

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

Original Application No. 606/2018

Compliance of Municipal Solid Waste Management Rules, 2016
(State of Bihar)

Date of hearing: 15.03.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s):

For Respondent (s): Mr. Deepak Kumar, IAS, Chief Secretary, Bihar
Mr. Rajkumar, Advocate for CPCB

ORDER

1. The issue for consideration is status of compliance of orders of this Tribunal on the subject of solid waste management and allied issues.
- I. PROCEEDINGS IN ALMITRA PATEL:**
2. The matter arose before this Tribunal on transfer of proceedings in *Writ Petition No. 888/1996, Almitra H. Patel Vs. Union of India & Ors.*, by the Hon'ble Supreme Court, vide order dated 02.09.2014.
3. We may note that the issue has been subject matter of consideration before the Hon'ble Supreme Court in several proceedings, including in *Municipal Council, Ratlam vs. Vardhichand*¹ and *B.L. Wadhera v. Union of India and Ors.*² . It has been categorically laid 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.

¹ (1980) 4 SCC 162

² (1996) 2 SCC 594

4. The Hon'ble Supreme Court had appointed Barman Committee which gave report on 06.01.1998 and it was duly accepted. The same led to draft for management of MSW Rules, 1999 which were replaced by 2000 Rules and are now succeeded by 2016 Rules. The Hon'ble Supreme Court gave directions for proper management of municipal solid waste, *inter-alia*, vide orders dated 24.08.2000, 04.10.2004, 15.05.2007 and 19.07.2010.
5. All the States were parties before the Hon'ble Supreme Court and draft action plans were prepared which were to be updated, as per revised Rules.
6. After transfer of proceedings to this Tribunal on 02.09.2014, the matter was taken up from time to time and several directions were issued. Finally vide order dated 22.12.2016, after noticing that the SWM Rules, 2016 had been notified on 08.04.2016 which laid down elaborate mechanism to deal with the solid waste management, the Tribunal directed as follows:
 1. *Every State and Union Territory shall enforce and implement the Solid Waste Management Rules, 2016 in all respects and without any further delay.*
 2. *The directions contained in this judgment shall apply to the entire country. All the State Governments and Union Territories shall be obliged to implement and enforce these directions without any alteration or reservation.*
 3. *All the State Governments and Union Territories shall prepare an action plan in terms of the Rules of 2016 and the directions in this judgment, within four weeks from the date of pronouncement of the judgment. The action plan would relate to the management and disposal of waste in the entire State. The steps are required to be taken in a time bound manner. Establishment and operationalization of the plants for processing and disposal of the waste and selection and specifications of landfill sites which have to be constructed, be prepared and maintained strictly in accordance with the Rules of 2016.*
 4. *The period of six months specified under Rule 6(b), 18, 23 of the Rules of 2016 has already lapsed. All the stakeholders including the Central Government and respective State*

Governments/UTs have failed to take action in terms thereof within the stipulated period. By way of last opportunity, we direct that the period of six months shall be reckoned w.e.f. 1st January, 2017. There shall be no extension given to any stakeholders for compliance with these provisions any further.

The period of one year specified under Rule 11(f) 12(a), 15(e), 22(1) and 22(2) has lapsed. The concerned stakeholders have obviously not taken effective steps in discharging their statutory obligations under these provisions. Therefore, we direct that the said period of one year shall commence with effect from 1st July, 2017. For this also, no extension shall be provided.

Any State or Union Territory which now fails to comply with the statutory obligations as afore indicated shall be liable to be proceeded against in accordance with Section 15 of the Environment (Protection) Act, 1986. Besides that, it would also be liable to pay environmental compensation, as may be imposed by this Tribunal. In addition to this, the senior most officer in-charge in the State Government/Urban Local Body shall be liable to be personally proceeded against for violation of the Rules and orders passed by this Tribunal.

5. The Central Government, State Government, Local Authorities and citizens shall perform their respective obligations/duties as contemplated under the Rules of 2016, now, without any further delay or demur.
6. All the State Governments, its departments and local authorities shall operate in complete co-ordination and cooperation with each other and ensure that the solid waste generated in the State is managed, processed and disposed of strictly in accordance with the Rules of 2016.
7. Wherever a Waste to Energy plant is established for processing of the waste, it shall be ensured that there is mandatory and proper segregation prior to incineration relatable to the quantum of the waste.
8. It shall be mandatory to provide for a buffer zone around plants and landfill sites whether they are geographically integrated or are located separately. The buffer zone necessarily need not be of 500 meters wherever there is a land constraint. The purpose of the buffer zone should be to segregate the plant by means of a green belt from surrounding areas so as to prevent and control pollution, besides, the site of the project should be horticulturally beautified. This should be decided by the authorities concerned and the Rules are silent with regard to extent of buffer zone. However, the Urban Development Manual provides for the same. Hence, we hold that this provision is not mandatory, but is directory.
We make it clear that buffer zone and green belt are essential and their extent would have to be decided on a case to case basis.
9. We direct that the Committees constituted under Rule-5 would meet at least once in three months and not once in a

