

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

**Original Application No. 673/2018**

**IN THE MATTER OF:**

**NEWS ITEM PUBLISHED IN 'THE HINDU' AUTHORED BY SHRI. JACOB KOSHY**

**Titled**

**"More river stretches are now critically polluted: CPCB"**

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON**

**HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER**

**HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

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**DATED: 20<sup>TH</sup> SEPTEMBER, 2018.**

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**ORDER**

1. This application has been registered on the basis of a news item dated 17.09.2018 in "The Hindu" under the heading "More river stretches are now critically polluted: CPCB"<sup>1</sup>.
2. According to the news item, 351 polluted river stretches have been noted by the Central Pollution Control Board (CPCB). 117 such stretches are in the States of Assam, Gujarat, and Maharashtra. The CPCB has apprised the concerned States of the extent of pollution in the rivers. According to the news item, most polluted stretches are from Powai to Dharavi – with Biochemical Oxygen Demand (BOD) 250 mg/L; the Godavari - from Someshwar to Rahed – with BOD of 5.0-80 mg/L; the Sabarmati – Kheroj to Vautha – with BOD from 4.0-147 mg/L; and the Hindon – Saharanpur to Ghaziabad – with a BOD of 48-120 mg/L. The CPCB has a programme to monitor the quality of rivers by measuring BOD. BOD greater than or equal to 30mg/L is termed as 'Priority I', while that between 3.1-6 mg/L is 'Priority V'. The CPCB considers a BOD less than 3mg/L an indicator of a healthy river. In its 2015 Report<sup>2</sup>, the CPCB had identified 302 polluted stretches on 275 rivers, spanning 28 States and six Union Territories. The number of such stretches has now been found to be 351.

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<sup>1</sup> <https://www.thehindu.com/news/national/more-river-stretches-critically-polluted-cpcb/article24962440.ece>

<sup>2</sup> <http://cpcb.nic.in/cpcb/RESTORATION-OF-POLLUTED-RIVER-STRETCHES.pdf>

3. The question for consideration is whether any direction is necessary by this Tribunal, if river stretches are polluted as per the report of CPCB, which is a statutory body under the Water (Prevention and Control of Pollution) Act, 1974, (the Water Act).
4. The matter has been considered by the Hon'ble Supreme Court and this Tribunal in several cases to which reference will be made at appropriate place in the order. The matter was recently reviewed in a Chamber Meeting held on 10.09.2018 amongst all the Members of the Tribunal and the representatives of the CPCB, the Department of Water Resources, the Ministry of Environment, Forest & Climate Change, the Niti Ayog, the National Mission for Clean Ganga, Ministry of Housing and Urban Affairs, the representatives of the States of Maharashtra, Gujarat, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Bihar, Punjab, Uttar Pradesh, NCT of Delhi and the Union Territory of Daman & Diu. The object of the meeting was to discuss as to how the level of fitness for bathing in all the rivers must be achieved at the earliest. The Tribunal was open to consider the matter on judicial side. Accordingly, we proceed to consider the same in the light of inputs available in public domain.
5. There is no dispute with the proposition that the water is the lifeline for existence. Shortage of clean water is a matter of serious concern. Checking of pollution in the rivers is integrally linked not only to the availability of clean potable water but also to the protection of environment.
6. Article 48A of the Constitution casts a duty on the State to protect and improve the environment. Article 51A imposes a fundamental duty on every citizen to protect and improve the environment. The Stockholm Declaration (1972) recommended prevention of pollution by adopting the 'Precautionary Principle', the 'Polluter Pays Principle' and the principle of 'Sustainable Development'.
7. The Water Act was enacted to provide for prevention and control of water pollution. The Central and State Boards have been established under the said Act. The Act

prohibits use of any stream or well for disposal of polluting matter. Standards to be maintained can be laid down. The Parliament has passed the Environment (Protection) Act, 1986 to protect and improve the quality of environment. The Central Government is authorized to issue appropriate directions for protection of environment to the concerned authorities.

8. Considering the issue of pollution in River Ganga by the leather industry at Kanpur, the Hon'ble Supreme Court of India in *M.C. Mehta Vs. Union of India & Ors.*<sup>3</sup>, held that the discharge of the pollutants in Ganga could not be permitted directly or indirectly.
9. Again, in *M.C. Mehta Vs. Union of India & Ors.*<sup>4</sup>, directions to enforce the statutory provisions by the municipal bodies and the industries by stopping discharge of untreated sewage and effluents in River Ganga were issued. It was noted that the water pollution caused serious diseases, including Cholera and Typhoid. Water pollution could not be ignored and adequate measures for prevention and control are necessary. It was also observed that the educational institutions must teach atleast for one hour in a week lessons relating to protection and improvement of environment. Awareness should be created by organizing suitable awareness programs. In the same matter, the issue of Calcutta tanneries was considered in *M.C Mehta Vs. Union of India And Ors.*<sup>5</sup>, (*Calcutta Tanneries' Matter*). The tanneries were directed to be shifted by adopting the 'Precautionary Principle' so as to prevent discharge of effluents in the River Ganga.
10. Dealing with the control of pollution in river Pallar in Tamil Nadu, the Hon'ble Supreme Court in *Vellore Citizen' Welfare Forum Vs. Union of India*, (1996) 5 SSC 647 observed:

*"13. The Precautionary Principle and the Polluter Pays Principle have been accepted as part of the law of the land. Article 21 of the Constitution of India guarantees protection of life and personal liberty. Articles 47, 48-A and 51-A(g) of the Constitution are as under:*

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<sup>3</sup> (1987) 4 SCC 463 ¶14

<sup>4</sup> (1988) 1 SCC 471

<sup>5</sup> (1997) 2 SSC 411

*“47. Duty of the State to raise the level of nutrition and the standard of living and to improve public health.—The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health.*

*48-A. Protection and improvement of environment and safeguarding of forests and wildlife.—The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.*

*51-A. (g) to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures.”*

*Apart from the constitutional mandate to protect and improve the environment there are plenty of post-independence legislations on the subject but more relevant enactments for our purpose are: the Water (Prevention and Control of Pollution) Act, 1974 (the Water Act), the Air (Prevention and Control of Pollution) Act, 1981 (the Air Act) and the Environment (Protection) Act, 1986 (the Environment Act). The Water Act provides for the constitution of the Central Pollution Control Board by the Central Government and the constitution of the State Pollution Control Boards by various State Governments in the country. The Boards function under the control of the Governments concerned. The Water Act prohibits the use of streams and wells for disposal of polluting matters. It also provides for restrictions on outlets and discharge of effluents without obtaining consent from the Board. Prosecution and penalties have been provided which include sentence of imprisonment. The Air Act provides that the Central Pollution Control Board and the State Pollution Control Boards constituted under the Water Act shall also perform the powers and functions under the Air Act. The main function of the Boards, under the Air Act, is to improve the quality of the air and to prevent, control and abate air pollution in the country. We shall deal with the Environment Act in the latter part of this judgment.*

*16. The constitutional and statutory provisions protect a person's right to fresh air, clean water and pollution-free environment, but the source of the right is the inalienable common law right of clean environment. It would be useful to quote a paragraph from Blackstone's commentaries on the Laws of England (Commentaries on the Laws of England of Sir William Blackstone) Vol. III, fourth edition published in 1876. Chapter XIII, “Of Nuisance” depicts the law on the subject in the following words:*

*“Also, if a person keeps his hogs, or other noisome animals, or allows filth to accumulate on his premises, so near the house of another, that the stench incommodes him and makes the air unwholesome, this is an injurious nuisance, as it tends to deprive him of the use and benefit of his house. A like injury is, if one's neighbour sets up and exercises any offensive trade; as a tanner's, a tallow-chandler's, or the like; for though these are lawful and necessary trades, yet they should be exercised in remote places; for the rule is, ‘sic uteretur, ut alienum non leadas’; this therefore is an actionable nuisance. And on a similar principle a constant ringing of bells in one's immediate neighbourhood may be a nuisance.*

*... With regard to other corporeal hereditaments; it is a nuisance to stop or divert water that used to run to another's meadow or mill; to corrupt or poison a watercourse, by erecting a dye-house or a lime-pit, for the use of trade, in the upper part of the stream; to pollute a pond, from which another is entitled to water his cattle; to obstruct a drain; or in short to do any act in common property, that in its consequences must necessarily tend to the prejudice of one's neighbour. So closely does the law of England enforce that excellent rule of gospel-morality, of 'doing to others, as we would they should do unto ourselves'."*

11. The Central Government was directed to constitute an Authority under section 3 (3) of the Environment Act which can take measures to reverse the damage and recover the cost from the individuals responsible.

12. In *S. Jagannath Vs. Union of India &Ors.*<sup>6</sup>, effluents discharged by commercial shrimp culture farms were directed to be controlled. An authority was directed to be constituted headed by former Judge of the High Court to protect fragile coastal areas.

13. In the news item published in Hindustan Times titled "And Quiet Flows The Maily Yamuna"<sup>7</sup>, steps were directed to be taken to check pollution in river Yamuna.

14. In *Tirupur Dyeing Factory Owners Association Vs. Noyyal River Ayacutdars Protection Association &Ors.*<sup>8</sup>, directions were issued to check pollution in river Noyyal in the State of Tamil Nadu. A Committee headed by a former Judge of the High Court was appointed to assess the extent of damage and to identify the victims and based on the said report direction to cover damages and to stop pollution were issued by the High Court. Upholding the said directions, it was observed that if the pollution is not checked, the industrial activity has to be closed; cost for restoration has to be covered from those responsible for the pollution.

15. In spite of directions in several Judgments, discharge of untreated sewage and industrial effluents in rivers and water bodies is continuing at a large scale. Sewage treatment capacity is disproportionate to the sewage generated. Reports have

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<sup>6</sup> (1997) 2 SCC 87

<sup>7</sup> (2009) 17 SSC 720

<sup>8</sup> (2009) 9 SSC 737

found high level of Coliform in water bodies. According to some estimates, 75 to 80 % water is polluted in India. Number of polluted river stretches is on the increase. It is patent that statutory framework is inadequate or those who man the statutory authorities are not able to perform the duties assigned to them. This aspect has to be reviewed by the concerned Governments.

16. We may also refer to some of orders of this Tribunal on the subject.

17. In *Manoj Mishra Vs. Union of India*<sup>9</sup>, the Tribunal dealt with the pollution of river Yamuna in the light of directions of the Hon'ble Supreme Court. The Tribunal noted that right to clean and healthy environment was a Fundamental Right of the inhabitants. In violation of the said Right, the debris and solid waste were being dumped on the river bed. Encroachments have taken place, resulting in damage to the environment. Storm water drains which were polluted, were meeting the river at several points without being cleaned. The failure to manage extraction of ground water and diverting the river water for irrigation and other purposes beyond reasonable norms was resulting in obstructing the flow of the river. Dumping of untreated sewerage and industrial effluents was a major source of pollution.

18. An Expert Committee was appointed which suggested setting up of STPs to tackle this problem. It was seen that on account of pollution, vegetables grown in the area, irrigated by the polluted water were a health hazard and caused diseases like cancer. The Committee appointed by the Tribunal recommended that solid waste dump should be removed from the flood plains and construction activities on the flood plains should be stopped. All Settlements on the flood plains should be relocated. Construction of new barrages and roads, railways and metro bridges, and embankments and bunds should not be permitted. In exceptional cases, if it is permitted, a critical assessment of their potential impact should be assessed. Environmental clearance should be made necessary. High level of lead was found in 23% of the children as a result of pollution adversely affecting their health. The food crops were contaminated. The ground water was contaminated. Mercury

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<sup>9</sup> O.A. No. 6/2012, 2015 ALL(I) NGT REPORTER (1) (DELHI) 139

concentration was 200 times the standards on account of location of thermal power plant. The Faecal Coliform- bacteria were 30 times the standards. There was presence of high level of pesticides, heavy metals and other harmful matters in the vegetables/vegetation grown on the river bank.

19. Accordingly, the Tribunal issued several directions for cleaning the river and protecting the flood plains. The implementation of above directions was monitored from time to time in the last three years.

20. On 26.07.2018, the Tribunal recorded that there was a failure of the Administration in complying with the directions, even after more than three years, which made it necessary for the Tribunal to exercise power as an Executing Court under Section 25 of the National Green Tribunal Act, 2010. The Tribunal directed constitution of a two-member Monitoring Committee, comprising a former Chief Secretary of Delhi and a former Expert Member of the Tribunal so that the said Committee could prepare a time bound action plan and closely oversee the execution of the order of this Tribunal on a regular basis.

21. The Tribunal also dealt with the problem of level of pollution in river Ganga which is 2025 km. The two main sources of pollution, which were noted, are the industrial pollution and the municipal sewage. Apart from this, diversion of water and extraction of groundwater reduced the flow of the river which adversely affected its eco-system and vitality. The serious industrial pollution was caused by the leather industries at Jajmau, Kanpur and Unnao. The Tribunal considered the initiatives taken by the Central Government by way of Ganga Action Plan-I and Ganga Action Plan-II. It was also noted that the said initiatives had failed to bring about the desired results. The Tribunal disposed of the matter on 10.12.2015 with regard to Phase-I, Segment-A i.e. from Gaumukh to Haridwar. The rest of the matter was dealt with by subsequent Judgement dated 13.07.2017 in *M.C. Mehta Vs. Union of India*<sup>10</sup>.

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<sup>10</sup>O.A No. 200 of 2014, 2017 NGTR (3) PB 1

The directions issued by the Tribunal included regulation of dumping of municipal solid waste and other wastes, prevention and control of sewage and industrial effluents, encroachments of floodplains, regulation of diversion of water and extraction of groundwater, cleaning of the drains meeting the river Ganga, maintaining environmental flow of the river, checking constructions on floodplains, setting up of regulating or stopping industrial activity of polluting nature, checking mining activities and disposal of bio-medical and other wastes, etc.

22. The implementation of the above directions was taken up from time to time. It was found that inspite of huge expenditure already incurred and efforts of the Committees monitoring the directions of this Tribunal as well as initiatives of the Government authorities, the requisite result has not been achieved. The water did not meet the requisite standards. The Tribunal had to appoint a Committee headed by a former High Court Judge vide order dated 06.08.2018.

23. On an earlier date on 27.07.2018, the Tribunal directed that the results of tests of water samples at various locations should be displayed on the website of Central Pollution Control Board (CPCB). It was noted that water from Haridwar to Kanpur was unfit for drinking and with few exceptions, even unfit for bathing. There was dumping of Chromium at and around Jajmau and Kanpur. There was violation of provisions of the Water Act, 1974 requiring closing of industries and prosecution. The Tribunal hoped that at one point of time the red sign in the map which was displayed on the website of the CPCB will be converted to green with the improvement in water quality. Till then, the progress could not be held to be satisfactory.

24. On 13.07.2018, in *Mahendra Pandey Vs. Union of India & Ors.*<sup>11</sup>, pollution in river Ramganga was considered. River Ramganga is a tributary of River Ganga. It was found that in surface water samples, there was presence of heavy metals like Iron (Fe), Zinc (Zn), Copper (Cu) and Mercury (Hg). The level of Mercury was found above the screening levels (i.e. Indian Drinking Water standard). The stand of the

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<sup>11</sup>O.A. No. 58/2017

Uttar Pradesh Pollution Control Board was that there was difficulty in locating the site for construction of secured landfill. The Tribunal noted that the hazardous waste was required to be disposed of in a scientific manner. Illegal dumping of e-waste was required to be stopped. It was noted that pollution was being caused by electronic waste processing which was generating Milled Black Powder. This resulted in contamination of water with heavy metals.

25. On 24.07.2018 in *Sobha Singh &Ors. Vs. State of Punjab &Ors.*<sup>12</sup>, the Tribunal considered the issue of pollution of River Sutlej and River Beas. The pollution resulted in toxicity and accumulation of Chromium, Nickel, Zinc and pesticides. The polluted drains were found meeting River Sutlej. The untreated industrial waste as well as the domestic waste was being dumped without any adequate action being taken by the Pollution Control Boards. Failure to check pollution was established by various inspections. In spite of steps taken in four years, with almost fifty adjournments and the directions of the Tribunal, the situation did not improve as expected. Accordingly, the Tribunal constituted an Independent Monitoring Committee which included a social activist to oversee the execution of directions of the Tribunal.

26. On 31.07.2018 in *Nityanand Mishra Vs. State of M.P. &Ors.*<sup>13</sup>, pollution of Son river was considered. Illegal sand mining activity was found to be resulting in affecting the flow of the river. Construction of barrage and operation of industries were affecting the habitat and breeding of *Gharials*. The Tribunal issued directions to stop illegal pollution for protection of the river and the wildlife near the Bansagar Dam and constituted a Committee to oversee the compliance of the directions of the Tribunal.

27. As already noted, on 06.08.2018, after reviewing the progress in the matter of River Ganga and finding that the progress did not meet the expectations of the Tribunal, the Tribunal exercised its jurisdiction under Section 25 of the National Green Tribunal Act, 2010 and constituted a Monitoring Committee headed by a former

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<sup>12</sup>O.A.No. 101/2014

<sup>13</sup>O.A. No. 456/2018

Judge of the High Court to execute the directions already issued in a time bound manner. It was also observed that public education and public involvement were required to be considered.

28. On 07.08.2018 in “Stench Grips Mansa’s Sacred Ghaggar River (Suo-Moto Case)<sup>14</sup>”, this Tribunal considered pollution of river Ghaggar and failure of the authorities to check the same. The report of the Joint Inspection Committee showed that the pollution in the river was beyond the prescribed standards. There was failure on the part of the Pollution Boards in checking the pollution. In spite of several directions in the last four years by the Tribunal, the situation has not improved. The Tribunal directed that a Special Task Force (STF) must be constituted in every District and in every State. In a District, the STFs should comprise of District Magistrate, Superintendent of Police, Regional Officer of the State Pollution Control Boards in concerned District and one person to be nominated by the District Judge in every District in his capacity as Head of the District Legal Services Authority. At the State level, it was to comprise of the Chief Secretary, the Environment Secretary, the Secretary of Urban Development and Secretary of Local Bodies. The STFs were required to publish reports on the website. The Tribunal also constituted a Committee headed by a former Judge to oversee the compliance of the directions.

29. On 08.08.2018, in *Doaba Paryavaran Samiti Vs. State of U.P. & Ors.*<sup>15</sup>, pollution in river Hindon was the subject matter of consideration. The matter was taken up on the allegation that 71 persons in Baghpat district died and more than 1000 persons were affected by diseases on account of pollution. The Tribunal noted that there was contamination of groundwater on account of pollution caused by sugar, paper, distilleries and tannery industries. An inspection team, appointed by the Tribunal, found that 124 industries were causing pollution. It was noted that no punitive action has been initiated. The pollution caused included discharge of Mercury. The Tribunal observed that sources of contaminated water are required to be closed. The victims of diseases are required to be rehabilitated. A statement that there are

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<sup>14</sup>O.A. No. 138/2016 (T<sub>NHRC</sub>)

<sup>15</sup> O.A. No. 231/2014

302 river stretches in the country was noted and the CPCB was directed to identify atleast 10 most critical stretches and prepare an action plan, in similar format as that of river Hindon.<sup>16</sup> The directions issued by the Tribunal include making functionaries of the statutory authorities accountable for their failure, making potable water available, sources of contamination being closed, action plans being prepared at District, State and National levels for restoration of water quality and reversing the damage. The Committee headed by a former Judge of High Court was also constituted to oversee the execution of the directions.

30. On 17.08.2018, in *Arvind Pundalik Mhatre Vs. Ministry of Environment, Forest and Climate Change &Ors.*<sup>17</sup>, the matter of pollution of River Kasardi was considered and directions were issued to remedy the situation and the Tribunal appointed a Committee headed by a former Judge of the High Court to oversee the compliance of the directions.

31. On 23.08.2018 in *Meera Shukla Vs. Municipal Corporation, Gorakhpur &Ors.*<sup>18</sup>, pollution of Ramgarh Lake, Ami River, Rapti River and Rohani River in and around District Gorakhpur on account of discharge of untreated sewage and industrial effluents was considered. It was noted that there was no proper management of solid waste disposal, leading to vector borne diseases and health problems. The pollution was caused, inter-alia, by sugar industries and other factories. The underground water was contaminated with arsenic. In the year 2012, 557 persons died with encephalitis deaths. In the last 30 years, 50,000 people had died. A financial package of Rs. 4,000 crore was given by the Central Government to fight the said diseases but there is no proper utilization of the amount. Apart from the 557 death in Gorakhpur District, more deaths had taken place in the area as stated in the news report dated 16.07.2013. The total deaths reported were 1256 in the year 2012. The Tribunal accordingly directed necessary steps to be taken to remedy

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<sup>16</sup> Hindon action plan prepared by CPCB is explained in para 46

<sup>17</sup> O.A. No. 125/2018,

<sup>18</sup> O.A. No. 116/2014,

the situation and also appointed a Committee headed by a former Judge of the High Court to oversee the compliance of directions of the Tribunal.

32. On 24.08.2018, in *Amresh Singh Vs. Union of India &Ors.*<sup>19</sup>, the matter of pollution of the Chenab and Tawi Rivers was considered and directions were issued to remedy the situation which was to be overseen by a Committee headed by a former High Court Judge.

33. Similarly, in respect of river *Subarnarekha in Sudarsan Das Vs. State of West Bengal &Ors.*<sup>20</sup>, this Tribunal considered the matter and also appointed a Committee headed by a former Judge of the High Court to oversee the compliance of the directions.

34. There are instances of many other cases involving pollution of rivers which have come up for consideration before this Tribunal. It is not necessary to refer to all the cases.

35. We are of the view that the situation is far from satisfactory and action is required to be taken on war footing. Once statutory framework in the form of Water Act and the Environment Act is in place and the standards have been laid down by the Central Pollution Control Board, the matter cannot rest at ascertaining and identification of polluted stretches. There has to be meaningful further action to restore the minimum prescribed standards for all the rivers of the country. The polluter has to pay the cost of restoring the damage.

36. Without casting any aspersions on the statutory bodies, it is an acknowledged fact that the Pollution Control Boards have not been able to take adequate steps for keeping the standards of water within the prescribed limits. They have not been able to stop dumping of wastes, discharge of municipal or industrial effluents in rivers and water bodies. One of the reasons which has been frequently highlighted is the unsatisfactory manning of the Pollution Control Boards. This aspect was

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<sup>19</sup> Execution Application No. 32/2016 in O.A. No. 295/2016,

<sup>20</sup>O.A.No. 173 of 2018

considered by the Hon'ble Supreme Court in *TechiTagi Tara Vs. Rajendra Singh*

*Bhandari &Ors.* <sup>21</sup> as follows:

"33. Unfortunately, notwithstanding all these suggestions, recommendations and guidelines the SPCBs continue to be manned by persons who do not necessarily have the necessary expertise or professional experience to address the issues for which the SPCBs were established by law. The Tata Institute of Social Sciences in a Report published quite recently in 2013 titled "Environmental Regulatory Authorities in India: An Assessment of State Pollution Control Boards" had this to say about some of the appointments to the SPCBs: "An analysis of data collected from State Pollution Control Boards, however, gives a contrasting picture. It has been observed that time and again across state governments have not been able to choose a qualified, impartial, and politically neutral person of high standing to this crucial regulatory post. The recent appointments of chairpersons of various State Pollution Control Boards like Karnataka (A a senior BJP leader), Himachal Pradesh (B a Congress party leader and former MLA), Uttar Pradesh (C appointed on the recommendation of SP leader X), Arunachal Pradesh (D a sitting NCP party MLA), Manipur Pollution Control Board (E a sitting MLA), Maharashtra Pollution Control Board (F a former bureaucrat) are in blatant violation of the apex court guidelines. The apex court has recommended that the appointees should be qualified in the field of environment or should have special knowledge of the subject. It is unfortunate that in a democratic set up, key enterprises and boards are headed by bureaucrats for over a decade. In this connection, it is very important for State Governments to understand that filling a key regulatory post with the primary intention to reward an ex-official through his or her appointment upon retirement, to a position 9 Item Nos. 07-08 July 20, 2018 dv for which he or she may not possess the essential overall qualifications, does not do justice to the people of their own states and also staffs working in the State Pollution Control Boards. The primary lacuna with this kind of appointment was that it did not evoke any trust in the people that decisions taken by an ex-official of the State or a former political leader, appointed to this regulatory post through what appeared to be a totally non-transparent unilateral decision. Many senior environmental scientists and other officers of various State Pollution Control Boards have expressed their concern for appointing bureaucrats and political leader as Chairpersons who they feel not able to create a favourable atmosphere and an effective work culture in the functioning of the board. It has also been argued by various environmental groups that if the government is unable to find a competent person, then it should advertise the post, as has been done recently by states like Odisha. However, State Governments have been defending their decision to appoint bureaucrats to the post of Chairperson as they believe that the vast experience of IAS officers in handling responsibilities would be easy. Another major challenge has been appointing people without having any knowledge in this field. For example, the appointment of G with maximum qualification of Class X as Chairperson of State Pollution Control Board of Sikkim was clear violation of Water Pollution and Prevention Act, 1974."

34. The concern really is not one of a lack of professional expertise – there is plenty of it available in the country – but the lack of dedication and willingness to take advantage of the resources available and instead benefit someone close to the powers that be. With this couldn't care-less attitude, the environment and public trust are the immediate casualties. It is unlikely that with such an attitude, any substantive effort can be made to

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<sup>21</sup> (2018) 11 SCC 734

*tackle the issues of environment degradation and issues of pollution. Since the NGT was faced with this situation, we can appreciate its frustration at the scant regard for the law by some State Governments, but it is still necessary in such situations to exercise restraint as cautioned in State of U.P. v. Jeet S. Bisht.*

*35.. Keeping the above in mind, we are of the view that it would be appropriate, while setting aside the judgment and order of the NGT, to direct the Executive in all the States to frame appropriate guidelines or recruitment rules within six months, considering the institutional requirements of the SPCBs and the law laid down by statute, by this Court and as per the reports of various committees and authorities and ensure that suitable professionals and experts are appointed to the SPCBs. Any damage to the environment could be permanent and irreversible or at least long-lasting. Unless (2007) 6 SCC 586 corrective measures are taken at the earliest, the State Governments should not be surprised if petitions are filed against the State for the issuance of a writ of quo warranto in respect of the appointment of the Chairperson and members of the SPCBs. We make it clear that it is left open to public spirited individuals to move the appropriate High Court for the issuance of a writ of quo warranto if any person who does not meet the statutory or constitutional requirements is appointed as a Chairperson or a member of any SPCB or is presently continuing as such."*

37. This Tribunal also considered this matter in order dated 20.07.2018, in the case of *Satish Kumar vs. U.O.I & Ors.*,<sup>22</sup> and observed as follows:

*"Accordingly, we suggest that the Central Government as well as State Governments may appoint persons with judicial background to deal with the issues which may require the knowledge of legal and judicial system in the Pollution Control Boards and the local authorities. Such persons can also advise such bodies on manner of compliance of law so that such bodies can be saved from unnecessary litigation and charges of failure to comply with law.*

*24. Presence of a person with judicial background will help the Pollution Control Boards as well as local bodies to effectively discharge their administrative and judicial functions in an efficient manner. We are informed that in some of the Pollution Control Boards and Local Bodies, Judicial officers are already being engaged.*

*25. We thus call upon the Central Government and all the State Governments to take a call on this issue consistent with the observation of the Hon'ble Supreme Court in Techhi Tagi Tara (Supra)"*

38. In order to do so, an officer of Superior Judicial Services may have to be taken on deputation by requesting the concerned High Court on the pattern of Law Secretaries of States.

39. As already noted, well known causes of pollution of rivers are dumping of untreated sewage and industrial waste, garbage, plastic waste, e-waste, bio-medical waste, municipal solid waste, diversion of river waters, encroachments of catchment areas and floodplains, over drawl of groundwater, river bank erosion on account of illegal sand mining. In spite of directions to install Effluent Treatment Plants (ETPs),

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<sup>22</sup>O.A No. 56 (T<sub>HC</sub>) of 2013

Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs), and adopting other anti-pollution measures, satisfactory situation has not been achieved. Tough governance is the need of the hour. If pollution does not stop, the industry has to be stopped. If sewage dumping does not stop, locals have to be made accountable and their heads are to be prosecuted. Steps have to be taken for awareness and public involvement.

40. River Water is considered to be fit for bathing when it meets the criteria of having Bio-chemical Oxygen Demand (BOD) less than 3.0 mg/L, Dissolved Oxygen more than 5.0 mg/L and Faecal Coliform bacteria to be less than 500 MPN/100 ml.

41. According to the "Restoration of Polluted River Stretches- Concept & Plan" published by CPCB in January, 2018, 30,042 million litres per day (MLD) of domestic sewage is generated from urban areas along the polluted river stretches. The installed sewage treatment capacity is about 16,846 MLD, leaving a gap of about 13,196 MLD (43.9%). There is a large gap in sewage treatment capacity and generation of sewage in urban areas.

42. As already noted, according to latest assessment by the CPCB, there are 351 polluted river stretches in India i.e. where the BOD content is more than 3mg/L. The plan of CPCB is to target enhancement of river flow. The plan for restoration of polluted river stretches is proposed to be executed through two-fold concepts. One concept is to target enhancement of river flow through interventions on the water sheds/catchment areas for conservation and recharge of rain water for subsequent releases during lean flow period in a year. This concept will work on dilution of pollutants in the rivers and streams to reduce concentration to meet desired level of water quality. Other concept is of regulation and enforcement of standards in conjunction with the available flow in rivers /streams and allocation of discharges with stipulated norms.

43. The water quality assessment of aquatic resources by CPCB, on long term basis, has provided information on the segments of rivers that are not meeting water quality

criteria and have been identified as polluted. Assessment studies carried out on the sources of Restoration of Polluted River Stretches pollution in the rivers has highlighted the need for creation of infrastructure facilities (STPs /CETPs/ETPs) for management of wastewater in line with low flow or no flow of fresh water in the rivers and streams. In order to have a practical solution to augment non-monsoon availability of water, CPCB has suggested four phases for full scale water shed management in the upper reaches of catchment of the rivers and streams. The suggested phases for water shed management may be (a) Recognition phase (b) Restoration phase (c) Protection phase (d) Improvement phase.

(a) Recognition Phase is identification and recognition of the problem, analysis of the cause of the problem and its effect and development of alternative solutions of problem.

(b) Restoration Phase includes two main steps viz. selection of best solution to problems identified and application of the solution to the problems of the land.

(c) Protection Phase takes care of the general health of the watershed and ensures normal functioning. The protection is against all factors, which may cause deterioration in watershed condition.

(d) Improvement Phase deals with overall improvement in the watershed and all land is covered.

44. Attention is paid to agriculture and forest management and production, forage production and pasture management, socio-economic conditions to achieve the objectives of watershed management.

45. The river action plans are designed for control of pollution and to restore the water quality of the rivers. The infrastructure development for treatment of sewage always remains short of the waste water generation. The ever growing population and increasing water use in the urban centres has outpaced the plan for creation of infrastructure. The river action plans although have not improved the quality of the

water resources, however in absence of such plans, the quality of aquatic resources would have been further deteriorated.

46. River Hindon has been taken up as a model for preparation of action plan for restoration of water quality.<sup>23</sup> Salient features of the Action Plan are:

- i. Execution of field surveys to assess pollution load generated by industries and sewage generated in a city or town discharging sewage and trade effluent into river Hindon and its tributaries.
- ii. Collating water quality monitoring data of Hindon and its tributaries and assigning the class as per primary water quality criteria.
- iii. Water quality assessment of river in context of sewage/industrial drain outfalls with dilution and distance factors.
- iv. Laying time-limes for regulating industrial pollution control by ensuring consent compliance and closing the defaulting industries till they comply with the norms stipulated to them.
- v. Setting up of STPs in towns located in the river catchment and emphasis on utilization of treated sewage.
- vi. Adopting water conservation practices, ground water regulation, flood plain zone management and maintaining environmental flow.

47. The polluted river stretches have been divided in five priority categories i.e., I, II, III, IV, V depending upon the level of BOD. Following are the parameters for assessing the criteria:

**I. Criteria for Priority I**

- (a) Monitoring locations exceeding BOD concentration 30 mg/L has been considered as it is the standard of sewage treatment plant and in river it appears without dilution.(River locations having water quality exceeding discharge standards for BOD to fresh water sources)
- (b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.
- (c) Monitoring locations exceeding 3 mg/L BOD are not meeting desired water quality criteria but does not affect to Dissolved

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<sup>23</sup> <http://cpcb.nic.in/NGT/CPCB-Reply-Affidavit-Report-on-Hindon-Action-Plan.pdf>

Oxygen level in water bodies. If BOD exceeds 6mg/L in water body, the Dissolved Oxygen is reduced below desired levels.

- (d) The raw water having BOD levels upto 5 mg/L are does not form complex chemicals on chlorination for municipal water supplies. Hence the water bodies having BOD more than 6 mg/L are considered as polluted and identified for remedial action.

## II. Criteria for Priority II

- (a) Monitoring locations having BOD between 20-30 mg/L.  
(b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

## III. Criteria for Priority III

- (a) Monitoring locations having BOD between 10-20 mg/L.  
(b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

## IV. Criteria for Priority IV

- (a) Monitoring locations having BOD between 6-10 mg/L.

## V. Criteria for Priority V

- (a) Monitoring locations having BOD between 3-6 mg/l.  
(b) The locations exceeding desired water quality of 3mg/l BOD.

