHA ON THE ISSUE OF SOLID WASTE MANAGEMENT INCLUDING HAZARDOUS WASTE, MEDICAL WASTE AND E-WASTE:

24. The Standing Committee on Urban Development, 16th Lok Sabha in its 25th Report dated 12.02.2019 considered the issue of solid waste management including hazardous waste, medical waste and e-waste and observed:

*"It is estimated that about **65 million tonnes of waste is generated annually** in the country out of which about 62 million tonnes is Municipal Solid Waste (MSW) which include organic waste, recyclables like paper, plastic, wood, glass etc. About 45-50% of this MSW is biodegradable/wet/organic waste, 20-25 % is recyclable waste & about 30-35% is inert/debris.*

*1.2 Only about 75-80% of the municipal waste gets collected and out of this only **22- 28% is processed and treated and remaining is deposited indiscriminately at dump yards.** It is projected that by the year 2031, the MSW generation shall increase to 165 million tonnes and to 436 million tonnes by 2050. **Eliminating, dumping and minimizing releases of hazardous chemicals by paying special attention to air quality and municipal and other waste management and reducing waste generation through prevention, reduction, recycling and reuse globally have been one of the Sustainable Development Goals (SDGs) that have been adopted by UN General Assembly in September, 2015**.*

*1.3 It has been estimated that the Urban Local Bodies (ULBs) spend about 60-70% of total expenditure on street sweeping, 20-30% on transportation and less than 5% on municipal disposal of waste, which shows that hardly any attention is given to scientific disposal of waste. The waste collection efficiency in India ranges between 70% and 90% in major Metro cities, whereas in several smaller cities it is below 50%. However, if the current 62 million tones annual generation of MSW continues to be dumped without treatment; it will need 3.40 lakh cubic meter of landfill space every day. Considering the projected waste generation of 165 million tonnes by 2031, **the requirement of land for setting up landfill for 20 years (considering 10 meter high waste pile) could be as high as 66 thousand hectares (1240 hectare per year) of precious land, which our country cannot afford to waste.** Currently, of the estimated 62 million tonnes of MSW generated annually by 377 million people in urban areas, more than 80% is disposed of indiscriminately at dump yards in an unhygienic manner by the municipal authorities leading to problems of health and environmental degradation.*

1.4 As per NITI Aayog, presently, out of the total MSW generated, only 29.51% is subjected to treatment which, however, is poised to improve with the Swachh Bharat Mission (Urban) scheme of Government of India being in full swing."

VI. FURTHER CONSIDERATION OF THE MATTER IN TODAY'S HEARING:

25. Accordingly, we have considered the matter further after interaction with the Chief Secretaries, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya and Member Secretary, CPCB. Even

though all the thematic areas of the environment are significant, interaction has been limited to few selected themes, other themes being left to be considered separately on different scheduled hearings.

26. As per available statistics, there is huge gap in generation and treatment of solid and liquid waste in the country. **As per CPCB report 2016 (06.12.2016), as against 61948 MLD sewage generated in urban areas in India, the treatment capacity is 23277 MLD. The deficit in capacity is 62%.** There is no data of sewage generation in rural areas. **As per CPCB estimate of solid waste[49], about 65 million tonnes of waste is generated annually in the country out of which about 62 million tonnes is Municipal Solid Waste (MSW). Only about 75-80% of the municipal waste gets collected and out of this only 22- 28% is processed and treated and remaining is deposited indiscriminately at dump yards. It is projected that by the year 2031, the MSW generation shall increase to 165 million tonnes and to 436 million tonnes by 2050. There are more than 4000 dump sites as per CPCB data[50] which need to be remediated to avoid harmful impact on environment and public health.**

27. All the States/UTs were directed by this Tribunal to commence remediation of legacy waste sites by 01.11.2019[51]. The Tribunal observed:

> *"28. .....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[52]."*

[49] http://164.100.47.193/lsscommittee/Urban%20Development/16_Urban_Development_25.pdf
[50] Order dated 18.10.2019 in O.A. No. 606/2018 para 6
[51] Order dated 17.07.2019 O.A. No. 519/2019 Para 28
[52] (a) What a Waste 2.0, Global Snapshot of Solid Waste Management to 2050, World Bank Group, ISBN (paper): 978-1-4648-1329-0, 2018 International Bank for Reconstruction and Development

"30. Needless to say that potential hazard of dumpsites on public health and environment is more or less on the same pattern and earliest such dumpsites are cleared, sooner it is better for public health. ***Such dumpsites are undoubted source of air pollution resulting in respiratory and other diseases. Most vulnerable are the infants and the senior citizens.*** *The right to breathe fresh air being part of right to life, delay in remedying the situation is not desirable. The plea of capping is being put forward on the ground of need for urgent remedial action, ignoring that doing so will perpetuate the adverse consequences of retaining non-biodegradable and other polluting components in the garbage eventually causing continuous damage to the soil and the ground water. Biological solutions have to be preferred over engineering solutions on the subject. However action has to be taken fast. Delay which has taken place so far is on account of inaction of the concerned authorities for which there is no justification.*

31. It will also be appropriate to note that the scheme of the SWM Rules is to prevent collection of waste and instead, to ensure its segregation, treatment and disposal at the earliest and as far as possible at the source itself. ***If it is not done, the waste continues to be accumulated which becomes a challenge for the environment and public health. In this regard particular reference may be made to Rule 15 (zi). The authorities need to evolve a holistic strategy for integrated waste management in the municipal planning which may result in 'zero waste' going to the landfill in terms of the said rules[53].***

35. A copy of this order be sent to CPCB, all the Chief Secretaries, the MoEF&CC and MoHUA."

/ The World Bank, http://datatopics.worldbank.org/what-a-waste/. The report states- When waste is burned, the resulting toxins and particulate matter in the air can cause respiratory and neurological diseases, among others (Thompson 2014). Piles of waste produce toxic liquid runoff called leachate, which can drain into rivers, groundwater, and soil. Organic waste entering waterways reduces the amount of oxygen available and promotes the growth of harmful organisms (Bhada-Tata and Hoornweg 2016). Marine pollution is also increasing as a result of mismanaged solid waste on land, poor disposal practices by sea vessels, and runoff from sewage and polluted streams.

(b)https://www.epw.in/engage/article/institutional-framework-implementing-solid-wastemanagement- india-macro-analysis Several studies have been published that link asthma, heart attack, and emphysema to burning garbage. Human faecal matter is also frequently found in

municipal waste—this, along with unmanaged decomposed garbage, attracts other rodents, that further lead to a spread of diseases such as dengue and malaria. Leachate from rotten garbage contains heavy metals and toxic liquid; with such emissions ending up either absorbed into the soil or flowing into water bodies today (Awasthi 2013), the entire food chain can be affected when this contaminated water is utilised for agriculture, human consumption and animal consumption.