year as stipulated under the Rules of 2016. The minutes of the meeting shall be placed in the public domain. Directions, on the basis of the minutes, shall be issued immediately after the meeting, to the concerned States, local bodies, departments and Project Proponents.

10. *The State Government and the local authorities shall issue directives to all concerned, making it mandatory for the power generation and cement plants within its jurisdiction to buy and use RDF as fuel in their respective plants, wherever such plant is located within a 100 km radius of the facility.*

In other words, it will be obligatory on the part of the State, local authorities to create a market for consumption of RDF. It is also for the reason that, even in Waste to Energy plants, Waste-RDF-Energy is a preferred choice.

11. *In Waste to Energy plant by direct incineration, absolute segregation shall be mandatory and be part of the terms and conditions of the contract.*

12. *The tipping fee, wherever payable to the concessionaire/operator of the facility, will not only be relatable to the quantum of waste supplied to the concessionaire/operator but also to the efficient and regular functioning of the plant. Wherever, tipping fee is related to load of the waste, proper computerised weighing machines should be connected to the online system of the concerned departments and local authorities mandatorily.*

13. *Wherever, the waste is to be collected by the concessionaire/operator of the facility, there it shall be obligatory for him to segregate inert and C&D waste at source/collection point and then transport it in accordance with the Rules of 2016 to the identified sites.*

14. *The landfill sites shall be subjected to bio-stabilisation within six months from the date of pronouncement of the order. The windrows should be turned at regular intervals. At the landfill sites, every effort should be made to prevent leachate and generation of Methane. The stabilized waste should be subjected to composting, which should then be utilized as compost, ready for use as organic manure.*

15. *Landfills should preferably be used only for depositing of inert waste and rejects. However, if the authorities are compelled to use the landfill for good and valid reasons, then the waste (other than inert) to be deposited at such landfill sites be segregated and handled in terms of Direction 13.*

16. *The deposited non-biodegradable and inert waste or such waste now brought to land fill sites should be definitely and scientifically segregated and to be used for filling up of appropriate areas and for construction of roads and embankments in all road projects all over the country. To this effect, there should be a specific stipulation in the contract awarding work to concessionaire/operator of the facility.*

17. *The State Government, Local Authorities, Pollution Control Boards of the respective States, Pollution Control Committees of the UTs and the concerned departments would ensure that they open or cause to be opened in discharge of Extended Producer Responsibility, appropriate number of centers in every colony of every district in the State which would collect or require residents of the locality to deposit the domestic hazardous waste like fluorescent tubes, bulbs, batteries, electronic items, syringe, expired medicines and such other allied items. Hazardous waste, so collected by the centers should be either sent for recycling, wherever possible and the remnant thereof should be transported to the hazardous waste disposal facility.*
18. *We direct MoEF&CC, and the State Governments to consider and pass appropriate directions in relation to ban on short life PVC and chlorinated plastics as expeditiously as possible and, in any case, not later than six months from the date of pronouncement of this judgment.*
19. *The directions and orders passed in this judgment shall not affect any existing contracts, however, we still direct that the parties to the contract relating to management or disposal of waste should, by mutual consent, bring their performance, rights and liabilities in consonance with this judgment of the Tribunal and the Rules of 2016. However, to all the concessionaire/operators of facility even under process, this judgment and the Rules of 2016 shall completely and comprehensively apply.*
20. *We specifically direct that there shall be complete prohibition on open burning of waste on lands, including at landfill sites. For each such incident or default, violators including the project proponent, concessionaire, ULB, any person or body responsible for such burning, shall be liable to pay environmental compensation of Rs. 5,000/- (Rs. Five Thousand only) in case of simple burning, while Rs. 25,000/- (Rs. Twenty Five Thousand only) in case of bulk waste burning. Environmental compensation shall be recovered as arrears of land revenue by the competent authority in accordance with law.*
21. *All the local authorities, concessionaire, operator of the facility shall be obliged to display on their respective websites the data in relation to the functioning of the plant and its adherence to the prescribed parameters. This data shall be placed in the public domain and any person would be entitled to approach the authority, if the plant is not operating as per specified parameters.*
22. *We direct the CPCB and the respective State Boards to conduct survey and research by monitoring the incidents of such waste burning and to submit a report to the Tribunal as to what pollutants are emitted by such illegal and unauthorized burning of waste.*
23. *That the directions contained in the judgment of the Tribunal in the case of 'Kudrat Sandhu Vs. Govt. of NCT & Ors', O.A. No. 281 of 2016, shall mutatis mutandis apply to this*

judgment and consequently to all the stakeholders all over the country.