Polluted River Stretches- State wise-Priority wise						
STATE	I	II	III	IV	V	Grand Total
ANDHRA PRADESH				2	3	5
ASSAM	3	1	4	3	33	44
BIHAR			1		5	6
CHHATTISGARH				4	1	5
DAMAN, DIU AND DADRA NAGAR HAVELI	1					1
DELHI	1					1
GOA			1	2	8	11
GUJARAT	5	1	2	6	6	20
HARYANA	2					2
HIMACHAL PRADESH	1	1	1		4	7
JAMMU & KASHMIR		1	2	2	4	9
JHARKHAND				3	4	7
KARNATAKA			4	7	6	17
KERALA	1			5	15	21
MADHYA PRADESH	3	1	1	3	14	22
MAHARASHTRA	9	6	14	10	14	53
MANIPUR		1			8	9
MEGHALAYA	2			3	2	7
MIZORAM			1	3	5	9
NAGALAND	1		1	2	2	6
ODISHA	1		3	2	13	19
PUDUCHERRY				1	1	2

PUNJAB	2			1	1	4
RAJASTHAN			1		1	2
SIKKIM					4	4
TAMIL NADU	4			1	1	6
TELANGANA	1	2	2	2	1	8
TRIPURA					6	6
UTTAR PRADESH	4		1	2	5	12
UTTARAKHAND	3	1	1	4		9
WEST BENGAL	1	1	3	4	8	17
<b>Grand Total</b>	<b>45</b>	<b>16</b>	<b>43</b>	<b>72</b>	<b>175</b>	<b>351</b>

Polluted River Stretches- Priority I & Priority II				
STATE	RIVER NAME	RIVER STRETCH	BOD RANGE/ MAX VALUE (mg/L)	PRIORITY
ASSAM	BHARALU	GUWAHATI TO CHILARAI NAGAR	52.0	I
	BORSOLA	ALONG SARABBHATTI, GUWAHATI	34.0	I
	SILSAKO	ALONG CHACHAL, GUWAHATI	34.0	I
	SORUSOLA	ALONG PALTAN BAZAR, GUWAHATI	30.0	II
DAMAN, DIU AND DADRA NAGAR HAVELI	DAMANGANGA	SILVASSA TO DAMAN JETTY, MOTI DAMAN	10 - 80	I
DELHI	YAMUNA	WAZIRABAD TO ASGARPUR	9 - 80	I
GUJARAT	AMLAKHADI	PUNGUM TO BHARUCH	40 - 45	I
	BHADAR	JETPUR VILLAGE TO SARAN VILLAGE	426.0	I
	BHOGAVO	SURENDRANAGAR TO NANA KERALA	67.0	I
	KHARI	LALI VILLAGE TO KASHIPURA	235.0	I
	SABARMATI	KHEROJ TO VAUTHA	4 - 147	I
	VISHWAMITRI	VADODARA TO ASOD	6 - 21	II
HARYANA	GHAGGAR	RORKI TO SIRSA	6 - 482	I
	YAMUNA	PANIPAT TO SONEPAT	4 - 55	I
HIMACHAL PRADESH	SUKHANA	SUKHNA TO PARWANOO	54.0	I
	MARKANDA	KALA AMB TO NARAYANPUR	3.2 - 24	II
JAMMU & KASHMIR	DEVIKA	GURU RAVIDAS TEMPLE TO NAINSU	3.4-22	II
KERALA	KARAMANA	MALEKKDU TO THIRUVALLAM	56.0	I
MADHYA PRADESH	CHAMBAL	NAGDA TO RAMPURA	12 - 80	I
	KHAN	KABIT KHEDI TO KHAJRANA	30.8 - 80	I
	KSHIPRA	SIDDHAWAT TO TRIVENISANGAM	4 - 38	I
	BETWA	MANDIDEEP TO VIDISHA	3.3 - 20.2	II
MAHARASHTRA	GODAVARI	SOMESHWAR TEMPLE TO RAHED	5.0-88	I
	KALU	ALONG ATALE VILLAGE	75.0	I
	KUNDALIKA	SALAV TO ROHA	3.8-65	I
	MITHI	POWAI TO	250.0	I

		DHARAVI		
	MORNA	AKOLA TO TAKALIJALAM	52.8	I
	MULA	BOPODI TO AUNDH GAON	33-35	I
	MUTHA	SHIVAJI NAGAR TO KHADAKWASLA DAM	5.0-42.5	I
	NIRA	SANGAVI TO SHINDEWADI	12.5-35	I
	VEL	NHAVARE TO SHIKARPUR	30.2	I
	BHIMA	VITHALWADI TO TAKLI	8.0-22.0	II
	INDRAYANI	MOSHIGAON TO ALANDIGAON	12.5-22	II
	MULA-MUTHA	THEUR TO MUNDHWA BRIDGE	14-22	II
	PAWANA	DAPODI TO RAVET	15.5-24	II
	WAINGANGA	TUMSA TO ASHTI	10.4-22.4	II
	WARDHA	GHUGHUS TO RAJURA	7.0-22.0	II
MANIPUR	NAMBUL	SINGDA DAM TO BISHNUPUR	3.6-23.7	II
MEGHALAYA	UMKHRAH	MAWLAI TO SHILLONG	30-90.2	I
	UMSHYRPI	UMSHYRPI BRIDGE TO DHANKETI	38.5-95.0	I
NAGALAND	DHANSIRI	CHECK GATE TO DIPHU BDG	7.0-50.0	I
ODISHA	GANGUA	D/S BHUWANESHWAR	14-39	I
PUNJAB	GHAGGAR	SARDULGARH TO MUBARAKPUR	9.0-380	I
	SATLUJ	RUPNAGAR TO HARIKA BRIDGE	3.8-108	I
TAMIL NADU	CAUVERY	METTUR TO MAYILADUTHURAI	3.3-32	I
	SARABANGA	THATHAYAMPATTI TO T.KONAGAPADI	78.0	I
	THIRUMANIMUTHAR	SALEM TO PAPPARAPATTI	190.0	I
	VASISTA	MANIVILUNDHAN TO THIYAGANUR	675.0	I
TELANGANA	MUSI	HYDRABAD TO NALGONDA	4.0-60.0	I
	MANJEERA	GOWDICHARLA TO NAKKAVAGU	5.0-26	II
	NAKKAVAGU	GANDILACHAPET TO SEVALAL THANDA	26.0	II
UTTAR PRADESH	HINDON	SAHARANPUR TO GHAZIABAD	48-120	I
	KALINADI	MUZAFFAR NAGARTO GULAOTHI TOWN	8 - 78	I
	VARUNA	RAMESHWAR TO CONF WITH GANGA, VARANASI	4.5-45.2	I
	YAMUNA	ASGARPUR TO ETAWAH SHAHPUR TO ALLAHABAD (BALUA GHAT)	12.0-55	I
UTTARAKHAND	BHELA	KASHIPUR TO RAJPURA ATNDA	6.0-76.0	I
	DHELA	KASHIPUR TO GARHUWALA, THAKURDWARA	12 - 80	I
	SUSWA	MOTHRWALA TO RAIWALA	37.0	I
	KICHHA	ALONG KICHHA	28.0	II
WEST BENGAL	VINDHADHARI	HAROA BRIDGE TO MALANCHABURNING GHAT	26.7-45.0	I
	MAHANANDA	SILIGURI TO BINAGURI	6.5-25	II

Polluted River Stretches- Priority III, IV & V				
STATE	RIVER NAME	RIVER STRETCH	BOD RANGE/ MAX VALUE (mg/L)	PRIORITY
ANDHRA PRADESH	KUNDU	NANDYAL TO MADDURU	7.7	IV
	TUNGABHADRA	MANTHRALAYAM TO BAVAPURAM	3.2 - 6.7	IV
	GODAVARI	RAYANPETA TO RAJAHMUNDRI	3.1 - 3.4	V
	KRISHNA	AMRAVATHI TO HAMSALA DEEVI	3.2	V
	NAGAVALI	ALONG THOTAPALLI	3.2	V
ASSAM	DEEPAR BILL	DEEPAR BILL TO GUWAHATI	10.6	III
	DIGBOI	LAKHIPATHE, RESERVE FOREST	14.0	III
	KAMALPUR	ALONG KAMALPUR	18.6	III
	PANCHNAI	ORANG TO BORSALA	11.4	III
	BRAHAMPUTRA	KHERGHAT TO DHUBRI	3.2 - 6.4	IV
	KHARSANG	ASSAM-ARUNANCHAL BORDER TO LONGTOM-1	7.2	IV
	PAGLDIA	NALBARI TO KHUDRA SANKARA	8.2	IV
	BARAK	PANCHGRAM TO SILCHAR	3.5 - 4.2	V
	BAROI	DOWNSTREAM OF BRIDGE AT NH-52	3.6	V
	BEGA	ALONG MANGALDOI	4.5	V
	BEKI	BARPETA ROAD TO JYOTI GAON	3.5	V
	BHOGDOI	JORHAT TO DULIAGAON	4.5	V
	BOGINADI	LAKHIMPUR TO DIBRUGARH	4.2	V
	BORBEEL	ALONG RAMNAGAR, DIGBOI	3.8	V
	BORDOIBAM BEELMUKH	ALONG BEELMUKH BIRD SANCTUARY, DHEMAJI	5.2	V
	BURHIDIHING	MARGHERITA TO TINSUKIA	4 - 4.6	V
	DHANSIRI	GOLAGHAT TO KATHKETIA	4.3 - 5.6	V
	DIKHOW	NAGINI MORA TO DIKHOMUKH	3.2	V
	DIKRONG	ALONG BANDARDEWA	3.2	V
	DIPLAI	ALONG SILGARA, KOKRAJHAR	3.2	V
	DISANG	DILLIGHAT TO GUNDAMGHAT	4.2	V
	GABHARU	ALONG TUMIUKI, SONITPUR	5.4	V
	HOLUDUNGA	ALONG SOMARAJAN, DHEMAJI	4.8	V
	Jai Bharali	ALONG SONITPUR	3.1	V
	JHANJI	JORHAT TO CHAWDANG	3.8	V
	KALONG	NAGAON TO MORI KALONG	3.7 - 4.3	V
	KAPILI	NAGAON TO KAMPUR TOWN	5.5	V
	KILLING	ALONG MOREGAON	5.8	V
	KOHORA	KOHORA TO MOHPARA	4.4	V
	KULSI	ALONG CHAYGAON	3.6	V
	MALINI	ALONG RAMNAGAR, SILCHAR	5.3	V
	MORA BHARALI	ALONG TEZPUR	5.2	V

	PARASHALI	ALONG DEMORIA	4.0	V
	PUTHIMARI	ALONG PUTHIMARI	4.8	V
	RANGA	ALONG GERAMUKH	3.8	V
	SAMAGURI	ALONG SAMAGURI, NAGAON	4.0	V
	SANKOSH	ALONG GOLAKGANJ	3.3	V
	SON	ALONG DEODHAR, KARIMGANJ	4.3	V
	SONAI	SONAI TO DAKSHIN MOHANPUR	4.4	V
	TENGA PUKHURI	ALONG KUKURACHOWA GAON	4.0	V
BIHAR	SIRSIA	RUXOL TO KOIREA TOLA (RAXAUL)	20.0	III
	FARMAR	ALONG JOGBANI	3.6	V
	GANGA	BUXAR TO BHAGALPUR	3.2 - 4.2	V
	POONPUN	GAURICHAK TO FATUHA	3.3	V
	RAM REKHA	HARINAGAR TO RAMNAGAR	5.0	V
	SIKRAHNA	ALONG NARKATIAGANJ	4.5	V
CHHATTISGARH	HASDEO	KORBA TO URG	3.6 - 7	IV
	KHAROON	BUNDRI TO RAIPUR	3.3 - 7.2	IV
	MAHANADI	ARRANG TO SIHAWA	3.3 - 8	IV
	SEONATH	SHIMGA TO BEMTA	3.4 - 8.4	IV
	KELO	RAIGARH TO KANAKTORA	3.8	V
GOA	SAL	KHAREBAND TO MOBOR	4.2 - 16.8	III
	MANDOVI	MARCELA TO VOLVOI	3.3 - 6.2	IV
	TALPONA	ALONG CANACONA	6.8	IV
	ASSONORA	ASSONORA TO SIRSAIM	3.3	V
	BICHOLIM	BICHOLIM TO CURCHIREM	4.8	V
	CHAPORA	PERNEM TO MORJIM	3.5 - 5.2	V
	KHANDEPAR	PONDA TO OPA	3.4	V
	SINQUERIM	ALONG CANDOLIM	3.6	V
	TIRACOL	ALONG TIRACOL	3.9	V
	VALVANT	SANKLI - BICHOLIM TO PORIEM	4.3	V
	ZUARI	CURCHOREM TO MADKAI	3.2 - 5.1	V
	DHADAR	KHOTDA TO CHANDPURA	16.0	III
GUJARAT	TRIVENI	TRIVENI SANGAM TO BADALPARA	11.0	III
	AMRAVATI (TRIBUTARY OF NARMADA)	ALONG DADHAL, ANKALESHWAR	10.0	IV
	DAMANGANGA	KACHIGAON TO VAPI	8.0	IV
	KOLAK	KIKARLA TO SALVAV	8.0	IV
	MAHI	SEVALIA TO BAHADARPUR	4.5 - 7	IV
	SHEDHI	DHAMOD TO KHEDA	9.0	IV
	TAPI	KHADOD (BARDOLI) TO SURAT	8.0	IV
	ANAS	DAHOD TO FATEHPURA	5.0	V
	BALEHWAR KHADI	PANDESARA TO KAPLETHA	4.0	V
	KIM	SAHOL BRIDGE TO HANSOL	3.1	V
	MESHW	ALONG SHAMLAJI	4.0	V
	MINDHOLA	ALONG SACHIN	6.0	V
	NARMADA	GARUDESHWAR TO BHARUCH	5.0	V
	SIRSA	NALAGARH TO SOLAN	8 - 16	III
HIMACHAL PRADESH	ASHWANI	ALONG YASHWANT NAGAR	3.2	V
	BEAS	KULLU TO DEHRAGOPIPUR	6.0	V

	GIRI	ALONG SAINJ	4.4 - 6	V
	PABBAR	ALONG ROHRU	3.6 - 4	V
JAMMU & KASHMIR	BANGANGA	PONY SHED TO BATHING GHAT	6 - 14	III
	CHUNT KOL	MAULANA AZAD BRIDGE TO KANIKADAL	14.5	III
	GAWKADAL	GAWKADAL BRIDGE TO NOHATA	9.0	IV
	TAWI	SURAJNAGAR TO BELICHARANA	5 - 8.3	IV
	BASANTER	SAMBA TO CHAKMANGARAKWAL	5 - 6	V
	CHENAB	JAL PATAN TO PARGAWAL	5.0	V
	JHELAM	CHATTABAL WEIR TO ANANTNAG	3.2 - 5.5	V
	SINDH	ALONG DUDERHAMA	3.7	V
JHARKHAND	GARGA	ALONG TALMUCHU	6.2	IV
	SANKH	KONGSERABASAR TO BOLBA	8.4	IV
	SUBARNAREKHA	HATIA DAM TO JAMSHEDPUR	3.4 - 10	IV
	DAMODAR	PHUSRO ROAD BDG TO TURIO	3.9	V
	JUMAR	KANKE DAM TO KADAL	3.3	V
	KONAR	ALONG TILAYA AND KONAR	3.4 - 3.6	V
	NALKARI	ALONG PATRATU	3.8	V
KARNATAKA	ARKAVATHI	HALLI RESERVOIR TO KANAKAPURA TOWN	14.0	III
	LAKSHMANTIRTHA	KATTEMALAVADI TO HUNSUR	7.1 - 12.4	III
	MALPRBHA	KHANAPUR TO DHARWAD	7.3 - 17.3	III
	TUNGABHADRA	HARIHAR TO KORLAHALLI	4 - 19	III
	BHADRA	HOLEHUNNUR TO BHADRAVATHI	5.5 - 7.8	IV
	CAUVERY	RANGANATHITTU TO SATHYAMANGALAM BRIDGE	3.1 - 6.7	IV
	KABINI	NANJANAGUD TO HEJJIGE	3.6 - 6.5	IV
	KAGINA	SHAHABAD TO HONGUNTA	4.6 - 7.4	IV
	KALI	HASAN MAAD (WEST COAST PAPER MILL) TO BOMMANAHALLI RESERVOIR	6.5	IV
	KRISHNA	YADURWADI TO TINTINI BRIDGE	3.1 - 6.2	IV
	SHIMSHA	YEDIYAR TO HALAGUR	4 - 10	IV
	ASANGI NALLA	ALONG ASANGI	4.4	V
	BHIMA	GHANAPUR TO YADGIR	3.3 - 6	V
	KUMARDHARA	ALONG UPPINANGADI	4.0	V
	NETRAVATHI	UPPINANGADI TO MANGALURU	4.0	V
	TUNGA	SHIVAMOGA TO KUDLI	4.3	V
	YAGACHI	ALONG YAGACHI, HASSAN	4.0	V
KERALA	BHARATHAPUZHA	ALONG PATAMBI	6.6	IV
	KADAMBAYAR	MANCKAKADAVU TO BRAHMAPURAM	5.9 - 6.4	IV
	KEECHERI	PULIYANNOR TO KECHERY	6.4	IV
	MANIMALA	KALLOOPARA TO THONDRA	6.3 - 6.4	IV
	PAMBA	MANNAR TO THAKAZHY	3.3 - 7.8	IV
	BHAVANI	ALONG ELACHIVAZHY	5.4	V
	CHITRAPUZHA	IRUMPANAM TO KARINGACHIRA	4.6	V

	KADALUNDY	ALONG HAJIRAPPALLY/ HAJIYARPALLI	3.6	V
	KALLAI	THEKEPURAM TO ARAKKINAR	4.5	V
	KARUVANNUR	ALONG KARUVANNUR	3.5	V
	KAVVAI	ALONG KAVVAI	3.9	V
	KUPPAM	THALIPARAMBA TO VELICHANGOOL	3.1 - 3.8	V
	KUTTIYADY	ALONG KUTTIYADY	5.0	V
	MOGRAL	ALONG MOGRAL	3.1	V
	PERIYAR	ALWAYE-ELOOR TO KALAMASSERY	3.2 - 5.1	V
	PERUVAMBA	ALONG PERUVAMBA	3.9	V
	PUZHACKAL	OLARIKKARA TO PUZHACKAL	3.8	V
	RAMAPURAM	ALONG RAMAPURAM	3.3	V
	THIRUR	NADUVILANGADI TO THALAKKADATHUR	3.6	V
	UPPALA	POYYA TO MULINJA	3.2	V
MADHYA PRADESH	SONE	ALONG AMLAI	12.4	III
	GOHAD	GOHAD DAM TO GORMI	6.3	IV
	KOLAR	SURAJNAGAR TO SHIRDIPURAM	7.5	IV
	TAPI	NEPANAGAR TO BURHANPUR	4.6 - 8	IV
	BICHIA	SILPARI TO GADHAWA	3.5	V
	CHAMLA	ALONG BADNAGAR, UJJAIN	4.0	V
	CHOUPAN	ALONG VIJAIPUR	3.4	V
	KALISOT	MANDIDEEP TO SAMARDHA VILLAGE	4.1	V
	KANHAN	KANHAN IN CHINDWARA DISTRICT BOUNDARY	3.2	V
	KATNI	ALONG KATNI	3.5	V
	KUNDA	KHARGONE TO KHEDI KHURD	4.0	V
	MALEI	JAORA TO BARAUDA	3.5	V
	MANDAKINI (MP)	ALONG CHITRAKUT	5.8	V
	NEWAJ	ALONG SHUJALPUR	4.0	V
	PARVATI	BATAWADA TO PILUKHEDI	3.2	V
	SIMRAR	ALONG KATNI	3.9	V
	TONS	CHAKGHAT TO CHAPPAR	3.5	V
	WAINGANGA	CHINDWARA TO BALAGHAT	3.2	V
MAHARASHTRA	GHOD	ANNAPUR TO SHISHUR	10.2	III
	KANHAN	BHANDARA TO NAGPUR	9.8-16.4	III
	KOLAR (MAH)	ALONG KORADI	18.0	III
	KRISHNA	SHINDI TO KURUNDWAD	3.4-14.0	III
	MOR	JALGAON TO AMODA	16.0	III
	PATALGANGA	KHADEPADA TO KOPOLI	5.0-18	III
	PEDHI	NARAYANPUR TO BHATKULI	20.0	III
	PENGANGA	MEHKAR TO UMARKHED	8.6-20	III
	PURNA	DHUPESHWAR TO ASEGAON	10.2-18.4	III
	TAPI	RAVER TO SHAHADA	8.0-12.0	III
	URMODI	DHANGARWADI TO NAGTHANE	12.4	III
	VENNA	MAHABALESHWAR TO MAHULI	7.2-12.5	III
	WAGHUR	SUNASGAON TO SAKEGAON	18.0	III
	WENA	KAWADGHAT TO HINDONGHAT	10.2-13.8	III

		BINDUSAR	SWARAJ NAGAR TO SNEHNAGAR	8.0	IV
		BORI	ALONG AMALNER	9.2	IV
		CHANDRABHAGA	PANDHARPUR TO SHEGAON DHUMALA	7.5-9.5	IV
		DARNA	IGATPURI TO SANSARI	5.0-9.0	IV
		GIRNA	MALEGAON TO JALGAON	6.6-9.0	IV
		HIWARA	PACHORA TO NIMBORA	8.6	IV
		KOYNA	KARAD TO PAPDARDE	8.6	IV
		PEHLAR	PELHAR DAM TO GOLANI NAKA	7.0	IV
		SINA	SOLAPUR TO BANKALAGI	8.5	IV
		TITUR	ALONG CHALISGAON, JALGAON	7.8	IV
		AMBA	BENSE TO ROHA	4.8	V
		BHATSA	SHAHAPUR TO BHADANE	4.8-6.0	V
		GOMAI	LONKHEDA TO SHAHDA	6.0	V
		KAN	KAVATHE TO SAKARI	5.0	V
		MANJEERA	LATUR TO NANDED BRIDGE	5.0	V
		PANCHGANGA	SHIROL TO KOLHAPUR	3.2-5.8	V
		PANZARA	VARKHEDE TO DHULE	6.0	V
		RANGAVALI	TINTEMBA TO NAVAPUR	5.0	V
		SAVITRI	DADLI TO MUTHAVALI	3.2-5.0	V
		SURYA	DHAMNI DAM TO PALGHAR	4.4-5.0	V
		TANSA	ALONG THANE	6.0	V
		ULHAS	KALYAN TO BADLAPUR	4.0-5.0	V
		VAITARNA	GANDHRE TO SARASHI	4.0	V
		VASHISTI	KHERDI TO DALVATNE	3.2-3.4	V
MANIPUR		IMPHAL	KANGLA MOAT TO SAMUROU	3.4-6.4	V
		IRIL	KANGLA SIPHAI TO UKHRUL	3.2	V
		KHUGA	KHUGA LAKE TO CHURACHANDPUR	3.1-3.6	V
		KHUJAIROK	MOREH TO MAOJANG	4.3	V
		LOKCHAO	BISHNUPUR TO LOKTAK LAKE	4.5	V
		MANIPUR	SEKMAIJAN TO THOUBAL	3.6-4.3	V
		THOUBAL	SHONG KONG TO PHADOM	3.5	V
		WANGJING	WANGJING TO HEIROK	4.1-4.3	V
MEGHALAYA		KYRHUKHLA	SUTNGA TO KHLIERIAT	10.0	IV
		NONBAH	NANGSTOIN TO WAHRIAT	6.0-7.5	IV
		UMTREW	BYRNIHAT TO MORANG DALA	6.2-8.0	IV
		LUKHA	MYNDIHATI TO SHYMPLONG	6.0	V
		MYNTDU	JOWAI TO PAMHADEM	5.2	V
MIZORAM		TIAU	ALONG CHAMPHAI	11.3	III
		TLAWNG	ALONG ZOBAWK, SAIRANG TO BAIRABI	3.1-6.7	IV
		TUIPUI	ALONG CHAMPHAI	8.2	IV
		TUIVAWL	ALONG KEIFANG	6.8	IV
		CHITE	ALONG ARMED VENG	3.7	V
		MAT	ALONG SERCHHIP	5.5	V
		SAIKAH	ALONG LAWNGTLAI	4.4	V
		TUIKUAL	ALONG SERCHHIP	6.0	V

	TUIRIAL	ALONG TUIRIAL, AIZWAL	3.4-4.6	V
NAGALAND	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
ODISHA	GURADIH NALLAH	ALONG ROURKELA	11.3	III
	KATHAJODI	CUTTACK TO URALI	5.8-11.2	III
	NANDIRAJHOR	D/S TALCHER	2.7 - 13	III
	DAYA	BHUBANESWAR TO BARAGARH	4.0-7.3	IV
	KUAKHAI	URALI TO BHUBANESWAR	6.7-7.7	IV
	BANGURU NALLAH	ALONG TALCHER RENGALI	3.2	V
	BHEDEN	ALONG BHEDEN	3.6	V
	BRAHAMANI	ROURKELA TO BIRITOL	5.8-6.0	V
	BUDHABALNAGA	MAHULIA TO BARIPADA	3.5	V
	KUSUMI	ALONG ANGUL TALCHER	3.2	V
	MAHANADI	SAMBALPUR TO PARADEEP	3.6	V
	MANGALA	ALONG PURI	5.7	V
	NAGAVALLI	JAYKAYPUR TO RAYAGADA	3.5	V
	NUNA	ALONG BIJIPUR, PURI	3.1	V
	RATNACHIRA	ALONG BHUBHNESHWAR, PURI	3.3	V
	RUSHIKULYA	PRATAPPUR TO GANJAM	3.4	V
	SABULIA	ALONG JAGANNATHPATNA, RAMBHA	5.0	V
	SERUA	KHANDAETA TO SANKHATRASA	4.8	V
PUDUCHERRY	ARASALAR	ALONG KARAİKAL	7.0	IV
	CHUNNAMBAR	ALONG ARIYANKUPPAM	6.0	V
PUNJAB	KALI BEIN	SULTANPUR LODHI TO CONF TO BEAS	9.0	IV
	BEAS	ALONG MUKERIAN	3.8	V
RAJASTHAN	BANAS	ALONG BISALPUR DAM, SWAROOPGANJ, NEWTA DAM	13.2	III
	CHAMBAL	SAWAIMADHOPUR TO KOTA	3.2-4.8	V
SIKKIM	MANEY KHOLA	ADAMPOOL TO BURTUKE	3.2-4.5	V
	RANGIT	DAM SITE (NHPC) TO TREVANI	3.2-3.8	V
	RANICHU	NAMLI TO SINGTAM	3.8-4.0	V
	TEESTA	MELLI TO CHUNGTHANG	4.0-4.3	V
TAMIL NADU	BHAVANI	SIRUMUGAI TO KALINGARAYAN	3.3-6.6	IV
	TAMBIRAPANI	PAPPANKULAM TO ARUMUGANERI	3.1-4.0	V
TELANGANA	KARAKAVAGU	ALONG PALWANCHA	18.0	III
	MANER	WARANGAL TO SOMNAPALLI	6-20.0	III
	GODAVARI	BASAR TO KHAMMAM	4.0-9.0	IV
	KINNERSANI	ALONG PALWANCHA	10.0	IV
	KRISHNA	THANGADIGI TO WADAPALLY	5.0-6.0	V
TRIPURA	BURIGAON	ALONG BISHALGARH	3.9	V
	GUMTI	TELKAJILA TO AMARPUR	3.9	V
	HAORA	AGARTALA TO BISHRAMGANJ	3.2-4.0	V
	JURI	ALONG	4.9	V

		DHARMANAGAR		
	KHOWAI	ALONG TELIAMURA	3.3	V
	MANU	ALONG KAILASHAHAR	3.5-3.6	V
UTTAR PRADESH	GOMTI	SITAPUR TO VARANASI	3.1-18.0	III
	GANGA	KANNAUJ TO VARANASI	3.5-8.8	IV
	RAMGANGA	MURADABAD TO KANNAUJ	6.6	IV
	BETWA	HAMIRPUR TO WAGPURA	3.5-4.2	V
	GHAGHARA	BARHALGANJ TO DEORIA	4.0-4.5	V
	RAPTI	DOMINGARH TO RAJGHAT	4.7-5.9	V
	SAI	UNNAO TO JAUNPUR	4.0-4.5	V
	SARYU	AYODHYA TO ELAFATGANJ	4.3	V
UTTARAKHAND	KALYANI	D/S PANT NAGAR	16.0	III
	GANGA	HARIDWAR TO SULTANPUR	6.6	IV
	KOSI	SULTANPUR TO PATTIKALAN	6.4	IV
	NANDOUR	ALONG SITARGANJ	5.6-8.0	IV
	PILKHAR	IN THE VICINITY OF RUDRAPUR	10.0	IV
WEST BENGAL	CHURNI	SANTIPUR TOWN TO MAJHADIA	10.3-11.3	III
	DWARKA	TARAPITH TO SADHAK BAMDEB GHAT	5.6-17.0	III
	GANGA	TRIBENI TO DIAMOND HARBOUR	5.0-12.2	III
	DAMODAR	DURGACHAKM TO DISHERGARH	4.4-8.2	IV
	JALANGI	LAAL DIGHI TO KRISHNA NAGAR	8.3	IV
	KANSI	MIDNAPORE TO RAMNAGAR	9.9	IV
	MATHABHANGA	MADHUPUR TO GOBINDAPUR	8.5	IV
	BARAKAR	KULTI TO ASANSOL	5.7	V
	DWARAKESHWAR	ALONG BANKURA	1-5.6	V
	KALJANI	BITALA TO ALIPURDWAR	6.0	V
	KAROLA	JALPAIGURI TO THAKURER KAMAT	3.9	V
	MAYURKASHI	SURI TO DURGAPUR	5.2	V
	RUPNARAYAN	KOLAGHAT TO BENAPUR	3.1-5.8	V
	SILABATI	GHATAL TO NISCHINDIPUR	3.8	V
	TEESTA	SILIGURI TO PAHARPUR	3.3	V

48. In view of above, it is absolutely necessary that Action Plans are prepared to restore the polluted river stretches to the prescribed standards. The Action Plans may cover the following:

#### **A) Source control**

Source control includes industrial pollution control and treatment and disposal of domestic sewage as detailed below:-

##### **(a) Industrial pollution control**

- (i) Inventorisation of industries
- (ii) Categories of industry and effluent quality

- (iii) Treatment of effluents, compliance with standards and mode of disposal of effluents
- (iv) Regulatory regime.

**(b) Channelization, treatment, utilization and disposal of treated domestic sewage.**

- (i) Identification of towns in the catchment of river and estimation of quantity of sewage generated and existing sewage treatment capacities to arrive at the gap between the sewage generation and treatment capacities;
- (ii) Storm water drains now carrying sewage and sullage joining river and interception and diversion of sewage to STPs,
- (iii) Treatment and disposal of septage and controlling open defecation,
- (iv) Identification of towns for installing sewerage system and sewage treatment plants.

**(B) River catchment/Basin Management-Controlled ground water extraction and periodic quality assessment**

- (i) Periodic assessment of groundwater resources and regulation of ground water extraction by industries particularly in over exploited and critical zones/blocks.
- (ii) Ground water re-charging /rain water harvesting
- (iii) Periodic ground water quality assessment and remedial actions in case of contaminated groundwater tube wells/bore wells or hand pumps.
- (iv) Assessment of the need for regulating use of ground water for irrigation purposes.

**(C) Flood Plain Zone.**

- (i) Regulating activities in flood plain zone.
- (ii) Management of Municipal, Plastic, Hazardous, Bio-medical and Electrical and Electronic wastes.
- (iii) Greenery development- Plantation plan.

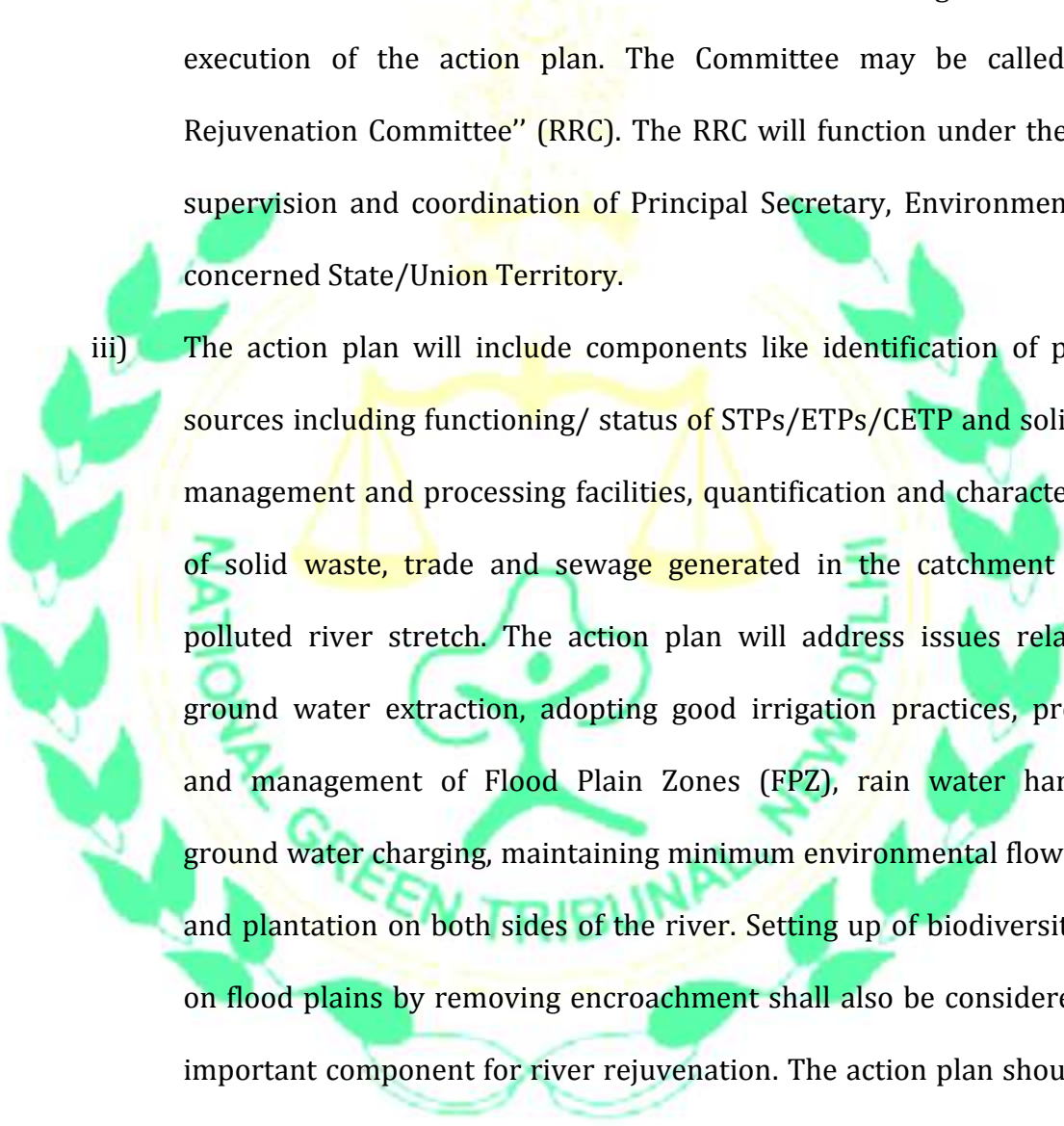
**(D) Ecological/Environmental Flow (E-Flow)**

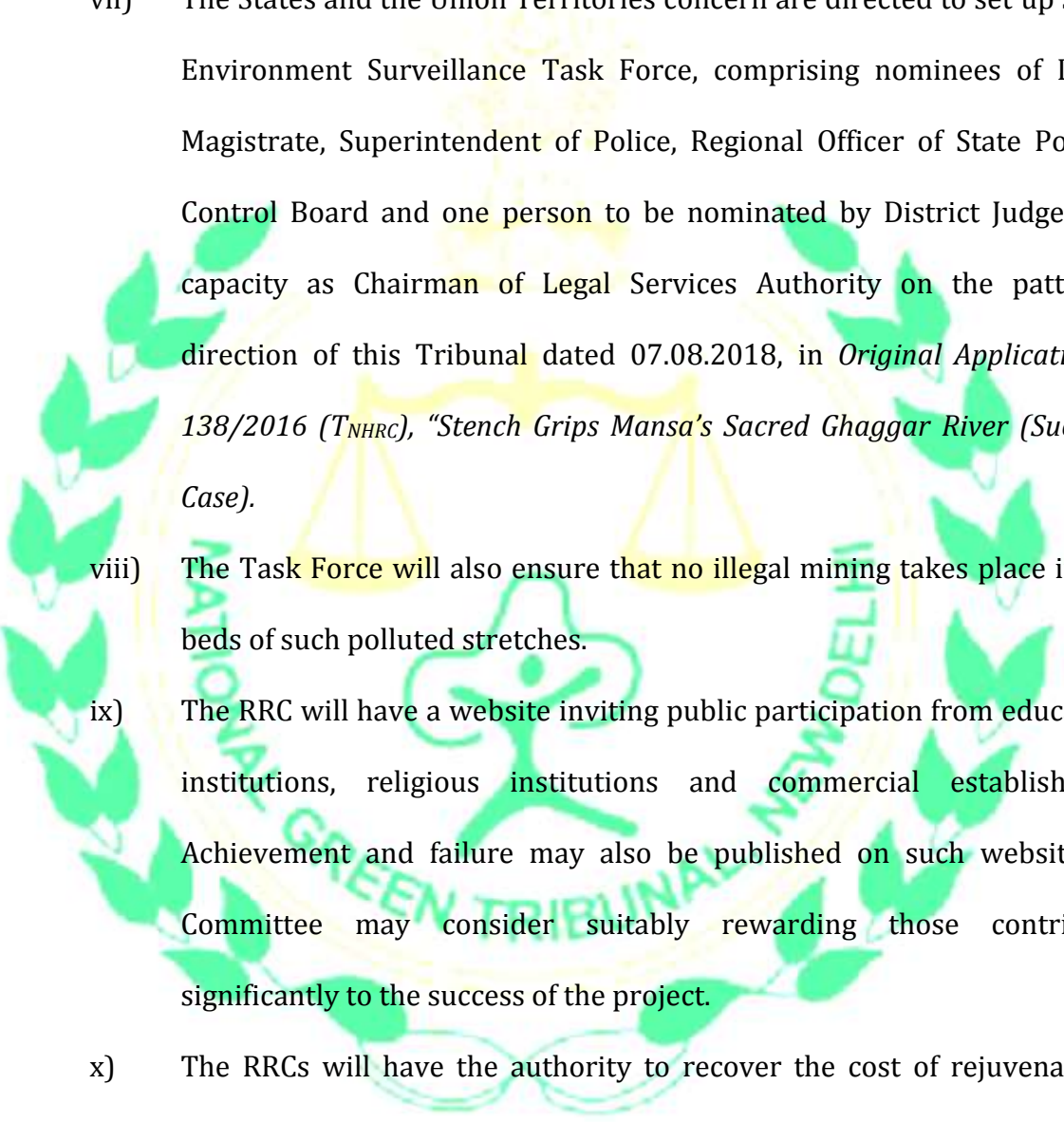
- (a) Issues relating to E-Flow
- (b) Irrigation practices

**(E)** Such other issues which may be found relevant for restoring water quality to the prescribed standards.

49. Model Action Plan for Hindon River, already prepared by the CPCB, may also be taken into account.

50. In view of above, we consider it necessary to issue the following directions:

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- i) All States and Union Territories are directed to prepare action plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e BOD < 3 mg/L and FC < 500 MPN/100 ml) within six months from the date of finalisation of the action plans.
- ii) The action plans may be prepared by four-member Committee comprising, Director, Environment., Director, Urban Development., Director, Industries., Member Secretary, State Pollution Control Board of concerned State. This Committee will also be the Monitoring Committee for execution of the action plan. The Committee may be called "River Rejuvenation Committee" (RRC). The RRC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory.
- iii) The action plan will include components like identification of polluting sources including functioning/ status of STPs/ETPs/CETP and solid waste management and processing facilities, quantification and characterisation of solid waste, trade and sewage generated in the catchment area of polluted river stretch. The action plan will address issues relating to; ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river and plantation on both sides of the river. Setting up of biodiversity parks on flood plains by removing encroachment shall also be considered as an important component for river rejuvenation. The action plan should focus on proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP) and emphasis should be on utilization of treated sewage so as to minimize extraction of ground or surface water. The action plan should have speedy, definite or specific timelines for execution of steps. Provision may be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/ Committee and out of Central Schemes.