[53] Reference may also be made to- Suggestive /Indicative "The National Action Plan for Municipal Solid Waste Management", Central Pollution Control Board, https://cpcb.nic.in/uploads/MSW/Action_plan.pdf.

28. The issue of solid and liquid waste needs to be taken seriously. We have already mentioned the available statistics on the subject. It is a matter of serious concern that legacy waste remediation has not even commenced at most of the sites even though statutory rules contemplate outer limit for completion of such remediation by 07.04.2021. Current processing of the waste generated and collected is also not taking place on regular basis. For any person travelling by train, hot spots of scattered garbage and overflowing sewage are common sights. Satisfactory sewage management also remains far cry. This unsatisfactory state of affairs must be remedied at the earliest and in a time bound manner by initiative at the highest level. Accountability needs to be fixed and consequences for failure clearly provided and enforced.

29. Before coming to the data of States of Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya, we may refer to recent orders passed in respect of some other States which may be relevant. On 10.01.2020, after interaction with the Chief Secretaries of UP, Punjab, Advisor to Administrator for UT Chandigarh, this Tribunal issued direction fixing timelines for compliance of the Rules and other environmental norms and consequences for non-compliance. The said directions were conveyed to all the States/UTs/Local Bodies. We propose to issue similar directions in the present case.

30. Further reference may be made to order dated 24.01.2020 in O.A. No. 606/2018 while dealing with the State of Maharashtra. As per data furnished in the said case, it was mentioned that bio mining had commenced at 117 dump sites while 23 dump sites had already been cleared. This information is being mentioned to show that legacy

waste remediation process can start simultaneously at all places where such legacy waste dump sites exist. We were informed that the State of Maharashtra approved a standard DPR at State level itself which may need to be considered by all concerned.

31. We may now note State specific scenario for Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya as depicted in the earlier orders of this Tribunal when the Chief Secretaries appeared and as emerging from the data now made available by CPCB based on information furnished by the State to CPCB.

I. **Data noted in the earlier orders of this Tribunal**:

A. <u>STATE OF ARUNACHAL PRADESH</u>

RULES	DATA
Solid Waste Management	Number of towns to be covered: 18 (17 Urban towns & 1 Capital City) Local Bodies : 19 (17 Urban division & 2 Municipal Councils) Waste Generation : 203.96 TPD Collected : 166.82 TPD Treated : Nil Landfilling : Nil No. of Dump sites : 09
Plastic Waste Management	Waste Generation : 06 TPA No. of registered manufacturing units : NIL No. of unregistered manufacturing units: Not provided
Biomedical Waste Management	No of Hospitals : 72+ Authorizations granted : 72 Waste Generation : 645.4 kg/d Treatment : 645.4 kg/d Common Bio-medical waste Treatment Facilities : Nil No. of Captive Facilities : 4
Polluted River Stretches	CPCB has not identified any polluted river stretches in Arunachal Pradesh.
Air Quality Management	There is no city from Arunachal Pradesh in the list of non-attainment cities.
Industrial Clusters	No PIA was identified/monitored during 2018 by CPCB.
ETP, CETP, STPs	**ETPs** No. of industries which require ETP : 2 No. of industries having functional ETP: 2 No. of industries complying : 2 **STPs** No. of STPs : 0 **CETPs**

	No. of CETPs : 0

B. STATE OF NAGALAND

RULES	DATA
Solid Waste Management	Number of towns to be covered: 32 Local Bodies: 32 Waste Generation: 348 TDP Collected: 252TPD Treated : 40 % in Kohima MC (139.2 TDP) Land filling : 10 % in Kohima MC (34.8 TDP) No. of Dumpsites :
Plastic Waste Management	Waste Generation: 14052.5 TPA No. of registered manufacturing unit: 6
Biomedical Waste Management	No of Hospitals :158+ Authorizations granted: 158 Waste Generation :626.5 kg/d Treatment :626.5 kg/d Common Bio-medical waste Treatment Facilities :Nil No. of Captive Facilities :158
Polluted River Stretches	P(I)- 1 P(II)- P(III)- 1 Dhansiri P(IV)- 2 Dzuna, Chathe P(V)- 2 Dzucha, Sano Total 6
Air Quality Management	Non-attainment cities-Dimapur, Kohima
Industrial Clusters	No PIA (Polluted Industrial Area was identified/monitored during 2018 by CPCB.
ETP, CETP, STPs	**ETPs** No. of industries which require ETP :27 No. of industries having functional ETP: 5 No. of industries complying :5 **STPs** No STP in the State **CETPs** No CETP in the State

C. STATE OF MANIPUR

RULES	DATA
Solid Waste Management	Number of towns to be covered : 10 Local Bodies : 01 Waste Generation : 176 TPD Collected :125 TPD Treated : 0 Landfilling : 0
Plastic Waste Management	Waste Generation : 24TPA No. of registered units : 02(carry bag mfg.) No. of unregistered units: : 15 recycling unit
Biomedical Waste Management	No of Hospitals : 680+ Authorizations granted : 85 Waste Generation : 529.14kg/d Treatment : 529.14kg/d Common Bio-medical waste Treatment Facilities : 01

	No. of Captive Facilities : 532
Polluted River Stretches	P(I)- P(II)- 1 Nambul P(III)- P(IV)- P(V)- 8 Imphal, Iril, Khuga, Khujairok, Lokchao, Manipur, Thoubal, Wangjing Total = 9
Air Quality Management	There is no city from Manipur in the list of nonattainment cities.
Industrial Clusters	No PIA was Identified/monitored during 2018 by CPCB.
ETP, CETP, STPs	**ETPs** No industry requiring ETPs **STPs** No STPs in the state **CETPs** No CETP in the State

D. STATE OF MIZORAM

RULES	DATA
Solid Waste Management	Number of towns to be covered: 01 Local Bodies : 01 Waste Generation : 159.88 TPD Collected :159.88 TPD Treated : 00 TPD Landfilling : 00 TPD No. of Dumpsites : not indicated
Plastic Waste Management	Waste Generation : Survey is on going
Biomedical Waste Management	Information relating to Biomedical Waste is not given.
Polluted River Stretches	P(I)- P(II)- P(III)-1 Tiau P(IV)-3 Tlawng, Tuipui, Tuivawl P(V)- 5 Chite, Mat, Saikah, Tuikual, Tuirial Total 9
Air Quality Management	There is no city from Mizoram in the list of non-attainment cities.
Industrial Clusters	No PIA was Identified/monitored during 2018 by CPCB.
ETP, CETP, STPs	**ETPs** No. of industries which require ETP : 64 No. of industries having functional ETP: 45 No. of industries complying : 45 **STPs** No. of STPs : 2 No. of STPs complying : 2 No. of STPs non-complying: No. of under construction/proposed STPs: 1 **CETPs** No CETP in the State. No under construction/proposed CETPs in the State.