24. *That any States/UTs, local authorities, concessionaires, facility operators, any stakeholders, generators of waste and any person who violates or fails to comply with the Rules of 2016 in the entire country and the directions contained in this judgment shall be liable for penal action in accordance with Section-15 of the Environment (Protection) Act, 1986 and shall also be liable to pay environmental compensation in terms of Sections 15 & 17 of the National Green Tribunal Act, 2010 to the extent determined by the Tribunal.*
25. *That the State Governments/UTs, public authorities, concessionaire/operators shall take all steps to create public awareness about the facilities available, processing of the waste, obligations of the public at large, public authorities, concessionaire and facility operators under the Rules and this judgment. They shall hold program for public awareness for that purpose at regular intervals. This program should be conducted in the local languages of the concerned States/UTs/Districts.*
26. *We expect all the concerned authorities to take note of the fact that the Rules of 2016 recognize only a landfill site and not dumping site and to take appropriate actions in that behalf.*
27. *We further direct that the directions contained in this judgment and the obligations contained under the Rules of 2016 should be circulated and published in the local languages.*
28. *Every Advisory Committee in the State shall also act as a Monitoring Committee for proper implementation of these directions and the Rules of 2016.*
29. *Copy of this judgment be circulated to all the Chief Secretaries/Advisers of States/UTs by the Registry of the Tribunal. The said authorities are hereby directed to take immediate steps to comply with all the directions contained in this judgment and submit a report of compliance to the Tribunal within one month from the date they receive copy of this judgment.”*

II. PREVIOUS PROCEEDINGS IN PRESENT MATTER:

7. The Tribunal had in a review meeting on the administrative side with the CPCB and municipal solid waste management experts, on 23.07.2018 considered the matter in the light of annual report prepared by the CPCB in April 2018 under Rule 24 of the MSW Rules and noticed serious deficiencies. Accordingly, it was decided to take up the issue of execution

of judgment dated 22.12.2016 in *Mrs. Almitra H. Patel & Anr. Vs. Union of India & Ors (supra)*, by way of interaction with all the States/UTs through video conferencing. For this purpose, meetings were held on 02.08.2018, 07.08.2018, 08.08.2018, 13.08.2018 and 20.08.2018.

8. At the conclusion of the interaction, the Tribunal declared that the mandatory provision of the Rules and directions should be implemented in a time bound manner. Following specific steps were required to be taken:

- i. Action plans were to be submitted by all the States to CPCB latest by 31.10.2018 and executed in the outer deadline of 31.12.2019 which should be overseen by the Principal Secretaries of Urban and Rural Development Departments of the States.
- ii. The States should have Monitoring Committees headed by the Secretary, Urban Development Department with the Secretary of Environment Department as Members and CPCB and State Pollution Control Boards (SPCBs) assisting the Committees.
- iii. They should have interaction with the local bodies once in two weeks.
- iv. Local bodies are to furnish their reports to State Committees twice a month.
- v. The State Committees may take a call on technical and policy issues.
- vi. Local bodies may have suitable nodal officers. Bigger local bodies may have their own Committees headed by Senior Officers.
- vii. Public involvement may be encouraged and status of the steps taken be put in public domain.
- viii. The State Level Committees are to give their reports to the Regional Monitoring Committees on monthly basis.³

³ Para 21

- ix. Instead of every local body separately floating tenders, the standardized technical specifications be involved and adopted.⁴
- x. Best practices may be adopted, including setting up of Control Rooms where citizens can upload photos of garbage which may be looked into by the specified representatives of local bodies, at local level as well as State level.
- xi. It was directed that mechanism be evolved for citizens to receive and give information.
- xii. CCTV cameras be installed at dumping sites.
- xiii. GPS be installed in garbage collection vans. This may be monitored appropriately.⁵
9. Performance audit was to be conducted for 500 ULBs with population of 1 lakh and above initially, as suggested by the MoHUA as follows:

	Key Parameters/ Indicators	Description of Parameters/Indicators for physical evaluation
1	Door to Door Collection	Door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non-residential premises. Transportation in covered vehicles to processing or disposal facilities
2	Source Segregation	Segregation of waste by households into Biodegradable, non-biodegradable, domestic hazardous.
3	Litter Bins & Waste Storage Bins	<ul style="list-style-type: none"> • Installation of Twin-bin/ segregated litter bins in commercial & public areas at every 50-100 meters. • Installation of Waste storage bins in strategic locations across the city, as per requirement (Unless Binless) • Elimination of Garbage Vulnerable Points .
4	Transfer Stations	Installation of Transfer Stations instead of secondary storage bins in cities with population above 5 lakhs.
5	Separate transportation	<ul style="list-style-type: none"> • Compartmentalization of vehicles for the collection of different fractions of waste. • Use of GPS in collection and transportation vehicles to be made mandatory at least in cities with population above 5 lakh along with the publication of route map.

⁴ Para 22

⁵ Para 23

6	Public Sweeping	<ul style="list-style-type: none"> All public and commercial areas to have twice daily sweeping, including night sweeping and residential areas to have daily sweeping.
7	Waste Processing <ul style="list-style-type: none"> Wet Waste Dry Waste MRF Facility 	<ul style="list-style-type: none"> Separate space for segregation, storage, decentralised processing of solid waste to be demarcated Establishing systems for home/decentralised and centralised composting Setting up of MRF Facilities.
8	Scientific Landfill	<ul style="list-style-type: none"> Setting up common or regional sanitary landfills by all local bodies for the disposal of permitted waste under the rules Systems for the treatment of legacy waste to be established.
9	C&D Waste	Ensure separate storage, collection and transportation of construction and demolition wastes.
10	Plastic Waste	Implementation of ban on plastics below <50 microns thickness and single use plastics.
11	Bulk Waste Generators (BWGs)	Bulk waste generators to set up decentralized waste processing facilities as per SWM Rules, 2016.
12	RDF	Mandatory arrangements have to be made by cement plants to collect and use RDF, from the RDF plants, located within 200 kms.
13	Preventing solid waste from entering into water bodies	Installation of suitable mechanisms such as screen mesh, grill, nets, etc. in water bodies such as nallahs, drains, to arrest solid waste from entering into water bodies.
14	User Fees	Waste Generators paying user fee for solid waste management, as specified in the bye-laws of the local bodies.
15	Penalty provision	Prescribe criteria for levying of spot fine for persons who litters or fails to comply with the provisions of these rules and delegate powers to officers or local bodies to levy spot fines as per the byelaws framed.
16	Notification of Bye Laws	Frame bye-laws incorporating the provisions of MSW Rules, 2016 and ensuring timely implementation.
17	Citizen Grievance Redressal	Resolution of complaints on Swachhata App within SLA.
18	Monitoring mechanism	States/ULBs to update month wise targets/action plans on the online MIS.

10. The Regional Committees were to be headed either by former High Court Judges or by Senior Retired Officers and Apex Committees by a former Supreme Court Judge.⁶ Common problems faced and suggestions were

⁶ Paras 18 and 20

to be noted in tabular chart.⁷ The Committees were to function for a period of one year subject to further orders.⁸

11. The matter was again taken up on 16.01.2019 in light of reports received from some of the Committees, especially from the State of Uttar Pradesh.

12. It was noticed that timeline of two years had expired which was the period prescribed for steps 1 to 7 under Rule 22 and three years is to expire on 08.04.2019 which covers steps upto serial number 10. Since violation of Rules are statutory offences under the Environment (Protection) Act, 1986 and results in deterioration of environment, affecting the life of the citizens, it was noted that the authorities may be made accountable for their lapses and required to furnish performance guarantee for compliance or pay damages as had been directed in some of the cases.⁹

13. The Tribunal had noted that solid waste management is of paramount importance for protection of environment, as the statistics paint a dismal picture of the environment in the country. The Tribunal had also referred to proceedings before it, relating to 351 polluted river stretches 102 non-attainment cities in terms of ambient air quality and 100 industrial clusters which are critically polluted as per data available with CPCB. The Tribunal had taken cognizance of such serious environmental issues and required the respective States to prepare time bound action plans

⁷ Para 14

⁸ Para 18

⁹ Para 20. Cases referred to in the said para are as follows:

- (a). All India Lokadhikar Sangathan vs. Govt of NCT Delhi & Anr, E.A No. 11/2017, Date of Order 16.10.2018;
- (b). Sobha Singh vs. State of Punjab & Ors. O.A. No. 916/2018, Date of Order 14.11.2018;
- (c). Threat to life arising out of coal mining in south Garo Hills district v. State of Meghalaya & Ors. O.A No. 110 (THC)/2012, Date of Order 04.01.2019;
- (d). Ms. Ankita Sinha vs. State of Maharashtra & Ors. O.A. No. 510/2018, Date of Order 30.10.2018,
- (e). Sudarsan Das vs. State of West Bengal & Ors. O.A. No. 173/2018, Date of Order 04.09.2018;
- (f). Court on its Own Motion vs. State of Karnataka, O.A. No. 125/2017, Date of Order 06.12.2018.

and execute the same so as to restore water and air quality, as per prescribed norms.¹⁰

14. The Tribunal had also noted that there was a need to conduct performance audit of statutory regulators so that they are manned by competent as well as credible persons and there is a regime of their accountability, as observed by Hon'ble Supreme Court. Failure to do so would be disastrous for the health of the citizens and defeat the very purpose of regulatory regime manned to protect the environment. Accordingly it was held that the issues being interconnected, an integral approach was required in the matter for sustainable development. Coordination was required with different authorities of the State, which was not possible without involvement of the Chief Secretaries.¹¹

¹⁰ Para 21. Cases referred to in the said para are as follows:

- O.A. No. 110 (THC)/2012-Threat to life arising out of coal mining in south Garo Hills district v. State of Meghalaya & Ors.
- O.A. No. 673/2018, News item published in 'The Hindu' authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB" dated 20.09.2018: wherein the Tribunal issued directions to prepare and implement Action Plans to rejuvenate and restore the 351 polluted river stretches.
- Original Application No. 681/2018, 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: wherein the Tribunal directed Action Plans to be prepared for the 102 non-attained cities to bring the standards of air quality within the prescribed norms.
- Original Application 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: wherein the Tribunal directed preparation of time bound Action Plans to ensure that all industrial clusters comply with the parameters laid down in Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- Original Application No. 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016 dated 31.08.2018: wherein the Tribunal constituted Apex and Regional Monitoring Committees for effective implementation of MSW Rules, 2016.

¹¹ Paras 21 to 25. Cases referred to in the said paras are as follows:

- Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors, O.A. No.95/2018.
- https://niti.gov.in/writereaddata/files/new_initiatives/presentation-on-CWMI.pdf- India ranks 120th in 122 countries in Water Quality Index as per Niti Ayog Report, <https://www.thehindu.com/sci-tech/energy-andenvironment/india-ranked-no-1-in-pollution-related-deaths-report/article19887858.ece>- Most pollution-linked deaths occur in India, <https://www.hindustantimes.com/india-news/delhi-world-s-most-polluted-city-mumbai-worse-than-beijing-who/story-m4JFTO63r7x4Ti8ZbHF7mM.html>- Delhi's most polluted city, Mumbai worse than Beijing as per WHO; http://www.un.org/waterforlifedecade/pdf/global_drinking_water_quality_index.pdf- WHO Water Quality Index .
- 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" O.A. No. 681/2018- <http://www.greentribunal.gov.in/DisplayFile.aspx>
- <https://www.ndtv.com/delhi-news/delhis-air-pollution-has-caused-of-death-of-15-000-people-study-1883022>.
- Sudarsan Das vs. State of West Bengal & Ors. O.A. No. 173/2018 Order dated 04.09.2018
- Shailesh Singh vs. Hotel Holiday Regency, Moradabad & Ors. O.A. No. 176/2015, order dated 3.1.2019

15. The Tribunal had also considered its experience of administrative interaction held on the subject on 04.12.2018 with the Committees appointed and found that the mechanism had not become as effective as expected.¹²

16. The Tribunal had accordingly modified the mechanism of Committees. For the States, Member Secretaries of the SPCBs were made the Convener of the Committees. Secretaries of Urban Development, Local Bodies, Local Self-Government, Environment, Rural Development Health and representatives of CPCB, wherever CPCB office is existing were to be Members. The Committees were to work for six months or as may be considered necessary.¹³

17. The Committees constituted under the Rules were to work in tandem with the Committees constituted by the Tribunal. The CPCB was to prepare Standard Operating Procedure (SOP) for implementation of Clause J for dealing with the legacy waste. The Collectors were to have monthly meetings, as per Rule 12 and submit reports to State Urban Development Departments, with a copy to State Level Committees.¹⁴

18. Every State was to constitute a Special Task Force (STF) in each District with four members – one each nominated by the District Magistrate,

-
- Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors O.A. No.95/2018, order dated 11.01.2019.