- 
- iv) The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.
  - v) The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate action plan, as directed.
  - vi) All States and Union Territories are required to send a copy of Action Plan to CPCB especially w.r.t Priority I & Priority II stretches for approval.
  - vii) The States and the Union Territories concern are directed to set up Special Environment Surveillance Task Force, comprising nominees of District Magistrate, Superintendent of Police, Regional Officer of State Pollution Control Board and one person to be nominated by District Judge in his capacity as Chairman of Legal Services Authority on the pattern of direction of this Tribunal dated 07.08.2018, in *Original Application No. 138/2016 (TNHRC), "Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case)*.
  - viii) The Task Force will also ensure that no illegal mining takes place in river beds of such polluted stretches.
  - ix) The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievement and failure may also be published on such website. The Committee may consider suitably rewarding those contributing significantly to the success of the project.
  - x) The RRCs will have the authority to recover the cost of rejuvenation in Polluter Pays Principle from those who may be responsible for the pollution, to the extent found necessary. In this regard, principle laid down by this Tribunal in order dated 13.07.2017 in *O.A No. 200 of 2014, M.C Mehta Vs. U.O.I* will apply. Voluntary donations, CSR contribution, voluntary services and private participation may be considered in consultation with the RRC.

51. We understand that the State Pollution Control Boards or other authorities are having funds deposited under the order of the Tribunal besides funds available

under Consent Mechanism. The said funds may be utilized for the purpose of expenditure for the Committees, including preparation and execution of action plans in accordance with the provisions contained in the Water Act, 1974.

52. A copy of this be sent by e-mail to all the concerned i.e. the Ministry of Water Resources, Ministry of Environment, Forest & Climate Change, Ministry of Housing and Urban Affairs, the Niti Ayog, National Mission for Clean Ganga, Central Pollution Control Board, Chief Secretaries of all the States and Union Territories for compliance.

53. The RRCs will send progress reports by e-mail at [filing.ngt@gmail.com](mailto:filing.ngt@gmail.com) on or before 15.12.2018.

54. Needless to say, that order of National Green Tribunal is binding as a decree of Court and non-compliance is actionable by way of punitive action including prosecution, in terms of the National Green Tribunal Act, 2010.

55. Put up for consideration of the Report on 19<sup>th</sup> December, 2018.

**New Delhi**  
**September 20, 2018**

....., CP  
(Adarsh Kumar Goel)

....., JM  
(S.P. Wangdi)

....., EM  
(Dr. Nagin Nanda)

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

Original Application No. 673/2018  
(M.A. No. 1777/2018)

WITH

Original Application No. 727/2018

News item published in "The Hindu" authored by Shri Jacob Koshy

Titled

"More river stretches are now critically polluted: CPCB

WITH

Dr. Tudi Indrasena Reddy & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 19.12.2018

**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):

Mr. Sravan Kumar, Advocate in Original  
Application No. 727/2018

For Respondent(s):

Mrs. Sharmila Upadhyay and Mr. Krishna  
Kanodia, Advocates for CPCB  
Mr. Pradeep Misra, Advocate for UPPCB  
Mrs. G. Indira, Mr. K.V. Jagdishvari and  
Ms. Mrinal K. Mondal, Advocates for  
Andaman & Nicobar Administration  
Mr. Dinesh Jindal, LO GNCTD  
Mr. Rajshree Choudhary, Mr. Guntur  
Pramod Kumar, Advocates for State of A.P.  
Mr. Sanjay Kumar, Advocate for HPSPCB  
Mr. Deepak K. Singh, Advocate for State of  
Telangana  
Mr. Dhananjay Baijal and Mr. Nikhil  
Nayyar, Advocates for APPCB and TSPCB

**ORDER**

1. The issue taken up for consideration in this matter is abatement of pollution in 351 river stretches in the country, identified as such by the Central Pollution Control Board (CPCB). The said river stretches

are not meeting the prescribed standards of the water quality in terms of Bio-chemical Oxygen Demand (BOD). Existence of polluted river stretches is evidence to show that the State Pollution Control Boards (SPCBs) have failed to perform their statutory obligation to take appropriate action to achieve the objects of the Water (Prevention and Control of Pollution) Act, 1974.

2. Having regard to the importance of the issue and in the light of judgments of the Hon'ble Supreme Court in *M.C. Mehta Vs. Union of India & Ors.*<sup>1</sup>, *M.C. Mehta Vs. Union of India And Ors.*<sup>2</sup> (Calcutta Tanneries' Matter), *Vellore Citizen' Welfare Forum Vs. Union of India*<sup>3</sup>, *S. Jagannath Vs. Union of India & Ors.*<sup>4</sup>, *And Quiet Flows The Maily Yamuna*<sup>5</sup>, *Tirupur Dyeing Factory Owners Association Vs. Noyyal River Ayacutdars Protection Association & Ors.*<sup>6</sup> and *TechiTagi Tara Vs. Rajendra Singh Bhandari & Ors.*<sup>7</sup> and of this Tribunal in *Manoj Mishra Vs. Union of India*<sup>8</sup>, *M.C. Mehta Vs. Union of India*<sup>9</sup>, *Mahendra Pandey Vs. Union of India & Ors.*<sup>10</sup>, *Sobha Singh & Ors. Vs. State of Punjab & Ors.*<sup>11</sup>, *Nityanand Mishra Vs. State of M.P. & Ors*<sup>12</sup>, *Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case)*<sup>13</sup>, *Doaba Paryavaran Samiti Vs. State of U.P. & Ors.*<sup>14</sup>, *Arvind Pundalik Mhatre Vs. Ministry of Environment, Forest and Climate Change & Ors.*<sup>15</sup>, *Meera Shukla Vs. Municipal Corporation, Gorakhpur & Ors.*<sup>16</sup>, *Amresh Singh Vs. Union of India & Ors.*<sup>17</sup>, *Sudarsan Das Vs. State of West Bengal & Ors.*<sup>18</sup>, *Satish Kumar vs. U.O.I & Ors.*<sup>19</sup>, this Tribunal noted

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<sup>1</sup> (1987) 4 SCC 463 ¶14 & (1988) 1 SCC 471

<sup>2</sup> (1997) 2 SSC 411

<sup>3</sup> (1996) 5 SSC 647

<sup>4</sup> (1997) 2 SCC 87

<sup>5</sup> (2009) 17 SSC 720

<sup>6</sup> (2009) 9 SSC 737

<sup>7</sup> (2018) 11 SCC 734

<sup>8</sup> O.A. No. 6/2012, 2015 ALL(I) NGT REPORTER (1) (DELHI) 139

<sup>9</sup> O.A. No. 200 of 2014, 2017 NGTR (3) PB 1

<sup>10</sup> O.A. No. 58/2017

<sup>11</sup> O.A.No. 101/2014

<sup>12</sup> O.A. No. 456/2018

<sup>13</sup> O.A. No. 138/2016 (T<sub>NHRC</sub>)

<sup>14</sup> O.A. No. 231/2014

<sup>15</sup> O.A. No. 125/2018

<sup>16</sup> O.A. No. 116/2014

<sup>17</sup> Execution Application No. 32/2016 in O.A. No. 295/2016

<sup>18</sup> O.A.No. 173 of 2018

<sup>19</sup> O.A.No. 56 (T<sub>HC</sub>) of 2013

the need for steps to check discharge of untreated sewage and effluents, plastic waste, e-waste, bio-medical waste, municipal solid waste, diversion of river waters, encroachments of catchment areas and floodplains, over drawal of groundwater, river bank erosion on account of illegal sand mining. There is need for installation of Effluent Treatment Plants (ETPs), Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs), Solid Waste Treatment and processing facilities etc.

3. It was also noted that BOD was required to be less than 3.0 mg/l, Dissolved Oxygen more than 5.0 mg/l and Faecal Coliform bacteria less than 500 MPN/100 ml.
4. The Tribunal also noted that as per data published by the CPCB in January, 2018, 30,042 million litres per day (MLD) of domestic sewage is generated from urban areas along the polluted river stretches. The installed sewage treatment capacity is about 16,846 MLD, leaving a gap of about 13,196 MLD (43.9%). There is a large gap in sewage treatment capacity and generation of sewage in urban areas.
5. The Tribunal also noted that on the one hand, there is need to enhance the river flow through intervention on the water sheds/catchment areas for conservation and recharge of rain water for subsequent releases during lean flow period in a year and on the other hand, there is need to dilute the pollutants in the rivers and streams so as to reduce concentration to meet the desired level of water quality and extent of flow as per prescribed norms. This called for preparation of action plan including the water shed management by way of (a) Recognition phase (b) Restoration phase (c) Protection phase (d) Improvement phase. Attention was also required for agriculture and forest management and production, forage

production and pasture management, socio-economic conditions to achieve the objectives of watershed management.

6. The object of the action plan should be to restore the water quality for which model action plan prepared for river Hindon could be taken into account. Salient features of the action plan are to be:

- i. Execution of field surveys to assess pollution load generated by industries and sewage generated in a city or town discharging sewage and trade effluent into river Hindon and its tributaries.
- ii. Collating water quality monitoring data of river Hindon and its tributaries and assigning the class as per primary water quality criteria.
- iii. Water quality assessment of river in context of sewage/industrial drain outfalls with dilution and distance factors.
- iv. Laying time-limits for regulating industrial pollution control by ensuring consent compliance and closing the defaulting industries till they comply with the norms stipulated to them.
- v. Setting up of STPs in towns located in the river catchment and emphasis on utilization of treated sewage.
- vi. Adopting water conservation practices, ground water regulation, flood plain zone management and maintaining environmental flow.

7. The Tribunal also referred to different actions to be taken for different categories of the priorities for the action plan to deal with the source control, treatment of sewage, ground water, regulation, activities in flood plain zone, e-flow and other issues.

8. The direction issued by the Tribunal was to constitute River Rejuvenation Committee (RRC) comprising of Directors of Environment, Urban Development, Industries and Member

Secretaries of the SPCBs so as to identify pollution sources, functioning/status of STPs/ETPs/CETP and solid waste management and processing facilities, quantification and characterisation of solid waste, trade and sewage generated in the catchment areas of polluted river stretch. The action plan is to address issues relating to ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river and plantation on both sides of the river, setting up of bio-diversity parks, interception and diversion of sewage carrying drains to the STP. The Chief Secretaries of States were to be personally accountable for failure to formulate the action plans.

9. This Tribunal directed action plans to be prepared within two months with the contemplation that water quality will be fit for bathing purposes within six months from the date of the action plan. We are informed that out of 29 States and 7 Union Territories (UTs), total of 16 States/UTs have prepared the draft action plans and 15 have failed to do so.
10. As already noted, contamination of water and deterioration of water quality are matters to be taken seriously as they affect public health and right of citizen to have access to potable drinking water. Unfortunately, in spite of categorical directions of this Tribunal in the order dated 20.09.2018 based on earlier judgments of the Hon'ble Supreme Court and this Tribunal, 15 States and UTs have failed to carry out the order of this Tribunal. The said States and UTs have not even taken the first requisite step of preparing an action plan, showing total insensitivity to such a serious matter and

public issue. With great regret, we may be left with no opinion but to take coercive action, if there is further failure.

11. We also find that for 16 States/UTs which have prepared action plans, the action plans are not complete. Base line data has not been given, preparation of action plans has been assigned to third parties, details of STPs etc. are also not given, timelines given are too long, status of e-flow has not been given, action plans are not proposed to be placed on websites to involve educational and other institutions and the public at large. The said States/ UTs may now give revised reports on or before 31.01.2019 to CPCB after complying with the deficiencies. The CPCB shall examine the action plans and only if they meet the scientific and technical yardstick shall approve the same and convey it to the respective States/UTs. The States/ UTs after its approval shall place/host these action plans on the respective website giving clear timelines for its execution, agencies responsible for its execution along with the matching budgetary provisions.

12. By way of last opportunity, we extend the time for preparation of action plans till 31.01.2019 with the stipulation that for every delay thereafter, 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. The payment will be the responsibility of the Chief Secretaries of the States/Administrators of the UTs and the amount may be recovered from the erring officers. The CPCB may prominently place the names of the defaulting States and UTs and a notice to this effect on its website.

13. The SPCBs and Pollution Control Committees of UTs may display the quality of the water of polluted river stretches on their respective websites within one month from today, alongwith action taken, if any, which may be revised every three months. The CPCB may also display the water quality of the river stretches and action/inaction by such States on its websites. It is made clear that BOD will not be the sole criteria to determine whether a particular river stretch is a polluted river stretch. Other parameters including Faecal Coliform (FC) bacteria will also be the criteria for classifying a stretch as polluted or otherwise. CPCB may devise within two weeks a mechanism for classification wherein two criteria pollutants that is BOD and FC shall henceforth be basis of classification in Priority Classes.

14. The CPCB may also examine whether river Rangpo in Sikkim falls in the category of polluted river stretches and if it is so, CPCB may give appropriate directions with regard to the said river also.

15. Any incomplete action plan will be treated as non-compliance. Performance guarantees are to be furnished for implementation of action plans within the above stipulated time to the satisfaction of Central Pollution Control Board in the sum of:

- (i) Rs. 15 crore for each of Priority I & II stretches
- (ii) Rs. 10 crore for each of Priority III stretches
- (iii) Rs. 5 crore for each of Priority IV & V stretches.

16. The CPCB will be at liberty to take further coercive measures against the States/UTs concerned and furnish a consolidated report to this Tribunal by 28.02.2019 by e-mail at [ngt.filing@gmail.com](mailto:ngt.filing@gmail.com).

List for further consideration on 08.04.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

December 19, 2018

Original Application Nos. 673/2018 & 727/2018

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

Original Application No.673/2018  
(M.A. No. 1777/2018)

News item published in “The Hindu” authored by Shri Jacob Koshy  
titled  
“More river stretches are now critically polluted : CPCB

Date of hearing: 08.04.2019

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

For Applicant(s): None

For Respondent (s): Ms. Sharmila Upadhyay, Advocate for CPCB  
Dr. S.D. Singh, APCCF, Uttarakhand

**ORDER**

1. The question for consideration is the remedial action to tackle the major problem of rivers pollution which is manifested in the form of 351 identified polluted river stretches based on the data compiled by the Central Pollution Control Board (CPCB) on the basis of analysis of sample by the State Pollution Control Boards (State PCB) as per National Water Quality Monitoring Programme (NWQMP) undertaken by the CPCB.
2. The Tribunal considered the matter by way of chamber meeting on 10.09.2018 with the participation of all the Members of the Tribunal and the representatives of CPCB, the Ministry of Water Resources

(MoWR), the Ministry of Environment, Forest & Climate Change (MoEF&CC), the NITI Aayog, the National Mission for Clean Ganga (NMCG), Ministry of Housing and Urban Affairs (MoHUA), States of Maharashtra, Gujarat, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Bihar, Punjab, Uttar Pradesh, NCT of Delhi and the Union Territory of Daman & Diu. (Some of the States appeared by video conferencing.

3. Present proceedings were initiated based on a news item dated 17.09.2018 in "The Hindu" under the heading "More river stretches are now critically polluted: CPCB"<sup>1</sup>.
4. According to the news item, 351 polluted river stretches have been noted by the Central Pollution Control Board (CPCB). 117 such stretches are in the States of Assam, Gujarat, and Maharashtra. The CPCB has apprised the concerned States of the extent of pollution in the rivers. Most polluted stretches are from Powai to Dharavi – with Biochemical Oxygen Demand (BOD) 250 mg/L; the Godavari - from Someshwar to Rahed – with BOD of 5.0-80 mg/L; the Sabarmati – Kheroj to Vautha – with BOD from 4.0-147 mg/L; and the Hindon – Saharanpur to Ghaziabad – with a BOD of 48-120 mg/L. The CPCB has a programme to monitor the quality of rivers by measuring BOD. BOD greater than or equal to 30mg/L is termed as 'Priority I', while that between 3.1-6 mg/L is 'Priority V'. The CPCB considers BOD less than 3mg/L an indicator of a healthy

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<sup>1</sup><https://www.thehindu.com/news/national/more-river-stretches-critically-polluted-cpcb/article24962440.ece>

river. In its 2015 Report<sup>2</sup>, the CPCB had identified 302 polluted stretches on 275 rivers, spanning 28 States and six Union Territories. The number of such stretches has now been found to be 351 in 2018.

5. The Water (Prevention and Control of Pollution) Act, 1974 prohibits use of any stream or well for disposal of polluted matter. Any person doing so is punishable.
6. Article 48A of the Constitution casts a duty on the State to protect and improve the environment. Article 51A imposes a fundamental duty on every citizen to protect and improve the environment. The Stockholm Declaration (1972) recommended prevention of pollution by adopting the 'Precautionary Principle', the 'Polluter Pays Principle' and the principle of 'Sustainable Development'.
7. In spite of above, in flagrant violation of law of the land, polluted water in the form of sewage, industrial effluents or otherwise has continued to be discharged in the water bodies including the rivers or the canals meeting the rivers. Violation of law is not only by private citizens but also statutory bodies including the local bodies and also failure of the regulatory authorities in taking adequate steps.
8. Above situation led to consideration of the matter by the Hon'ble Supreme Court in the context of pollution of river pallar in Tamil

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<sup>2</sup><http://cpcb.nic.in/cpcb/RESTORATION-OF-POLLUTED-RIVER-STRETCHES.pdf>

Nadu<sup>3</sup> and river Noyyal. In *M.C. Mehta Vs. Union of India & Ors.*<sup>4</sup>, directions to enforce the statutory provisions by the municipal bodies and the industries by stopping discharge of untreated sewage and effluents in River Ganga were issued by the Hon'ble Supreme Court. It was noted that the water pollution caused serious diseases, including Cholera and Typhoid. Water pollution could not be ignored and adequate measures for prevention and control are necessary. It was also observed that the educational institutions must teach at least for one hour in a week lessons relating to protection and improvement of environment. Awareness should be created by organizing suitable awareness programs. In the same matter, the issue of Calcutta tanneries was considered in *M.C Mehta Vs. Union of India And Ors.*<sup>5</sup>, (Calcutta Tanneries' Matter). The tanneries were directed to be shifted by adopting the 'Precautionary Principle' so as to prevent discharge of effluents in the River Ganga.

9. This Tribunal also considered the issue of pollution of river Yamuna, in *Manoj Mishra Vs. Union of India*<sup>6</sup>, river Ganga in *M.C. Mehta Vs. Union of India*<sup>7</sup>, river Ramganga which is a tributary of river Ganga in *Mahendra Pandey Vs. Union of India & Ors.*<sup>8</sup>, rivers Sutlej and Beas in the case of *Sobha Singh & Ors. Vs. State of Punjab & Ors.*<sup>9</sup>, river Son in *Nityanand Mishra Vs. State of M.P. & Ors.*<sup>10</sup>, river

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<sup>3</sup>*Vellore Citizen' Welfare Forum v. Union of India*, (1996) 5 SSC 647

<sup>4</sup> (1988) 1 SCC 471

<sup>5</sup> (1997) 2 SSC 411

<sup>6</sup>O.A. No. 6/2012, 2015 ALL(I) NGT REPORTER (1) (DELHI) 139

<sup>7</sup>O.A No. 200 of 2014, 2017 NGTR (3) PB 1

<sup>8</sup>O.A. No. 58/2017

<sup>9</sup>O.A.No. 101/2014

<sup>10</sup>O.A. No. 456/2018

Ghaggar in Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case)<sup>11</sup>”, river Hindon in *Doaba Paryavaran Samiti Vs. State of U.P. & Ors.*<sup>12</sup>, river Kasardi in *Arvind Pundalik Mhatre Vs. Ministry of Environment, Forest and Climate Change & Ors.*<sup>13</sup>, River Ami, Tapti, Rohani and Ramgarh lake in *Meera Shukla Vs. Municipal Corporation, Gorakhpur & Ors.*<sup>14</sup>, rivers Chenab and Tawi in the case of *Amresh Singh Vs. Union of India & Ors.*<sup>15</sup> and *Subarnarekha in Sudarsan Das Vs. State of West Bengal & Ors.*<sup>16</sup> and issued directions from time to time.

10. On 08.08.2018, in *Doaba Paryavaran Samiti Vs. State of U.P. & Ors.*<sup>17</sup>, pollution in river Hindon was the subject matter of consideration. The matter was taken up on the allegation that 71 persons in Baghpat district died and more than 1000 persons were affected by diseases on account of pollution. The Tribunal noted that there was contamination of groundwater on account of pollution caused by sugar, paper, distilleries and tannery industries. An inspection team appointed by the Tribunal, found that 124 industries were causing pollution. It was noted that no punitive action has been initiated. The pollution caused included discharge of Mercury. The Tribunal observed that sources of contaminated water are required to be closed. The victims of diseases are required to be rehabilitated. A statement that there are 302 river stretches in the

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<sup>11</sup>O.A. No. 138/2016 (T<sub>NHRC</sub>)

<sup>12</sup> O.A. No. 231/2014

<sup>13</sup> O.A. No. 125/2018,

<sup>14</sup> O.A. No. 116/2014,

<sup>15</sup> Execution Application No. 32/2016 in O.A. No. 295/2016,

<sup>16</sup>O.A.No. 173 of 2018

<sup>17</sup> O.A. No. 231/2014

country was noted and the CPCB was directed to identify at least 10 most critical stretches and prepare an action plan, in similar format as that of river Hindon<sup>18</sup>. The directions issued by the Tribunal include making functionaries of the statutory authorities accountable for their failure, making potable water available, sources of contamination being closed, action plans being prepared at District, State and National levels for restoration of water quality and reversing the damage. The Committee headed by a former Judge of High Court was also constituted to oversee the execution of the directions.

11. As already noted, well known causes of pollution of rivers are dumping of untreated sewage and industrial waste, garbage, plastic waste, e-waste, bio-medical waste, municipal solid waste, diversion of river waters, encroachments of catchment areas and floodplains, over drawl of groundwater, river bank erosion on account of illegal sand mining. In spite of directions to install Effluent Treatment Plants (ETPs), Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs), and adopting other anti-pollution measures, satisfactory situation has not been achieved. Tough governance is the need of the hour. If pollution does not stop, the industry has to be stopped. If sewage dumping does not stop, local bodies have to be made accountable and their heads are to be prosecuted. Steps have to be taken for awareness and public involvement.

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<sup>18</sup>Hindon action plan prepared by CPCB is explained in para 46

12. River Water is considered to be fit for bathing when it meets the criteria of having Bio-chemical Oxygen Demand (BOD) less than 3.0 mg/L, Dissolved Oxygen more than 5.0 mg/L and Faecal Coliform bacteria to be less than 500 MPN/100 ml.
13. As already noted, according to latest assessment by the CPCB, there are 351 polluted river stretches in India i.e. where the BOD content is more than 3mg/L. The plan of CPCB is to target enhancement of river flow. The plan for restoration of polluted river stretches is proposed to be executed through two-fold concepts. One concept is to target enhancement of river flow through interventions on the water sheds/catchment areas for conservation and recharge of rain water for subsequent releases during lean flow period in a year. This concept will work on dilution of pollutants in the rivers and streams to reduce concentration to meet desired level of water quality. Other concept is of regulation and enforcement of standards in conjunction with the available flow in rivers /streams and allocation of discharges with stipulated norms.
14. In view of above, this Tribunal found it necessary to take up the matter and direct preparation and execution of river action plans to control pollution and restore water quality of the river as per norms within reasonable time. There have been successful river cleaning programmes in other countries such as relating to rivers Thames(England), Rhine(Germany) and Danube(France). There is no reason why our polluted river stretches cannot be restored.

15. Accordingly, vide order dated 20.09.2018, the Tribunal issued following directions:-


- “ i) *All States and Union Territories are directed to prepare action plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e BOD < 3 mg/L and FC < 500 MPN/100 ml) within six months from the date of finalisation of the action plans.*
- ii) *The action plans may be prepared by four-member Committee comprising, Director, Environment, Director, Urban Development., Director, Industries., Member Secretary, State Pollution Control Board of concerned State. This Committee will also be the Monitoring Committee for execution of the action plan. The Committee may be called “River Rejuvenation Committee” (RRC). The RRC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory.*
- iii) *The action plan will include components like identification of polluting sources including functioning/ status of STPs/ETPs/CETP and solid waste management and processing facilities, quantification and characterisation of solid waste, trade and sewage generated in the catchment area of polluted river stretch. The action plan will address issues relating to; ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river and plantation on both sides of the river. Setting up of biodiversity parks on flood plains by removing encroachment shall also be considered as an important component for river rejuvenation. The action plan should focus on proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP) and emphasis should be on utilization of treated sewage so as to minimize extraction of*

*ground or surface water. The action plan should have speedy, definite or specific timelines for execution of steps. Provision may be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/ Committee and out of Central Schemes.*

- iv) The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.*
- v) The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate action plan, as directed.*
- vi) All States and Union Territories are required to send a copy of Action Plan to CPCB especially w.r.t Priority I & Priority II stretches for approval.*
- vii) The States and the Union Territories concern are directed to set up Special Environment Surveillance Task Force, comprising nominees of District Magistrate, Superintendent of Police, Regional Officer of State Pollution Control Board and one person to be nominated by District Judge in his capacity as Chairman of Legal Services Authority on the pattern of direction of this Tribunal dated 07.08.2018, in Original Application No. 138/2016 (T<sub>NHRC</sub>), "Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case).*
- ix) The Task Force will also ensure that no illegal mining takes place in river beds of such polluted stretches.*
- x) The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievement and failure may*

*also be published on such website. The Committee may consider suitably rewarding those contributing significantly to the success of the project.”*

16. The Tribunal suggested that action plan prepared for River Hindon could be taken as a model for restoration of water quality.<sup>19</sup> Salient features of the said Action Plan are:

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- i. Execution of field surveys to assess pollution load generated by industries and sewage generated in a city or town discharging sewage and trade effluent into river Hindon and its tributaries.
  - ii. Collating water quality monitoring data of Hindon and its tributaries and assigning the class as per primary water quality criteria.
  - iii. Water quality assessment of river in context of sewage/industrial drain outfalls with dilution and distance factors.
  - iv. Laying time-limes for regulating industrial pollution control by ensuring consent compliance and closing the defaulting industries till they comply with the norms stipulated to them.
  - v. Setting up of STPs in towns located in the river catchment and emphasis on utilization of treated sewage.
  - vi. Adopting water conservation practices, ground water regulation, flood plain zone management and maintaining environmental flow.

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<sup>19</sup> <http://cpcb.nic.in/NGT/CPCB-Reply-Affidavit-Report-on-Hindon-Action-Plan.pdf>

17. The data for the polluted river stretches indicated that the river stretches were identified in 5 categories as follows:-

**I. Criteria for Priority I**

- (a) Monitoring locations exceeding BOD concentration 30 mg/L has been considered as it is the standard of sewage treatment plant and in river it appears without dilution.(River locations having water quality exceeding discharge standards for BOD to fresh water sources)
- (b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.
- (c) Monitoring locations exceeding 3 mg/L BOD are not meeting desired water quality criteria but does not affect to Dissolved Oxygen level in water bodies. If BOD exceeds 6mg/L in water body, the Dissolved Oxygen is reduced below desired levels.
- (d) The raw water having BOD levels upto 5 mg/L are does not form complex chemicals on chlorination for municipal water supplies. Hence the water bodies having BOD more than 6 mg/L are considered as polluted and identified for remedial action.

**II. Criteria for Priority II**

- (a) Monitoring locations having BOD between 20-30 mg/L.
- (b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

**III. Criteria for Priority III**

- (a) Monitoring locations having BOD between 10-20 mg/L.
- (b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

**IV. Criteria for Priority IV**

- (a) Monitoring locations having BOD between 6-10 mg/L.

**V. Criteria for Priority V**

- (a) Monitoring locations having BOD between 3-6 mg/l.
- (b) The locations exceeding desired water quality of 3mg/l BOD.

18. Table showing location and categories are reproduced in the said order. The action plans were required to cover the following:-

**A) Source control**

Source control includes industrial pollution control and treatment and disposal of domestic sewage as detailed below:-

**(a) Industrial pollution control**

- (i) Inventorisation of industries
- (ii) Categories of industry and effluent quality
- (iii) Treatment of effluents, compliance with standards and mode of disposal of effluents
- (iv) Regulatory regime.

**(b) Channelization, treatment, utilization and disposal of treated domestic sewage.**

- (i) Identification of towns in the catchment of river and estimation of quantity of sewage generated and existing sewage treatment capacities to arrive at the gap between the sewage generation and treatment capacities;
- (ii) Storm water drains now carrying sewage and sullage joining river and interception and diversion of sewage to STPs,
- (iii) Treatment and disposal of septage and controlling open defecation,
- (iv) Identification of towns for installing sewerage system and sewage treatment plants.

**(B) River catchment/Basin Management-Controlled ground water extraction and periodic quality assessment**

- (i) Periodic assessment of groundwater resources and regulation of ground water extraction by industries particularly in over exploited and critical zones/blocks.

- (ii) Ground water re-charging /rain water harvesting
- (iii) Periodic ground water quality assessment and remedial actions in case of contaminated groundwater tube wells/bore wells or hand pumps.
- (iv) Assessment of the need for regulating use of ground water for irrigation purposes.

**(C) Flood Plain Zone.**

- (i) Regulating activities in flood plain zone.
- (ii) Management of Municipal, Plastic, Hazardous, Bio-medical and Electrical and Electronic wastes.
- (iii) Greenery development- Plantation plan.

**(D) Ecological/Environmental Flow (E-Flow)**

- (a) Issues relating to E-Flow
- (b) Irrigation practices

**(E)** Such other issues which may be found relevant for restoring water quality to the prescribed standards.

19. The matter was thereafter taken up for consideration on 19.12.2018. It was noted that contamination of water and deterioration of water quality are matters to be taken seriously as they affect public health and right of citizen to have access to potable drinking water. Unfortunately, in spite of categorical directions of this Tribunal in the order dated 20.09.2018 based on earlier judgments of the Hon'ble Supreme Court and this Tribunal, 15 States and UTs failed to carry out the order of this Tribunal. The said States and UTs had not even taken the first requisite step of preparing action plans, showing total insensitivity to such a serious matter and public issue.

20. We also found that for 16 States/UTs which had prepared action plans, the action plans are not complete. Base line data was not been given, Preparation of action plans was assigned to third parties. Details of STPs etc. were not given. Timelines given were too long. Status of e-flow was not been given, action plans were not proposed to be placed on websites to involve educational and other institutions and the public at large. The said States/ UTs were directed to give revised reports on or before 31.01.2019 to CPCB after complying with the deficiencies. The CPCB was to examine the action plans and if they met the scientific and technical yardstick, was to approve the same and convey it to the respective States/UTs. The States/ UTs, after approval were to place/host these action plans on the respective website giving clear timelines for execution, agencies responsible for execution along with the matching budgetary provisions.
21. By way of last opportunity, we extended the time for preparation of action plans till 31.01.2019 with the stipulation that for delay thereafter, compensation for damage to the environment was to 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. The payment was to be the responsibility of the Chief Secretaries of the States/Administrators of the UTs and the amount could be recovered from the erring officers. The CPCB was to prominently

place the names of the defaulting States and UTs and a notice to this effect on its website.

22. The SPCBs and Pollution Control Committees of UTs were to display the quality of the water of polluted river stretches on their respective websites within one month, along with action taken, if any, which was to be revised every three months. The CPCB was also to display the water quality of the river stretches and action/inaction by such States on its websites. It was made clear that BOD will not be the sole criteria to determine whether a particular river stretch is a polluted river stretch. Other parameters including Faecal Coliform (FC) bacteria will also be the criteria for classifying a stretch as polluted or otherwise. CPCB was to devise within two weeks a mechanism for classification wherein two criteria pollutants that is BOD and FC shall henceforth be basis of classification in Priority Classes.

23. The Tribunal directed that the CPCB may also examine whether river Rangpo in Sikkim falls in the category of polluted river stretches and if it is so, CPCB may give appropriate directions with regard to the said river also.

24. Further direction in the order dated 19.12.2018 is that any incomplete action plan will be treated as non-compliance. Performance guarantees are to be furnished for implementation of action plans within the above stipulated time to the satisfaction of Central Pollution Control Board in the sum of:

- (i) Rs. 15 crore for each of Priority I & II stretches
- (ii) Rs. 10 crore for each of Priority III stretches
- (iii) Rs. 5 crore for each of Priority IV & V stretches.

25. We have taken up the matter for consideration to consider further progress. Apart from response of other parties, consolidated and updated reports have been filed by the CPCB on 05.04.2019.

26. Before proceeding further, we may also note that vide order dated 16.01.2019 in Original Application No. 606 of 2018, dealing with the issue of compliance of Municipal Solid Waste Management Rules and other important issues, the Tribunal directed presence of Chief Secretaries of all States/ Union Territories on specified dates before this Tribunal in person after monitoring the progress in their respective States on several issues, including the issue of polluted river stretches. By now, Chief Secretaries of Himachal Pradesh, Haryana, Punjab, Delhi, Bihar, Odisha, Uttarakhand, and West Bengal and Advisor to Administrator, Chandigarh have appeared in person before this Tribunal and indicated progress in the said States/UTs which was not found to be satisfactory and further directions have been issued on 05.03.2019, 06.03.2019, 07.03.2019, 11.03.2019, 15.03.2019, 26.03.2019, 07.03.2019, 26.03.2019 and 02.04.2019.

27. Coming to the updated consolidated report dated 05.04.2019 filed by the CPCB, we find that 28 States and 3 Union Territories have constituted River Rejuvenation Committees (RRCs). The CPCB

constituted a 'Task Team' for scrutiny of the action plans under the Chairmanship of Member Secretary, CPCB. So far, CPCB has received 41 out of 45 action plans with reference to P-I, 14 out of 16 action plans with reference to P-II and total 182 action plans received with reference to P-III to P-V polluted river stretches. 6 out of 61 action plans in respect of P-I and P-II have not been received from the States of Assam (P-I: 3 viz., Bharalu, Borsola, Silsako) and P-II:1 (Sorusola)), Manipur (P-II: 1 viz., Nambu) and Uttar Pradesh (P-I: viz., river Hindon). It is also submitted that the action plan in respect of River Hindon is required to be implemented by the Government of Uttar Pradesh in compliance to the Hon'ble NGT Orders passed in Original Application No. 231/2014 & Original Application No.66/2015. State-wise Identified Polluted River stretches and the Status of Action Plans received (as on 03.04.2019) is given in Table 2.

***"Table 2. State-wise Identified Polluted River stretches and the Status of Action Plans as received by CPCB (as on 04.04.2019)"***

Name of the State / UT	Total No. of Identified Polluted River Stretches (PRS)	Priority I Identified Polluted River Stretches		Priority II Identified Polluted River Stretches		Priority - III to V Identified Polluted River Stretches		Total Action Plans Received
		No. of P-I PRS	Action Plans received w.r.to P-I	No. of P-II PRS	Action Plans received w.r.to P-II	No. of P-III to P-V	Action Plans received w.r.to P-III to P-V	
Andhra Pradesh	5	0	0	0	0	5	5	5
<b>Assam</b>	<b>44</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>40</b>	<b>1</b>	<b>1</b>
Bihar	6	0	0	0	0	6	6	6
Chhattisgarh	5	0	0	0	0	5	5	5
DD & DNH	1	1	1	0	0	0	0	1

Delhi	1	1	1	0	0	0	0	1
Goa	11	0	0	0	0	11	9	9
Gujarat	20	5	5	1	1	14	14	20
Haryana	2	2	2	0	0	0	0	2
Himachal Pradesh	7	1	1	1	1	5	5	7
Jammu & Kashmir	9	0	0	1	1	8	8	9
Jharkhand	7	0	0	0	0	7	7	7
Karnataka	17	0	0	0	0	17	17	17
Kerala	21	1	1	0	0	20	0	1
Madhya Pradesh	22	3	3	1	1	18	0	4
Maharashtra	53	9	9	6	6	38	38	53
<b>Manipur</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>
Meghalaya	7	2	2	0	0	5	5	7
Mizoram	9	0	0	0	0	9	0	0
Nagaland	6	1	1	0	0	5	5	6
Odisha	19	1	1	0	0	18	8	9
Puducherry	2	0	0	0	0	2	2	2
Punjab	4	2	2	0	0	2	2	4
Rajasthan	2	0	0	0	0	2	2	2
Sikkim	4	0	0	0	0	4	4	4
Tamil Nadu	6	4	4	0	0	2	2	6
Telangana	8	1	1	2	2	5	5	8
Tripura	6	0	0	0	0	6	6	6
<b>Uttar Pradesh</b>	<b>12</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>6</b>	<b>9</b>
Uttarakhand	9	3	3	1	1	5	5	9
West Bengal	17	1	1	1	1	15	15	17
<b>Grand Total</b>	<b>351</b>	<b>45</b>	<b>41</b>	<b>16</b>	<b>14</b>	<b>290</b>	<b>182</b>	<b>237</b>

28. State-wise status of action plans received and the action plans recommended for approval by the CPCB Task Team is enclosed as Table 3.