E. STATE OF TRIPURA

RULES	DATA
Solid Waste Management	Number of towns to be covered : 20 Local Bodies : 20 Waste Generation : 433.2MTPD Collected : 372.50MTPD Treated : 148.40MTPD Landfilling : 224.1 MTPD
Plastic Waste Management	Waste Generation : 28.5 TPA
Biomedical Waste Management	No of Hospitals : 1890+ Authorizations granted : 342 Waste Generation : 1607 kg/d Treatment : 1582.88 kg/d Common Bio-medical waste Treatment Facilities : 1 No. of Captive Facilities : 749
Polluted River Stretches	P(V)- 06 Burigaon, Gumti, Haora, Juri, Khowai, Manu Total : 6
Air Quality Management	There is no city from Tripura in the list of non-attainment cities.
Industrial Clusters	No PIA (Polluted Industrial Area) was identified/monitored during 2018 by CPCB
ETP, CETP, STPs	**ETPs** No. of industries which require ETP : 22 No. of industries having functional ETP: 13 No. of industries complying : 13 **STPs** No. of STP : 17 No. STP complying: 17 No. of under construction/ proposed STPs: 05 **CETPs** No. of CETP :01 No. of CETPs complying : 01 No. of CETPs non-complying : 01

F. STATE OF MEGHALAYA

RULES	DATA
Solid Waste Management	Number of towns to be covered : 07 Local Bodies : 07 Waste Generation : 210 TPD Collected : 175 TPD Treated : 36 TPD Landfilling : 139 TPD
Plastic Waste Management	Waste Generation : 15.096 TPA
Biomedical Waste Management	No of Hospitals : 740 Authorizations granted :339 Waste Generation : 1061.65 kg/day Treatment : 830.85kg/d Common Bio-medical : 1(dysfunctional)

	No. of Captive Facilities : deep burials/sharp Pits
Polluted River Stretches	P(I)- 2 Umkhrah, Umshyrpi P(II)- P(III)- P(IV)-3 Kyrhukhla, Nonbah, Umtrew P(V)- 2 Lukha, Myntdu Total-7
Air Quality Management	Non-attainment cities- Byrnihat
Industrial Clusters	No PIA was Identified/monitored during 2018 by CPCB.
ETP, CETP, STPs	**ETPs** No. of industries which require ETP : 231 No. of industries having functional ETP: 190 No. of industries complying : 190 **STPs** No. of STPs : 4 No. of STPs complying : 4 No. of under construction/proposed STPs : Data not provided **CETPs** No CETP in the State. No. of CETPs under construction/proposed CETPs : Data not provided

II. Data now made available during the hearing by the CPCB by way of presentation based on the data furnished by the States of Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya alongwith its observations:

A. <u>STATE OF ARUNACHAL PRADESH</u>

(i) Solid waste management including legacy waste.

STATUS OF SOLID WASTE MANAGEMENT (Arunachal Pradesh)				
Total No. of ULBs: 34				
MSW generated (TPD)	**MSW Processed (TPD)**	**MSW Landfill (TPD)**	**Gap (TPD)**	**Timeline**
271	**-**	**-**	**271**	**-**

Assessment of SWM Facilities (capacity wise)						
All units in TPD	**Required Capacity**	**Existing capacity**	**Gap (TPD)**	**Proposed Capacity**	**Time frame**	**Observations**
Waste Segregation Facility (MRF)	**143.6 (@53%)**	**-**	**-**	**-**	**-**	**.**
Waste Processing						

Biodegradable waste (Composting)	**127.4 (@ 47%)**	**1 No.**	**-**	**1 No. (capacity not specified)**	**-**	**Operational status to be confirmed**
Non bio-degradable (Recycling; RDF, WtE Co-processing)	**75.9 (@ 28%)**	**-**	**-**	**-**	**-**	**-**
Waste Disposal (Landfill)	**67.7 (@ 25%)**	**-**	**-**	**2 landfills planned**	**November 2019**	**Status to be conformed**

Assessment of SWM Facilities (ULB wise)						
	Required	**Existing**	**Gap**	**Proposed**	**Timeframe**	**Observations**
Waste Segregation Facility (MRF)	**34**	**0**	**34**	**-**	**-**	**-**
Biodegradable waste (Composting)	**34**	**1**	**33**	**-**	**-**	**-**
Non-biodegradable (Recycling; WtE, RDF, Co-processing)	**34**	**-**	**-**	**-**	**-**	**-**
Waste Disposal (Inert-Landfill)	**34**	**2**	**32**	**1**	**-**	**-**

Legacy Waste		
		Present Status
1	**Number of dumpsites**	**31**
2	**Quantity of Waste dumped at dumpsites**	**-**
3	**Number of dumpsites cleared**	**0**
4	**Number of dumpsites in which bio-mining has commenced**	**0**
5	**Time frame for clearing all dumpsites**	**-**

(ii) Sewage management and 351 polluted river stretches.

SEWAGE MANAGEMENT

TREATMENT CAPACITY					**Remarks**
Sewage Generation	**Existing**	**Gap**	**Proposed**	**Timeline**	**Partial Information**

N.A	**Nil**	**N.A**	**3.1**	**N.A**	
Existing Sewerage Length	**Required**	**Gap**	**Timelines**		**-**
N.A	**N.A**	**N.A**	**N.A**		
NUMBER OF STPS					
Number of STPs	**New Proposed**		**Total STPs**	**Timeline**	**-**
N.A	**02**		**02**	**N.A**	
RE-USE OF TREATED SEWAGE					
Present Utilization	**Proposed**	**Timelines**	**Type of Use**		**-**
N.A	**N.A**	**N.A**	**N.A**		

Water Quality Management:

- **Water Quality Monitoring locations under NWMP : River – 29**
- **Inventorisation, Assessment of Water Quality of all Stagnant Water Bodies, Geo-Tagging, Prioritization of Polluted Water Bodies (Stagnant) for restoration etc. yet to be done by the State**

(iii) Air quality management in 122 non-attainment cities.

Annual Average (PM10 in µg/m³) of NAMP data

S. No.	City	2016	2017	2018
1	Itnagar	-	63	116
2	Naharlagun	-	76	88
Annual average standard 60 µg/m3				

B. <u>STATE OF NAGALAND</u>

(i) Solid waste management including legacy waste.