¹² Para 26.

¹³ Para 28. Cases referred to in the said para are as follows:

- See order dated 19.9.2018 of this Tribunal in O.A No. 606/2018 to the effect that the non-official Chairperson will be paid consolidated amount equal to basic pay of the post held by the incumbent. A former Judge of Hon'ble Supreme Court will be entitled to Rs. 2.50 Lakhs per month. A former Judge of the High Court will be paid Rs. 2.25 Lakhs per month. On same pattern, remuneration may be fixed for any other retired Member.
- E.A. No.32/2016 order dated 15.11.2018- Clarifying that while the State may provide the logistics and other facilities, the financial aspects may be taken care of by the State Pollution Control Boards/Committees. The financial aspects will include the remuneration or other incidental expenses which may be increased with a view to effectively execute the directions of this Tribunal. Such expenses may include secretarial assistance, travel as well as cost incurred for any technical assistance.
- Apart from remuneration, all actual expenses incurred in taking assistance for secretarial working will be reimbursed by concerned PCB as already directed vide order dated 17.12.2018 E.A. No.32/2016, Amresh Singh v. Union of India & Ors.

¹⁴ Para 32.

Superintendent of Police, Regional Officer of the SPCBs and the District Legal Services Authority (DLSA) for awareness by involving educational, religious and social organizations, including local Eco-clubs. This was also to apply with regard to awareness in respect of other connected issues i.e. polluted rivers, air pollution, etc. In this regard, reference was made to directions of the Hon'ble Supreme Court requiring such awareness programmes to be undertaken.¹⁵

19. The Tribunal also referred to its order dated 19.12.2018, in Original Application No. 673/2018, for laying down scale of compensation to be recovered from each State/UT in failing to carry out directions of this Tribunal on the issue of preparing action plans for river stretches. Similar pattern was proposed in case of failing to carry out directions in the present case.¹⁶

20. The Chief Secretaries of all the States and UTs were required to appear in person and be ready on the following specific points:

- 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).*

¹⁵ Paras 35 and 36. Cases referred to in the said paras are as follows:

- O.A. No. 138/2016 order dated 27.08.2018
- O.A.No. 673/2018, order dated 20.09.2018
- Suo Moto Application No. 290/2017, order dated 24.10.2018
- O.A. No. 200/2014 order dated 29.11.2018
- (2004)1 SCC 571
- (2005)5 SCC 733

¹⁶ Para 38. Cases referred to in the said para are as follows:

- Threat to life arising out of coal mining in south Garo Hills district v. State of Meghalaya & Ors O.A. No. 110(THC)/2012.
- News Item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB (O.A. No. 673/2018) vide order dated 19.12.2018- wherein this Tribunal held that compensation for damage to the environment will be payable by each of the States/ UTs at the rate of Rs. One Crore per month for each of the Priority- I and Priority- II stretches, Rs. 50 lacs per month for stretches in Priority- III and Rs. 25 lacs per month each for Priority- IV and Priority- V stretches.

- 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*
- 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."*

21. It was also directed that they may not nominate other officer for appearance before this Tribunal. However, they may seek change of date, with advance intimation.¹⁷

22. Further direction was for the State to display on their respective websites the progress made on the above issues.¹⁸ Under Rule 14, the CPCB was directed to coordinate with the Committees.¹⁹

III. PRESENT PROCEEDINGS:

23. In pursuance of above, Shri Deepak Kumar, Chief Secretary, State of Bihar is present in person.

24. A status report dated 14.03.2019 has been tendered on behalf of the State of Bihar during the proceedings indicating status of compliance of order dated 16.01.2019. The status report indicates some of the steps taken for solid waste management. Status of compliance of Plastic Waste Management Rules, 2016, Bio-medical Waste Management Rules, 2016, polluted river stretches, polluted industrial clusters, air polluted cities and illegal mining have also been mentioned.

¹⁷ Paras 40 and 41

¹⁸ Para 42

¹⁹ Para 45

25. From perusal of the status report and after hearing submissions of the State, we find that steps required to be taken under Rule 22 of the Solid Waste Management Rules, 2016 have not yet been completed. It is not clear whether the local bodies have submitted their annual reports to the State Pollution Control Board (SPCB) under Rule 24 and whether SPCB has submitted consolidated annual report to the Central Pollution Control Board (CPCB) under the said Rules. We have also found the steps taken for plastic waste management and bio-medical waste management to be inadequate.