**“Table 3. State-wise status of action plans received and the action plans recommended for approval by the CPCB Task Team w.r.t Priority I & Priority II Polluted Rivers (as on 03.04.2019)**

STATE	Total Identified Polluted River	Identified PRS Priority	Identified Priority	No. of Action Plans	No. of Action Plans Not	Action Plans Not	Action plans approved subject
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	Stretches (PRS) Priority-I & Priority II	-I	- II	Received	Received	Recommended for approval	to conditions
ASSAM	4	3	1	0	4	-	0
DAMAN, DIU AND DADRA NAGAR HAVELI	1	1	0	1	0	-	1
DELHI	1	1	0	1	0	1	0
GUJARAT	6	5	1	6	0	-	6
HARYANA	2	2	0	2	0	-	2
HIMACHAL PRADESH	2	1	1	2	0	-	2
JAMMU & KASHMIR	1	0	1	1	0	-	1
KERALA	1	1	0	1	0	-	1
MADHYA PRADESH	4	3	1	4	0	-	4
MAHARASHTRA	15	9	6	15	0	-	15
MANIPUR	1	0	1	0	1	-	0
MEGHALAYA	2	2	0	2	0	2	0
NAGALAND	1	1	0	1	0	1	0
ODISHA	1	1	0	1	0	-	1
PUNJAB	2	2	0	2	0	-	2
TAMIL NADU	4	4	0	4	0	4	0
TELANGANA	3	1	2	3	0	-	3
UTTAR PRADESH	4	4	0	3	1	3	0
UTTARAKHAND	4	3	1	4	0	4	0
WEST BENGAL	2	1	1	2	0	-	2
<b>TOTAL</b>	<b>61</b>	<b>45</b>	<b>16</b>	<b>55</b>	<b>6</b>	<b>15</b>	<b>40</b>

29. 55 out of 61 total action plans received so far, 40 action plans pertaining to the States /UT of Daman [P-I (01) ], Gujarat [P-I (5), P-

II (01)], Haryana [P-I (01), P-II (01)], Himachal Pradesh [P-I (01), P-II (1)], J & K [P-II (01) ], Kerala [P-I (01)], Madhya Pradesh [P-I (03), P-II (1)], Maharashtra [P-I (09), P-II (06)], Odisha [P-I (1)], Punjab [P-I (02)], Telangana [P-I (01), P-II (02)] and West Bengal [P-I (01) and P-II (01)] have been approved along with the conditions. 15 action plans received require further improvement with reference to either of the following:

- (i) Identification of polluting sources including drains contributing to river pollution, functioning status of STPs/ETPs/CETP and solid waste management and processing facilities;
- (ii) Map showing Polluted River, its tributaries, drains, major towns, industrial estates, location of STPs/CETPs
- (iii) Detailed gap analysis w.r.t town-wise water consumption (including ground water consumption), sewage generation, existing infrastructure in the catchment area of the and the gap analysis;
- (iv) Detailed gap analysis w.r.t industrial water consumption, wastewater generation, existing infrastructure for treatment of industrial effluent (both captive ETPs/CETPs and their performance assessment), gap analysis w.r.to the industrial effluent management in the catchment area;
- (v) Quantification and characterisation of waste (such as solid waste, industrial hazardous waste, bio-medical waste, E-Waste), STP sludge management, existing infrastructure and detailed gap analysis;
- (vi) Latest Water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;
- (vii) Aspects such as ground water extraction, adopting good irrigation practices, protection and management of Flood

Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river (by having watershed management provisions), plantation on both sides of the river, setting up biodiversity parks on flood plains by removing encroachment., proper interception and diversion of sewage carrying drains to Sewage Treatment Plant (STP), upgradation of existing sewage treatment plants if not in a position to comply with effluent discharge norms, emphasis on utilization of treated sewage so as to minimize extraction of ground or surface water be included,

- (viii) Speedy, definite or specific timelines for execution of action plans and the estimated budget including the monitoring agency
- (ix) Achievable goals with specific timelines for restoration of water quality of polluted rivers
- (x) Organisation-wise action plans with timelines and the estimated budget for implementation of action plans.

30. It has also been stated that water quality of polluted river stretches has not been displayed by Manipur, Sikkim, Tamil Nadu and Delhi UT on their respective websites.

31. CPCB has suggested that as against the timeline laid down by this Tribunal, longer timeline may be required where infrastructure has to be set up and where no infrastructure was possible, the polluted river stretches be diluted by using fresh water, preventing disposal of waste or adoption of bio-remediation/provision of green bridges/proper O&M of existing STPs, ensuring proper disposal of STP sludges, ODF, etc. In case of industries, 100 % strict compliance to the discharge norms by the industries should be

ensured and in case of non-compliance, penalty or environmental compensation as per guidelines of CPCB on such industries should be levied in addition to prosecution under various provisions of Rules, as necessary.

32. CPCB has further suggested that scale of performance guarantee should be as follows:

“

No. of Polluted River Stretches in a State/UT	Suggested Performance Guarantee (in Rupees)
> 10	15 Crore
5 to 10	10 Crore
< 5	5 Crore

”

33. We have heard Mr. A. Sudhakar, Scientist-E, In-charge Member Secretary, CPCB and Dr. A.B. Akolkar, Member of Task Team, CPCB. They have assisted this Tribunal by highlighting various aspects of the problem. None appears for any other State/UT or authority.

34. As already noted, pollution of 351 river stretches has caused serious threat to safety of water and environment. On account of use of polluted water in irrigation, there is threat to food safety. On account of consumption of polluted water in absence of any other source of drinking water being available and partly on account of ignorance of the persons consuming such water, health of human being is threatened, apart from the aquatic flora and fauna, animals wild and domestic who may consume such water. It is therefore,

necessary to have regular hygienic survey of the rivers particularly with reference to pathogenic organisms having impact on human health directly or indirectly. It is also important to note that biological health of the rivers is an important aspect. Much of the important biodiversity is lost on account of severe pollution in the rivers. There has to be a regular study of the Indian rivers with regard to biological health and its diversity. We understand that bio-mapping of rivers and setting biological goals/criteria is part of River Rejuvenation Programmes in some countries. There is threat to the environmental rule of law of the country.

35. These are substantial questions relating to the environment. For enforcing legal right to clean environment, which is also a fundamental right, this Tribunal has to pass appropriate orders for relief to the victims of pollution and for restoration of the environment even in absence of an identified victim. All the States and UTs have been duly put to notice of the present case.
36. In this endeavor, this Tribunal directed constitution of RRCs by the concerned States/UTs by including Departments of Environment, Urban Development, Industries and the Pollution Control Boards/Pollution Control Committees and further directions to the Chief Secretaries of the States/UTs to monitor the progress. At the national level, CPCB has been required to assist the Tribunal by way of compiling the data and furnishing its views. A copy of order dated 29.09.2018 was directed to be forwarded to the Niti Ayog, Ministry of

Water Resources, Ministry of Environment, Forest & Climate Change, Ministry of Housing and Urban Affairs, National Mission for Clean Ganga, apart from other authorities as the said authorities were represented in a chamber meeting before this Tribunal to consider the problem of pollution of rivers.

37. Having regard to the exercise already undertaken in pursuance of orders of this Tribunal, we find that while substantial number of States have framed their action plans within the extended time i.e. 31.01.2019, some have defaulted in spite of clear stipulation that failure will require this Tribunal to direct payment of compensation for the damage to the environment on account of inaction of the said States.<sup>20</sup> No explanation has been given by defaulting States. The order has attained finality.

38. Accordingly, States of Assam, Manipur and Uttar Pradesh are liable to pay compensation in terms of order dated 19.12.2018 for delay after 31.1.2019 till the action plans are furnished for failing to submit action plan in respect of four river stretches. The said amount may be deposited with the CPCB within one month. CPCB may use the amount for restoration of environment as per law. It will be open to the States to recover the amount from the erring officers. For delay, interest @ 12% will be payable. Responsibility for payment will be of Chief Secretaries. CPCB is at liberty to seek enforcement of this order as decree of Civil Court by civil imprisonment of Chief Secretaries concerned or attachment of salary

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<sup>20</sup>Para 12, Order dated 31.01.2019

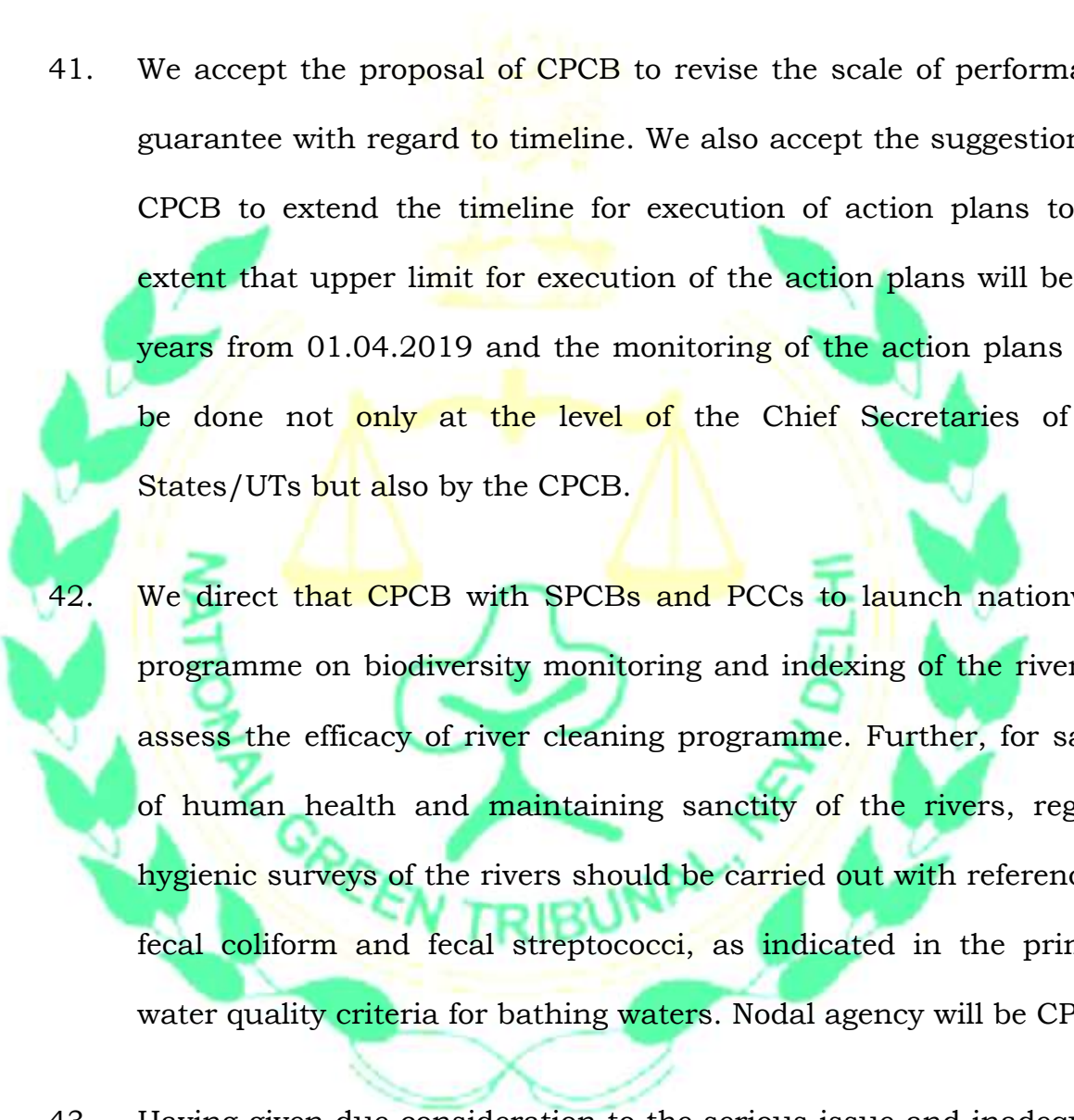
or assets as per Section 51, Code of Civil Procedure read with Section 25 of the National Green Tribunal Act, 2010. It is also permissible to initiate prosecution under Section 26 of NGT Act, as noncompliance of order of NGT is a criminal offence.

39. The report of the CPCB further shows that 6 States have furnished incomplete action plan as given in Table 3 quoted above. The said six states i.e. Delhi, Meghalaya, Nagaland, Tamil Nadu, Uttar Pradesh and Uttarakhand are liable to pay compensation as per order dated 19.12.2018 for delay after 31.1.2019 at the scale of 50% of the compensation payable by the States who have failed to submit any action plan.

None of the above defaulting States except the State of Uttarakhand is represented before this Tribunal. There is no satisfactory explanation by any of the States, including the State of Uttarakhand who is represented by an officer. This part of order will be governed by earlier para for interest and enforcement. The requirement to pay compensation will continue till action plans are furnished or completed. The action plans may be uploaded on the websites of the CPCB as well as respective States/UTs and the MoEF&CC after former approval by the CPCB.

40. As regards 108 river stretches for which action plans have not still been furnished for Priority-III, Priority-IV and Priority-V river stretches, we direct that same scale of compensation will apply for

failure to furnish action plans in further extended timeline upto 30.06.2019. The Action Plans not so far furnished, as required by earlier order of this Tribunal, may also now be furnished upto 30.06.2019.

- 
41. We accept the proposal of CPCB to revise the scale of performance guarantee with regard to timeline. We also accept the suggestions of CPCB to extend the timeline for execution of action plans to the extent that upper limit for execution of the action plans will be two years from 01.04.2019 and the monitoring of the action plans may be done not only at the level of the Chief Secretaries of the States/UTs but also by the CPCB.
42. We direct that CPCB with SPCBs and PCCs to launch nationwide programme on biodiversity monitoring and indexing of the rivers to assess the efficacy of river cleaning programme. Further, for safety of human health and maintaining sanctity of the rivers, regular hygienic surveys of the rivers should be carried out with reference to fecal coliform and fecal streptococci, as indicated in the primary water quality criteria for bathing waters. Nodal agency will be CPCB.
43. Having given due consideration to the serious issue and inadequacy of success achieved so far, we find it necessary to constitute a Central Monitoring Committee to undertake a national initiative by way of preparation and enforcement of a national plan to make river stretches pollution free comprising a senior representative of NITI

Aayog, Secretaries Ministry of Water Resources, Ministry of Urban Development, Ministry of Environment, Forest and Climate Change, Director General, National Mission for Clean Ganga and Chairman CPCB. Chairman CPCB will be the nodal authority for coordination. Senior most among them will preside over the deliberations.

44. The Central Monitoring Committee will also co-ordinate with the RRCs of the States and oversee the execution of the action plans, taking into account the timelines, budgetary mechanism and other factors. Chief Secretaries of States will be the nodal agency at State level. The Chief Secretaries of the States may undertake review of progress of RRCs by involving concerned Secretaries of Department of Urban Development, Environment, Industries, Irrigation and Public Health, Health etc.

45. We also direct the MoEF & CC to consider a policy for giving environmental awards to outstanding persons (natural and juristic) and Institutions/States and introducing dis-incentives for non compliant states. Such scheme may be framed preferably before 30.06.2019.

46. First meeting of the Central Monitoring Committee may be held by 30.06.2019. The Central Monitoring Committee may consider identifying experts, best practices and models for use of treated water, including plan to supply untreated sewage for a price or

otherwise so that the concerned needy party can treat and utilize such water as is reportedly being done at Surat in Gujarat, Nagpur in Maharashtra and Bhilwada in Rajasthan or any other place. Use of treated water for agriculture or other purpose may save potable surface and ground water.

47. The Central Monitoring Committee may give its report by 31.07.2019.

A copy of this order be furnished to CPCB for being mailed to all concerned.

List for further consideration on 05.08.2019.

Adarsh Kumar Goel, CP

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

April 08, 2019  
Original Application No.673/2018  
(M.A. No. 1777/2018)  
A & DV

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

(By Video Conferencing)

O.A. No. 673/2018

***In Re: News item published in “The Hindu” authored by Shri Jacob Koshi, titled “More river stretches are now critically polluted: CPCB”***  
(With Reports dated 18.06.2020 & 19.06.2020)

Date of hearing: 22.06.2020  
Date of uploading of order: 29.06.2020

**CORAM: HON’BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON’BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER  
HON’BLE DR. NAGIN NANDA, EXPERT MEMBER**

**ORDER**

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## **I. The issue: Remedial action for 351 polluted river stretches**

1. This order is in continuation of order dated 06.12.2019 on the subject of remedial action to tackle the **problem of large-scale pollution of rivers in India, manifested in the form of 351 identified polluted river stretches, based on data compiled by the Central Pollution Control Board (“CPCB”). CPCB data is based on analysis of samples by State Pollution Control Boards/Committees (“PCBs/PCCs”) under CPCB’s National Water Quality Monitoring Programme (“NWQMP”).** We may note that overlapping issues have also been dealt with in several other petitions<sup>1</sup> and directions issued from time to time. Additionally, cases dealing with pollution in rivers Gomti, Musi and Bhadra, Karamana, Tirur-Ponar as also coastal pollution, restoration of water bodies (also necessary for maintaining flow in rivers) are being dealt with by separate orders today. This list is not exhaustive.

<sup>1</sup> These orders include, orders dated:

- 16.01.2019 as updated subsequently in **O.A. No. 606/2018** (dealing with compliance of solid waste management and other environmental norms),
- 22.08.2019 as updated subsequently in M.C. Mehta V. UOI **O.A. No. 200/2014** (pollution of **Ganga**), see also 2017 NGTR (3) PB 1
- 28.08.2019 as updated subsequently in Paryavaran Surakhsha **O.A. No. 593/2017** (dealing with preventing discharge of untreated sewage and industrial effluents),
- 13.01.2015 (2015 (ALL(I) NGT REPORTER (1) (DELHI) 139), and 11.09.2019, as updated subsequently in Manoj Mishra V. UOI, **O.A. No. 06/2012** (pollution of **Yamuna**)
- 22.11.2019 in Stench Grips Mansa’s Sacred Ghaggar River (Suo-Moto Case) **O.A. No. 138/2016** (TNHRC) (pollution of river **Ghaggar**)
- Mahendra Pandey V. UOI & Ors. **O.A. No. 58/2017** (river **Ramganga**, a tributary of river Ganga)
- Sobha Singh & Ors. V. State of Punjab & Ors. **O.A. No. 101/2014** (rivers **Sutlej and Beas**)
- Amresh Singh V. UOI & Ors. **O.A. No. 295/2016, Execution Application No. 32/2016** (rivers **Chenab and Tawi**)
- Nityanand Mishra V. State of M.P. & Ors. **O.A. No. 456/2018** (river **Son**)
- Doaba Paryavaran Samiti V. State of U.P. & Ors. **O.A. No. 231/2014** (river **Hindon**)
- Arvind Pundalik Mhatre V. MoEF&CC & Ors. **O.A. No. 125/2018** (river **Kasardi**)
- Sudarsan Das V. State of West Bengal & Ors. **O.A. No. 173/2018** (river **Subarnarekha**)
- Meera Shukla V. Municipal Corporation, Gorakhpur & Ors. **O.A. No. 116/2014** (rivers **Ami, Tapti, Rohani and Ramgarh lake**)

2. Prior to judicially taking cognizance of this matter, on 10.09.2018, this Tribunal had held a chamber meeting with all Tribunal Members and representatives of CPCB, Ministries of Water Resources (“MoWR”), Environment, Forest & Climate Change (“MoEF&CC”), and Housing and Urban Affairs (“MoHUA”), NITI Aayog, National Mission for Clean Ganga (“NMCG”), States of Maharashtra, Gujarat, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Bihar, Punjab, Uttar Pradesh, NCT of Delhi and Union Territory of Daman & Diu. (Some participating by video conferencing). The issue of pollution of water bodies in the country and need for remedial action was discussed.

3. The present proceedings were initiated *suo-motu*, based on a news item dated 17.09.2018 in “The Hindu”, titled “More river stretches are now critically polluted: CPCB”<sup>2</sup>. According to the news item, 351 polluted river stretches have been identified by the CPCB as polluted river stretches. 117 such stretches are in the States of Assam, Gujarat, and Maharashtra. The CPCB has apprised the concerned States of the extent of pollution in the rivers. The most polluted river stretches are from:

- Powai to Dharavi – Biochemical Oxygen Demand (“BOD”) 250 mg/L;
- Godavari - from Someshwar to Rahed – with BOD of 5.0-80 mg/L;
- Sabarmati – Kheroj to Vautha – with BOD from 4.0-147 mg/L;
- Hindon – Saharanpur to Ghaziabad – with a BOD of 48-120 mg/L.

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<sup>2</sup><https://www.thehindu.com/news/national/more-river-stretches-critically-polluted-cpcb/article24962440.ece>

4. The CPCB has a programme to monitor the quality of rivers by measuring BOD. BOD greater than or equal to 30mg/L is termed as 'Priority-I', while that between 3.1-6 mg/L is 'Priority-V'. The CPCB considers BOD less than 3mg/L an indicator of a healthy river. In its 2015 Report<sup>3</sup>, the CPCB had identified 302 polluted stretches on 275 rivers, spanning 28 States and six Union Territories. The number of such stretches had now increased to 351 in 2018.

### **Magnitude of river pollution**

5. The Hon'ble Supreme Court has noticed the level of degradation of rivers in India and apathy of the authorities as follows:

***“58. Rivers in India are drying up, groundwater is being rapidly depleted, and canals are polluted. Yamuna in Delhi looks like a black drain. Several perennial rivers like Ganga and Brahmaputra are rapidly becoming seasonal. Rivers are dying or declining, and aquifers are getting over pumped. Industries, hotels, etc. are pumping out groundwater at an alarming rate, causing sharp decline in the groundwater levels. Farmers are having a hard time finding groundwater for their crops e.g. in Punjab. In many places there are serpentine queues of exhausted housewives waiting for hours to fill their buckets of water. In this connection John Briscoe has authored a detailed World Bank Report, in which he has mentioned that despite this alarming situation there is widespread complacency on the part of the authorities in India.”***<sup>4</sup>

***“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.***

<sup>3</sup> <http://cpcb.nic.in/cpcb/RESTORATION-OF-POLLUTED-RIVER-STRETCHES.pdf>

<sup>4</sup> State of Orissa v. Govt. of India, (2009) 5 SCC 492

***We club the pending case of water management with this matter.<sup>5</sup>***

6. A reference to relevant observations from a series of judgments of the Hon'ble Supreme Court as well as this Tribunal, in context of several rivers, including river Ganga will be made later herein. Rivers' pollution has affected Indian civilization as a whole, what to talk of aquatic life, loss of biodiversity and affecting food safety. Needless to say that remedial action has to be taken on the principle of sustainable development, especially 'Intergenerational Equity'. The fact that 351 river stretches are identified as polluted is a serious matter. This shows that the concern expressed while enacting the Water Act in the year 1974 has remained largely unaddressed even after 46 years. In fact, the number of polluted river stretches has been rising and may further go up, if the entire relevant data is considered.

7. The Water (Prevention and Control of Pollution) Act, 1974 ("**Water Act**") prohibits use of any stream or well for disposal of polluted matter but this provision is certainly being held in breach without much consequences for the violators who are liable to be prosecuted and punished by imprisonment to uphold the rule of law and public health. Article 48A of the Constitution casts a duty on the State to protect and improve the environment. Article 51A imposes a fundamental duty on every citizen to protect and improve the environment. The Stockholm Declaration (1972) recommended prevention of pollution by adopting the 'Precautionary Principle', the 'Polluter Pays Principle' and the principle of 'Sustainable Development'. The Statement of objects and reasons for The Water Act is as follows:

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<sup>5</sup> M.C. Mehta Vs UOI- W.P. (Civil) No. 13029/1985 dated 25.11.2019

***“The problem of pollution of rivers and streams has assumed considerable importance and urgency in recent years as a result of the growth of industries and the increasing tendency to urbanisation. It is, therefore, essential to ensure that the domestic and industrial effluents are not allowed to be discharged into the water courses without adequate treatment as such discharges would render the water unsuitable as source of drinking water as well as for supporting fish life and for use in irrigation. Pollution of rivers and streams also causes increasing damage to the country's economy.***

A Committee was set up in 1962 to draw a draft enactment for the prevention of water pollution. The report of the Committee was circulated to the State Governments and was also considered by the Central Council of Local Self-Government in September, 1963. This Council resolved that a single law regarding measures to deal with water pollution control, both at the Centre and at the State levels, may be enacted by the Union Parliament. A Draft Bill was accordingly prepared and put up for consideration at a joint session of the Central Council of Local Self-Government and the Fifth Conference of the State Ministers of Town and Country Planning held in 1965. In pursuance of the decision of the joint session, the Draft Bill was considered subsequently in detail by a Committee of Ministers of Local Self-Government from the States of Bihar, Madras, Maharashtra, Rajasthan, Haryana and West Bengal.

Having considered the relevant local provisions existing in the country and recommendations of the aforesaid Committees, the Government came to the conclusion that the existing local provisions are neither adequate nor satisfactory. ***There is, therefore, an urgent need for introducing a comprehensive legislation which would establish unitary agencies in the Centre and States to provide for the prevention, abatement and control of pollution of rivers and streams, for maintaining or restoring wholesomeness of such water courses and for controlling the existing and new discharges of domestic and industrial wastes.”***

8. The Hon'ble Supreme Court has held in several matters that it is the duty of the State to ensure access to clean drinking water, which is part of Right to Life. The Hon'ble Court has repeatedly directed State bodies to enforce statutory provisions by municipal bodies and industries by stopping discharge of untreated sewage and effluents in rivers, and prevent water pollution in any form<sup>6</sup>. It was observed that water pollution

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<sup>6</sup> Orders dealing with pollution of

- river Pallar, Vellore Citizen Welfare Forum v. UOI, (1996) 5 SCC 647, A.P. Pollution Control Board II v. Prof. M.V. Nayudu, (2001) 2 SCC 62 ¶ 45
- river Noyyal, in Tamil Nadu, (2009) 9 SCC 737
- river Ganga, M.C. Mehta V. UOI & Ors. (1997) 2 SSC 411, (1988) 1 SCC 471

causes serious diseases, including Cholera and Typhoid<sup>7</sup>. It was also observed that the educational institutions must teach atleast for one hour in a week lessons relating to protection and improvement of environment, and suitable awareness programs be undertaken<sup>8</sup>. Likewise, the issue of Calcutta tanneries was considered in *M.C Mehta Vs. Union of India And Ors.*<sup>9</sup>, (Calcutta Tanneries' Matter). The tanneries were directed to be shifted by adopting the 'Precautionary Principle' so as to prevent discharge of effluents in the River Ganga. In view of dangerous potential of pollution, it has been laid down that even the State cannot grant any exemption for discharge of pollutants in water in violation of 'Precautionary' principle.<sup>10</sup>

9. In spite of the above, in flagrant violation of law of the land, polluted water in the form of sewage, industrial effluents or otherwise as also different forms of solid waste has continued to be discharged in the water bodies including the rivers or the canals/drains meeting the rivers. Violation of law is not only by private citizens but also statutory bodies including the local bodies and also failure of the regulatory authorities in taking adequate steps. There is no adequate coercive action or accountability, weakening the rule of law when large-scale violations go unaddressed despite repeated multitude of judicial orders.

10. It will be appropriate to note the crisis situation in the country on the subject of availability of potable water. The matter has been

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<sup>7</sup> M.C. Mehta (1988), *supra* n.6

<sup>8</sup> *Id.*

<sup>9</sup> M.C. Mehta (1997), *supra* n.6

<sup>10</sup> M.V. Nayudu, *supra* n. 6

considered in the report of Niti Aayog on Composite Water Management Index (“CWMI”).<sup>11</sup>

11. The following additional information as per reports in public domain (subject to verification) also need to be noted:

- (a) India is suffering from the worst water crisis in history and millions of lives and livelihoods are under threat. Currently, 600 million Indians face high to extreme water stress and about two lakh people die every year due to inadequate access to safe water<sup>12</sup>. Critical groundwater resources – which account for 40% of our water supply – are being depleted at unsustainable rates<sup>13</sup>. The crisis is only going to get worse. By 2030, the country’s water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people and an eventual ~6% loss in the country’s GDP<sup>14</sup>. As per the report of National Commission for Integrated Water Resource Development of MoWR, the water requirement by 2050 in high use scenario is likely to be a milder 1,180 BCM, whereas the present-day availability is 695BCM. The total availability of water possible in country is still lower than this projected demand, at 1,137BCM. Thus, there is an imminent need to deepen our understanding of water resources and usage and use interventions that make our water use efficient and sustainable.

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<sup>11</sup> Niti Ayog on “Composite Water Management Index”, June 2018, [https://niti.gov.in/writereaddata/files/document\\_publication/2018-05-18-Water-Index-Report\\_vS8-compressed.pdf](https://niti.gov.in/writereaddata/files/document_publication/2018-05-18-Water-Index-Report_vS8-compressed.pdf)

<sup>12</sup>Source: WRI Aqeduct; WHO Global Health Observatory

<sup>13</sup> Id.

<sup>14</sup> McKinsey & WRG, ‘Charting our water future’, 2009 [https://www.mckinsey.com/~media/mckinsey/dotcom/client\\_service/sustainability/pdfs/charting%20our%20water%20future/charting\\_our\\_water\\_future\\_full\\_report\\_ashx](https://www.mckinsey.com/~media/mckinsey/dotcom/client_service/sustainability/pdfs/charting%20our%20water%20future/charting_our_water_future_full_report_ashx); World Bank; Times of India

- (b) Most states have achieved less than 50% of the total score in the augmentation of groundwater resources, highlighting the growing national crisis—54% of India's groundwater wells are declining, and 21 major cities are expected to run out of groundwater as soon as 2020, affecting ~100 million people<sup>15</sup>.
- (c) With nearly 70% of water being contaminated, India is placed at 120th amongst 122 countries in the water quality index.
- (d) As per statistics mentioned before the Lok Sabha on April 6, 2018, waterborne diseases such as cholera, acute diarrhoeal diseases, typhoid and viral hepatitis continue to be prevalent in India and have caused 10,738 deaths, over the last five years since 2013. Of this, acute diarrhoeal diseases caused maximum deaths followed by viral hepatitis, typhoid and cholera.<sup>16</sup>
- (e) As per 'National Health Profile' published by Central Bureau of Health Investigation, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, a total of 1535 deaths due to acute diarrhoeal diseases was reported during the year 2013.<sup>17</sup>

### **Main Causes and requisite Remedial Action for Rivers' Pollution**

12. As already noted, well known causes of pollution of rivers are
- dumping of untreated sewage and industrial waste, garbage, plastic waste, e-waste, bio-medical waste, municipal solid waste,
  - diversion of river waters for various purposes affecting e-flow,

<sup>15</sup> Source: UN Water, 'Managing water under uncertainty and risk', 2010; World Bank (Hindustan Times, The Hindu).

<sup>16</sup> <https://www.indiaspend.com/diarrhoea-took-more-lives-than-any-other-water-borne-disease-in-india-58143/>

<sup>17</sup> <http://pib.nic.in/newsite/PrintRelease.aspx?relid=106612>

- encroachment of catchment areas and floodplains,
- over drawl of groundwater,
- river bank erosion due to number of anthropogenic reasons, such as illegal sand mining.

13. In spite of directions to install Effluent Treatment Plants (“ETPs”), Common Effluent Treatment Plants (“CETPs”), Sewage Treatment Plants (“STPs”), and adopting other anti-pollution measures, satisfactory situation has not been achieved. As per CPCB report, 2016<sup>18</sup>, it has been estimated that **61,948 million liters per day (“MLD”) sewage is generated from the urban areas of which treatment capacity of 23,277 MLD is currently existent in India.** Thereby the deficit in capacity of waste treatment is of 62%. There is no data available with regard to generation of sewage in rural areas.

14. Effective governance is the need of the hour. **If industrial pollution does not stop, the polluters must be dealt with. If sewage dumping does not stop, local bodies have to be made accountable and their heads prosecuted as per the Hon’ble Supreme Court directions**<sup>19</sup>. The Hon’ble Supreme Court only recently<sup>20</sup>, upheld prosecution of a local body for violation of provisions of the Water Act.

15. Steps have also to be taken for awareness and public involvement<sup>21</sup>. Water being scarce and necessary for human existence, a Welfare State cannot plead lack of funds for such overriding need for

<sup>18</sup> [http://www.sulabhenvi.nic.in/Database/STST\\_wastewater\\_2090.aspx](http://www.sulabhenvi.nic.in/Database/STST_wastewater_2090.aspx) July 16, updated December 6, 2016

<sup>19</sup> Paryavaran Suraksha Samiti v. UOI, (2017) 5 SCC 326, Para 10-13

<sup>20</sup> Criminal Appeal No. 1734 of 2019 in *Karnataka State Pollution Control Board Vs B. Heera Naik* (26.11.2019)

<sup>21</sup> Supra n. 7

existence of human life<sup>22</sup>. Thus, requisite budgetary provision has to be made.

16. Implementation timelines for remedial action procedures and interventions have to be shortened to avoid delays. This Tribunal vide Order dated 18.10.2019 in **O.A. No. 606/2018**<sup>23</sup> while dealing with the issue of procedures of DPRs and tendering process, observed:

*“8. Expeditious compliance of directions for clearance of legacy waste sites as well as **stopping of discharge of untreated sewage and directions on associated subjects require immediate implementation for protection of environment and public health by curtailing undue delay.** As suggested, necessary technologies need to be standardized with cost breakups for operation and maintenance, including procurement. Besides this, the service providers need to be identified and empaneled. This exercise may also require the concerned authorities to explore business models.”*

This Tribunal has constituted a Committee headed by Niti Ayog on the subject to give a report within two months, pursuant to which Niti Ayog has done an exercise and uploaded a standards document to the GeM portal<sup>24</sup>.

17. As per laid down standards, river water is considered to be fit for bathing when it has BOD < 3.0 mg/L, Dissolved Oxygen (“DO”) > 5.0 mg/L and Faecal Coliform bacteria (“FC”) < 500 MPN/100 ml.

18. As already noted, according to latest assessment by the CPCB, there are 351 polluted river stretches in India i.e. where the BOD > 3mg/L. The plan for restoration of polluted river stretches has to be executed through two-fold concepts. One concept is to enhance river

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<sup>22</sup> *Municipal Council, Ratlam v. Vardhichand* (1980) 4 SCC 162; *B.L. Wadhwa v. UOI and Ors.* (1996) 2 SCC 594

<sup>23</sup> *Supra* n. 1

<sup>24</sup> As per letter dated 25.6.2020 received by the Registry of this Tribunal

flows through interventions in water sheds/catchment areas for conservation and recharge of rain water (for subsequent releases during lean flow period in a year). This concept will dilute pollutants in rivers and streams to reduce concentration to meet desired level of water quality. Other concept is of regulation and enforcement of standards in conjunction with available flow in rivers /streams and allocation of discharges within stipulated norms. The fact remains that desired result has not been achieved and more and more polluted river stretches are being added to the list. Apart from pH, DO, COD and BOD, if other standards such as FC etc. are also assessed, number of polluted stretches will go even further up.

**II. Order dated 20.09.2018 (“First Order”) requiring preparation of Action Plans by States/UTs – Preventing discharge of sewage and effluents, dumping of waste, maintaining flood plain zones and e-flow, restoring water quality to bathing standards**

**Timeline: Action Plans in two months and execution in six months**

19. In view of above, this Tribunal found it necessary to take up the matter and direct preparation and execution of river Action Plans to control pollution and restore water quality of the river as per norms within reasonable time. Accordingly, vide order dated 20.09.2018 proceedings were initiated as already mentioned para 3 above. **It may be noted that there have been successful river cleaning programmes in other countries such as those of river Thames (England), Rhine (Germany) and Danube (France).** There being no reason as to why our polluted river stretches also cannot be restored, this Tribunal issued the following directions:

- ***“All States and Union Territories are directed to prepare Action Plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes***

(i.e BOD < 3 mg/L and FC < 500 MPN/100 ml) **within six months from the date of finalisation of the Action Plans.**

- The Action Plans may be prepared by four-member Committee comprising, Director, Environment, Director, Urban Development, Director, Industries, Member Secretary, State Pollution Control Board of concerned State. This Committee will also be the Monitoring Committee for execution of the Action Plan. The Committee may be called "River Rejuvenation Committee" (RRC). The RRC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory.
- The Action Plan will include components like identification of polluting sources including functioning/ status of STPs/ETPs/CETP and solid waste management and processing facilities, quantification and characterisation of solid waste, trade and sewage generated in the catchment area of polluted river stretch. The Action Plan will address issues relating to; ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river and plantation on both sides of the river. Setting up of biodiversity parks on flood plains by removing encroachment shall also be considered as an important component for river rejuvenation. The Action Plan should focus on proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP) and emphasis should be on utilization of treated sewage so as to minimize extraction of ground or surface water. The Action Plan should have speedy, definite or specific timelines for execution of steps. Provision may be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/ Committee and out of Central Schemes.
- The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.
- **The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate Action Plan, as directed.**
- All States and Union Territories are required to send a copy of Action Plan to CPCB especially w.r.t Priority I & Priority II stretches for approval.
- The States and the Union Territories concern are directed to set up Special Environment Surveillance Task Force, comprising nominees of District Magistrate, Superintendent of Police, Regional Officer of State Pollution Control Board and one person to be nominated by District Judge in his capacity as Chairman of Legal Services Authority on the pattern of direction of this Tribunal dated 07.08.2018, in O.A. No. 138/2016 (T<sub>NHRC</sub>), "Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case).
- The Task Force will also ensure that no illegal mining takes place in river beds of such polluted stretches.
- The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievement and failure may also be published on such website. The Committee may consider suitably

*rewarding those contributing significantly to the success of the project.”*

20. This Tribunal noted that data compiled by CPCB on polluted river stretches classified such river stretches in five categories:

(a) **Criteria for Priority I**

- i. Monitoring locations exceeding BOD concentration 30 mg/L has been considered as it is the standard of sewage treatment plant and in river it appears without dilution. (River locations having water quality exceeding discharge standards for BOD to fresh water sources)
- ii. All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.
- iii. Monitoring locations exceeding 3 mg/L BOD are not meeting desired water quality criteria but does not affect to Dissolved Oxygen level in water bodies. If BOD exceeds 6mg/L in water body, the Dissolved Oxygen is reduced below desired levels.
- iv. The raw water having BOD levels upto 5 mg/L are does not form complex chemicals on chlorination for municipal water supplies. Hence the water bodies having BOD more than 6 mg/L are considered as polluted and identified for remedial action.