STATUS OF SOLID WASTE MANAGEMENT				
Total No. of ULBs:32				
MSW generated (TPD)	MSW Processed (TPD)	MSW Landfill (TPD)	Gap (TPD)	Timeline
339.5	75.6	30	233.9	-

Assessment of SWM Facilities (capacity wise)

All units in TPD	Required Capacity	Existing capacity	Gap (TPD)	Proposed Capacity	Time frame	Observations
Waste Segregation Facility (MRF)	179.9 (@53%)	8	171.9	-	-	Proposed capacity along with time frame to be provided
Waste Processing						
Biodegradable waste (Bio-methanation and Composting)	159.5 (@ 47%)	-	159.5	-	-	Existing /proposed capacity along with time frame to be provided
Non biodegradable (Recycling; RDF, WtE Co-processing)	95 (@ 28%)	-	95	-	-	-do-
Waste Disposal (Landfill)	84.8 (@ 25%)	-	84.8	-	-	-do-

Assessment of SWM Facilities (ULB wise)						
	Required	Existing	Gap	Proposed	Time frame	Observation
Waste Segregation Facility (MRF)	32	1	31	31	-	-.
Biodegradable waste (Bio-methanation & Composting)	32	-	32	-	-	-
Non-biodegradable (Recycling; WtE, RDF, Co-processing)	32	-	32	-	-	-
Waste Disposal (Inert-Landfill)	32	-	32	-	-	-

Legacy Waste		
		Present Status
1	Number of dumpsites	6 (As per AR – 12)
2	Quantity of Waste dumped at dumpsites	Not estimated

3	Number of dumpsites cleared	1
4	Number of dumpsites in which bio-mining has commenced	1
5	Time frame for clearing all dumpsites	--

(ii) Sewage management and 351 polluted river stretches.

SEWAGE MANAGEMENT

TREATMENT CAPACITY					Remarks
Sewage Generation	Existing	Gap	Proposed	Timeline	Gap partially addressed; Not within NGT timelines
12 MLD	0	12 MLD (100%)	9.6 MLD 01 STP	June, 2021	

SEWERAGE NETWORK				
Existing Sewerage Length	Required	Gap	Timelines	STP planned – No sewerage network planned
Nil	Nil	Nil	Nil	

NUMBER OF STPS				
Number of STPs	New proposed	Total STPs	Timeline	-
Nil	01	01	June, 2021	

RE-USE OF TREATED SEWAGE				
Present Utilization	Proposed	Timelines	Type of Use	-
Nil	9.6 MLD	June, 2021	Irrigation	

Rejuvenation of Polluted River Stretches (PRS) O.A. NO 673/2018

Priority Class	I	II	III	IV	V	Grand Total
No. of PRS	1	-	1	2	2	6

Polluted River name	Polluted River Stretch	Observed BOD Range/ Max Value (mg/l) (2016-2017 data)	Priority Class
Dhansiri	Check Gate To Diphu Bdg	7.0-50.0	I
Dzuna	Along Kohima	6.0-13.0	III

Chathe	Medziphema To, Dimapur	7.0	IV
Dzu	Kohima To Dzuko Valley	7.0	IV
Dzucha	Along Kohima	4.0	V
Sano	Along Kohima	4.0	V

Rejuvenation of PRS, O.A. NO 673/2018

Priority Class	No. of PRS	No. of RRC approved Action plans received	Date of Receipt of action plans	Action plans approved by CPCB Task Team subject to conditions	Remarks
I	1	-	Action plan received on 24.01.2019 & revised action plan received on 02.05.19 & 6.8.19	Action plans for river Dhansiri (P-I) was approved in 8th Task Team meeting held on 6th September, 2019.	
II	-	-			
III	1	1		Target Date: 31.03.2020 (For P-III and P-IV)	RRC approved action plans for PIII to P-IV PRS were examined in 10th Task Team meeting held on 26th Feb. 2020
IV	2	2			
V	2	2			
Grand Total	6	6			

Gap Analysis and the Proposed Action Points as per submitted Action Plan of Dhansiri (P-I)

Details	Generation	Existing Capacity	Gap	Proposed Treatment Facilities	Timelines Proposed
Sewage Management	16.19 MLD (1 PRS)	25.43 MLD (STP under cons) + 1 SeTP (30 KLD)	No gap	1 STP of 25.43 MLD under construction	30th June, 2021

Industrial Effluent Management	**200.3 KLD (615 no. of industries)**	**309 KLD (5 Captive ETPs)**	**No gap**	**Not required**	**-**
Solid Waste Management	**118.4 TPD (Dimapur)**	**Dump Site :1**	**100%**	**SWM Facility (1)**	**31st March, 2021**

(iii) Air quality management in 122 non-attainment cities.

Status of Actions for Non attainment cities (NACs) Hon'ble NGT Directions (O.A. 681/2018) – Nagaland

Number of Non Attainment Cities	**02 (Dimapur, Kohima)**
Action Plan approved	**02**
Timelines for Actions	**Short - term (continuous or within 1 year), mid – term (within 1-2 Year), and long - term (within 3 years).**
CPCB comments	➢ **Micro level planning for each action in city plan required*.** ➢ **Submission of implementation status quarterly** ➢ **Consent fund details yet to be received** ➢ **Directions issued by CPCB for improvement in plans** ○ **Source Apportionment and Carrying Capacity** ○ **Interim Emission Reduction Targets** ○ **Consideration to Graded Response Action Plan (GRAP)** ○ **District Level Monitoring Committee Constitution** ○ **Identify actions for domestic fuel sources**
*** Done for improvement of city & colony roads**	
Source Apportionment Studies	**No information available**
Strengthening of Monitoring Network	**Existing: Manual-9*, CAAQMS-0** **Additional required as per CPCB criteria: Manual-0, CAAQMS-01 (Timeframe – November 20, 2020)**
GRAP	**GRAP to be prepared and implementation ensured**
Development of Public Grievance Redressal portal (PGRP)	• **Submitted (Public complaint helpline working)** • **App based portal yet to be developed**
Quarterly Progress Report	**Report received on 18.02.2020**
***Including SAMP stations**	

Annual Average (PM10 in µg/m³) of NAMP data

S. No.	City	2016	2017	2018
1	Dimapur	121	138	134
2	Kohima	90	114	104

C. STATE OF MANIPUR

(i) Solid waste management including legacy waste.

STATUS OF SOLID WASTE MANAGEMENT				
Total No. of ULBs:27				
MSW generated (TPD)	MSW Processed (TPD)	MSW Landfill (TPD)	Gap (TPD)	Timeline
284.33	121.31	56.6	106.42	-

Assessment of SWM Facilities (capacity wise)						
All units in TPD	Required Capacity	Existing capacity	Gap (TPD)	Proposed Additional Capacity	Time frame	Observations
Waste Segregation Facility (MRF)	150.7 (@53%)	100	50.7	184.33	Dec., 2021	Only dry waste to be considered
Waste Processing						
Biodegradable waste (Composting)	133.63 (@ 47%)	100	33.63	20	Dec 2020	Proposed capacity less than required capacity
Non bio-degradable (Recycling; RDF, WtE Co-processing)	79.61 (@ 28%)	Recycling:3 RDF:0.5 WtE:0	76.11	RDF:4 W t E:120	RDF: Dec.,20 WtE: Mar,20	
Waste Disposal (Landfill)	71.08 (@ 25%)	5 No. (capacity not specified)	-	-	-	Existing /Proposed capacity to be provided

Assessment of SWM Facilities (ULB wise)						
	Required	Existing	Gap	Proposed	Timeframe	Observations
Waste Segregation Facility (MRF)	27	5	22	22	December, 2021	.