26. From the status report furnished by the Chief Secretary, huge gap is noticed in the steps taken and the steps required to be taken in terms of the Rules and for ensuring sustainable development. Unless such steps are taken, the unsatisfactory state of environment in the country in general and in the State in particular may not improve.

27. As per reports, around forty percent districts of Bihar have arsenic in its groundwater. The causes of arsenic contamination are mostly through geogenic channel. Excess use of arsenic in drinking water over prolonged period leads to primary, secondary and tertiary health impacts.²⁰ Arsenic contaminated aquifers in a 5 km. wide study belt along the banks of river Ganga, in Patna, Bhojpur, Vaishali and Bhagalpur districts of Bihar, are used for both drinking and irrigation purposes.²¹ Due to high levels of arsenic, the cases of cancer in Bihar are increasing day by day.²² The air quality index (AQI) of the city, surged from 402 to 423, putting Patna as the third highest polluted city in the country. Muzaffarpur in terms of level of air pollution as the AQI of the north Bihar city was measured at

²⁰https://www.researchgate.net/publication/281865761_Groundwater_Arsenic_Contamination_in_Bihar_Causes_Issues_and_Challenges

²¹<https://www.indiawaterportal.org/articles/arsenic-contamination-ground-water-bihar-and-its-mitigation-strategy>

²²<https://scroll.in/pulse/835431/ignored-arsenic-contamination-in-bihars-water-has-led-to-an-explosion-of-cancer>

445.23 It was further reported that pollution level in Bihar is increasing by 3 per cent per year and blamed population and density as the major factor for the high pollution.²⁴ Further as per some study, it was found out that more than 4,000 people die every year due to air pollution-related diseases in Bihar.²⁵ Unabated illegal sand mining in river beds is now being cited as the major cause for the flood havoc, which claimed over 60 lives in East and West Champaran districts of north Bihar.²⁶ Damage was done to embankments at Sikta, Mainatand and Gaunaha areas where illegal sand mining was rampant. As per some Experts, greatest contributor to air pollution in Gaya is suspended dust particles released by unregulated construction activities and illegal sand mining.²⁷ There is lack of waste management in Bihar can lead to emergency like situation. No project has come up to harness methane gas from quarries. Data showed that the state government can produce 2MW of power from quarries that are filled with 750 tonnes of garbage every day and placed in fallow land.²⁸

28. On behalf of CPCB, following data has been furnished in respect of State of Bihar. The same is reportedly based on report furnished by the PPCB under Rule 24(3) of the SMW Rules or other corresponding provisions:

RULES	DATA
Solid Waste Management	No of Local Bodies and Towns: 143 <ul style="list-style-type: none"> • Waste generation: 2272 TPD • Collection : YES • House to House Collection: 2623 wards out of 3337 • Segregation: 437 wards out of 833 wards • Treated: Compost plants in Muzaffarpur, Munger, Bodhgaya and planned at Patna, Barh.

²³http://timesofindia.indiatimes.com/articleshow/66740168.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

²⁴<https://www.dailypioneer.com/2017/india/in-2012-one-out-of-nine-deaths-due-to-air-pollution.html>

²⁵<https://www.dnaindia.com/india/report-air-pollution-causes-over-4k-deaths-in-bihar-every-year-2619807>

²⁶<https://www.hindustantimes.com/patna/illegal-sand-mining-in-river-beds-blamed-for-flood-fury-in-bihar-s-east-and-west-champaran/story-PUuQbOw8pjj24sWYCxpLVI.html>

²⁷<https://timesofindia.indiatimes.com/city/patna/illegal-sand-mining-causing-air-pollution-in-gaya-say-experts/articleshow/64966442.cms>

²⁸<https://www.patnadaily.com/index.php/readers-write/13441-lack-of-adequate-waste-management-in-bihar.html>

	<ul style="list-style-type: none"> • Legacy Dumpsites: Information not provided • Action plans Prepared: 143
Plastic waste Management	<ul style="list-style-type: none"> • Waste generation: 2280 TPA • No. of unregistered recycling units : 40
Biomedical Waste Management	<ul style="list-style-type: none"> • No. of Hospitals: 23684 • Authorization granted: 42 • Waste generation: 33799 kg/day • BMW treated: 7439 • No. of CBWTF: 3 & 1 under installation • No. of Captive facilities installed by HCFs : 3
Polluted river stretches	<p>Total : 6 Stretches</p> <p>P-III: 1 Sirsia Ruxol to Koirea Tola (Raxaul)</p> <p>PV: 5 Farmar along Jogbani Ganga Buxar to Bhagalpur Poonpun Gaurichak to Fatua Ram Rekha HariNagar to RamNagar Sikrahna Along Narkatiaganj</p>
Air Quality Management	<p>Non-attainment Cities : Patna, Gaya, Muzaffarpur.</p> <p>(Action Plan prepared and endorsed by CPCB)</p>
Industrially polluted clusters	<p>Clusters : Hajipur</p> <p>(Action plan is to be prepared and as per CEPI score)</p>
ETPs, CETPs and STPs	<p style="text-align: center;">ETPs</p> <p>No. of industries which require ETP : 223 No. of industries having functional ETP: 214 No. of industries complying: 207 No. of industries non-complying: 7</p> <p style="text-align: center;">CETPs</p> <p>No. of CETPs : 0 No. of under construction/proposed CETPs : 5</p> <p style="text-align: center;">STPs</p> <p>No. of STPs: 14 No. of STPs complying: 14 No. of under construction/proposed STPs : 16</p>