(b) **Criteria for Priority II**

- i. Monitoring locations having BOD between 20-30 mg/L.
- ii. All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

(c) **Criteria for Priority III**

- i. Monitoring locations having BOD between 10-20 mg/L.

- ii. All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

(d) **Criteria for Priority IV**

- i. Monitoring locations having BOD between 6-10 mg/L.

(e) **Criteria for Priority V**

- i. Monitoring locations having BOD between 3-6 mg/l.
- ii. Locations exceeding desired water quality of 3mg/l BOD.

21. A table showing the location and categories have been reproduced in the said order and reference to the same will also be made in the later part of this order. The Action Plans were directed to cover the following:

(a) **Source Control**

Source control includes industrial pollution control and treatment and disposal of domestic sewage as detailed below:

(i) **Industrial pollution control**

- A. Inventorisation of industries
- B. Categories of industry and effluent quality
- C. Treatment of effluents, compliance with standards and mode of disposal of effluents
- D. Regulatory regime.

(ii) **Channelization, treatment, utilization and disposal of treated domestic sewage.**

- A. Identification of towns in the catchment of river and estimation of quantity of sewage generated and existing sewage treatment capacities to arrive at the gap between the sewage generation and treatment capacities;

- B. Storm water drains now carrying sewage and sullage joining river and interception and diversion of sewage to STPs,
- C. Treatment and disposal of septage and controlling open defecation,
- D. Identification of towns for installing sewerage system and sewage treatment plants.

(b) **River catchment/Basin Management-Controlled ground water extraction and periodic quality assessment**

- (i) Periodic assessment of groundwater resources and regulation of ground water extraction by industries particularly in over exploited and critical zones/blocks.
- (ii) Ground water re-charging /rain water harvesting
- (iii) Periodic ground water quality assessment and remedial actions in case of contaminated groundwater tube wells/bore wells or hand pumps.
- (iv) Assessment of the need for regulating use of ground water for irrigation purposes.

(c) **Flood Plain Zone.**

- (i) Regulating activities in flood plain zone.
- (ii) Management of Municipal, Plastic, Hazardous, Bio-medical and Electrical and Electronic wastes.
- (iii) Greenery development- Plantation plan.

(d) **Ecological/Environmental Flow (E-Flow)**

- (i) Issues relating to E-Flow
- (ii) Irrigation practices

- (e) **Such other issues which may be found relevant for restoring water quality to the prescribed standards.**

**III. Order dated 19.12.2018 (“Second Order”) reviewing the progress of execution of First Order**

- **Action Plans found incomplete and execution timelines too long; time extended to 31.01.2019 subject to compensation of upto One Crore/month per defaulting state;**
- **State PCBs directed to upload water quality online (to also reflect FC)**

22. On 19.12.2018 to consider status of compliance of the First Order, we found only 16 States/UTs had prepared Action Plans, but they were not complete. There was no base line data. Preparation of Action Plans was assigned to third parties. Details of STPs etc. were not given. Execution timelines were too long. Status of e-flow was not given. Action Plans were not proposed to be placed on websites to involve educational and other institutions and the public at large. The said States/ UTs were directed to give revised reports on or before 31.01.2019 to CPCB after complying with the deficiencies. The CPCB was to examine the Action Plans and, if they met the scientific and technical yardsticks, to approve the same and convey it to the respective States/UTs. The States/ UTs, after approval were to upload these Action Plans on their respective websites giving clear execution timelines, indicating agencies responsible for execution, along with matching budgetary provisions. By way of last opportunity, we extended the time for preparation of proper Action Plans till 31.01.2019, with the stipulation that for delay thereafter, compensation for damage to the environment would 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. The payment was to be the responsibility of the Chief Secretaries of the States/Administrators of the UTs and the amount could be recovered from the erring officers personally. The CPCB was to prominently place a notice to this effect and the names of the defaulting States and UTs and on its website.

23. The PCBs and PCCs were further directed to display the water quality of polluted river stretches on their respective websites within one-month alongwith action taken, if any, which was to be updated every three months. The CPCB was also to display the water quality of the river stretches and action/inaction by such States on its websites. CPCB was to devise within two weeks a mechanism for classification wherein, besides BOD, FC, pH, DO and COD shall also be a basis of water quality and classification in Priority Classes. It was further directed that any incomplete Action Plan would be treated as non-compliance. It was made necessary to furnish Performance Guarantees to ensure implementation of Action Plans within the above stipulated time to the satisfaction of CPCB in the sum of:

- (a) Rs. 15 crore for each of Priority I & II stretches;
- (b) Rs. 10 crore for each of Priority III stretches; and
- (c) Rs. 5 crore for each of Priority IV & V stretches

**IV. Order dated 16.01.2019 in O.A. No. 606/2018 for reviewing significant environmental issues including Polluted River Stretches, in presence of Chief Secretaries of all States/UTs**

24. While noticing pan-India violations of environmental norms particularly with regard to solid and liquid waste management, this Tribunal directed Chief Secretaries of all States/UTs to appear in person after acquainting themselves with compliance status of environmental laws and remedial Action Plans. Accordingly, they appeared on various

dates and this Tribunal directed further remedial action, including restoration of polluted river stretches in terms of their Action Plans, within six months. After expiry of this stipulated period, with no significant results in respect of all of the States/UTs, the Chief Secretaries were again directed to appear. Some States/UTs have already appeared in second round though much work remains to be done. **Thus, all the States/UTs have had sufficient notice of their respective failures to comply with statutory obligations and Hon'ble Supreme Court directions. Any continuing failure has to be viewed seriously and visited with requirement to pay compensation already stipulated, to enforce the Rule of Law.**

**V. Order dated 08.04.2019 ("Third Order") extending time for execution of Action Plans till 31.03.2021 and constituting a Central Monitoring Committee (CMC) to prepare a National Plan for Rejuvenation of Polluted River Stretches as per timeline**

25. The matter was thereafter taken up on 08.04.2019 in light of consolidated and updated report filed by the CPCB on 05.04.2019 to the effect that 28 States and 3 Union Territories had constituted River Rejuvenation Committees ("RRCs"). The CPCB constituted a 'Task Team' for scrutiny of the Action Plans under the Chairmanship of Member Secretary, CPCB. CPCB received 41 out of 45 Action Plans with reference to P-I, 14 out of 16 Action Plans with reference to P-II and total 182 Action Plans were received with reference to P-III to P-V polluted river stretches. 6 out of 61 Action Plans in respect of P-I and P-II were not received from the States of Assam (P-I: 3 viz., Bharalu, Borsola, Silsako) and P-II:1 (Sorusola)), Manipur (P-II: 1 viz., Nambu) and Uttar Pradesh (P-I: viz., river Hindon). It was submitted that the Action Plan in respect of River Hindon was required to be implemented by the Government of

Uttar Pradesh in compliance of the NGT Orders in O.A. No. 231/2014 & O.A. No. 66/2015.

26. This Tribunal further observed:

*“36. In this endeavor, this Tribunal directed constitution of RRCs by the concerned States/UTs by including Departments of Environment, Urban Development, Industries and the Pollution Control Boards/Pollution Control Committees and further directions to the Chief Secretaries of the States/UTs to monitor the progress. At the national level, CPCB has been required to assist the Tribunal by way of compiling the data and furnishing its views. A copy of order dated 29.09.2018 was directed to be forwarded to the Niti Ayog, Ministry of Water Resources, Ministry of Environment, Forest & Climate Change, Ministry of Housing and Urban Affairs, National Mission for Clean Ganga, apart from other authorities as the said authorities were represented in a chamber meeting before this Tribunal to consider the problem of pollution of rivers.*

**41. We accept the proposal of CPCB to revise the scale of performance guarantee with regard to timeline. We also accept the suggestions of CPCB to extend the timeline for execution of Action Plans to the extent that upper limit for execution of the Action Plans will be two years from 01.04.2019 and the monitoring of the Action Plans may be done not only at the level of the Chief Secretaries of the States/UTs but also by the CPCB.**

42. We direct that CPCB with SPCBs and PCCs to launch nationwide programme on biodiversity monitoring and indexing of the rivers to assess the efficacy of river cleaning programme. Further, for safety of human health and maintaining sanctity of the rivers, regular hygienic surveys of the rivers should be carried out with reference to fecal coliform and fecal streptococci, as indicated in the primary water quality criteria for bathing waters. Nodal agency will be CPCB.

**43. Having given due consideration to the serious issue and inadequacy of success achieved so far, we find it necessary to constitute a Central Monitoring Committee (“CMC”) to undertake a national initiative by way of preparation and enforcement of a national plan to make river stretches pollution free comprising a senior representative of NITI Aayog, Secretaries Ministry of Water Resources, Ministry of Urban Development, Ministry of Environment, Forest and Climate Change, Director General, National Mission for Clean Ganga and Chairman CPCB. Chairman CPCB will be the nodal authority for coordination. Senior most among them will preside over the deliberations.**

**44. The CMC will also co-ordinate with the RRCs of the States and oversee the execution of the Action Plans, taking into account the timelines, budgetary mechanism and other**

***factors. Chief Secretaries of States will be the nodal agency at State level. The Chief Secretaries of the States may undertake review of progress of RRCs by involving concerned Secretaries of Department of Urban Development, Environment, Industries, Irrigation and Public Health, Health etc.***

***45. We also direct the MoEF& CC to consider a policy for giving environmental awards to outstanding persons (natural and juristic) and Institutions/States and introducing disincentives for non-compliant states. Such scheme may be framed preferably before 30.06.2019.***

27. The composition of CMC was modified vide orders dated 24.04.2019 and 17.05.2019 in O.A. 606/2018 to the effect that other important issues be also considered by the CMC and having regard to the significance of the issues involved, the deliberations of CMC may be presided over by the Cabinet Secretary if viable and if possible, PMO may depute an Observer at important deliberations.

**VI. CMC Report dated 11.06.2019 and Tribunal order dated 18.07.2019 disapproving the same for not being in conformity with its orders**

28. The CMC meeting was held on 11.06.2019 without taking cognizance of further orders dated 24.04.2019 requiring other issues also to be taken up for consideration and order dated 17.05.2019 requesting the Cabinet Secretary to preside over the deliberation<sup>25</sup>. Accordingly, this Tribunal observed that CMC may give its report by 31.08.2019, failing which, the Tribunal may proceed without the benefit of such report. On MoEF&CC application<sup>26</sup> seeking extension of time to furnish CMC report, this Tribunal so granted extension until 31.10.2019. The report was ultimately filed only on 19.06.2020, and that too not by CMC, but rather a monitoring committee constituted under a later order.

<sup>25</sup> Order dated 18.07.2019 in O.A. No. 606/2018 (State of J&K)

<sup>26</sup> I. A. 551/2019 disposed of on 04.09.2019

29. The report dated 11.06.2019 was considered vide order dated 06.12.2019 and it was observed:

*“32. The above timelines being in conflict with the mandate of environmental law, and the Constitutional guarantees in terms of the judgments of the Hon’ble Supreme Court and earlier orders of this Tribunal, and cannot be accepted. Vide order dated 18.07.2019 in O.A. No. 606/2018 (J&K), Para 47, this Tribunal noted that proceedings dated 11.06.2019 did not meet the mandate of this Tribunal. Further the Tribunal had already fixed specific timelines which the Committee could not change. The Committee was expected to facilitate the directions of this Tribunal and not to nullify the same. As already noted, the issue is a major concern for the people of the country. Discharge of untreated sewage is a criminal offence and affects right to life. Failure to enforce the law cannot be condoned by giving long timelines unconditionally. Apart from the timelines fixed in the order dated 08.04.2019, timelines given by the Hon’ble Supreme Court for 100% sewage in Paryavaran Suraksha, (2017) 5 SCC 326 have expired. This Tribunal has directed that compensation will be payable if 100% sewage is not ensured even till 31.03.2020. In the context of river Ganga, outer timeline for ensuring that all the requisites STPs are set up is 31.12.2020 and interim in-situ remediation is 31.10.2019 and for Yamuna also somewhat similar timeline has been fixed.*

33. We may note the observations of the Hon’ble Supreme Court in several decisions:

**“26. Enactment of a law, but tolerating its infringement, is worse than not enacting a law at all.** The continued infringement of law, over a period of time, is made possible by adoption of such means which are best known to the violators of law. **Continued tolerance of such violations of law not only renders legal provisions nugatory but such tolerance by the enforcement authorities encourages lawlessness and adoption of means which cannot, or ought not to, be tolerated in any civilized society. Law should not only be meant for the law-abiding but is meant to be obeyed by all for whom it has been enacted.** A law is usually enacted because the legislature feels that it is necessary. It is with a view to protect and preserve the environment and save it for the future generations and to ensure good quality of life that Parliament enacted the anti-pollution laws, namely, the Water Act, Air Act and the Environment (Protection) Act, 1986. **These Acts and Rules framed and notification issued thereunder contain provisions which prohibit and/or regulate certain activities with a view to protect and preserve the environment. When a law is enacted containing some provisions which prohibit certain types of activities, then, it is of utmost importance that such legal provisions are effectively enforced. If a law is enacted but is not being voluntarily obeyed, then, it has to be**

**enforced. Otherwise, infringement of law, which is actively or passively condoned for personal gain, will be encouraged which will in turn lead to a lawless society. Violation of anti-pollution laws not only adversely affects the existing quality of life but the non-enforcement of the legal provisions often results in ecological imbalance and degradation of environment, the adverse effect of which will have to be borne by the future generations.**<sup>27</sup>

*“45..... The Government could not pass such orders of exemption having dangerous potential, unmindful of the fate of lakhs of citizens of the twin cities to whom drinking water is supplied from these lakes. **Such an order of exemption carelessly passed, ignoring the “precautionary principle”, could be catastrophic.**”*<sup>28</sup>

*“61. .... If the laws are not enforced and the orders of the courts to enforce and implement the laws are ignored, the result can only be total lawlessness. It is, therefore, necessary to also identify and take appropriate action against officers responsible for this state of affairs. **Such blatant misuse of properties at large-scale cannot take place without connivance of the officers concerned. It is also a source of corruption. Therefore, action is also necessary to check corruption, nepotism and total apathy towards the rights of the citizens.**”*<sup>29</sup>

*“15. .... 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*

<sup>27</sup> INDIAN COUNCIL FOR ENVIRO-LEGAL ACTION V. UOI & ORS. (1996) 5 SCC 281

<sup>28</sup> A.P. Pollution Control Board II v. Prof. M.V. Nayudu, (2001) 2 SCC 62

<sup>29</sup> M.C. Mehta v. UOI, (2006) 3 SCC 399 – Public functionaries

*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.”<sup>30</sup>*

34. *In view of above observations, the timeline proposed in the minutes of CMC dated 11.06.2019 cannot be accepted and the timeline already laid down will have to be strictly adhered to with the consequences as stipulated therein.”*

**VII. Order dated 22.08.2019 – Directions regarding control of pollution of river Ganga in pursuance of orders of Hon’ble Supreme Court in (2015) 12 SCC 764 and orders of this Tribunal**

30. In **M.C. Mehta v. Union of India**, (2015) 12 SCC 764, the Hon’ble Supreme Court held:

**“2.** *This Court has over the past thirty years or so passed a series of orders to which we need not refer except a few that are specially notable. The first of these orders was passed as early as on 9-9-1985 by which this Court issued notices to all the industries situated in the urban areas on the banks of River Ganga to stop discharging effluents from their factories without treating the same properly in accordance with the standards prescribed by the Central Pollution Control Board. General notices pursuant to the said direction were issued and published in various newspapers in response where to some of the industries filed affidavits while others did not even choose to appear. By another order dated 10-12-1991<sup>1</sup> this Court directed compliance with the earlier directions and closure of such of the industries as failed to do the needful.*

**3.** *The third significant order to which we must refer at this stage is an order dated 22-9-1987<sup>2</sup> whereby this Court directed closure of as many as 20 tanneries working on the banks of Ganga and discharging effluents into the river. The relevant passages from the said order read: (M.C. Mehta case<sup>2</sup>, SCC pp. 479-80, paras 14-17)...*

**4.** *What is important is that **this Court upon consideration of several reports including scientific studies recorded a specific finding to the effect that industrial pollutants were ten times more noxious than domestic waste no matter the latter is also one of the causes for the pollution of the river.** The above directions were soon followed by a further order dated 12-1-1988<sup>3</sup> by which this Court while reiterating the earlier*

<sup>30</sup> M.C. Mehta Vs UOI- W.P. (Civil) No. 13029/1985 dated 25.11.2019

directions ordered the municipalities concerned to set up sewage treatment plants to ensure that untreated domestic sewage does not enter the river to pollute the waters. This Court observed: (M.C. Mehta case<sup>3</sup>, SCC p. 489, para 17)

“17. It is no doubt true that **the construction of certain works has been undertaken under the Ganga Action Plan at Kanpur in order to improve the sewerage system and to prevent pollution of the water in the River Ganga. But as we see from the affidavit filed on behalf of the authorities concerned in this case the works are going on at a snail’s pace.** We find from the affidavits filed on behalf of the Kanpur Nagar Mahapalika that certain target dates have been fixed for the completion of the works already undertaken. We expect the authorities concerned to **complete those works within the target dates mentioned in the counter-affidavit and not to delay the completion of the works beyond those dates.** It is, however, noticed that the Kanpur Nagar Mahapalika has not yet submitted its proposals for sewage treatment works to the State Board constituted under the Water Act. The Kanpur Nagar Mahapalika should submit its proposals to the State Board within six months from today.”

This Court also directed that **applications for grant of licences to establish new industries shall be refused unless adequate provisions are made for the treatment of trade effluents flowing out of the factories and that immediate action should be taken against industries found responsible for polluting the river.**

...

15. We regret to say that **the intervention and sustained efforts made by us over the past 30 years notwithstanding no fruitful result has been achieved so far except the shutting down of some of the polluting units. This is largely because while orders have been passed by us their implementation remains in the hands of statutory authorities including the CPCB and the State PCBs which have done practically nothing to effectuate those orders or to take independent steps that would prevent pollution in the river. A total lack of monitoring by the statutory bodies has also contributed to the current state of affairs. The report of the Comptroller and Auditor General to the effect is a clear indictment of the statutory authorities and those at the helm of their affairs.**

16. There is no gainsaying that **River Ganga** has for the people of this country great significance not only in the spiritual or mythological sense but also in material terms for it **sustains millions who are settled on its bank or eke out their living by tilling lands that are fertilised by its water.** Despite the experience of the past we have not lost hope, for the Central Government appears to be resolute in its efforts to ensure that the mission of cleaning the holy river is carried forward and accomplished. How far will the Government’s renewed zeal make any difference on the ground is for anyone to guess.

**17.** What is, however, clear is that if the mission has to succeed, all those concerned will have to rededicate themselves to the accomplishment of the cause that will not only cleanse the holy river but comfort millions of souls that are distressed by the fetid in what is believed to be so holy and pure that a dip in its water cleanses all sins. **Statutory authorities that are charged with the duty to prevent pollution need to monitor and take action where they find any breach of the law. Failure of the authority to do so may also have to be noted for such action as may be required under law. This may call for a closer monitoring of the performance of all concerned.** Time constraints unfortunately do not allow us to do that on a continuing basis no matter we have over the past thirty years devoted enough time and energy in that direction.

**18.** We are comforted by the thought that the National Green Tribunal has been established under the National Green Tribunal Act, 2010. The Tribunal, it is evident from the provisions of the Act, has the power to take stock of the situation and pass necessary orders on the subject. **It has the legislative mandate to undertake effective and speedy adjudication and disposal of issues touching preservation of environment by prevention of pollution. It is in the above backdrop that we consider it more appropriate to refer the issue relating to enforcement of the provisions of the statutes touching environment and its preservation arising out of discharge of industrial effluents into River Ganga to the National Green Tribunal.**

**19.** We are confident that the Tribunal which has several experts as its members and the advantage of assistance from agencies from outside will spare no efforts to effectively address all the questions arising out of industrial effluents being discharged into the river. This will include discharge not only from the grossly polluting industries referred to in the earlier part of this order but also discharge from “highly polluting units” also. As regards the remainder of the matter concerning discharge of domestic sewage and other sources of pollution we will for the present retain the same with us.

**20. We accordingly request the Tribunal to look into all relevant aspects and to pass appropriate directions against all those found to be violating the law. We will highly appreciate if the Tribunal submits an interim report to us every six months only to give us an idea as to the progress made and the difficulties, if any, besetting the exercise to enable us to remove such of the difficulties as can be removed within judicially manageable dimensions..”**

**(internal citations omitted) (emphasis supplied)**

31. Vide order dated 22.08.2019<sup>31</sup>, this Tribunal issued directions and laid down coercive measures to be taken to restrain discharge of untreated sewage in river Ganga:

*“16 .....As already observed by this Tribunal including in the order dated 14.05.2019 that River Ganga being National River with distinct significance for the country, even a drop of pollution therein is a matter of concern. **All the authorities have to be stringent and depict zero tolerance to the pollution of River Ganga. Wherever STPs are not operating, immediate bioremediation and/or phyto-remediation may be undertaken if feasible. To avoid procedural delay of tender processes, etc. specifications and norms for undertaking such activities may be specified in consultation with the CPCB as was earlier directed in our order dated 29.11.2018.** Performance guarantees may be required to be furnished for ensuring timely performance. It needs to be ensured that setting up of STPs and sewerage network to be completed and carried out so as to avoid any idle capacities being created. Performance guarantees may be taken for preventing such defaults.*

*17. **Wherever the work has not commenced, it is necessary that no untreated sewage is discharged into the River Ganga. Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.***

*15. **With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019.”***

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<sup>31</sup> O.A. 200/2014, dealing with the pollution of river Ganga

VIII. Order dated 28.08.2019, in pursuance of Hon'ble Supreme Court judgment in (2017) 5 SCC 326, for 100% treatment of sewage by 31.3.2018

32. In **Paryavaran Suraksha Samiti v. UOI**, (2017) 5 SCC 326, the Hon'ble Supreme Court held:

***“10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the “common effluent treatment plant” shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.***

***11. Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge industrial pollutants and sewer, directly into rivers and water bodies.***

***12. We are of the view that in the manner suggested above, the malady of sewer treatment, should also be dealt with simultaneously. We, therefore, hereby direct that “sewage***

treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.

**13. We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down.** We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional “primary effluent treatment plants”, and the setting up of functional “common effluent treatment plants” within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned. **The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.** They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which shall evaluate the data and shall furnish the same to the Bench of the jurisdictional **National Green Tribunal.**

**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.”**

**(emphasis supplied)**

33. Vide order dated 28.08.2019<sup>32</sup>, this Tribunal held:

**“15. It is clear from the order of the Hon’ble Supreme Court<sup>33</sup> that the responsibility of operating STPs under Article 243W and item 6 of Schedule XII to the Constitution is of local bodies who have to evolve norms to recover funds for the purpose which is to be supervised by the States/UTs. The norms were to be finalized upto 31.03.2017 to be implemented from the next year, i.e 01.04.2018. In absence thereof, the States/UTs have to cater to the financial requirement from its own resources. The States/UTs are to prioritize the cities, towns, villages discharging effluents/sewage directly into the water bodies. Industrial activity without proper treatment plants (ETPs and CETPs) is not to be allowed by the State PCBs and the Secretaries, Environment of the States/UTs are to be answerable. Thus, the source for financial resources for the STPs, stands**

<sup>32</sup> O.A. No. 593/2017, Paryavaran Suraksha Samiti v. UOI

<sup>33</sup> Para 10-14 in Paryavaran Suraksha Samiti v. UOI, (2017) 5 SCC 326

**finalized under the binding judgment of the Hon'ble Supreme Court. Authorities and persons accountable are identified. Rigid implementation has been laid down. This Tribunal has been required to monitor compliance of the directions and timelines.**

16. It is in this background that the present report needs to be appraised and further directions given. As regards the Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water is accepted as an interim measure. With regard to setting up of STPs, while we appreciate the extensive work of the CPCB based on information furnished by States/UTs, the challenge remains about verification of the said data on the one hand and analysis of the steps taken and required on the other. There is already a database available with the CPCB with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites. This needs to be collated and river basinwise macro picture needs to be prepared by the CPCB in terms of need for interventions, existing infrastructure and gaps therein. The States have given timelines which need to be effectively monitored both by the CPCB and the Chief Secretaries in terms of its execution.

17. **As already noted, prevention of pollution of water is directly linked to access to potable water as well as food safety. Restoration of pristine glory of rivers is also of cultural and ecological significance. This necessitates effective steps to ensure that no pollution is discharged in water bodies. Doing so is a criminal offence under the Water Act and is harmful to the environment and public health. 'Precautionary' principle of environmental law is to be enforced. Thus, the mandate of law is that there must be 100% treatment of sewage as well as trade effluents. This Tribunal has already directed in the case of river Ganga that timelines laid down therein be adhered to for setting up of STPs and till then, interim measures be taken for treatment of sewage. There is no reason why this direction be not followed, so as to control pollution of all the river stretches in the country. The issue of ETPs/CETPs is being dealt with by an appropriate action against polluting industries. Setting up of STPs and MSW facilities is the responsibility of Local Bodies and in case of their default, of the States. Their failure on the subject has to be adequately monitored. Recovery of compensation on 'Polluter Pays' principle is a part of enforcement strategy but not a substitute for compliance. It is thus necessary to issue directions to all the States/UTs to enforce the compensation regime, latest with effect from 01.04.2020. We may not be taken to be condoning any past violations. The States/UTs have to enforce recovery of compensation from 01.04.2020 from the defaulting local bodies. On failure of the States/UTs, the States/UTs themselves have to pay the requisite amount of compensation to be deposited with the CPCB for restoration of environment. The Chief Secretaries of all the States may furnish their respective compliance reports as per directions already issued in O.A. No. 606/2018.**

21. We may now sum up our directions:

(i), (ii). ....

**(iii) All the Local Bodies and or the concerned departments of the State Government have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment.”**

34. The above matter (O.A. No. 593/2017) was further reviewed recently vide order dated 21.05.2020. Reference may only be made to paras 13 and 26 as follows:

“13. The above report shows that some steps have been initiated against non-compliant ETPs/CETPs/STPs while further steps need to be taken. With regard to industries not having ETP or not connected to CETP, pending construction of CETPs as mentioned in the above report, the State PCBs/PCCs may ensure that there is no discharge of any untreated pollutants by the industries and such polluting activities must be stopped and compensation recovered for the non-compliance, if any, apart from any other legal action in accordance with law. As regards non-compliant STPs, further action may be completed by the State PCBs/PCCs and it may be ensured that there is 100% treatment of sewage and till STPs are set up, atleast in-situ remediation takes place. **However, on account of Corona pandemic which has affected several on-going activities, the timeline of levy of compensation in terms of order dated 28.08.2019 in O.A. No. 593/2017 read with order dated 06.12.2019 in O.A. No. 673/2018, of 01.04.2020 may be read as 01.07.2020 and 01.04.2021 may be read as 01.07.2021.** Further reports may be taken by the CPCB from all the State PCBs/PCCs as per the system evolved by the CPCB from time to time.

...

...

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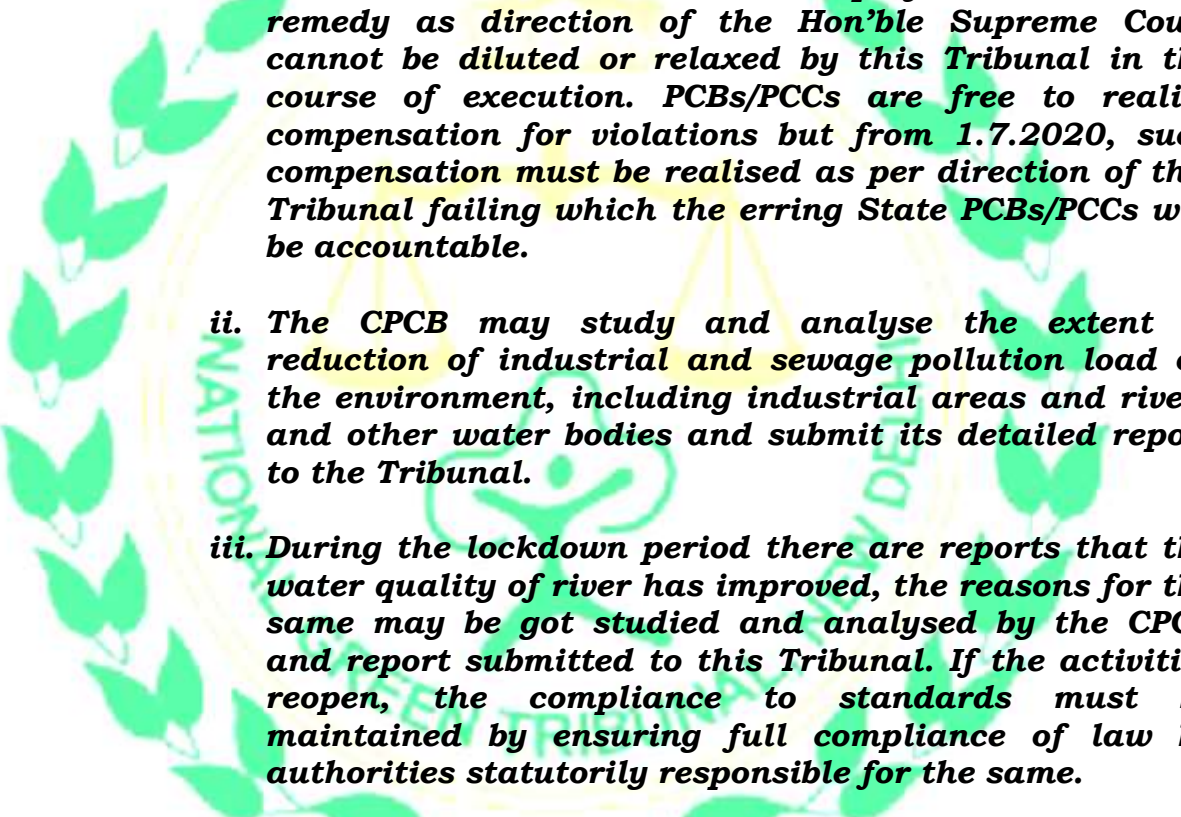
#### **26. Summary of directions:**

- i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.**

**CPCB may further continue efforts on compilation of River Basin-wise data. Action Plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all Action Plans and file a report accordingly.**

**Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.**

**As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.**

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- ii. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.**
  - iii. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.**
  - iv. Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the Action Plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. The CPCB may compile further information on the subject accordingly.**
  - v. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court."**

**IX. Order dated 11.09.2019 – Directions regarding control of pollution of river Yamuna in pursuance of orders of Hon'ble Supreme Court in (2012) 13 SCC 736 and Tribunal's earlier orders**

35. In News Item Published in Hindustan Times Titled “And Quiet Flows the Maily Yamuna”, In re, (2012) 13 SCC 736, the Hon'ble Supreme Court observed:

**“1.4. This writ petition is of the year 1994 and has been pending in this Court since then (approximately for a period of 18 years).**

**1.5. This Court should find appropriate ways to pass such orders which would dispose of this petition while attaining the object of making the Yamuna pollution free. It should also ensure that no person, including corporations or other industries, discharge their sewage, trade or other effluents directly into Yamuna, without treating the same in accordance with the provisions of the Environment Protection Act.**

**1.6. In order to have a complete background of this case and the directions required to be passed by this Court, it is required that:**

**1.6.1. The learned counsel appearing for the parties be directed to file written submissions supported by an affidavit stating the complete background of the case according to that authority, litigant or industry.**

**1.6.2. Whether any treatment plants have been constructed by the public authorities, in particular for treatment of sewage before its discharge into River Yamuna at Delhi, Haryana and the districts of Uttar Pradesh.**

**1.7. If the answer to the same is in affirmative, then its details and if the same is in the negative, its reasons. It may also be stated as to why was it not possible for the authorities concerned to construct such treatment plants and ensure their functioning even after lapse of such a long period of time. If they could not be made operational, why the alternative systems of sewage or trade disposal were not adopted rather than discharging metric cubic tonnes of discharge into Yamuna River.**

**1.8. Whether any of the State Governments and particularly Haryana, Delhi and Uttar Pradesh has appointed Consultants to finalise the design and places of installation of sewerage treatment plants. If so, whether such experts have submitted their reports to the State Governments and what action has been taken by the respective State Governments.**

**1.9. Committees: How many committees have been appointed under the orders of this Court or otherwise, by the State**

Governments, directly with reference to this writ petition. Details with regard to the functioning of these committees, analysis of the reports, if any, submitted by the said committees and implementation of their reports, may also be furnished.

**1.10.** Costing: How much expenditure has so far been incurred by the Central or the respective State Governments on the projects relating to cleaning and making Yamuna River free of pollution and the details of such projects on which such expenditures have been incurred by the respective States.

**1.11.** Whether audit of such expenditure has been done by any competent authority i.e. CAG or the State Accounts Department, if so, the particulars of the reports and if any objections were taken/pointed out.”

**(emphasis supplied)**

36. The proceedings were then transferred to this Tribunal. The Supreme Court later observed:

**“We are satisfied, that the National Green Tribunal is examining the issue in hand effectively, and is passing appropriate orders from time to time. In the instant view of the matter, we consider it just and appropriate to transfer these proceedings and the writ petition to the National Green Tribunal. Ordered accordingly.”<sup>34</sup>**

37. Vide the order dated 11.09.2019, in O.A. No. 06/2012, dealing with river Yamuna, this Tribunal observed as follows:

**“12. One of the major concerns of this Tribunal is that repeated directions remain un-complied and in spite of largescale failures, no accountability is fixed. There is huge loss to public exchequer for which no action is taken. Timelines are conveniently and unilaterally changed. Officers indulge in blame game in shifting responsibility from one to another. There is failure at higher levels in monitoring and taking actions. If this continues, it is difficult to expect any positive change for long. This requires paradigm shift in approach adopted so far. The approach to be adopted is to have clear time- bound plan with flexibility and due to accountability for failure by way of departmental action and monetary compensation. The rescheduled timelines have to be compressed so as to complete every action by December, 2020 except where shorter timelines are specified in this order or are otherwise possible. If any contract permits longer timeline, it is clearly in violation of binding orders of the Tribunal which has attained finality. Violation thereof is per se criminal offence. Such longer timeline has to be consistent with orders of the Tribunal and compressed within**

<sup>34</sup> Order dated 24.04.2017, W.P. No. 725/ 1994 (Supreme Court).

**31.12. 2020. Failing to do so may invite criminal prosecution NMCG may also monitor the compliance. The Chief Secretaries of Delhi, Haryana and U.P. have to personally see the compliance and have to set up Monitoring Cell directly under them. Vice Chairman, DDA can also monitor and coordinate with Chief Secretary, Delhi. All other departments can monitor subject to overall directions of the Chief Secretaries. This can avoid shifting of responsibilities once ownership is with highest authorities in the State. Monthly review reports may be shared with the Monitoring Committee and also placed on websites of concerned States. Failure and successes of the individual involved may be specifically recorded and reflected in service record of the concerned officer. Stock taking may be done by the Chief Secretaries of the failure and successes so far and appropriate actions be initiated against those who have been responsible for the failure. Nodal Officers may be identified in respect of different projects clearly defining the responsibilities. Wherever there is misappropriation of funds, criminal case has to be registered. Posting of Officers entrusted with the responsibility may be reviewed from time to time depending on their responsibility. Procedure for giving of contracts may be shortened and standardized at State level and if possible at National level by NMCG and CPCB. Giving of contracts should be based on successful credentials instead of mere lowest rates. Pollution load at entry and exist point of each concerned State may or at entry points of each drains need to be recorded periodically. The Chief Secretaries of Delhi, Haryana and U.P. may furnish action taken reports in this regard at the time of their personal appearance before this Tribunal in O.A. 606/2018.**

13. Priorities need to be planned. The first step is to ensure that no pollutant is discharged into the river or drains connected thereto. Projects of setting up and upgradation of STPs including setting up of interceptors, laying of sewerage line network etc. have to be completed within strict timelines. Pending such action, immediate bioremediation and/or phytoremediation or any other alternative remediation measure may be undertaken as an interim measure. Pollution of river or water bodies is a criminal offence which needs to be checked by setting up ETPs/CETPs/STPs. The Hon'ble Supreme Court has directed<sup>35</sup> that establishment and proper functioning of ETPs/CETPs/STPs in the country be ensured. This is to enforce the right of access to water. It has been noted by the Hon'ble Supreme Court that water pollution is the cause of various diseases and also affects food safety apart from affecting the environment as such. Following the said judgment, this Tribunal has directed<sup>36</sup> that "All the local bodies have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the

<sup>35</sup> (2017) 5 SCC 326

<sup>36</sup> Order dated 28.08.2019 in Paryavaran Suraksha Samiti & Anr. V. UOI & Ors., O.A No. 593/2017

environment.” While dealing with the pollution of river Ganga, this Tribunal directed:

“Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.