Biodegradable waste (Composting)	27	27	0	-	December, 2020	-
Non-biodegradable (Recycling; WtE, RDF, Co-processing)	27	Recycling:27 RDF:5 W t E:26	-	-	-	Capacity of WtE has been indicated as Nil
Waste Disposal (Inert-Landfill)	27	27	0	-	-	As per AR only Landfill has been provided in Imphal

Legacy Waste		
		Present Status
1	Number of dumpsites	17
2	Quantity of Waste dumped at dumpsites	Not provided
3	Number of dumpsites cleared	3
4	Number of dumpsites in which bio-mining has commenced	0
5	Time frame for clearing all dumpsites	December, 2021

(ii) Sewage management and 351 polluted river stretches.

Restoration of Polluted River Stretches (PRS) O.A. NO 673/2018

Priority Class	I	II	III	IV	V	Total
No. of PRS	-	1	-	-	8	9

S. No	RIVER NAME	STRETCH IDENTIFIED	BOD RANGE/ MAX VALUE	PRIORITY
1	Imphal	Kangla moat to Samurou	3.4-6.4	V
2	Iril	Kangla siphai to Ukhrul	3.2	V
3	Khuga	Khuga lake to Churachandpur	3.1-3.6	V
4	Khujairok	Moreh to Maojang	4.3	V
5	Lokchao	Bishnupur to Loktak lake	4.5	V
6	Manipur	Sekmaijan to Thoubal	3.6-4.3	V
7	Nambul	Singda dam to Bishnupur	3.6-23.7	II

8	Thoubal	Shong kong to Phadom	3.5	V
9	Wangjing	Wangjing to Heirok	4.1-4.3	V

Restoration of Polluted River Stretches (PRS) O.A. NO 673/2018

Priority Class	No. of PRS	No. of RRC approved Action plans received	Date of Receipt of action plans	Status of Action plans approved by CPCB Task Team	Remarks
I	-	-	22.04.2019	8th Task Team meeting held on 06.09.2019	Action plans w.r.t P-III & P-IV reviewed in 10th Task team meeting held on 26th Feb, 2020
II	1	1			
III	-	-		-	
IV	-	-			
V	8	8			
Grand Total	9	9		1	

Gap Analysis and the Proposed Action Points as per Action Plans (P-III to P-V) submitted by Manipur State

Details	Generation	Existing Capacity	Gap	Proposed Treatment Facilities	Proposed Timelines
Sewage Management	109.754 MLD (9 PRS)	27 MLD (1 STP) (1 PRS)	82.75 MLD (As per estimation)	58 MLD (5 STPs) (1 PRS)	April 2021
Industrial Effluent Management	Reportedly no water polluting industries. 18 brick fields, packaged drinking water and tile making units exists in the catchment.				
Solid Waste Management	168.048 TPD (7 PRS)	200 TPD 1 MSWM Facility at Lamdeng	Waste Collected and Disposed in MSWM Facility: 94.04 TPD Gap in Waste Collection: 74.964 TPD	Waste Processing Site with Cluster approach: 5	June 2021

(iii) Air quality management in 122 non-attainment cities.

Annual Average (PM10 in µg/m³) of NAMP data for Manipur

City	2016	2017	2018
Imphal	29	-	70 (std. 60 µg/m3)

D. STATE OF MIZORAM

(i) Solid waste management including legacy waste.

STATUS OF SOLID WASTE MANAGEMENT				
Total No. of ULBs: 23				
MSW generated (TPD)	MSW Processed (TPD)	MSW Landfill (TPD)	Gap (TPD)	Timeline
266	32.7	Nil	233.3	-

Assessment of SWM Facilities (capacity wise)						
All units in TPD	Required Capacity	Existing capacity	Gap (TPD)	Planned Capacity	Time frame	Observations
Waste Segregation Facility (MRF)	140.9 (@53%)	74	66.9	25	2025	Proposed capacity less than required capacity
Waste Processing						
Bio-degradable waste (Composting)	125 (@ 47%)	72	53	24	-	Proposed capacity less than required capacity
Non bio-degradable (Recycling; RDF, WtE Co-Processing)	74.4 (@ 28%)	-	74.4	-	-	-
Waste Disposal (Landfill)	66.5 (@ 25%)	44	22.5	-	-	Proposed capacity along with timeframe to be provided

Assessment of SWM Facilities (ULB wise)						
	Required	Existing	Gap	Proposed	Time frame	Observations
Waste Segregation Facility (MRF)	23	1	22	2	2025	Timeframe not provided for all components

Biodegradable waste (Composting)	**23**	**3**	**19**	**20**	**-**	
Non-bio-degradable (Recycling; WtE, RDF, Co-processing)	**23**	**-**	**23**	**-**	**-**	**Non-biodegradable fraction not covered.**
Waste Disposal (Inert-Landfill)	**23**	**1**	**22**	**2**	**-**	

Legacy Waste : **No Dumpsite indicated- (Annual Report, 23 dumpsites); Timeframe provided: Aizwal 2020; Urban Towns 2025 exceeding timeline as per SWM Rules,2016 (April 2021)**

(ii) Sewage management and 351 polluted river stretches.

Restoration of Polluted River Stretches (PRS) O.A. NO 673/2018

Priority Class	I	II	III	IV	V	Total
No. of PRS			1	3	5	9

S No	RIVER NAME	STRETCH IDENTIFIED	BOD RANGE/ MAX VALUE (in mg/l)	PRIORITY
1	Chite	Along Armed Veng	3.7	V
2	Mat	Along Serchhip	5.5	V
3	Saikah	Along Lawngtlai	4.4	V
4	Tiau	Along Champhai	11.3	III
5	Tlawng	Along Zobawk, Sairang to Bairabi	3.1-6.7	IV
6	Tuikual	Along Serchhip	6.0	V
7	Tuipui	Along Champhai	8.2	IV
8	Tuirial	Along Tuirial, Aizwal	3.4-4.6	V
9	Tuivawl	Along Keifang	6.8	IV

Restoration of Polluted River Stretches (PRS) O.A. NO 673/2018

Priority Class	No. of PRS	No. of RRC approved Action plans received	Date of Receipt of action plans	Status of Action plans approved by CPCB Task Team	Remarks
I	-	-	-	-	-
II	-	-			

III	1	1	28.06.2019	Target date for approval – 31.03.2020	Action plans of P-III & IV reviewed by CPCB in 10th Task team meeting held on 26th Feb, 2020
IV	3	3			
V	5	5			
Grand Total	9	9			

Gap Analysis and the Proposed Action Points as per Action Plans submitted by Mizoram State (Only for Tiau River Catchment P-III)

Details	Generation	Existing Capacity	Gap	Proposed Treatment Facilities	Proposed Timelines
Sewage Management	0.88 MLD	NIL	0.88 MLD	Onsite Liquid Waste Treatment for Grey water	
Industrial Effluent Management	No major water polluting industries present in the catchment. Only 11 No. of Automobile Service Centers				
Solid Waste Management	5.970 TPD	NIL	5.970 TPD	Not Provided	Not Provided

(iii) Air quality management in 122 non-attainment cities.