29. Some of the serious challenges to the protection of environment in the State of Bihar have been considered by this Tribunal in its orders.²⁹

²⁹(a). Order dated 24.07.2018 in Sanjay Sinha vs. State of Bihar & Ors., [O.A. No. 78 of 2018 (Earlier O.A. No. 17 of 2014) (EZ)]

(b). Order dated 04.12.2018 in Gaurav Govind vs. State of Bihar & Ors., O.A. No. 209/2018.

(c). Order dated 14.02.2019 in Amarshakti vs. State of Bihar & Ors., O.A. No. 596/2018.

(d). Order dated 28.11.2018 in Veterans Forum for Transparency in Public Life vs. Chapra Nagar, E.A. No. 46/2018.

30. Needless to say that improvement in this respect 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 inspite 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.

31. 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. This may require effective institutional monitoring mechanism and training of all the authorities charged with the duty of overseeing protection of environment and effective schemes for community involvement at every level.

IV. DIRECTIONS:

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

- i. Steps for compliance of Rules 22 and 24 of SWM Rules be now taken within six weeks to the extent not yet taken. Similar steps be taken with regard to Bio-Medical Waste Management Rules and Plastic Waste Management Rules.
- ii. Atleast three major cities and three major towns in the State and atleast three Panchayats in every District may be notified on the website within two weeks from today as model cities/towns/villages which will be made fully compliant within next six months.
- iii. The remaining cities, towns and Village Panchayats of the State may be made fully compliant in respect of environmental norms within one year.
- iv. A quarterly report be furnished by the Chief Secretary, every three months. First such report shall be furnished by June 30, 2019.
- v. The Chief Secretary may personally monitor the progress, atleast once in a month, with all the District Magistrates.
- vi. The District Magistrates or other Officers may be imparted requisite training.
- vii. The District Magistrates may monitor the status of compliance of environmental norms, atleast once in two weeks.
- viii. Performance audit of functioning of all regulatory bodies may be got conducted and remedial measures be taken, within six months.
- ix. System of ranking of cities, town and villages in the State based on level of compliance with environment laws may be

developed. The system so developed may be placed on the website of the State Government within two months from today. This process may be overseen by the Chief Secretary.

x. Information, Education and Communication strategies may be reviewed and strengthened for community involvement, including education and religious or other organizations.

xi. The Chief Secretary may remain present in person before the Tribunal with the status of compliance in respect of various issues mentioned in para 20 as well as any other issues discussed in the above order on 30.09.2019.

33. Direction in Para no. 32 (ix) and (x) will also apply to the States of Himachal Pradesh, Haryana, Punjab and Uttarakhand though the same were not mentioned in the orders passed in respect of said States on 05.03.2019, 06.03.2019, 07.03.2019 respectively.

34. It is made clear that Chief Secretary may not delegate the above function and the 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.

35. The issue of recovery of damages from the States for their failure to comply with the environmental norms, including the statutory rules and orders of this Tribunal, will be considered later. The Tribunal may also consider the requirement of performance guarantee of a particular amount in case progress achieved is not found to be satisfactory.

36. Accordingly, vide order dated 05.03.2019 in the present matter (dealing with State of Himachal Pradesh) it has been directed that the Apex Committee is to conclude its proceedings by 30.04.2019 and furnish its final report. Thereafter, monitoring at apex level can be done by

MoEF&CC and CPCB in terms of Rules 5 and 14 of the SWM Rules respectively and direction of this Tribunal vide order dated 22.12.2016 [Para 43(9)].

37. Any other Committee or regulatory body will work in tandem with the above mechanism.

Put up the report which may be received on 08.07.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

March 07, 2019
Original Application No. 606/2018
DV