With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019.”<sup>37</sup>

“15. A. (iv):

- e). DJB to complete the task of setting up of STPs by 31.12.2020.
- g) Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.01.2020, failing which the Govt. of NCT of Delhi may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs, sewerage network and its connectivity. For delay of the work, the Chief Secretary, Govt. of NCT Delhi must identify the officers responsible and assign specific accountability. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers for delay in setting up of STPs, sewerage network and its connectivity by the concerned head of the department.
- h) The Govt. of NCT, Delhi will be liable to pay Environment Compensation if defaults take place as under:
  - i. The operational deficiencies of the existing STPs must be rectified within three months failing which Environmental compensation of Rs. 5 Lacs per month for STP shall be deposited with CPCB.
  - ii. With regard to works under construction, after 01.07.2020, direction for payment of environmental

<sup>37</sup>O.A No. 200/2014 order dated 22.08.2019

compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Yamuna and Rs. 10 lakhs per month to CPCB per incomplete STP, sewerage network and its connectivity will apply.

- iii. With regard to the situation where works with regard to STP, sewerage network and its connectivity have not yet started, the Govt. of NCT, Delhi has to pay an Environmental Compensation at the rate of Rs. 10 lakhs per month per STP, Sewerage network and its connectivity after 31.12.2020 for the delay in setting up of the same. It will be open to Govt. of NCT of Delhi to recover the said amount from erring officers/contractors.”

**X. Order dated 06.12.2020 (“Fourth Order”) in the present matter (last date)**

38. Vide order dated 06.12.2019, this Tribunal further observed:

**“40. From the above, it is clear that this Tribunal has fixed specific timelines in view of object of the law and repeated failures of the authorities which has resulted in continuing pollution of rivers adversely affecting the environment and the public health. It is not desirable to prolong the problem on any ground. The apparent conflict in above timelines needs to be clarified. Vide order dated 08.04.2019 in the present matter, timeline for final execution of all steps of Action Plan stands extended till 31.03.2021 after which compensation is to be recovered from the defaulting States and action is to be against the erring officers. Vide order dated 22.08.2019 in the case of river Ganga, outer timeline for compliance is 31.12.2020. In terms of order dated 28.08.2019 in Paryavaran Suraksha Samiti, outer timeline for 100% sewage treatment is 31.03.2020. We clarify that since order in Paryavaran Suraksha was passed on 28.08.2019 and all concerned have been put to notice, it is desirable that 100% treatment of sewage takes place as directed atleast to the extent of in situ remediation and commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as directed vide order dated 28.08.2019, supra. The timelines for Ganga, Yamuna or other rivers covered by specific orders will stand, as already directed. Timeline for completing all steps of Action Plan till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In view of this, the timelines proposed by the CMC cannot be accepted, as observed earlier. The States/UTs may take necessary steps accordingly.**

41. **Consolidated status report has been filed by CPCB on 18.11.2019 with reference to the present matter as well as dealing with the Musi River in the State of Telangana (O.A. 426/2018) and with regard to coastal pollution (O.A. 829/2019). Separate orders are passed in O.A. 426/2018 with regard to Musi River and O.A. 829/2019 dealing with the coastal pollution. The present order deals with the issue of 351 polluted river stretches.**

42 to 45. ...

46. The report of CPCB shows the status of compliance. As already noted, the Action Plans have been prepared with respect to 351 river stretches by the concerned States/UTs with regard to category P-I & P-II (the most polluted river stretches), the Action Plans have been duly recommended by CPCB with certain changes. The said Action Plans are reported to be complete with respect to necessary components for river rejuvenation including identification of drains, their interception, setting up of STPs, utilization of treated water, identification of flood plain zones, maintaining e-flow, etc. Let the same be executed by 31.03.2021 as already directed. No case is made out to extend the laid down timeline unconditionally. **As noted earlier, situation of water pollution is grim in the country and there has been deterioration inspite of the Water Act which was enacted way back in 1974 which was intended to bring about any improvement. This Tribunal has repeatedly put all authorities to notice in the light of earlier orders of the Hon'ble Supreme Court on the subject. Directions were also issued for budgetary support as part of the Action Plans which has been done in indicative terms. There can be no plea of lack of funds on issue threatening the existence of human beings. We have thus no option except to be strict about the timelines already laid down.** We are also of the view that adherence to the timelines must be monitored by the Chief Secretaries of all the States/UTs and should also be monitored at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB. For this purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance and may give its quarterly report to this Tribunal commencing from 01.04.2020. The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the secretary level and ensuring appropriate adverse entries in the ACRs. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an accountable person attached in his office for this purpose. Monthly progress report may be furnished to Secretary, Ministry of Jal Shakti with a copy to CPCB. Steps for in situ remediation as an interim measure may be ensured as directed above as per laid down timeline. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers. As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level.

Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.

CPCB may after scrutiny finalize the Action Plans relating to P-III and P-IV also as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the execution of the Action Plans prepared by the States which may start forthwith, if not already started.

**I. Directions:**

47. We now sum up our directions as follows:

- i. **100% treatment of sewage may be ensured as directed by this Tribunal vide order dated 28.08.2019 in O.A. No. 593/2017 by 31.03.2020 atleast to the extent of in-situ remediation and before the said date, commencement of setting up of STPs and the work of connecting all the drains and other sources of generation of sewage to the STPs must be ensured. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as already directed vide order dated 22.08.2019 in the case of river Ganga i.e. Rs. 5 lakhs per month per drain, for default in in-situ remediation and Rs. 5 lakhs per STP for default in commencement of setting up of the STP.**
- ii. **Timeline for completing all steps of Action Plans including completion of setting up STPs and their commissioning till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In default, compensation will be liable to be paid at the scale laid down in the order of this Tribunal dated 22.08.2019 in the case of river Ganga i.e. Rs. 10 lakhs per month per STP.**
- iii. **We further direct that an institutional mechanism be evolved for ensuring compliance of above directions. For this purpose, monitoring may be done by Chief Secretaries of all the States/UTs at State level and at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB.**
- iv. **For above purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance who may take assistance of CPCB and may give its quarterly report to this Tribunal commencing 01.04.2020.**
- v. **The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the Secretary level and ensuring appropriate adverse entries in the ACRs of**

**erring officers.** Monitoring at State level must take place on **fortnightly basis and record of progress maintained.** The Chief Secretaries may have an accountable person attached in his office for this purpose.

- vi. Monthly progress report may be furnished by the States/UTs to Secretary, Ministry of Jal Shakti with a copy to CPCB. **Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers.**
- vii. As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level.
- viii. Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.
- ix. **CPCB may finalize its recommendations for Action Plans relating to P-III and P-IV as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the execution of the Action Plans prepared by the States which may start forthwith, if not already started.**
- x. **The Action Plan prepared by the Delhi Government which is to be approved by the CPCB has to follow the action points delineated in the order of this Tribunal dated 11.09.2019 in O.A. No. 06/2012.**
- xi. Since the report of the CPCB has focused only on BOD and FC without other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification, a survey may now be conducted with reference to all the said parameters by involving the SPCB/PCCs within three months. Monitoring gaps be identified and upgraded so to cover upstream and downstream locations of major discharges to the river. CPCB may file a report on the subject before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).
- xii. Rivers which have been identified as clean may be maintained."

**XI. Review of Monitoring Reports filed in pursuance of directions in "Fourth Order"**

**Review of CPCB Report dated 18.06.2020**

39. We have carefully considered the consolidated status report dated 18.06.2020 filed by the CPCB. **The said report merely gives status of approval of Action Plans and that States/UTs, State PCBs/PCCs**

were requested to ensure compliance of the orders of this Tribunal.

It is stated as follows:

“Till date, all 61 out of total 61 Action Plans pertaining to P-I and P-II received by CPCB from 18 States and 2 UTs have been approved by CPCB Task Team along with the conditions. Further, in pursuance to Hon'ble NGT directions dated 06.12.2019, CPCB also organised three Task Team meetings for review of Action Plans pertaining to P-III and P-IV categories of PRS. Ninety one Action Plans out of 115 target Action Plans pertaining to P-III and P-IV polluted river stretches submitted by 17 States and 01 UT have been approved by CPCB Task Team. The Action Plans in respect of the States viz., Chhattisgarh, Jharkhand, Punjab, Rajasthan, Uttarakhand and West Bengal required modifications in light of the recommendations of the CPCB Task Team whereas Nagaland State could not participate in 12<sup>th</sup> Task Team meeting in view of technical problem. State-wise action plans (Priority I to Priority IV PRS) approved with conditions by CPCB Task Team is annexed at Annexure-IV and Annexure-V and also detailed in Table 1 below:-

**Table 1. State-wise Status of Action Plans (P—I to P-IV) Approved by CPCB**

Name of the State / UT	Total No. of Identified Polluted River (PRS)	Priority I & II PRS		Priority III & IV PRS		Priority-V PRS*	Total Action Plans (P-I to P-IV PRS) Approved by CPCB Task Team along with conditions
		Priority-I PRS approved	Stretches Priority-II PRS approved	Priority — III & IV PRS received	Priority-III & IV PRS approved		
Andhra Pradesh	5	-	-	2	2	3	2
Assam	44	3	1	7	7	33	11
Bihar	6	-	-	1	1	5	1
Chhattisgarh	5	-	-	4	-	1	-
DD & DNH	1	1	-	-	-	-	1
Delhi	1	1	-	-	-	-	1
Goa	11	-	-	3	3	8	3
Gujarat	20	5	1	8	8	6	14
Haryana	2	2	-	-	-	-	2
Himachal Pradesh	7	1	1	1	1	4	3
J & K	9	-	1	4	4	4	5
Jharkhand	7	-	-	3	-	4	-
Karnataka	17	-	-	11	11	6	11
Kerala	21	1	-	5	5	15	6
Madhya Pradesh	22	3	1	4	4	14	8
Maharashtra	53	9	6	24	24	14	39
Manipur	9	-	1	-	-	8	1
Meghalaya	7	2	-	3	3	2	5
Mizoram	9	-	-	4	4	5	4
Nagaland	6	1	-	3	-	2	1

<b>Odisha</b>	19	1	-	5	5	13	6
<b>Puducherry</b>	2	-	-	1	1	1	1
<b>Punjab</b>	4	2	-	1	-	1	2
<b>Rajasthan</b>	2	-	-	1	-	1	-
<b>Sikkim</b>	4	-	-	-	-	4	-
<b>Tamil Nadu</b>	6	4	-	1	1	1	5
<b>Telangana</b>	8	1	2	4	4	1	7
<b>Tripura</b>	6	-	-	-	-	6	-
<b>Uttar Pradesh</b>	12	4	-	3	3	5	7
<b>Uttarakhand</b>	9	3	1	5	-	-	4
<b>West Bengal</b>	17	1	1	7	-	8	2
<b>Grand Total</b>	<b>351</b>	<b>45</b>	<b>16</b>	<b>115</b>	<b>91</b>	<b>175</b>	<b>152</b>

*Note:- \*Approval of CPCB Task Team is not required in case of P-V category PRS. These action plans to be approved by the RRC Constituted by the State Governments or UT Administrations”*

40. Under the heading ‘Identification of Gaps in water quality monitoring locations and for water quality monitoring for physico-chemical and biological parameters’, it is stated that the water quality monitoring network has been increased to 4111 locations, including 2021 river monitoring locations. Further, it is stated that as per order dated 06.12.2019, national level monitoring was conducted by the Secretary, Department of Water Resources, the Chief Secretaries of the States/UTs and the Member Secretaries of the State PCBs/PCCs and that certain States/UTs have furnished performance guarantees in pursuance of order dated 06.12.2019.

**41. We find the report to be wholly unsatisfactory and inadequate. The report does not give the extent of status of compliance of the mandate of law under the Water Act and the remedial action against the law violators who are discharging pollutants in the water bodies and are responsible for pollution of river stretches. Nothing is mentioned about the improvement in water quality, reduction in pollution load and**

nature of action taken or planned against continued discharge of sewage or effluent recovery of compensation from the law violators, including disciplinary action against the erring officers. Nothing is mentioned about immediate preventive steps when no budget is planned or treatment plans are immediately in sight. There is thus no meaningful strategy for enforcement of law. There is no clear plan to raise resources where adequate budget is not available. Even corporate social responsibility has not been explored. Should citizens continue to suffer inspite of fundamental right to pollution free environment when such massive environment violations are taking pace with impunity? In a country governed by rule of law, crime cannot be allowed to be free. **The data already referred to above, shows large scale violation of law in discharging pollutants in the rivers. The law violators include government authorities as well as commercial establishments. There is also large-scale inaction by the statutory authorities entrusted with the task of enforcing the law in preventing pollution by closing polluting activities in discharge of statutory powers and recovering compensation from the polluters. Inspite of large-scale violation, no matching action has been taken against the polluters or authorities entrusted with the task of taking such action. Such action is resulting in avoidable damage to lives and public health and to the environment reversing which may be a difficult task and cost public revenue hugely and allow law violators to go scot free.** The Chief Secretaries as well as the Secretary, Water Resources who were expected to monitor

meaningfully by way of taking and overseeing action do not appear to have done so for reasons difficult to fathom.

#### **Review of NMCG Report dated 19.06.2020**

42. We have also carefully perused the report dated 19.06.2020 furnished by the NMCG. **The report does not show any meaningful action in terms of directions of this Tribunal. The report merely refers to certain meetings and field visits by the officials of the Ministry of Jal Shakti. There is, however, no mention of compliance of law and rigorous steps which are expected against law violators when violations are rampant and patent. The implementation timelines are unsustainably long, in complete defiance of orders of the Hon'ble Supreme Court in (2017) 5 SCC 326, repeated orders of this Tribunal, law of the land and the seriousness of the problems.** The Water Act was enacted 46 years ago and still discharge of pollution is taking place with impunity and inaction and tolerance by monitoring and statutory authorities has led to total lawlessness. **Clear direction of the Hon'ble Supreme Court requiring prosecution of the erring officers and orders of this Tribunal requiring recovery of compensation on "Polluter Pays" principle continue to be flagrantly violated.**

43. As already mentioned, this Tribunal is also monitoring the issue in O.A. No. 593/2017, *Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors.* in pursuance of direction of the Hon'ble Supreme Court.

44. We may reiterate that the authorities' generic, vague and repeated stand over the decades, that some steps are being taken, or proposed to be taken in future, is untenable. This is so because such piecemeal action or remote planned action, which ultimately fails to stop or prevent water bodies' pollution nor result in punitive action against violators, cannot condone the continuing crime and damage to the environment. Indeed, also as repeatedly observed by the Hon'ble Supreme Court, the same stand, culpable inaction, and 'passing-the-buck' approach has continued since decades<sup>38</sup>, and the situation only continues to worsen, much to the detriment of valuable human and other life. For current and continuing violations, action must be taken according to law by way of recovery of compensation, closing polluting activity and other measures. Violators must be brought to justice. Not doing so by the authorities may lead to inference of collusion with law violators and demonstrate a lack of commitment to public duties entrusted to the statutory and oversight authorities.

## **XII. Directions:**

45. We reiterate our directions in order dated 6.12.2019 in the present matter, reproduced in Para 38 above, read with those in order dated 21.5.2020 in OA 873/2017 and direct CPCB and Secretary, Jal Shakti to further monitor steps for enforcement of law meaningfully in accordance with the directions of the Hon'ble Supreme Court and this Tribunal. **The monitoring is expected with reference to ensuring that no pollution is discharged in water bodies and any violation by local bodies or private persons are dealt with as per mandate of law as laid down in orders of the Hon'ble Supreme Court and this Tribunal without any**

<sup>38</sup> M.C. Mehta (2015), Para 15, supra, Para 30; M.C. Mehta (2006), Para 61, supra note 29; M.C. Mehta (2019), Para 15, note 30.

**deviation from timelines. The higher authorities must record failures in ACRs as already directed and recover compensation as per laid down scale. Every State/UT in the first instance must ensure that at least one polluted river stretch in each category is restored so as to meet all water quality standards upto bathing level. This may serve as a model for restoring the remaining stretches.**

Further reports be filed by the CPCB and Secretary Jal Shakti by 15.9.2020 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) (preferably in the form of searchable/OCR PDF and not image PDF).

**As already noted, the constant difficulty faced by this Tribunal in monitoring abatement of pollution in river Ganga (as well other polluted rivers) remains failure of States and PCBs/PCCs to enforce its orders, despite repeated directions and close monitoring, even in physical presence of Chief Secretaries who have appeared before this Tribunal.**

A copy of this order be sent to the Chief Secretaries of all States/UTs, Secretaries of MoHUA and Ministry of Jal Shakti, Govt. of India, CPCB and all the State PCBs/PCCs by e-mail.

A copy of this order be also sent to the Secretary General, Supreme Court of India with reference to the order of the Hon'ble Supreme Court in (2015) 12 SCC 764, for information and any further directions in terms of para 20 of the said judgement. This is being sent in continuation of earlier orders passed in O.A. 200 of 2014 (relating to River Ganga). **The Secretary-General may place the matter on the judicial side in terms of the direction of the Hon'ble Supreme Court in para 20 of said judgement.**

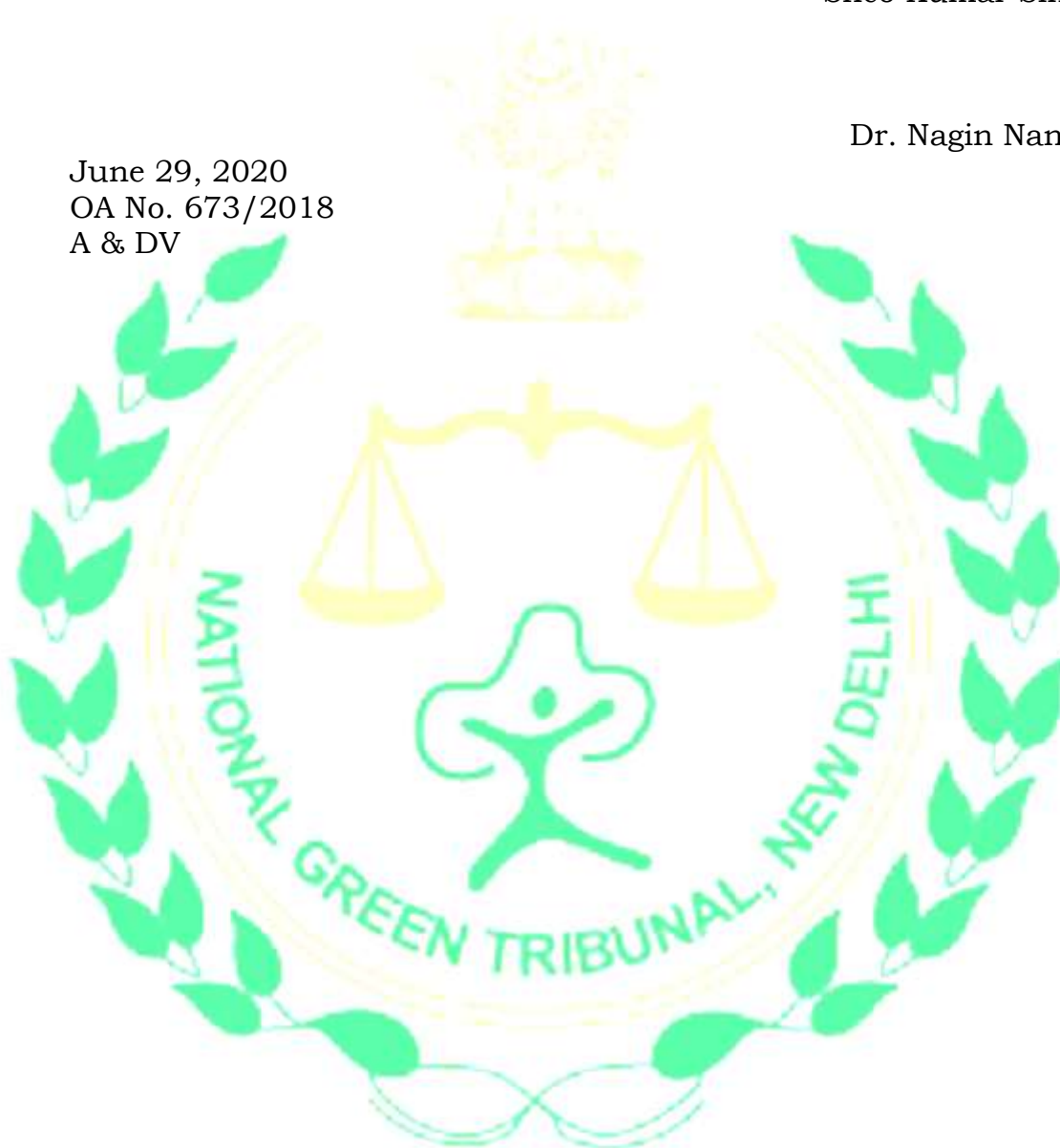
List for further consideration on 21.09.2020.

Adarsh Kumar Goel, CP

Sheo Kumar Singh, JM

Dr. Nagin Nanda, EM

June 29, 2020  
OA No. 673/2018  
A & DV



**Corrected on 26.09.2020**

Item Nos. 01 to 03

Court No. 1

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

(By Video Conferencing)

**Original Application No. 593/2017**

Paryavaran Suraksha Samiti & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

**WITH**

**Original Application No. 673/2018**

*In Re:* News item published in “The Hindu” authored by Shri Jacob Koshiy, titled “More river stretches are now critically polluted: CPCB”

**WITH**

Original Application No. 829/2019

Lt. Col. Sarvadaman Singh Oberoi

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

**WITH**

**Original Application No. 148/2016**

Mahesh Chandra Saxena

Applicant(s)

Versus

South Delhi Municipal Corporation & Ors.

Respondent(s)

Date of hearing: 21.09.2020

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

## ORDER

### **I. Original Application No. 593/2017**

#### **Review of proceedings before the Tribunal**

1. Proceedings in this matter are a follow up of the judgment of the Hon'ble Supreme Court dated 22.02.2017 in **Paryavaran Suraksha Samiti Vs. Union of India**<sup>1</sup>, which mandates establishment and functioning of requisite ETPs/CETPs/STPs by 31.3.2018 and in default, to take coercive measures. This Tribunal has been mandated to monitor compliance. The pertinent directions therein are:

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

X

X

X

**10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating**

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<sup>1</sup> (2017) 5 SCC 326

**finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the “common effluent treatment plant” shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.**

- 11.** Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge **industrial pollutants and sewer, directly into rivers and water bodies.**
- 12.** We are of the view that in the manner suggested above, **the malady of sewer treatment, should also be dealt with simultaneously.** We, therefore, hereby direct that “sewage treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.
- 13.** We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down. We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional “primary effluent treatment plants”, and the setting up of functional “common effluent treatment plants” within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned. **The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.** They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which

*shall evaluate the data and shall furnish the same to the Bench of the jurisdictional **National Green Tribunal**.*

**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.”**

***(emphasis supplied)***

2. The matter has been dealt with earlier, in light of status reports about the gaps in waste generation and treatment, and requisite number of treatment plants. Notices were issued to all State/UT PCBs/ PCCs, and status reports sought. The CPCB was directed to prepare an action plan for compliance of the order of the Hon’ble Supreme Court, monitor execution and file quarterly reports before this Tribunal and also upload the same on its website. Penal action was to be taken for failure in compliance of the orders of the Hon’ble Supreme Court by way of recovery of compensation and other coercive means. Orders passed by this Tribunal earlier include those dated 25.05.2017, 03.08.2018, 19.02.2019, 28.08.2019 and 21.05.2020.

3. It may be noted that the Tribunal is also simultaneously considering overlapping issues in several matters, including:

- **O.A. 673/2018:** remedial action for 351 identified polluted river stretches. **This matter now is, and will henceforth be, reviewed together with the present matter.**
- **O.A. 829/2019:** issue of coastal pollution on account of discharge of untreated effluents/sewage. *This matter now is reviewed together with the present matter, and will stand disposed of in terms of directions herein.*

- **O.A. 148/2016:** management of sewage treated water is involved. *This matter now is reviewed together with the present matter, and will stand disposed of in terms of directions herein.*
- **O.A. 1038/2018:** 100 identified polluted industrial clusters, in which the water pollution is caused mainly by discharge of untreated sewage/effluents.
- **O.A. 606/2018:** monitoring compliance of Solid and Liquid Waste Management, including river pollution. **The Tribunal interacted with Chief Secretaries of all the States/UTs, who appeared, in person, with progress reports on significant environmental issues.** They were directed to personally monitor ongoing compliance at least monthly through dedicated cells.

4. Further, in O.A. 673/2018, the Tribunal directed constitution of **River Rejuvenation Committees (RRC)** in all the States/UTs, headed by Chief Secretaries, to prepare and execute action plans for restoration of the polluted river stretches. The action plans envisage prevention of discharge of untreated effluents/sewage. Apart from O.A. 673/2018, which deals with the rejuvenation of 351 river stretches generally, the Tribunal is considering remedial action for control of pollution of certain rivers separately, under Supreme Court directions, or otherwise<sup>2</sup>.

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<sup>2</sup> These include (not an exhaustive list):

- M.C. Mehta V. UOI **O.A. No. 200/2014** (pollution of **Ganga**), see also 2017 NGTR (3) PB 1
- Manoj Mishra V. UOI, **O.A. No. 06/2012** (pollution of **Yamuna**)
- Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case) **O.A. No. 138/2016** (TNHRC) (pollution of river **Ghaggar**)
- Mahendra Pandey V. UOI & Ors. **O.A. No. 58/2017** (river **Ramganga**, a tributary of river Ganga)
- Sobha Singh & Ors. V. State of Punjab & Ors. O.A. 916/2018, and **O.A. No. 101/2014** (rivers **Sutlej and Beas**)
- Amresh Singh V. UOI & Ors. **O.A. No. 295/2016, Execution Application No. 32/2016** (rivers **Chenab and Tawi**)
- Nityanand Mishra V. State of M.P. & Ors. **O.A. No. 456/2018** (river **Son**)
- Doaba Paryavaran Samiti V. State of U.P. & Ors. **O.A. No. 231/2014** (river **Hindon**)

5. Whilst not necessary to refer to all previous orders, we start with the Tribunal's order of **28.08.2019, wherein for the first time, the Tribunal set up a compensation regime for default.** The Tribunal considered the CPCB reports dated 30.05.2019, 19.07.2019 and 14.08.2019 with compiled status of setting up of ETPs/ CETPs/STPs and methodology for assessment of environmental compensation. The Tribunal noted that **deficit in capacity of liquid waste treatment was 62 percent which was the major source of polluting rivers and water bodies.** In the said order, the following directions were issued:-

*“21. We may now sum up our directions:*

- (i) The Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water in the report dated 30.05.2019 is accepted and the same may be acted upon as an interim measure.*
- (ii) SPCBs/PCCs may ensure remedial action against non-compliant CETPs or individual industries in terms of not having ETPs/fully compliant ETPs or operating without consent or in violation of consent conditions. This may be overseen by the CPCB. CPCB may continue to compile information on this subject and furnish quarterly reports to this Tribunal which may also be uploaded on its website.*
- (iii) All the Local Bodies and or the concerned departments of the State Government have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment.**
- (iv) The CPCB needs to collate the available data base with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites and prepare a river basin-wise macro picture in terms of gaps and needed interventions.*
- (v) The Chief Secretaries of all the States/UTs may furnish their respective compliance reports on this subject also in O.A. No. 606/2018.**

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- Arvind Pundalik Mhatre V. MoEF&CC &Ors. **O.A. No. 125/2018** (river **Kasardi**)
  - Sudarsan Das V. State of West Bengal & Ors. **O.A. No. 173/2018** (river **Subarnarekha**)
  - Meera Shukla V. Municipal Corporation, Gorakhpur & Ors. **O.A. No. 116/2014** (rivers **Ami, Tapti, Rohani and Ramgarh lake**)
  - O.A. 426/2018, Mohammed Nayeem Pasha & Anr. v. The State of Telangana & Ors. (river Musi)
  - O.A. 50/2018, Nav Yuva Sanghatan & Ors. v. The Secretary, Narmada, Water Resources, Water Supply & Kalpsar Department & Ors. (river Tapi).

*List for further consideration on 21.05.2020, unless required earlier. A copy of this order be placed on the file of O.A. No. 606/2018 relating to all States/UTs and be sent to Chief Secretaries of all States/UTs, Secretary MoEF&CC, Secretary Jal Shakti and Secretary, MoHUA.”*

**(emphasis supplied)**

6. Thereafter on **21.05.2020**, wherein the Tribunal directed data collection by river basin; reduction of timelines; the Central Government to facilitate the State/UTs efforts; and CPCB to study extent of reduction of pollution load. The following directions were issued:-

“26. Summary of directions:

- i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.

**CPCB may further continue efforts on compilation of River Basin-wise data.** Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.

**Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.**

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.

- ii. ***The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.***
- iii. *During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.*
- iv. *Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. **The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected.** The CPCB may compile further information on the subject accordingly.*
- v. *Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court."*

## **Review of Compliance Status Reports**

### **CPCB Report dated 16.09.2020**

7. In light of the order of 21.05.2020, CPCB filed a report dated 16.09.2020. In substance, the report states that 1831 industries are working without ETP, 1123 with non-compliant ETPs, there are 62 non-compliant CETPs, 530 non-compliant STPs, several projects are still at proposal/construction stage, OCEMS data for 11 PCBs/PCCs is not in public domain, there is a gap in waste generated and treated and large number of dump sites are not scientifically managed resulting in contamination of water. **There is, thus, a need for more rigorous and continuous monitoring, including further steps for coercive measures to enforce rule of law and citizens' right to clean**

**environment. The authorities must ensure reduction in pollution load for meaningful good governance.**

8. The findings in the report include:-

**“A. 2.0 Compliance Status of ETPs, CETPs & STPs reported by SPCBs/PCCs**

- i. As per the data received from SPCBs/PCCs, out of total 64,484 number of industries requiring ETPs, 62,653 industries are operating with functional ETPs and **1,831 industries are operating without ETPs**. Show-cause notices and closure directions have been issued to 856 and 824 industries, respectively for operating without ETPs. Legal cases have been filed against 6 industries and action is under process for 145 industries. Out of 62,653 operational industries, 61,530 industries are complying with environmental standards and **1,123 industries are non-complying**. Show-cause notices and closure directions have been issued to 613 and 135 industries, respectively, for non-compliance. Legal cases have been filed against 13 industries and action is under process for 362 industries.
- ii. As per the data received from SPCBs/PCCs, there are total 191 CETPs, out of which 129 CETPs are complying with environmental standards and **62 CETPs are non-complying**. Show-cause notices and closure directions have been issued to 20 and 5 CETPs, respectively for non-compliance. Legal cases have been filed against 8 CETPs and action is under process for 29 CETPs.
- iii. As per the data received from SPCBs/PCCs, there are total 15,730 STPs (including municipal and other than municipal (non-municipal/stand-alone) STPs), out of which, 15,200 STPs are complying with environmental standards and **530 STPs are non-complying**. Show-cause notices and closure directions have been issued to 262 and 28 STPs, respectively, for non-compliance. Legal cases have been filed against 17 STPs and action is under process for 223 STPs.
- iv. As per the data received from SPCBs/PCCs, there are 84 CETPs in construction/proposal stage, whereas, for STPs, 1,081 projects (municipal and non-municipal) are under construction/proposal stage.
- v. As per the data received from SPCBs/PCCs, 15 SPCBs/PCCs (namely- Andhra Pradesh, Assam, Bihar, Goa, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Tamil Nadu, Telangana and West Bengal) are displaying OCEMS data in public domain. **The links provided by Gujarat and**

**Uttarakhand SPCBs are password protected and data is not available in public domain. The 4 SPCBs (namely, Chhattisgarh, Jammu & Kashmir, Punjab and Sikkim) have not provided appropriate web links. Further, Chandigarh PCC has clarified that OCEMS data will be displayed after upgradation of STPs. Karnataka SPCB has requested for time till 30.09.2020 to make the system operational. Mizoram SPCB has informed that there is no industry requiring OCEMS connectivity. Lakshadweep PCC informed that there is no industry in the Union Territory of Lakshadweep.**

OCEMS data of 11 SPCBs/PCCs (Andaman & Nicobar, Arunachal Pradesh, Daman & Diu, Dadra Nagar Haveli, Delhi, Manipur, Meghalaya, Nagaland, Rajasthan, Tripura and Uttar Pradesh) is not available in public domain.

## **B. 3.1 Sewage Management**

### **3.1.1 Compliance status w.r.t. the directions under Para 24 and 26 (iv)**

- i. CPCB requested all States/UTs vide email/letter dated 03.06.2020, 24.06.2020 and 24.08.2020 to submit action plans as per the format and compliance reports. Further, CPCB has also provided link of the report submitted to the Hon'ble NGT indicating observations/ shortcomings on action plans of reuse of treated sewage, to the SPCBs/PCCs. A copy of the correspondences is attached at **Annexure-II.**
- ii. Accordingly, action plan was received from the State of Punjab and revised action plans were received from Jammu and Kashmir (UT), Lakshadweep, Rajasthan (specific to Ajmer district), and Sikkim. Information is awaited from other States. **The gap analysis of action plans is attached as Annexure-III.**
- iii. 4 States/UTs (Arunachal Pradesh, Manipur, **Uttar Pradesh, Uttarakhand**) have not submitted any information till date.

### **3.1.2 Compliance w.r.t. directions under Para 26 (i)**

- i. CPCB communicated to all SPCBs/PCCs to provide information on STPs inventory as per the format, vide letter dated 15/07/2020. A copy of letter is attached as Annexure-IV. Based on continuous follow-up, all SPCBs/PCCs have provided information on STPs and same is attached as Annexure-V.
- ii. CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans through online portal of CPCB.

**C. 3.2 River basin-wise macro picture of ETPs, CETPs, STPs, MSW Facilities and Legacy Waste Sites**

*The Hon'ble NGT, in the matter of OA No. 593 of 2017, vide order 28.08.2019, directed CPCB to collect the data of ETPs, CETPs, STPs, MSW facilities and legacy waste sites and prepare a river-basin-wise macro picture in terms of gaps.*

*In compliance of the Hon'ble NGT's directions, CPCB has developed an online portal for the collection of river-basin wise information. The details of the river basins associated with the concerned states, as adopted from River Basin Classification, 2019 of Central Water Commission, is given at **Annexure-VI**. The portal, with modules for ETPs, CETPs and STPs, is operational and SPCBs/PCCs are in the process of using the same for submission of information.*

**3.2.1. Status of ETPs:**

*CPCB has been collecting the industry specific information related to river basin, locational coordinates (latitude & longitude), disposal point for trade effluent, treatment capacity & actual treatment, environmental compliance status, action taken by concerned authority in case of non-compliance, etc. Further, provision for capturing information regarding pollution load of four major water quality parameters i.e. pH, BOD, COD and TSS are being also incorporated. SPCBs/PCCs have been reminded to expedite the work for data submission, vide letter dated 12.05.2020, 30.07.2020 and 25.08.2020 (email). Copy of the correspondences is given at **Annexure-VII (a to c)**.*

*So far, information from 6 SPCBs/PCCs (namely; Delhi, Haryana, Daman & Diu, Mizoram, Odisha and Tripura) have been received through CPCB portal. Rest of the SPCBs/PCCs are under the process of compilation and submission of data. The data submitted by Haryana, Daman & Diu, Delhi and Odisha SPCB/PCC has some shortcomings, which were communicated vide letter dated 07.09.2020 & 09.09.2020. A Copy of the correspondences to concerned SPCBs/PCCs is given at **Annexure-VIII (a to d)**.*

**Although, to have the complete and clear picture, data from all the States/UTs is required, however, preliminary analysis based on the information received from 04 SPCBs/PCCs, is as follows:**

**a. River basin-wise disposal point of industrial units for the discharge of trade effluent:**

As per the river basin-wise information received from 04 SPCBs/PCCs (Delhi, Daman & Diu, Mizoram and Tripura), there are total 1,544 industrial units in these States/UTs. The river basin-wise number of units with respect to their effluent discharge points is summarized in the following table:

**Table No. 1: River basin-wise status of trade effluent generating units and their disposal points**

SI. No.	River Basin	State/ UT	Number of units w.r.t. their effluent disposal points									Total
			CETP	Canal	Drain	Land/ Irrigation	River	Sewer	STP	ZLD	Other s	
1	Ganga	Delhi	817	1	571	0	0	26	1	3	0	1419
2	West flowing rivers from Tapi to Tadri	Daman & Diu	0	0	0	2	1	0	0	20	21	44
3	Minor river basins drainage to Bangladesh & Burma	Mizoram	0	0	61	0	0	0	0	0	0	61
		Tripura	4	0	2	I	2	0	0	0	II	20
Total			821	1	634	3	3	26	1	23	32	1544

**b. River basin-wise discharge of treated/partially treated effluents**

Based on the information received from Delhi, Daman & Diu, Mizoram and Tripura SPCB/PCC, river basin-wise quantum of treated/partially treated industrial effluents, is summarized in the following table:

**Table No. 2: River basin-wise status of discharge of treated/partially treated effluent at various disposal points**

SI. No.	River Basin	State/UT	Discharge Volume at the				Particular discharge point (KLD)					Total
			CETP	Canal	Drain	Land/irrigation	River	Sewer	STP	ZLD	Others	
1	Ganga	Delhi	6178	0	6721	0	0	177	195	6	0	13277
2	West flowing rivers from Tapi to Tadri	Daman & Diu	0	0	0	24	400	0	0	1210	233	1867
3	Minor river basins drainage to Bangladesh & Burma	Mizoram	0	0	43	0	0	0	0	0	0	43
		Tripura	545	0	2	18	1320	0	0	0	470	2355
Total			6723	0	6766	42	1720	177	195	1216	703	17542

**c. River basin-wise discharge of untreated/partially treated industrial trade effluent**

As per the available information for the 04 States/UTs, the Table No. 3 summarizes the river basin-wise status of the designed capacity of ETPs, daily average volume of effluent generation and Discharge of untreated/partially treated effluent (KLD).