Annual Average (PM10 in µg/m^3) of NAMP data for Mizoram

S. No.	City	2016	2017	2018
1	Aizawl	60	52	50
2	Champhai	29	25	27
3	Kolasib	30	29	24
4	Lunglei	33	25	11

No Non-attainment City in Mizoram

E. STATE OF TRIPURA

(i) Solid waste management including legacy waste.

STATUS OF SOLID WASTE MANAGEMENT				
Total No. of ULBs: 20				
MSW generated (TPD)	MSW Processed (TPD)	MSW Landfill (TPD)	Gap (TPD)	Timeline
405.6	236.4	153.2	16	-

Assessment of SWM Facilities (capacity wise)

All units in TPD	Required Capacity	Existing capacity	Gap (TPD)	Proposed Capacity	Time frame	Observations
Waste Segregation Facility (MRF)	214.9 (@53%)	109	105.9	-		Gap in capacity not addressed.
Waste Processing						
Bio-degradable waste (Composting)	190.6 (@ 47%)	250	No gap	33	March, 2022	Adequate capacity
Non bio-degradable (Recycling; RDF, WtE Co-processing)	113.5 (@ 28%)	Recycling:6	-	Recycling: 6.5	Recycling: March ,2022	Proposed capacity not meeting the required capacity
Waste Disposal (Landfill)	101.4 (@ 25%)	324900 MT	-	36100MT	December, 2024	-

Assessment of SWM Facilities (ULB wise)						
	Required	Existing	Gap	Proposed	Timeframe	Observations
Waste Segregation Facility (MRF)	20	20	0	-	-	-
Bio-degradable waste (Composting)	20	14	6	6	March, 2022	-
Non-bio-degradable (Recycling; WtE, RDF, Co-processing)	20	9	11	11	March, 2022	-
Waste Disposal (Inert-Landfill)	20	20	0	-	-	-

Legacy Waste		
		Present Status
1	Number of dumpsites	1
2	Quantity of Waste dumped at dumpsites	5000
3	Number of dumpsites cleared	0
4	Number of dumpsites in which bio-mining has commenced	0
5	Time frame for clearing all dumpsites	Nov, 2022

(ii) Sewage management and 351 polluted river stretches.

SEWAGE MANAGEMENT

TREATMENT CAPACITY			Remarks		
Sewage Generation	Existing	Gap	Proposed	Timeline	Other than Agartala, ULBs are very small. The proposed 600 KLD plants will cater to 14 ULBs. Also, most of the septage in Agartala is treated through septic tanks as well
82.4 MLD	8.72 MLD	74.4 MLD (90.29%)	8 MLD STP + 600 KLD Fecal Sludge Treatment Plants	Year-2024	
SEWERAGE NETWORK					
Existing Sewerage Length	Required	Gap	Timelines	-	
104.5 KM	154.5 KM	50 KM	Year-2024		
NUMBER OF STPS					
Number of STPS	New Proposed	Total STPs	Timeline	Timeline not as per NGT Directions	
1	1	2	December 2023		
RE-USE OF TREATED SEWAGE					
Present Utilization	Proposed	Timelines	Type of Use	As informed, Tripura has high ground water table, therefore, demand for treated water is less.	
30%	30%	Nil	Road watering, Agri field, Municipal Garden, etc.		

Restoration of Polluted River Stretches (PRS) O.A. NO 673/2018

Priority Class	I	II	III	IV	V	Total
No. of PRS	-	-	-	-	6	6

S. No	RIVER NAME	STRETCH IDENTIFIED	BOD RANGE/ MAX VALUE (in mg/l)	PRIORITY CLASS
1	Burigaon	Along Bishalgarh	3.9	V
2	Gumti	Telkajila to Amarpur	3.9	V
3	Haora	Agartala to Bishramganj	3.2-4.0	V
4	Juri	Along Dharmanagar	4.9	V
5	Khowai	Along Teliamura	3.3	V
6	Manu	Along Kailashahar	3.5-3.6	V

Restoration of Polluted River Stretches (PRS) - O.A. NO 673/2018-Tripura

Priority Class	No. of PRS	No. of RRC approved Action plans received	Date of Receipt of action plans	Status of Action plans approved	Remarks
I	-	-	-	-	
II	-	-			
III	-	-			
IV	-	-			
V	6	6	14.12.2018	RRC constituted by Tripura State approved action plans	Comments communicated sent vide CPCB letters dated 10.01.2019 and 08.04.2019
Grand Total	6	6			

Gap Analysis and the Proposed Action Points as per Action Plans submitted by Tripura State

Details	Generation	Existing Capacity	Gap	Proposed Treatment Facilities	Proposed Timelines
Sewage Management	82.4 MLD	8 MLD	74.4 MLD	Community Toilets, STP	Max. 3 Years
Industrial Effluent Management	14.427 KLD from 179 Water Polluting Industries (6 PRS)	14.427 KLD (6 PRS)	NIL	-	-
Solid Waste Management	405.6 TPD	389.68 TPD	15.92 TPD	Proposed 08 Cluster Waste Management Facilities covering 19	Max. Two Years

				ULBs and 26 Census Towns	

(iii) Air quality management in 122 non-attainment cities.

Annual Average (PM10 in µg/m³) of NAMP data for Tripura

State	City	2016	2017	2018
Tripura	Agartala	-	62	76
Annual average standard 60 µg/m3				

F. STATE OF MEGHALAYA

(i) Solid waste management including legacy waste.