**Table No. 3 River-basin wise industrial effluent generation and treatment**

SI. No.	River Basin	State/UT	Designed capacity of ETPs (KLD)	Daily Average Volume of Effluent Generation	Daily average volume of treated effluent (KLD)	Discharge of untreated/ partially treated effluent (KLD)
			(i)	(ii)	(iii)	(iv) = (ii) — (iii)
1	Ganga	Delhi	32358	13417	13338	79
2	West flowing rivers from Tapi to Tari	Daman & Diu	4351	1867	1867	0
3	Minor river basins drainage to Bangladesh & Burma	Mizoram	95	44	43	1
		Tripura	13869	2359	2355	4
Total			50673	17687	17603	84

**3.2.2 River basin-wise status of CETPs:**

So far, river basin-wise information of CETPs have been received from 6 SPCBs/PCCs (namely Chandigarh, Delhi, Mizoram and Tripura, Daman & Diu and Dadra Nagar Haveli). The Chandigarh, Mizoram Daman & Diu and Dadra Nagar Haveli, have informed that there is no CETP in their State/UT. The information from other SPCBs/PCCs is awaited.

**3.2.3 River basin-wise status of STPs:**

CPCB has developed a portal to facilitate submission of river basin-wise data for STPs. CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans and river basin-wise data through portal. The information from SPCBs/PCCs is awaited.

**3.2.4 River basin-wise status of MSW Facilities and Legacy Waste Sites:**

CPCB developed the formats for collection of information regarding Municipal solid Waste (MSW) processing facilities, landfill sites and dumpsites from all the States/UTs, to ensure compliance with Hon'ble NGT Directions. The formats circulated to all States/UTs vide letter dated July 31, 2020 **Annexure-IX**. Information has been received from 10 States/UTs (namely;

Kerala, Maharashtra, Jammu & Kashmir, Himachal Pradesh, Mizoram, Tamil Nadu, Delhi, West Bengal, Meghalaya & Pondicherry). Out of the 10 states, Tamil Nadu has provided information for only dumpsites. On the basis of information, as submitted by States/UTs, the status is as follow:

**3.2.4.1 Status of MSW facilities and legacy waste sites**

a) State wise distribution of the SWM facilities is given in Table No. 4. River basin-wise distribution of the SWM facilities is given in Table No. 5.

**Table No. 4: State-wise Distribution of Solid Waste Management Facilities**

Sl. No.	Name of the State	Waste Processing	Landfill Sites	Dumpsite
1.	Delhi	40	2	3
2.	Himachal	52	0	15
3.	Jammu &	3	7	53
4.	Kerala	20	-	39
5.	Maharashtra	103	19	62
6.	Meghalaya	2	<b>1</b>	5
7.	Mizoram	26	1	5
8.	Puducherry	4	3	3
9.	Tamil Nadu	Not Provided	Not Provided	136
10.	West Bengal	9	2	107
<b>TOTAL</b>		<b>259</b>	<b>35</b>	<b>428</b>

**Table No. 5: River basin-wise Distribution of Solid Waste Management Facilities**

Sl. No.	River basin	Name of the State	Waste Processing	Landfill	Dumpsite
1.	Alur	Kerala	0	0	1
2.	Amravati	Maharashtra	0	0	1
3.	Anchar	Jammu & Kashmir	1	<b>1</b>	<b>1</b>
4.	Beas	Himachal Pradesh	5	0	3
5.	Bharthpuza	Kerala	0	0	1
6.	Bhatsa	Maharashtra	0	0	1
7.	Bhawani	Tamil Nadu	0	0	1
8.	Bindusar	Maharashtra	1	0	1
9.	Binwa Khud	Himachal Pradesh	0	0	1
10.	Bori	Maharashtra	1	0	1
11.	Cauvery	Tamil Nadu	0	0	3
12.	Chalakudy	Kerala	1	0	0
13.	Chandrabhaga	Maharashtra	1	1	1
14.	Chitra Puzha	Kerala	1	0	2
15.	Darna	Maharashtra	1	0	1
16.	Devanathi	Tamil Nadu	0	0	1
17.	Gandhari	Maharashtra	1	1	0
18.	Ganga	West Bengal	4	0	0

19.	Ghodnadi	Maharashtra	1	0	1
20.	Girnna	Maharashtra	1	0	2
21.	Godavari	Maharashtra	5	1	5
22.	Gomai	Maharashtra	1	0	1
23.	Grad	Jammu & Kashmir	0	0	1
24.	Haldi	West Bengal	2	2	0
25.	Hatheli Khud	Himachal Pradesh	1	0	1
26.	Hiwara	Maharashtra	1	0	1
27.	Indrayani	Maharashtra	2	1	2
28.	Jhelum	Jammu & Kashmir	0	2	2
29.	Kadalundi River	Kerala	1	0	2
30.	Kalam	Himachal Pradesh	1	0	0
31.	Kalyan creek	Maharashtra	3	1	1
32.	Kan	Maharashtra	0	0	1
33.	Kanhan	Maharashtra	3	0	2
34.	Karamana	Kerala	0	0	1
35.	Karuvannoor	Kerala	0	0	1
36.	Khir Ganga	Himachal Pradesh	1	0	0
37.	Kolar	Maharashtra	1	0	1
38.	Kora Puzha	Kerala	1	0	1
39.	Koringa	Puducherry	0	0	1
40.	Koyana	Maharashtra	1	1	1
41.	Krishna	Maharashtra	6	2	6
42.	Kundalika	Maharashtra	1	1	1
43.	Maharaza	Tamil Nadu	0	0	1
44.	Manjara	Maharashtra	1	1	1
45.	Markanda River	Himachal Pradesh	1	0	0
46.	Marna	Maharashtra	0	0	1
47.	Meenachil	Kerala	0	0	1
48.	Minkjai	Meghalaya	0	0	1
49.	Mithi	Maharashtra	0	0	1
50.	Mula	Maharashtra	38	0	1
51.	Nallathanni	Kerala	0	0	1
52.	Nira	Maharashtra	1	1	1
53.	Pabbar river	Himachal Pradesh	2	0	0
54.	Panchganga	Maharashtra	2	1	2
55.	Panzara	Maharashtra	1	0	1
56.	Patalganga	Maharashtra	2	0	2
57.	Pedhi	Maharashtra	0	0	1
58.	Pelhar	Maharashtra	1	0	1
59.	Penganga	Maharashtra	2	0	2
60.	Puzhakal	Kerala	0	0	1
61.	Rangavali	Maharashtra	1	0	1
62.	Ravi	Himachal Pradesh	1	0	1
63.	Ringre	Meghalaya	1	0	1
64.	Satluj	Himachal Pradesh	4	0	1
65.	Savitri	Maharashtra	0	0	1
Sl.	River basin	Name of the State	Waste	Landfill	Dumpsite
66.	SEER KHAD	Himachal Pradesh	1	0	0
67.	Sina	Maharashtra	1	0	1
68.	Sirsa	Himachal Pradesh	0	0	1
69.	Suketi Khad	Himachal Pradesh	1	0	0
70.	Swan river	Himachal Pradesh	1	0	0
71.	Tapi	Maharashtra	2	1	2
72.	Tawi	Jammu & Kashmir	0	0	1
73.	Tirur	Kerala	0	0	1

<b>74.</b>	<i>Titur</i>	<i>Maharashtra</i>	<i>1</i>	<i>0</i>	<i>1</i>
<b>75.</b>	<i>Tuirial</i>	<i>Mizoram</i>	<i>1</i>	<i>1</i>	<i>0</i>
<b>76.</b>	<i>Ulhas</i>	<i>Maharashtra</i>	<i>3</i>	<i>0</i>	<i>3</i>
<b>77.</b>	<i>Umiam</i>	<i>Meghalaya</i>	<i>1</i>	<i>1</i>	<i>1</i>
<b>78.</b>	<i>Una Khad</i>	<i>Himachal Pradesh</i>	<i>1</i>	<i>0</i>	<i>0</i>
<b>79.</b>	<i>Uppanaru</i>	<i>Tamil Nadu</i>	<i>0</i>	<i>0</i>	<i>1</i>
<b>80.</b>	<i>Valapattanam</i>	<i>Kerala</i>	<i>0</i>	<i>0</i>	<i>1</i>
<b>81.</b>	<i>Wainganga</i>	<i>Maharashtra</i>	<i>5</i>	<i>3</i>	<i>5</i>
<b>82.</b>	<i>Wardha</i>	<i>Maharashtra</i>	<i>3</i>	<i>2</i>	<i>2</i>
<b>83.</b>	<i>Wena</i>	<i>Maharashtra</i>	<i>1</i>	<i>0</i>	<i>1</i>
<b>84.</b>	<i>Yamuna</i>	<i>Delhi</i>	<i>41</i>	<i>2</i>	<i>3</i>
<b>85.</b>	<i>NA</i>	<i>Break-up given</i>	<i>88</i>	<i>8</i>	<i>325</i>
		<i>TOTAL</i>	<i>259</i>	<i>35</i>	<i>428</i>

- b) *The SWM facilities located in the ten states are spread over 84 river basins, a majority of them are significantly small.*
- c) *The information, regarding river basin in which a particular solid waste management facility is falling, has not been reported for 34% of the waste processing facilities, 22% of the landfills and 75% of the dumpsites. State wise number of states for which the river basin in which the waste management facility has not been provided is given in the Table No. 6.*

**Table No. 6: SWM facilities for which river basin has not been indicated**

<b>State/UT</b>	<b>Waste processing facilities</b>	<b>Landfills</b>	<b>Dumpsites</b>
Himachal Pradesh	31	No sanitary landfill site	7
Jammu & Kashmir	2	4	48
Kerala	16	Not provided	25
Maharashtra	7	1	1
Meghalaya	0	0	2
Mizoram	25	0	5
Puducherry	4	3	2
Tamil Nadu	Not provided	Not provided	128
West Bengal	3	0	107
<b>Total</b>	<b>88</b>	<b>8</b>	<b>325</b>

- d) ***The number of dumpsites (428) is substantially higher than the number of scientifically designed landfills (35). As no arrangement for collection and treatment of leachate is provided in these dumpsites, there is a high potential of contamination of surface and groundwater resources at these dumpsites.***
- e) *Capacity of one landfill site in Maharashtra is exhausted.*

- f) ***Fresh waste is reported to be dumped at 224 out of 428 dumpsites.***
- g) ***Disposal of legacy waste is not under consideration in 46 out of 428 dumpsites***
- h) ***Bio-remediation in 72 out of 428 dumpsites is not being done in accordance with CPCB guidelines.***
- i) *Ground water analysis report is not available for 215 out of the 259 waste processing sites, 26 out of 35 landfill sites, 222 of the 428 dumpsites.*
- j) *174 out of the 259 waste processing facilities, 16 out of 35 landfill sites and 422 out of 428 dumpsites have not provided leachate treatment facilities.*
- k) *Only 22 out of the 259 waste processing facilities, 14 out 35 landfill sites and 109 out of 428 dumpsites have confirmed that the leachate complies with the stipulated norms.*
- l) *Locational coordinates for waste processing facilities have not been provided for 60 out of 259 facilities and point of disposal for 214 out of 259 facilities; 8 out of 35 landfill sites and 20 out of 35 point of disposal of leacheates; 80 out of 428 dumpsites and 376 out of 428 point of disposal of leachates.”*

**Report of the Oversight Committee (OC) constituted by the Tribunal for the State of UP**

9. A separate report has been received on 18.09.2020 from the OC for the State of UP. The report has given the compliance status. Most of the directions have been found to be ‘not complied’ or ‘partially complied’ which is again a matter of concern. **Thus, the State of UP needs to address the OC recommendations for 100% treatment and reuse of treated water, ground water management, setting up of adequate number of OCEMs and preparing District Environment Plans. This may be monitored by the CMC as well.**

10. The OC recommendations are as follows:-

***“1. The action plan for 100% sewage treatment and action plan for reuse of the treated water should be prepared as directed by the Hon'ble NGT in its order. The Committee directed the Principal Secretary, Urban Development to submit the action plan to the CPCB immediately as they have already crossed the prescribed time limit. A copy of both the action plans should also be given to the committee.***

2. **The issue of Groundwater** is being dealt by Central Ground Water Board as per Supreme Court Orders. Recently some States including UP have passed their own legislations on the subject and created their own State Boards. In the light of the Supreme Court Order and the State Act, the Oversight Committee felt that the roles of Central Ground Water Board /Authority and State Ground Water Board/ Authority need to be clarified. Also, the Central Government needs to come out atleast with a legislation/model legislation on Ground water to ensure uniformity amongst States.

3. The Committee felt that though **there are complaints of reverse boring and consequent contamination of groundwater leading to widespread diseases and even mortality in affected areas, the issue has not been dealt with the seriousness that it deserves.** Presently Reverse Boring is dealt with alongwith other offences for polluting water sources under Section 24(1 a) of Water Pollution Act 1974 with penalty clause under Section 43. The Committee felt that specific provisions need to be done for Reverse Boring and the penalty amount needs to be increased because this act is similar to abetment to mass murder of the community.

4. **OCEMS for STPs:** CPCB has installed 36 real time monitoring stations all across the country out of which 21 are in Uttar Pradesh as part of the Online Continuous Effluent Monitoring System (OCEMS). The number of stations in Ganga is 15, 5 on its tributaries and 1 is on a drain. A central control room has been established at UPPCB HQs to do 24x7 monitoring of pollution data relating to these stations. The system was very effective in monitoring pollution in Ganga river during Kumbh and was widely appreciated. **The Committee feels that these stations be established in all Polluted River Stretches so that all gap areas are covered and major polluting sources are monitored on 24x7 basis.** UPPCB may be directed to ascertain the number of such stations required for ensuring monitoring of all such polluted river stretches in the State. A list regarding the location and tentative cost of setting up the stations alongwith likely sources of funding may be prepared by SPCB and submitted to the Committee within one month. The online monitoring stations will overcome the challenges of manual monitoring and prevent data fudging.

5. **OCEMS for industries:** The **State Pollution Control Board should ensure compulsory installation of Online Continuous Effluent Monitoring System (OCEMS) in all GPIs along with Pan-tilt Zoom Web Camera with open access to the department.** Consent to operate shall be provided only after such compliance.

6. Even after so much of emphasis **the District Environment Plan (DEP) has not been finalized yet.** UPPCB may be directed to get it implemented in all the

***Districts within a month, failing which adverse entries be recorded in the ACRs of concerned officers. The DEPs should focus inter alia on the working of ETPs, STPs and CETPs.***

7. As per the compliance report of UPPCB it is evident that they are continuously monitoring the STPs/ETPs/CETPs and have installed OCEEMS in the State for online monitoring still the same information is not reflected in the report of CPCB. Thus, it is directed that UPPCB should timely submit their progress report to the CPCB.

***8. Chief Secretary may be directed to take immediate steps to activate the district level Environment committee to meet regularly at least once in two weeks as directed by Hon'ble NGT. It will help to tackle the issues, adversely affecting the environment at an early stage."***

### **Going Forward**

11. The Tribunal has already issued directions vide orders dated 28.08.2019 and 21.05.2020 for ensuring that no untreated sewage/effluent is discharged into any water body and for any violation compensation is to be assessed and recovered by the CPCB so that the same can be utilized for restoration of the environment, complying with the principle of 'Polluter Pays' which has been held to be part of 'Sustainable Development' and part of right to life. Control of such pollution is crucial for environment, aquatic life, food safety and also human health. Since CMC headed by the Secretary, Ministry of Jal Shakti has taken over monitoring of abatement of pollution of polluted river stretches in the country in coordination with the Chief Secretaries who are heading the RRCs in the States, henceforth the monitoring of directions for ensuring requisite number of pollution control devices may also be monitored by the CMC with a view to enable compliance of mandate of law. **The CMC may give a consolidated quarterly report covering the status of compliance with regard to adequate number of pollution control equipments as well as steps taken for**

rejuvenation of rivers in terms of orders already passed in OA 673/2018 and in the light of observations in paras 7 and 9 above.

## **II. Original Application No. 673/2018**

### **Review of proceedings before the Tribunal**

12. As noted earlier, the issue for consideration in this matter is rejuvenation of 351 polluted river stretches causing threat to public health and the environment. The Tribunal has considered the matter on several occasions *suo motu* as well as on directions of the Hon'ble Supreme Court with regard to certain polluted river stretches, **including Ganga and Yamuna**. It is not necessary to refer to all such orders. We may only refer to the directions issued on 06.12.2019 and 29.06.2020 which are as follows.

13. Directions in order dated **06.12.2019**:

#### **“XII. Directions:**

47. *We now sum up our directions as follows:*

- i. 100% treatment of sewage may be ensured as directed by this Tribunal vide order dated 28.08.2019 in O.A. No. 593/2017 by 31.03.2020 atleast to the extent of in-situ remediation and before the said date, commencement of setting up of STPs and the work of connecting all the drains and other sources of generation of sewage to the STPs must be ensured. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as already directed vide order dated 22.08.2019 in the case of river Ganga i.e. Rs. 5 lakhs per month per drain, for default in in-situ remediation and Rs. 5 lakhs per STP for default in commencement of setting up of the STP.*
- ii. Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In default, compensation will be liable to be paid at the scale laid down in the order of this Tribunal dated 22.08.2019 in the case of river Ganga i.e. Rs. 10 lakhs per month per STP.*

- iii. *We further direct that an institutional mechanism be evolved for ensuring compliance of above directions. For this purpose, monitoring may be done by the Chief Secretaries of all the States/UTs at State level and at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB.*
- iv. ***For above purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance who may take assistance of CPCB and may give its quarterly report to this Tribunal commencing 01.04.2020.***
- v. *The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the Secretary level and ensuring appropriate adverse entries in the ACRs of erring officers. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an accountable person attached in his office for this purpose.*
- vi. *Monthly progress report may be furnished by the States/UTs to Secretary, Ministry of Jal Shakti with a copy to CPCB. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers.*
- vii. ***As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level.***
- viii. ***Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.***
- ix. *CPCB may finalize its recommendations for action plans relating to P-III and P-IV as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the execution of the action plans prepared by the States which may start forthwith, if not already started.*
- x. *The action plan prepared by the Delhi Government which is to be approved by the CPCB has to **follow the action points delineated in the order of this Tribunal dated 11.09.2019 in O.A. No. 06/2012.***
- xi. *Since the report of the CPCB has focused only on BOD and FC without other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification, **a survey may now be conducted with reference to all the said parameters** by involving the SPCB/PCCs within three months. Monitoring gaps be*

*identified and upgraded so to cover upstream and downstream locations of major discharges to the river. CPCB may file a report on the subject before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).*

- xii. *Rivers which have been identified as clean may be maintained.”*

**(emphasis supplied)**

14. Directions in order dated **29.06.2020**:

**“XII. Directions:**

45. *We reiterate our directions in order dated 6.12.2019 in the present matter, reproduced in Para 38 above, read with those in order dated 21.5.2020 in OA 873/2017 and direct CPCB and Secretary, Jal Shakti to further monitor steps for enforcement of law meaningfully in accordance with the directions of the Hon’ble Supreme Court and this Tribunal. **The monitoring is expected with reference to ensuring that no pollution is discharged in water bodies and any violation by local bodies or private persons are dealt with as per mandate of law as laid down in orders of the Hon’ble Supreme Court and this Tribunal without any deviation from timelines. The higher authorities must record failures in ACRs as already directed and recover compensation as per laid down scale. Every State/UT in the first instance must ensure that at least one polluted river stretch in each category is restored so as to meet all water quality standards upto bathing level. This may serve as a model for restoring the remaining stretches.”***

## **Review of Compliance Status Reports**

### **CPCB Report dated 15.09.2020**

15. Report of the CPCB filed on 15.09.2020 in pursuance of order dated 29.06.2020 in O.A. 673/2018 mentions the status of approval of action plans in a tabular form in Annexure -2 which is summed up as follows:-

“

- *All 61 action plans pertaining to Priority I and Priority II polluted river stretches submitted by 18 States & 2 UTs have been approved along with conditions by CPCB Task Team*
- *Out of 115 Action plans pertaining to P-III and P-IV polluted river stretches received from 24 States & 1 UT, 108 action plans pertaining to 22 States and 1 UT have been approved along with the conditions.*

- Total 169 action plans submitted by 24 States & 3 UTs have been approved by CPCB Task Team.”

Annexure-2 is reproduced below:-

**“State-wise Identified Polluted Rivers and the Status of Action Plans approved by CPCB in compliance to Hon’ble NGT Orders dated 20.09.2018, 19.12.2018, 08.04.2019, 6.12.2019 & 29.6.2020 in OA No. 673 of 2018 (as on 10.09.2020)**

Name of the State/UT	Total No. of Identified polluted River stretches (PRS)	Priority I & II PRS approved		Priority III PRS		Priority IV PRS		Priority V PRS*	Total Action Plans approved by CPCB Task Team
		Priority I	Priority II	Total Number	CPCB Task Priority III approved	Total Number	Priority IV approved		
Andhra Pradesh	5	0	0			2	2	3	2
Assam	44	3	1	4	4	3	3	33	11
Bihar	6	0	0	1	1			5	1
Chhattisgarh	5	0	0			4**	0	1	0
DD & DNH	1	1	0					0	1
Delhi	1	1	0					0	1
Goa	11	0	0	1	1	2	2	8	3
Gujarat	20	5	1	2	2	6	6	6	14
Haryana	2	2	0					0	2
Himachal Pradesh	7	1	1	1	1			4	3
J & K	9	0	1	2	2	2	2	4	5
Jharkhand	7	0	0			3**	0	4	0
Karnataka	17	0	0	4	4	7	7	6	11
Kerala	21	1	0			5	5	15	6
Madhya Pradesh	22	3	1	1	1	3	3	14	8
Maharashtra	53	9	6	14	14	10	10	14	39
Manipur	9	0	1					8	1
Meghalaya	7	2	0			3	3	2	5
Mizoram	9	0	0	1	1	3	3	5	4
Nagaland	6	1	0	1	1	2	2	2	4
Odisha	19	1	0	3	3	2	2	13	6
Puducherry	2	0	0			1	1	1	1
Punjab	4	2	0			1	1	1	3
Rajasthan	2	0	0	1	1			1	1
Sikkim	4	0	0					4	0
Tamil Nadu	6	4	0			1	1	1	5
Telangana	8	1	2	2	2	2	2	1	
Tripura	6	0	0					6	
Uttar Pradesh	12	4	0	1	1	2	2	5	7
Uttarakhand	9	3	1	1	1	4	4	0	9
West Bengal	17	1	1	3	3	4	4	8	9
Grand Total	351	45	16	43	43	72	65	175	169

\*Action plans pertaining to Priority V does not need approval by CPCB.

\*\* Action plans under consideration, upon receipt of RRC approved revised action plans from the respective State.”

16. The report further mentions that certain States sought omission of polluted river stretches from the list. In response, CPCB prepared a

criteria that a stretch can be deleted from the list of polluted river stretches if water quality complies with the criteria for two years. The report also mentions that in terms of order dated 06.12.2019, Central Monitoring Committee (CMC) has been constituted under the Chairmanship of Secretary, MoJS to review the status of compliance of implementation of action plans with the Chief Secretaries of all States/UTs, with the assistance of the CPCB and the NMCG.

### **CMC Report dated 15.09.2020**

17. Compliance status has been mentioned in the CMC report as follows:-

#### ***“Existing Sewage Infrastructure***

*In respect of the existing sewage infrastructure, **53,396 MLD of sewage (from urban settlements) is generated in 31 States/UTs and 29,556 MLD capacity of STPs exists (1212 nos.) which approximates to about 55% of sewage generation. Against the existing capacity, only 62% of the capacity is being utilized for treatment of municipal sewage (except for Andhra Pradesh, Tripura and West Bengal who have not reported the figures of utilization of existing capacity). Rest of the existing capacity remains unutilized because of various reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality on various counts. This leaves a gap of 24,144 MLD in treatment capacity for which States are regularly being asked to provide their inputs with regards to their plans to fill the gap including that for financing the creation of infrastructure. It is also important that operational STPs remain compliant to the STP outlet standards as per environmental norms. The data obtained from the States of Chhattisgarh, Daman, Diu and Dadra Nagar Haveli, Gujarat, Manipur, Odisha, Sikkim, Tripura, Uttarakhand and Uttar Pradesh shows that out of total 235 operational STPs in these States, 162 STPs are compliant to the outlet standards and a large number of STPs remain non-compliant to the environmental norms.** Other States have failed to report compliance of existing STPs to STP outlet standards. The States have assured that the same will be provided to CMC. The details of sewage generation, existing*

sewage treatment capacity, its utilization and gap thereof is presented in **Table-1**.

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

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present ( in MLD)
1	Andhra Pradesh	1384	515.45	-	868.55
2	Assam	703	0	0	703
3	Bihar	651.5	40 (2 STPs)	22 (55%)	611.5
4	Chhattisgarh	600	73.1 (3 STPs)	6 (8.2%)	526.9
5	Daman, Diu And Dadra Nagar Haveli	20.5	17.21 (2 STPs)	5.2 (30%)	3.29
6	Delhi	3273	2714 (35 STPs)	2455 (90%)	559
7	Goa	165	78.35 (9 STPs)	46.6 (59%)	86.65
8	Gujarat	3765	3378 (70 STPs)	2812 (83%)	387
9	Haryana	1454	1767	1466 (82%)	-
10	Himachal Pradesh	102.8	86.9	55.1 (63%)	15.9
11	Jammu & Kashmir	970	126.80 (11 STPs)	80.70 (63%)	843.2
12	Jharkhand	700	131 (19 STPs)	75 (57%)	569
13	Karnataka	3356.5	2561 (142 STPs)	1704 (66%)	795.5
14	Kerala	3759.28	124.135 (11 STPs)	81.325 (65%)	3634.935
15	Madhya Pradesh	2183.65	690.76 (25 STPs)	524.24 (75%)	1492.89
16	Maharashtra	9757	7746 (137 STPs)	4013 (51%)	2011
17	Manipur	114.054	27 (1 STP)	8 (29%)	87.05
18	Meghalaya	87.91	0	0	87.91
19	Mizoram	80	10 (1 STP)	0	70
20	Nagaland	44.3	25.4 (1 STP)	0	18.9
21	Odisha	439.49	91 (5 STPs)	70 (76%)	348.49
22	Puducherry	84	56	30 (52%)	28
23	Punjab	2111	1621.5 (115 STPs)	80%	456

24	<b>Rajasthan</b>	1712	966 (68 STPs)	43%	746
25	<b>Sikkim</b>	47.68	19.02 (6 STPs)	17 (89%)	28
26	<b>Tamil Nadu</b>	2070.855	1484.42 (56 STPs)	798.34 (53%)	586.435
27	<b>Telangana</b>	2453	920.1	810 (88%)	1532.9
28	<b>Tripura</b>	175	8 (1 STP)	-	167
29	<b>Uttarakhand</b>	329.33	355.13 (61 STPs)	203.9 (57%)	-
30	<b>Uttar Pradesh</b>	5500	3365.88 (105 STPs)	2566.55 (76%)	2134.11
31	<b>West Bengal (as per CPCB Report 2018)</b>	5303	557.64 (43 STPs)	-	4745.36
<b>Total</b>		<b>53,396.849</b>	<b>29,556.795</b>		<b>24,144.47</b>

*In particular, poor capacity utilization of Rajasthan (43%), Manipur (29%), Daman Diu & Dadra Nagar Haveli (30%), Chhattisgarh (8%), Maharashtra (51%), Puducherry (53%), Tamil Nadu (53%) needs consideration and attention for which Chief Secretaries of the concerned States have been apprised through D.O. letters from Secretary, Department of Water Resources, River Development & Ganga Rejuvenation. The States of Assam and Meghalaya do not have any existing treatment capacity while Tripura & Manipur has only one STP each. The compliance of existing STPs in Telangana (88%), Madhya Pradesh (75%), Delhi (90%), Gujarat (83%), Haryana (82%), Odisha (76%), Punjab (80%), Sikkim (89%), UP (76%), remains good. This needs to be maintained and continuously improved. Utilization has not been reported by Andhra Pradesh, West Bengal, Tripura, for which these States have been reminded.*

*Most of States do not have online system of monitoring the functioning of STPs, both in respect of quantity of sewage being treated and whether the treatment conforms to the environmental norms for STP outlet standards. Directions are required to be given to States to not only ensure that created capacity is optimally utilized by carrying out condition assessment of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months, but also putting in plans to upgrade STPs requiring upgradation so as to make them functional. In addition, it is also equally important that States must develop a modern technology based online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage*

**infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future.** Such a system will enable that health of sewage treatment facility is readily available, with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.

So far as monitoring of water quality of rivers by CPCB is concerned, **CPCB must continue to monitor all the parameters prescribed under "Primary Water Quality Criteria for Bathing Water" notified under Environment (Protection) Rules, 1986 (i.e. pH, DO, BOD, Faecal Coliform and Faecal Streptococci) as well as COD and other recalcitrant toxic pollutants having tendency for bio-magnification as prescribed under "Guidelines on Water Quality Monitoring - 2017" issued by MoEF&CC.** The monitoring will ensure that environmental standards are observed in respect of rivers and other water bodies."

18. The report gives State-wise details of the projects which are ongoing, under tendering, awaiting sanction and where DPRs are yet to be prepared. Further mention has been made of the status of bio-remediation projects as follows:

*"The status of in-situ bioremediation/ phyto-remediation in Polluted River Stretches being undertaken by the State was monitored. Most of the States have reported that they **do not have technical expertise as well as competency to take up in-situ bio-remediation/ phyto-remediation measures.** Further, it has been reported that due to lack of availability of vendors, appropriate agencies with proven capability to implement such works and non-availability of standard rates, the progress in this activity has been slow. **Accordingly, Andhra Pradesh, Assam, Gujarat, Kerala, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu, Tripura are yet to take up any such measures on the drains in the polluted river stretches.** Other States have taken up measures on pilot basis only which they propose to evaluate based on the results obtained before works in other reaches are taken. Uttar Pradesh, West Bengal have reported that works have been taken up in 42 drains and 10 drains respectively in their State.*

*Further, Hon'ble NGT's vide its order dated 05.3.2020 (hearing on 18.2.2020) in the matter OA No. 06 of 2012 Manoj Mishra & Ors. while considering the report of Yamuna Monitoring Committee on "Approach to in-situ bio- remediation/ phyto-remediation of sewage in drains of Delhi", has observed and directed that CPCB report on "Alternate technologies for management of WW drains" be revised and circulated to MoUD, MoJS, NMCG and Govt. of Delhi, UP, Haryana for formulation of Policy for alternate technologies for waste water drain management. The same has already been informed to the States for their guidance to enable them to take decisions in implementation.*

*State wise status of bio-remediation/ phyto-remediation projects is given below.*

19. The status of Industrial Pollution Management has been mentioned as follows:-

#### **8. Industrial Pollution Management in the State/ UTs:**

*"So far as measures for abatement of industrial pollution are concerned, the State-wise details about number of water polluting industries, industries having ETPs, quantity of effluent discharge, treatment capacity of ETPs and number of ETPs and CTPs is given in **Table-7**. It can be seen from the information provided by the States that only Delhi, Dadra and Nagar Haveli and Kerala have all the industries with functional ETPs. In respect of Andhra Pradesh, Kerala, Bihar, Jharkhand and Assam, data submitted by States has been observed to be inconsistent and needs to be further clarified by the States.*

*All the industries located in catchment of Polluted River Stretches in State of Gujarat, Delhi, Odisha, Maharashtra, Sikkim, Meghalaya, Jharkhand and Bihar have been provided with functional ETPs. The compliance status of these ETPs is being reviewed and will be taken up in subsequent meetings of CMC."*

20. Finally State specific issues have been mentioned. The report also gives the status of Solid Waste Management, Ground Water Augmentation Afforestation, Floodplain and E-flow Management and Scrutiny of Action Plans for P-II and P-IV.

#### **Observations and recommendations in the CMC report:**

21. The observations and recommendations in the report are as follows:

*“States are regularly submitting Monthly Progress Reports, in the requisite formats, by the stipulated dates. However, **quality of information provided in MPR in respect of a few States is wanting and needs to be improved.** As MPRs are one of an important document which provides requisite status in respect of various activities being undertaken as per approved Action Plans, the quality of information is important for meetings of CMC and further reporting to Hon“ble NGT. MPR before being submitted should therefore, necessarily be studied by senior officers in States and so certified.*

- *Most of States have informed that the progress of ongoing works has been severely affected due to COVID-19 pandemic which has impacted issues related to mobilization of skilled and unskilled manpower as well as supply of materials besides site works. Site works often reportedly get affected due to lockdown kind of situations whenever the same is under enforcement. The project completion timelines, therefore, are getting impacted due to these factors also.*
- *States have failed to report specific reasons for delay in grounding the projects as well identification of officials responsible for the delays. The necessary reporting from the States is being taken up and will be followed up in future review meetings.*
- *States have reported about financing difficulties being faced by them on account of resource crunch due to COVID-19 situation. States, reportedly are trying to arrange funding for priority projects and will be apprising the status in subsequent meetings of the CMC. The process of sanctioning of projects, being dependent on funding, is getting affected due to pandemic situation.*
- ***Considering financial limitations, States/ UTs may take up STP projects on Hybrid Annuity Model, which, as a business model, enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue.** It will help ULBs to tap the external market funding for development & operation of sewage infrastructure, apart from quality treatment services. NMCG has prepared model tender documents for development of STPs through HAM and recently these documents have also been approved by NITI Aayog.*
- ***One City- One Operator concepts offer integrating the rehabilitation and Operation & Maintenance of the existing treatment infrastructure along with development & operation of new STPs.** This concept can be integrated with HAM model, as is being done in many projects under Namami Gange.*

- Government of India has also introduced **National Faecal Sludge & Septage Management (FSSM) Policy in 2017 to emphasize the importance of treating the faecal sludge from on-site sanitation system.** Some State Governments have also issued State level FSSM policies/ guidelines. Nearly 25 Faecal Sludge Treatment Plants (FSTPs) are operational and another 400 are in the offing in the country. Other States must consider adopting State level FSSM policies/ guidelines for regulating the handling, treatment and disposal of faecal sludge.
- Many of the States/ UTs have also been looking for alternatives beyond conventional STPs for treatment the sewage/ faecal sludge. States may consider implementation of FSTPs and/or co-treatment of faecal sludge in existing STPs, or may judiciously adopt any other alternate treatment technology, in towns wherever feasible.
- Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD. States, in such situations, may consider to adopt installation of **decentralized modular STPs; which offer advantages in form of lesser time involved in commissioning of systems, less land footprints, easy operations; instead of conventional centralized STPs based on techno-commercial considerations.** This will also enable them to comply to NGT stipulated timelines.
- States have created assets for treatment of sewage and capacity of **STPs so created is not being optimally utilised due to many reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality etc.** A large number of STPs remain non-compliant to STPs outlet norms. States must ensure optimum utilization of the existing treatment infrastructure and also ensure compliance of the plants with regard to the environment norms. For this purpose, States may carry condition assessment studies of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months so as to identify the reasons of sub-optimum utilization and dysfunctionality of existing STPs. This will help them in finalizing plans to upgrade STPs requiring upgradation so as to make them functional.
- States do not have an online monitoring system in place to monitor (both quantity and quality of treated water) the health of existing sewerage infrastructure. States must consider to develop an online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future. Such a system will enable that health of sewage treatment facility is readily available,

*with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.*

- **53 projects** with capacity of about **867.46 MLD** in Polluted River Stretches are expected to be completed by December 2020. The concerned States must ensure that monthly monitoring and regular watch on the progress of these projects is to be maintained, so that the completion timelines are strictly complied and projects commissioned in time.
- **41 projects** are likely to be completed during time window of January 2021-March 2021. Progress of these projects is also required to be continuously monitored at State level so that lag, if any, in adhering to the timelines is avoided.
- State of Maharashtra, Telangana & Gujarat have to ensure that decision on tenders already called by State are finalized and the pending land acquisition issues for many STPs are sorted out urgently.”