STATUS OF SOLID WASTE MANAGEMENT				
Total No. of ULBs:7				
MSW generated (TPD)	MSW Processed (TPD)	MSW Landfill (TPD)	Gap (TPD)	Timeline
170.6	2	44.8	123.77	-

Assessment of SWM Facilities (capacity wise)						
All units in TPD	Required Capacity	Existing capacity	Gap (TPD)	Proposed Additional Capacity	Time frame	Observations
Waste Segregation Facility (MRF)	90.4 (@53%)	6	84.4	0	-	-
Waste Processing						
Biodegradable waste (Composting)	80.1 (@ 47%)	2	78.1	168	June, 2020	
Non biodegradable (Recycling; RDF, WtE Co-processing)	47.7 (@ 28%)	0	47.7	0	-	
Waste Disposal (Landfill)	42.6 (@ 25%)	1,34,129 m3 (64516 T estimated @ 481kg/m3)	-	-	-	Proposed capacity along with time frame to be provided

Assessment of SWM Facilities (ULB wise)

	Required	Existing	Gap	Proposed	Time frame	Observations
Waste Segregation Facility (MRF)	7	1	6	6	March 2021	
Biodegradable waste (Bio-methanation & Composting)	7	1	6	1	June, 2020	All ULBs not covered.
Non-biodegradable (Recycling; WtE, RDF, Co-processing)	7	0	7	-	-	All ULBs not covered.
Waste Disposal (Inert-Landfill)	7	2	5	-	-	All ULBs not covered.

Legacy Waste : No Dumpsite indicated - (Annual Report, 6 dumpsites)

(ii) Sewage management and 351 polluted river stretches.

SEWAGE MANAGEMENT

TREATMENT CAPACITY					Remarks
Sewage Generation	Existing	Gap	Proposed	Timeline	Proposed STPs in reportedly low lying areas. Capacity details are not mentioned.
76.41 MLD	0	76.41 MLD (100%)	15 STPs	March, 2021	
SEWERAGE NETWORK					
Existing Sewerage Length	Required		Gap	Timelines	No information
Nil	Nil		Nil	Nil	
NUMBER OF STPs					
Number of STPs	New Proposed		Total STPs	Timeline	-
Nil	10 STPs for Jowai 5 STPs for Shillong		15	March, 2021	
RE-USE OF TREATED SEWAGE					

Present Utilization	Proposed	Timelines	Type of Use	No Information
Nil	Nil	Nil	Nil	

Restoration of Polluted River Stretches (PRS) - O.A. NO 673/2018

Priority Class	I	II	III	IV	V	Total
No. of PRS	2	-	-	3	2	7

S No	RIVER NAME	STRETCH IDENTIFIED	BOD RANGE/ MAX VALUE	PRIORITY
1	Kyrhukhla	Sutnga to Khlieriat	10.0	IV
2	Lukha	Myndihati to Shymplong	6.0	V
3	Myntdu	Jowai to Pamhadem	5.2	V
4	Nonbah	Nangstoin to Wahriat	6.0-7.5	IV
5	Umkhrah	Mawlai to Shillong	30-90.2	I
6	Umshyrpi	Umshyrpi bridge to Dhanketi	38.5-95.0	I
7	Umtrew	Byrnihat to Morang Dala	6.2-8.0	IV

Priority Class	No. of PRS	No. of RRC approved Action plans received	Date of Receipt of action plans	Status of Action plans approved by CPCB Task Team	Remarks
I	2	2	07.01.2019 and revised action plans on 22.2.2019	2 8th Task Team meeting held on 06.09.2019	Action plans wrt P-III & IV were reviewed by CPCB in 10th Task team meeting held on 26th Feb, 2020.
II	-	-		Target date for approval – 31.03.2020	
III	-	-			
IV	3	3		-	
V	2	2			
Grand Total	7	7		2	

Gap Analysis and the Proposed Action Points as per Action Plans submitted by Meghalaya State

Details	Generation	Existing Capacity	Gap	Proposed Treatment Facilities	Timelines

Sewage Management	**61.61 MLD**	**--**	**61.61 MLD**	**Faecal Sludge Treatment Plant (1.5 MLD) 3 Decentralized STPs(Capacity not provided)**	**30th March 2021**
Industrial Effluent Management	**3.3 MLD (236 water polluting industries)**	**1.86 MLD (219 No. of Captive ETPs)**	**1.42 MLD**	**--**	**30th March 2021**
Solid Waste Management	**240.3 TPD**	**--**	**240.3 TPD**	**Compost Plant (170 TPD) Vermicomposting unit (15 TPD)**	**30th March 2021**

(iii) Air quality management in 122 non-attainment cities.

Status of Actions for Non attainment cities (NACs) Hon'ble NGT Directions (O.A. 681/2018)

Number of Non Attainment Cities	**01 – Byrnihat**
Action Plan approved	**01**
Timelines for Actions	**Short - term (continuous or within 3 months), mid –term (within 4), and long - term (within 3 years).**
CPCB comments	➢ **Micro level planning for each action in city plan required.** ➢ **Submission of implementation status quarterly** ➢ **The Board does not have enough Consent Funds and not submitted Action Plan** ➢ **Directions issued by CPCB for improvement in plans** ○ **Source Apportionment and Carrying Capacity** ○ **Interim Emission Reduction Targets** ○ **Consideration to Graded Response Action Plan (GRAP)** ○ **District Level Monitoring Committee Constitution** ○ **Identify actions for domestic sources**
Source Apportionment Studies	**Proposal forwarded to MoEF&CC for funding**
Strengthening of Monitoring Network	**Existing: Manual-1*, CAAQMS-0** **Additional required as per CPCB criteria: Manual-0, CAAQMS-0 (Timeframe – November 20, 2020)**
GRAP	**GRAP to be prepared and implementation ensured**
Development of Public Grievance Redressal portal (PGRP) -	**Complaint cell established in the Head office of MSPCB and portal developed and available on board's website**

Quarterly Progress Report	**Report received on 14.08.2019**
***Including SAMP stations**	

Annual Average (PM10 in µg/m3) of NAMP data

City	2016	2017	2018
Byrnihat	**175**	**174**	**166**

ANALYSIS:

Solid Waste Management:

32. We find that steps taken for legacy waste remediation are not adequate. The work has not even commenced at any of sites in Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya which is a matter of serious concern. In Nagaland, one of the sites is said to have been capped without bio-mining which is not proper and not as per Standard Operating Procedure as already held vide order dated 14.02.2020 in *O.A. No. 606/2018* in respect State of Telangana. The observations therein are:

> *"32. … … Capping will result in leachate remaining untreated affecting the ground water and gases in the dump site will remain unflared having potential for air pollution and hazardous for environment. Moreover, huge area of land which is scarce and valuable will be wasted.*
>
> *xx xx xx*
>
> *… Some of the observations of the said Committee are as follows:*
>
> *"3.6 As per CPCB Guidelines, **capping of dumpsites is not advisable** as it would lead to generation of more leachates and methane/landfill gas generation which would further contaminate the already heavily contaminated Groundwater (Ground/surface water reports at Annexure VIII to X). Further as per CPCB Guidelines, gas extraction is very difficult and inefficient when attempts are made to insert suction pipes into dumped waste instead of before dumping begins. Poor success at*

Gorai capping led to the forced refund by Mumbai city of Rs.15 crore advance carbon credits. Taking into consideration the present height (65 m) of the landfill, extraction of leachate & gas will be even more difficult.

3.7 xx xx

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

xx xx

12. *We find merit in the model followed by Indore Municipal Corporation, the views of Member Secretary, CPCB and the Chief Secretary, Delhi. This opinion is also in consonance with the SWM Rules as well as the CPCB Guideline on Legacy Waste54 and recent orders of this Tribunal.* ***A conjoint reading of Rule 15 (zj), Rule 15(zk) and Clause J of Schedule I of the SWM Rules leaves room for capping of old dump sites, only in cases where there is "absolute absence of potential of bio-mining and bio-remediation" and not in cases of present nature where bio-mining and bio-remediation is possible.*** *In cases of present nature, both ex-situ and in-situ bio-mining options can be exercised according to Indore Municipal Corporation, which is not only environmentally safe but cost effective.* ***Though plea for capping legacy waste dumpsites is being raised frequently as a convenient mode, there may be hardly any situation when bio-remediation is not possible. The option of capping of legacy wastes, which has huge environmental and health consequences, in practical terms is no option at all, except for inert waste, which again is to be disposed in a scientific secured landfill.*** *According to Indore Municipal Corporation, bio-mining as a treatment option is environmentally safe and does not require recurrent costs on account of leachate treatment in Effluent Treatment Plant (ETP). Furthermore, only peripheral leachate can be taken to the ETP and leachate percolating underneath the dumpsite contaminates ground water and water in subterranean space. Bio-mining as a treatment option in comparison to engineering capping of legacy wastes, is not only environmentally safe and holistic but also meets the yardstick of fiscal prudence and propriety."*

33. ***Applying the above principle to the present case, we reject the plea of the State and direct that instead of capping of the dump site, it is imperative to do bio-mining***

[54] Guidelines for Disposal of Legacy Waste (Old Municipal Solid Waste), Central Pollution Control Board, February 2019

and bioremediation in the interest of environment and to save valuable scarce public resource in the form of land. *The land can be used for setting up integrated waste processing facilities and developing green belt or bio-diversity park. If the State/Corporation does not have funds, the State may consider monetizing a part of the land to raise revenue for the purpose, after following due process of law. In any case, capping cannot be permitted."*

33. **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.**

For this particular site, the loss is about Rs. 30 crore per year or Rs. 2.5 crore per month. Thus, monetary cost of every legacy dump site is expected to be huge depending upon the

location, quantity of waste and area covered. Needless to say that there is huge cost for non-compliance of other 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. Pending such exercise, we are directing as an interim arrangement, recovery of an amount on a scale as indicated in Para 41. 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.

34. The timeline needs to be consistent with the statutory rules as well as the orders of this Tribunal.

35. There remains gap of 271 TPD for Arunachal Pradesh, 263.9 TPD for Nagaland, 163.02 TPD for Manipur, 233.3 TPD for Mizoram, 169.2 TPD for Tripura and 168.6 TPD for Meghalaya in terms of current generation and treatment of solid waste which is endangering environment, adversely affecting public health and posing serious threat to life. Thus, suitable remedial measures need to be adopted in the matter.

Sewage Management:

36. As regards sewage management, there is a huge gap for Arunachal Pradesh, Manipur, Mizoram (quantity not specified), 263.9 MLD for Nagaland, 73.68 MLD for Tripura and 76.41 MLD for Meghalaya. We can only observe that the entire gap needs to be remedied in terms of directions already issued by this Tribunal. The timeline proposed for bridging the gap between sewage generation and treatment needs to be preponed with interim arrangement by way of phyto/bio-remediation. Discharge of untreated sewage is statutorily prohibited under the provisions of the Water Act, 1974 as well as under the orders of this Tribunal. Untreated waste water and raw sewage being continuously discharged in water bodies needs to be stopped. As already observed, prompt action needs to be taken to reduce pollution load on recipient river systems by way of phyto-remediation/bio-remediation of any other alternative low capital-intensive natural remediation processes and to successfully tap the sewage containing storm water drains so as to channelize the untreated sewage to central STP. Phytoremediation/bio-remediation or other such remediation must commence at or nearest the source of generation as a supplement to setting up of STPs as an interim measure to reduce the load of pollution on recipient water bodies before 31.03.2020. Setting up of STPs must also commence before the said date so as to complete the same by 31.03.2021. In this regard, compensation regime has already been laid down which has to be strictly followed. The timelines and compensation regime already laid down are:

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.

37. The Chief Secretaries mentioned that the central assistance was inadequate which cannot be a justification for failure of the State in managing its waste. Waste management is responsibility of the State and Local Bodies, as already held by the Hon'ble Supreme Court in the judgments referred to above. If the funds available are inadequate, the State has to raise the same from the generators of waste.

38. The Chief Secretaries must ensure adverse entries in the service records of erring officers in respect of liquid waste management atleast from 01.04.2020.

Likewise, remediation work of legacy dump sites must commence at the earliest and adverse entries in ACRs of concerned officers if the remediation does not commence by 31.03.2020 which may be ensured by the Chief Secretaries.

To save time, standard specifications and service providers must be notified by the Chief Secretaries on the websites of the State/UT within one month from today. The Chief Secretaries may take such opinion as may be necessary for the purpose.

Compliance reports may be filed quarterly and first such report may be filed by 31.03.2020 with a copy to the CPCB. CPCB may furnish gap analysis report.

Restoration of Polluted River Stretches:

39. Similarly, with regard to restoration of polluted river stretches, the execution of action plans is required in right earnest and holistic manner. Considering that implementation requires inter-sectoral consideration and there is a need for a robust institutional mechanism to implement it, this needs to be overseen by the Chief Secretaries.

Air Quality Management:

40. With regard to air quality management in non-attainment cities, execution of action plans has to be duly ensured as per laid down timelines by making adequate budgetary provision in accordance with the orders of this Tribunal by clearly defined monitoring and enforcement strategies and fixing responsibilities for failures on the officers. Absence of due execution of action plans is worsening the situation on account of resultant pollution. The execution of action plan needs to be supervised by the Chief Secretaries of the States.

VII. DIRECTIONS:

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[55] 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,

[55] 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.

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:

   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.

The Chief Secretaries, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya may remain present in person for further review tentatively on 03.11.2020.

A copy of this order be sent to the Chief Secretaries, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya and the CPCB by e-mail.

Adarsh Kumar Goel, CP

Dr. Nagin Nanda, EM

Siddhanta Das, EM

February 28, 2020
Original Application No. 606/2018
DV