## **Report of OC dated 16.09.2020 for the State of UP**

22. In O.A. 673/2018, a separate report has been filed by the Oversight Committee constituted by this Tribunal for the State of UP making following recommendations:

**“1. Only 45% of the total Sewage Generation of 4292 MLD in the catchment areas of these 12 Polluted River Stretches is being treated. To check this 2336 MLD untreated discharge from going in the rivers, all the 324 drains flowing in these rivers need to be tapped, the treatment capacity be increased by increasing the number of STPs, In situ remediation of untreated sewage be done as an interim measure and E Flow of these rivers need to be maintained above a prescribed level.**

**2. Out of total 324 drains in 12 polluted river stretches, 289 are untapped till date. Plan details along with timelines and corresponding physical and financial progress regarding tapping of these 289 drains be filed by the Govt. before NGT within a month.**

**3. Out of total 4292 MLD sewage generated in the catchment area of these 12 polluted rivers stretches, only 1956 MLD is treated in 79 STPs. That leaves a gap of 2336 MLD untreated sewage discharge. DPRs have been prepared/sanctioned for 47 new STPs for 1796 MLD. The**

**DPRs for remaining 540 MLD gap should be immediately prepared and sanctioned by the State. Out of 47 STPs sanctioned, only in 26 construction has started. The progress appears to be very slow. The State Govt. should file the physical and financial progress of STP capacity augmentation before NGT along with definite timelines within a month.**

4. Progress of in situ remediation as an interim measure also is not satisfactory. **In 37 untapped drains falling in Priority 1, only one drain was found under Phyto Remediation during inspection. CPCB has already given notice for EC for Rs 18 Crore.** The proposed timelines for in situ remediation along with details of project approval and financial approvals for these 289 untapped drains be filed by the Govt before NGT within a month.

5. **Though minimum E Flow is being maintained in River Ganga, no such study had taken place in these stretches.** Now IIT Delhi is doing a study in 8 perennial rivers out of these 12 Stretches and its report will come by December 2020. Irrigation Department needs to adhere to the timelines regarding study and post study action plan to maintain minimum E Flows in these river stretches.

6. **The State government should deposit the Performance Guarantee of Rs.15 crore as mandated by NGT.**

7. Monitoring of Grossly Polluting Industries needs to be stepped up. **Out of 386 identified GPIs, 87 were issued show cause notices. Total EC imposed was Rs 20.62 crore, out of which approx. Rs 10 crore has been realised. UPPCB should issue notices to all defaulters and also realize the balance EC. 1092 GPIs in Ganga Basin are connected 24x7 to Central Control Room at Lucknow through OCEMS. It yielded excellent results during Kumbh.** Same system needs to be followed in these stretches. This will increase transparency and accountability in the pollution reporting of these GPIs.

8. Regarding demarcation of floodplain zones, identification survey is going on and after it the notification pillars will be set up. This entire exercise is expected to get completed by October, 2020. **The Committee feels that Irrigation Department should closely monitor it to adhere to the timelines.**

#### **Regarding Gomti (O.A 24/2018)**

1. The sewage treatment capacity of Gomti needs to be augmented at Lucknow. **The present treatment capacity is 438 MLD against requirement of 784 MLD. The gap of 346 MLD is proposed to be filled up in 3 Phase-160 MLD in Phase1, 102 MLD in Phase2 and 85 MLD in Phase3. So far Phase 2 comprising of Bijnor STP (80 MLD) and Ghaila STP (22MLD) is pending for sanction with NMCG. DPR for Phase3 (Bharwara 85 MLD) is under preparation. The State Govt should immediately get these STPs sanctioned and ensure that work commences as per timelines prescribed by NGT.**

2. *In the interim, NGT had directed that in situ remediation measures be taken up to check the discharge of untreated water in the river. Unfortunately, despite two pilots having been taken in the past, no in situ remediation has been initiated. CPCB/SPCB may impose and realize EC as directed by NGT on this count.*
3. ***There are many flaws in Waste Management Processing Plant in Lucknow managed by M/s Eco Green. During the inspection visits in June, 2020 it was found that in landfill site area along with the inert material, urban solid waste was also present. No 'waste to energy' work had been started in the treatment unit. ETP was non-operational and its O&M was unsatisfactory. The leachates was getting collected around it. Such negligence is unacceptable. SPCB must issue show cause notice within a fortnight to Nagar Nigam and impose EC for violations of Environmental norms with liberty to the Nagar Nigam to realize it from the Operator along with such penal action as they deem fit.***

#### **General Recommendations:**

1. ***Sewerage Network:*** *The Hon'ble NGT vide order dated 22.08.2019 had directed to complete ongoing sewerage network work by 1.07.2020 and after that it was directed that payment of environmental compensation of Rs. 10 lakhs per month would be deposited with CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries. Accordingly, CPCB shall initiate imposition of EC and issue notices within 15 days. Principal Secretary Urban Development should personally monitor the progress of tapping of untapped drains.*
2. ***Phytoremediation/bioremediation:*** *The Hon'ble Tribunal directed phytoremediation/bioremediation to be done as an interim measure until tapping of drains is complete. In case of non-compliance beyond 1.11.2019, penalty of 5 lakh per drain per month was to be imposed by CPCB. CPCB must submit report regarding how much EC has been realized out of total imposed EC of Rs 18 crore on 120 drains for non-compliance of this order for the period 1.11.2019 to 31.1.2020.*
3. ***STPs:*** *Vide order dated 22.08.2019 it was stated that with regard to sewerage works/STP under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per STP per month to CPCB will apply. Accordingly, CPCB shall calculate EC and send notices to defaulters in the next 15 days. It shall also explain why notices have not been issued in this regard so far.*
4. ***Timelines:*** *The oversight committee is concerned that the progress on ground is minimal and timelines keep on getting shifted. The State government, while keeping in mind the NGT directions, must provide firm timelines for completion of work within one month to the Committee with reference to the following issues:*
  - *Tapping of untapped drains*

- STP/CETPs installation in the State
  - Action Plan for treated water
  - Complete demarcation of Floodplain zones in Phase I
  - Detailed mapping of legacy waste and standardization of process for remediation
  - Completion of project for conserving and sustainably managing Floodplain Wetland
5. **OCEMS for STPs:** CPCB has installed 36 real time monitoring stations all across the country out of which 21 are in Uttar Pradesh as part of the Online Continuous Effluent Monitoring System (OCEMS). The number of stations in Ganga is 15, 5 on its tributaries and 1 is on a drain. A central control room has been established at UPPCB HQs to do 24x7 monitoring of pollution data relating to these stations. The system was very effective in monitoring pollution in Ganga river during Kumbh and was widely appreciated. **The Committee feels that these stations be established in all Polluted River Stretches so that all gap areas are covered and major polluting sources are monitored on 24x7 basis. UPPCB may be directed to ascertain the number of such stations required for ensuring monitoring of all such polluted river stretches in the State. A list regarding the location and tentative cost of setting up the stations alongwith likely sources of funding may be prepared by SPCB and submitted to the Committee within one month. The online monitoring stations will overcome the challenges of manual monitoring and prevent data fudging.**
  6. **OCEMS for industries:** The State Pollution Control Board should ensure compulsory installation of Online Continuous Effluent Monitoring System (OCEMS) in all industrial units along these polluted river stretches along with Pan-tilt Zoom Web Camera with open access to the department. Consent to operate shall be provided only after such compliance.
  7. **Green Belts:** The Irrigation Department should coordinate with Forest Department of the State to identify vacant areas /flood planes on the banks of these river stretches which may be developed as Green Belts. An action plan regarding this may be submitted by Irrigation Department to Department of Forest, Uttar Pradesh within two months. Moreover, the Plantation model of Gautam Budh Nagar developed under Public-Private Partnership can be replicated in other districts of the State (Refer Annexure VII).
  8. **Flood Plain Zones:** The Irrigation Department, Uttar Pradesh and Central Water Commission need to expedite work related to identification and demarcation of floodplain zones. There is lack of coordination at the field level between Irrigation Department and Revenue Department for correction of records. Chief Secretary should ensure coordination between the two departments so that floodplains are jointly demarcated, revenue records corrected accordingly, encroachments removed and pillars are fixed. The progress in this

**matter be monitored in Chief Secretary's monthly review meeting and informed to NGT regularly in the quarterly report.**

9. **Cleaning of Ghats:** The State government must ensure cleaning and maintenance of ghats by organizing local people, NGOs and professional agencies. The copy of the action taken with documentary evidences to be submitted to the Committee.
10. **Crematoria:** In order to prevent disposal of dead bodies into these rivers, provision of crematoria in rural areas is necessary. The existing scheme of construction of crematoria in villages handled by Panchayati Raj Department needs to be strengthened.
11. **Idol Immersion:** The Committee recommends **banning of idol immersion in all these rivers in Uttar Pradesh.** Chief Secretary may be asked to issue directions to concerned department for creation of artificial ponds, if found absolutely necessary (as done in NCR-Delhi region for preventing pollution in river Yamuna) for idol immersion during traditional festivals like Ganesh Chaturthi and Durga Puja specifying prior permission of District Administration and strict timelines pertaining to religious days only.
12. **Ground Water Recharge:** The Committee recommends steps to be taken for **ground water recharge by digging of ponds and establishing drain network to tap excess runoff during rainfall.** Such simple interventions have been taken up in district Mathura, Uttar Pradesh to increase groundwater level and rejuvenate water bodies (Refer Annexure VIII).
13. **Replication of Success stories:** The Committee also recommends replication of **successful waste management models such as that of Vengurla town in Sindhurdurg district, Maharashtra in small towns of Uttar Pradesh.** This town has converted a landfill into a waste management park, generates revenue from waste and has paved way for Sustainable Development.
14. **Floating Barriers:** In order to restrict and regulate waste into rivers, the committee recommends **use of floating barriers as being used on Cooum River in Chennai.**
15. **Improvement in Capacity Utilisation of existing STPs:** The Committee feels that there is no point establishing new STPs/CETPs without reforming the operational performance of existing STPs/CETPs. **There is lot of scope for improving the efficacy and functioning of the current STPs/CETPs. They need to be continuously monitored on a 24x7basis.All the STPs in the State should be equipped with SCADA, connected with a central control room, continuously monitored 24x7 , their performance analysed on day to day basis, problem areas like maintenance issues be addressed without any delay and accountability be fixed for non performance/suboptimal performance. The Committee appreciates the One**

**Operator One City scheme followed by UP, which will certainly help in focusing responsibility.**

16. **Phyto Remediation:** *Phyto remediation measures have not been realistically tried. The DPR of Rs 1796 crores for 459 drains sent to NMCG appears to be excessive. It needs to be reviewed. It appears that these estimates are prepared by engineers and not by environmentalists. If instead of civil construction, natural solutions are proposed, the project can be prepared at a fraction of the cost proposed currently and may be more efficacious.* A few demonstration projects regarding phyto remediation at a relatively much lower cost could be taken up with the help of environment experts so that these proposed projects could be realistically remodeled.
17. **Bio-Plastics:** *Use of bio-plastics/bio-degradables in every sector viz. domestic and industrial sectors is a viable solution to prevent rivers from choking and warding off adverse implications on biodiversity. The State government may develop plans for switching to bio-plastics/bio-degradables at macro level within six months.*
18. **Awareness Generation:** *The residents of different districts are contended to see the clean water of all the rivers during the lockdown period. In view of this, the Committee suggests conducting mass awareness campaigns and media-based water consciousness campaigns that make people sensitive towards the environment as well as show that they are an integral part of the solution. Further, "One Drop project" can be followed to create awareness about environment.*
19. **Floating barrier:** *In the year 2015, Alpha MERS developed an indigenous design of floating trash barrier for controlling hyacinth and trash from flowing in water. The barrier made of steel and aluminium with a high tensile strength claims to have an ability to survive in both polluted water bodies and change in water levels. For the first time in November 2017 these barriers were deployed in Cooum river in Chennai. Currently, the barriers have been deployed at eight locations in Cooum river (NDTV,2018)*
20. **CETPs: None of the polluting industries should be allowed to run without properly functioning CETP/ETP.** *Regarding 7 CETPs in the State, it was reported that all were functional and achieving norms. UPPCB has to continuously monitor their performance and shut down the cluster if the CETP performance is not compliant with environment norms. Special focus to be kept on tanneries and textile industries. Moreover, the implementation of new CETPs at Jajmau and Unnao and upgradation of CETP at Mathura and Banthar is already quite delayed. Timelines for implementation be strictly followed and accountability be fixed for delay. All GPIs to compulsorily install OCEMS within 2 months with open access to UPPCB so that there are no gaps in monitoring. No consent to operate be issued by UPPCB without verifying compliance. All new distilleries to compulsorily have ZLD.*

21. **FSSTPs:** There has been considerable delay in implementation of all FSSTP Plants underway in 60 AMRUT towns. The process needs to be expedited. **The procurement process with specifications be standardized. List of vendors be circulated and whole process should be put on GeM portal to ensure transparency and cut down delay.** Regarding faecal sludge management following steps to be undertaken:
- a) **The percentage of households connected to main sewer is just 1015% in the State.** U.P Jal Nigam to be asked about the current status of sewer connections in the State and analyse the gaps.
  - b) At a number of places, toilets constructed under Swachh Bharat for ODF are not connected to sewerage network. . It is required that these toilets be connected to either the sewerage network or arrangements be made to periodically transfer there faecal sludge to nearby FSSTP plants.
  - c) It is required that **FSSTP Plants be built on priority at designated STPs and arrangements for transfer of Faecal sludge from non network areas be implemented at the earliest in order to have better and effective sewage management.** The State Govt should share the action plan for implementation of the FSTP Policy at the earliest with NGT.
  - d) It is recommended that in households wherein sewer connections are not present, the concerned authority must ensure that the households are connected to FSSTP plant.
22. **One city one operator model for sewage management:** The State government started "one city one operator" model wherein single company operates, maintains and manages sewage treatment and network infrastructure in the city. Implementation of such models has made operation and maintenance easy as there can be no shifting of responsibility and the entire process is under the command of one company. However, it is needed that proper monitoring of these operators and the plants managed by them is done in each city so as to assess the efficacy of STP plants. Urban Development Department must submit an evaluation report in this regard within three months.
23. **Encroachment along drains:** At many places in the State there are encroachments in the flood plains of drains. **For example more than 300-400 encroacher households are living in the flood plain of Kukrail drain in Lucknow city.** In the absence of any regular toilet facilities, their faecal matter/grey water is washed away directly in the river Gomti, which also supplies drinking water to Lucknow city.. The State government needs to take steps for removing such encroachments on priority by rehabilitating these households under the "Housing for All" programme.
24. **Floodplain Zones:** The process of demarcation of Floodplain zones is quite slow. There is lack of co-ordination at the field level between Irrigation Department and Revenue Department for correction of revenue records. Chief Secretary should ensure coordination between the Departments so that the floodplains are jointly demarcated, revenue records corrected

accordingly, pillars are erected and encroachments are removed in these floodplains. The progress may be monitored in Chief Secretary's monthly review meeting and informed to NGT regularly in the quarterly report.

25. **River side Mining: Reckless sand mining in river beds leads to erosion and environmental degradation.** There has to be compulsory demarcation of boundaries of all mineral leases before permission be given for mining. Mining should be as per EIA notification, 2006, MOEF notification dated 15.01.2016 and Sustainable Sand Mining Management Guidelines, 2016. **DMS /SSPs be made fully accountable for ensuring compliance of the directions.** In case of illegal mining, besides seizure of vehicles and all mining equipment, exemplary penalty be levied. CPCB should work out SOPs for levying penalty which should include besides cost of material mined out, cost of ecological damage also. All mining sites should compulsorily install CCTV cameras. Regular patrolling by Police and night monitoring through Drones.
26. **Groundwater Recharge: Over drawal of groundwater adversely affects the E Flow of rivers. Out of 820 blocks, UP has 280 blocks in the OCS category** (82-overexploited, 47-critical and 151- semi critical). No consent to operate be given by UPPCB without taking NOC from CGWA. State has recently enacted its own State Ground Water Act, 2019 and set up its own State Ground Water Authority. One of the reasons for poor implementation of Ground Water Act is lack of manpower at field level. The State should provide enough manpower at field level for proper enforcement.
27. **Rejuvenation of water bodies:** Rejuvenated water bodies lead to constant recharge of ground water as also proper E Flow in the rivers. The State Government may prepare an action plan by 31.07.2020 as per NGT directives mentioning the number of identified water bodies, location details, water quality status, compliance status, prioritization and detailed action plans. All the ponds should be identified and geo-tagged. In case of non-compliance, CPCB would issue notice for compensation for Rs.1 lakh/month.
28. **Bio Diversity Parks: Development of Bio Diversity Parks in the vicinity of rivers lead to continuous recharge of aquifers and maintenance of E Flow of the rivers.** CPCB may circulate Guidelines for Biodiversity parks to the States to enable them to develop these Parks.
29. **Monsoon Discharge:** The Committee reiterates the direction of Hon'ble NGT vide order dated 14.07.2020 in O.A.985/2019 which states that CPCB has to issue strict directions to ensure that no authority allows discharge of polluted sewage or polluted effluents directly into a water channel or stream even during the monsoon season.
30. **Success story of river Tamsa in Ayodhya should be circulated among all the District Magistrates and they**

***should be asked to identify and take up similar activities, with the involvement of local public, that may help in improvising the water bodies/ rivers / groundwater or environment in any manner that too with the minimum financial burden.***

31. *All these rivers throughout have multitudes of temples on both banks. Floral offerings from the devotees of these temples invariably find their place in these rivers. **IIT Kanpur has come out with a low price model wherein they convert these flowers into incense sticks (Agarbattis) which can be used in these temples itself. This way the flowers are recycled and it saves expenditure on incense sticks as well.** This model is being used in Kashi Vishwanath temple at present. It could be used elsewhere to lessen river pollution.*
32. ***Monitoring Mechanism:*** *The Committee finds that a number of problems are coordination problems among various departments. Such issues can easily be resolved **if there is a regular monthly meeting at the CS level, which unfortunately is not happening. The Committee requests the CS to hold a monthly monitoring meeting as laid down in the monitoring framework submitted by the State Govt before NGT.***

## **Consideration of CMC and OC reports**

23. The CMC report states that it addressed communication to all the Chief Secretaries and explained Hybrid Annuity Model (**HAM**) based PPP projects, One City One Operator (**OCOO**) concept, as implemented for sewerage intervention projects under Namami Gange programme as well as Faecal Sludge and Septage Management (**FSSM**) concept. The business model for liquid waste management has in-built mitigation mechanism against time & cost overrun, improper design, sub-optimal operation and failure to meet the performance standards. As a business model, HAM enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue. States were also facilitated by holding a Webinar on “Mainstreaming Faecal Sludge & Septage Management in Ganga Basin”, which was attended by officials from

almost all the States. The Webinar also included a session on experience of Odisha which has taken up FSSM extensively, besides initiatives taken by NMCG in these directions. States were urged to consider the implementation of FSTPs and/ or co-treatment of faecal sludge in existing STPs, in all towns wherever feasible, so that dumping of the faecal sludge in water bodies/ land and thereby polluting them, can be avoided. The States/UT Administrations were specifically requested to ensure that **at least one polluted river stretch in each category is restored to meet all water quality standards up to bathing level** as ordered by this Tribunal. This may serve as a “model” with a view to replicate the efforts for restoring the remaining stretches. **States have failed to report reasons for delay in grounding the projects as well identification of officials responsible for the delays.** The necessary reporting from the States is being taken up and will be followed up in future review meetings.

### **Going Forward**

24. **We have duly considered the CPCB, CMC and OC reports as above and noted the gaps and recommendations. We accept the recommendations of the Committees already quoted above that the States should furnish quality information and comply with the directions of this Tribunal in terms of orders dated 06.12.2019 and 29.06.2020. The violation of mandate of 100% treatment of sewage may be visited with the assessment and recovery of compensation and violation of timelines for setting up of pollution control devices may also be likewise strictly enforced with the compensation regime in place. There is also need for fully utilizing and augmenting the existing infrastructure as already noted above.**

25. **The States/UTs may consider using HAM as a business model as well as OCOP concept, FSSM Policy, alternative models for treatment of sewage/faecal sludge, decentralized STPs and also strengthen the online monitoring system. We are also of the view that flood plain zones of all the rivers need to be mapped and demarcated and encroachments removed therefrom. The same be utilized for plantation, creation of bio-diversity parks and constructed wetlands or other recreational purposes, consistent with the environmental concern. We agree with the OC that river side mining needs to be regulated. To reduce the timelines for setting up of STPs, many States/UTs are consuming time in preparing DPRs whereas model DPRs can be prepared and used for shortening the timelines. Similarly, SOPs need to be prepared for the timeline to be taken in setting up of STPs as well as for maintenance and operation of existing STPs particularly those not meeting the norms. Number of monitoring stations also needs to be suitably increased. We are also of the view that the State RRCs must function effectively and the Chief Secretaries must hold monthly meetings as it is found from the report of the OC for the State of UP that the Chief Secretaries may not be doing so. Huge failures of the States/UTs may show poor governance as far as environment is concerned which may need to be remedied. As found by the CMC, neither delay is explained nor accountability is fixed for the failure of the concerned officers which is not a happy situation.**

26. While dealing with the control of pollution of River Ganga, the Tribunal noted that following action points for monitoring:

- i. *Setting up of STPs, Interception and Division (I&D) of drains and preventing untreated sewage and effluents*
- ii. *Use of treated water*
- iii. *Use of sludge manure*
- iv. *Status of septage management*
- v. *Compliance in relation to industries*
- vi. *Installation of STPs/treatment facilities in Hotels/Ashrams and Dharmshalas.*
- vii. *Water quality monitoring of river Ganga and its tributaries.*
- viii. *Maintenance of environmental flow in river Ganga.*
- ix. *Disposal of Bio-medical waste.*
- x. *Compliance of Solid Waste Management (SWM) Rules, 2016.*
- xi. *Preparation of maps and zoning of flood plains.*
- xii. *Mining activity under supervision of the concerned authorities.*
- xiii. *Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.*

**CMC/RRCs/ OC for UP may conduct further monitoring keeping in mind the above action points.**

**III. Original Application No. 829/2019, It. Col. Sarvadaman Singh Oberoi v. Union of India & Ors.**

**Review of proceedings before the Tribunal**

27. OA 829/2019 deals with remedial action against pollution of sea water along the Indian Coastal areas. The Tribunal, vide order dated 03.12.2019, noted the problem and sought a report from the Central Pollution Control Board (CPCB), after referring to the observations of the Hon'ble Supreme Court in *Indian Council for Enviro Legal Action v. UOI, (1996) 5 SCC 281* that degradation of coastal areas was a matter of serious concern and affected aesthetic and environment which required Environmental Management Plans to ensure that coastal water remains fit for human and aquatic life. It was observed that major source of pollution is municipal sewage and effluents in the same manner as polluted river stretches. The National Coastal Zone Management Authority (NCZMA) has been constituted but the problem of marine pollution continues. CPCB report dated 11.03.2020 was considered on **29.06.2020**. It was found that in most of the coastal areas there was

non-compliance with regard to the water quality parameters on account of untreated sewage and industrial effluents being discharged into the marine waters through river systems. Apart from untreated effluents/sewage, there was lack of management of hazardous waste, bio-medical waste, municipal solid waste, plastic waste, e-waste and C&D waste which also affected the marine water quality. Integrated Coastal Management Plans were required with the assistance of NCSCM and MoEF&CC. The Tribunal accordingly directed that concerned departments of all the concerned States/UTs may implement the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and ensure 100% treatment of sewage/effluents in the same manner in which the Tribunal has issued directions for preventing untreated sewage and effluents being discharged into the rivers in OA 673/2018. **The Tribunal directed the State PCBs/PCCs/Chief Secretaries to take remedial action and file their reports with the CPCB so that the CPCB could file a consolidated action taken report.**

#### **Review of CPCB Report dated 10.09.2020**

28. **Accordingly, CPCB has filed its action taken report dated 10.09.2020** mentioning the directions issued to the 13 Coastal State PCBs/PCCs as follows:

***“A. That the directions under Section 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974 shall be issued to all the concerned local bodies /urban bodies/municipalities/authorities in the coastal States/UTs within 15 days from the date of issuance of these directions:***

- i. To set up a sewerage system for sewage collection, conveyance, treatment and its disposals to cover the entire local/urban coastal area within the respective jurisdiction.*
- ii. To develop adequate capacity of sewage treatment using conventional STPs or any other technology and ensure to*

*comply with the discharge norms as prescribed by the coastal SPCBs/PCCs under consent mechanism prescribed under Water (Prevention & Control of Pollution) Act, 1974.*

- iii. For ensuring treatment and use of treated sewage for non-potable purposes such as industrial process, railways & bus cleaning, flushing of toilets through dual piping, construction activities, horticulture and irrigation etc.*
- iv. To set up requisite facilities for collection, transportation, treatment and disposal of Municipal Solid Waste, Plastic Waste, Construction and Demolition Waste generated as well as bio-mining of the existing legacy dumpsites in accordance with the Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016 and Construction & Demolition Waste Management Rules, 2016 as amended respectively, notified under the Environment (Protection) Act, 1986, in the coastal areas within the respective jurisdiction of the State/UT.*
- v. For periodic cleaning and removal of plastic waste/solid waste in coastal areas to prevent marine pollution and for ensuring its safe disposal in accordance with the provisions notified under the Environment (Protection) Act, 1986.*
- vi. To submit a time bound action plan for management of sewage, municipal solid waste, plastic waste, C & D waste generated in the respective jurisdiction of the local/urban bodies in coastal areas as mentioned in afore-said paras, within a period of two months from the date of issuance of the directions dated 31/8/2020.*

**B. Directed all the 13 Coastal SPCBs/PCCs shall:**

- i. Ensure proper treatment and disposal of industrial effluent generated from water polluting industries located in the coastal States/UTs by ensuring installation of captive ETPs or disposal of industrial effluent through CETPs by prescribing PETP Standards under consent mechanism and for safe disposal or utilization of treated effluents in accordance with the disposal modes permitted under Environment (Protection) Act, 1986.*
- ii. Ensure proper treatment and disposal of industrial hazardous waste generated from hazardous waste generating industries located in the coastal States/UTs and to ensure requisite infrastructure for environmentally sound management of generated hazardous waste in accordance with the Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016 as amended notified under the Environment (Protection) Act, 1986.*
- iii. Associate with National Centre for Coastal Research (NCCR), Chennai under Ministry of Earth Sciences for monitoring and assessment of coastal waters within the jurisdiction of the coastal States/UTs up to 5 km from shore and to evolve*

*strategies for protection of the coastal areas in association with Coastal Zone Management Authority in the State.*

- iv. Prepare time bound comprehensive action plans along with implementing agencies in consultation with the respective Coastal Zone Management Authority for control of coastal Pollution in States/UTs, and submit to CPCB within three months from the date of issuance of these directions i.e. by 25th November 2020.”*

### **Going Forward**

29. While the CPCB report mentions the directions issued to 13 Coastal State PCBs/PCCs but compliance of such directions needs to be monitored. We have dealt with OA Nos. 593/2017 and 673/2018, dealing with the setting up of ETPs/ STPs/CETPs and preventing discharge of untreated effluents/sewage into the rivers hereinabove. **The subject of coastal pollution needs to be dealt with in the same manner as polluted river stretches by preparing action plans of each States/UTs which may also be monitored by the Central Monitoring Committee (CMC) simultaneously with the 351 polluted river stretches and the said subject may also be covered in the next report of the CMC. As already mentioned, the CMC is to be headed by the Secretary, Ministry of Jal Shakti and assisted by the CPCB and NMCG and at the States/UTs level, the Chief Secretaries have to monitor the compliance status and give reports to and interact with the CMC.**

OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.

#### **IV. Original Application No. 148/2016, Mahesh Chandra Saxena V. South Delhi Municipal Corporation & Ors.**

## **Review of proceedings before the Tribunal**

30. The issue of utilization of sewage treated water is incidental to setting up and operation of STPs. In view of shortage of clean water for drinking purposes, use of treated water for secondary purposes results in more clean water being available for drinking purposes. In absence of proper planning, fresh water is used for secondary purposes, which needs to be avoided. Vide order dated 11.09.2019, the Tribunal noted:

***“1. ... ... Delhi is an urbanized city state having a population of about 20 millions which is expected to increase to 23 million by the year 2021. Present total water requirement for domestic purposes for population of 20 million @ 60 GPCD works out to 1200 MGD. Present average potable water production by Delhi Jal Board is about 936 MGD and includes about 80-85 MGD of ground water. Thus, there is a gap of 204 MGD. Only 81.3 households have piped water supply. Reuse of water both in domestic and industrial sectors is essential. Around 150 billion liters of sewage water is produced in India annually. 70% of Singapore drinks treated sewage water.<sup>3</sup> There appears to be no satisfactory plan with any of the States/Union Territories (UTs) in the country. This Tribunal monitored the matter with reference to the NCT of Delhi for more than two years and passed several orders.***

***2. Finally, on 27.11.2018, the Tribunal considered the report of the Delhi Jal Board (DJB) dated 16.11.2018 to the effect that 460 MGD waste water was being treated but reuse of such water was not being ensured.***

***3. As per CPCB's report 2016<sup>4</sup>, it has been estimated that 61,948 million liters per day (mld) sewage is generated from the urban areas of which treatment capacity of 23,277 mld is currently existent in India. Thereby the deficit in capacity of waste treatment is of 62%. There is no data available with regard to generation of sewage in the rural areas. To remedy this situation orders have been passed by the Hon'ble Supreme Court<sup>5</sup> as well as this Tribunal<sup>6</sup> directing 100% treatment of the sewage and industrial effluents by installing requisite ETPs/CETPs/STPs. Proper utilization of treated water has implications not only to save***

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<sup>3</sup> Second interim report dated 31.07.2019 of Monitoring Committee constituted under O.A. No. 496/2016.

<sup>4</sup>[http://www.sulabhenviis.nic.in/Database/STST\\_wastewater\\_2090.aspx](http://www.sulabhenviis.nic.in/Database/STST_wastewater_2090.aspx) July 16, updated on December 6, 2016

<sup>5</sup> Paryavaran Suraksha Samiti Vs. Union of India, (2017) 5 SCC 326

<sup>6</sup> Paryavaran Suraksha Samiti Vs. Union of India, O.A No. 593/2017 order dated 28.08.2019

potable water but also to prevent illegal extraction of groundwater and conservation of water bodies. Timelines have been laid down for ensuring treatment of sewage and effluents for preventing pollution of river Ganga<sup>7</sup> as well as other polluted river stretches which will result in more treated water being available.

4. **Having regard to the necessity to ensure utilization of treated waste water to reduce pressure on the ground water resources throughout the country, the Tribunal directed all the States/UTs in India to prepare and furnish their action plans within three months to the Central Pollution Control Board (CPCB) so that CPCB could review the same and issue further directions.**

5. Report dated 01.05.2019 furnished by the CPCB was considered by this Tribunal on 10.05.2019 and it was noted that some of the States did not furnish their action plans and the action plans furnished by some of the States needed improvements. The Tribunal directed that the States/UTs which had not yet furnished their action plans may do it by 30.06.2019 and such action plans may have monitoring mechanism for coordination with the local bodies which will be the responsibility of the Chief Secretaries of the States/UTs.

6. ....

**“7. It is well known that absence of plan for reuse of treated water affects recharge of ground water and also results in fresh water being used for purposes for which treated water can alternatively be used. Proper plans for reuse of waste water can add to availability of potable water which is many times denied this basic need or has to travel long distances to fetch clean water. This being a substantial question of environment, direction is issued to the States/UTs which have not yet submitted their action plans to do so latest by 30.06.2019, failing which the Tribunal may have to consider coercive measures, including compensation for loss to the environment. The plans may include a monitoring mechanism in the States for coordination with the local bodies. This will be the responsibility of the Chief Secretaries of all the States/UTs.**

8 The issue is also connected with the rejuvenation of 351 river stretches. The States/UTs may include this subject in the deliberations with the Central Monitoring Committee constituted in terms of orders dated 08.04.2019 in 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 and order dated 24.04.2019 in O.A.606/2018, Compliance of Municipal Solid Waste Management Rules, 2016. **The Chief Secretaries may also include this subject in their reports to this Tribunal in pursuance of orders passed in O.A. No. 606/2018 on 16.01.2019 and further orders in their presence.”**

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<sup>7</sup> O.A No. 200/2014

31. The report of the CPCB dated 15.05.2020 was considered on **21.05.2020**, wherein the gap analysis was given as follows:

### **“3.0 GAP ANALYSIS**

*As per Hon'ble NGT Directions dated 10.5.2019, suggestive measures for action plan for use of treated sewage was uploaded on CPCB's website. The same was also sent to all States/UTs vide letter dated 16.07.2019. CPCB had directed all States / UTs to cover the following action points in the Action Plan to be prepared for use of treated sewage:*

- i. Estimation of quantity of present and projected sewage generation,*
- ii. Estimation of Present and planned treatment capacity*
- iii. Identification of Bulk users (Irrigation, horticulture, Industries, PWD and Railways etc) and to quantify the usage*
- iv. Estimation of quantity of treated sewage to be used by the bulk users*
- v. Specification time lines to meet the target.*

*Accordingly, action plan submitted by 31 States / UTs were assessed based on its adequacy in addressing the above-mentioned points. The overview of the assessment is given in Table-1. Following are the major observations based on the assessment:*

- i. 06 States/ UTs (Andhra Pradesh, Delhi, Puducherry, Haryana, Tamil Nadu, Madhya Pradesh) have addressed all the five action points as listed above in their action plan.***
- ii. 10 States/UTs have partially addressed the above- listed action points in their action plan. 09 States / UTs (Gujrat, Chhattisgarh, Jharkhand, Goa, Daman & Diu, Dadar Nagar Havelli, Jammu and Kashmir, Maharashtra and Rajasthan) have identified bulk users However, quantity of treated sewage to be used by these bulk-users as well as timelines for meeting these targets have not been specified. Chandigarh has not estimated the presented / projected qty of Sewage generation and not specified timelines for meeting the target.***
- iii. 08 States / UTs (Assam, Bihar, Himachal Pradesh, Mizoram, Nagaland, Meghalaya, Orissa and West Bengal) have submitted very limited information in the action plan.***
- iv. Action plan received from 03 States (Kerala (Trivandrum), Karnataka (Bangalore), Telangana (Hyderabad) are city specific. Action plan for treated sewage reuse in the state not provided.***
- v. Apart from above, it has been informed 4 States / UTs that due to local terrain and technical issues and***

**action plan could not be conceptualized., 02 UTs (Lakshadweep, Andaman and Nicobar Islands) do not have STPs and having only septic management. Fecal Sludge Treatment Plant has been planned in these UTs. 02 States (Sikkim, Tripura) have high water table and therefore plan to discharge treated water to rivers.**

**vi. 5 States/ UTs (Arunachal Pradesh, Manipur, Uttar Pradesh, Uttarakhand, Punjab) have not submitted any information.**

CPCB's observations on the action plan submitted by the individual states/UTs have been enumerated in Table 1.

Additional observations on the action plan submitted by the States /UTs are as follows:

- i. Only 14 States/UTs (Andhra Pradesh, Daman & Diu, Delhi, Gujarat, Haryana, Himachal Pradesh, J&K, Madhya Pradesh, Maharashtra, Nagaland, Rajasthan, Tripura, Puducherry, A&N) have estimated present quantity of Sewage generated in their States/UTs.**
- ii. Only 3 States/UTs (Haryana, Himachal Pradesh, Jammu & Kashmir) have adequate capacity of Sewage treatment w.r.t to present quantity of sewage generated.**
- iii. Major bulk users identified include- Irrigation, horticulture,, Rejuvenation of water bodies, Construction, Recreation, Railways, Vehicles and Coach washing, firefighting, recreation and industry.**
- iv. 13 States/UTs (Andhra Pradesh, Maharashtra, Chhattisgarh, Goa, Delhi, Rajasthan, Tamil Nadu, Puducherry, Odisha, Madhya Pradesh, Gujarat, Haryana, Jharkhand) plan to use treated sewage in industries which include Steel Plant, Thermal Power Plant, Refineries and Railways.**
- v. Percentage of reuse of treated sewage planned maximum in Haryana (80 %) followed by Puducherry (55 %), Delhi (50 %), Chandigarh (35 %), Tamil Nadu (25%), Madhya Pradesh (20 %), Andhra Pradesh (5 %).**
- vi. NCT of Delhi has set target to increase their re usage from 12.5 % to 60 %. In future, utilization of 341 MGD treated sewage are proposed for drinking purpose (197 MGD), Irrigation (112 MGD) and 10 MGD in rejuvenation of water bodies.**
- vii. Time-line specified by States/UTs for implementation of Action Plan varies between 2020 -2030.”**  
**(emphasis supplied)**

32. The Tribunal issued following directions:

***“24. Accordingly, we direct that States which have not addressed all the action points may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. All the States may take steps accordingly. The CPCB may compile further information on the subject. The compliance for action plans will be the responsibility of the Secretaries of Urban Development/other concerned, including Irrigation & Public Health, Local Bodies, Rural Development Departments of all the States/UTs and to be overseen by the Chief Secretaries. The Ministry of Jal Shakti and Ministry of Housing and Urban Affairs, Government of India may also monitor and coordinate the situation appropriately in the interest of water qualities of rivers, lakes, water bodies and protection of groundwater.”***

#### **Review of CPCB Report dated 16.09.2020**

33. **Accordingly, the CPCB has filed its report dated 16.09.2020** detailing the compliance status as follows:

##### ***“3.1.1 Compliance status w.r.t. the directions under Para 24 and 26 (iv)***

- i. CPCB requested all States/UTs vide email/letter dated 03.06.2020, 24.06.2020 and 24.08.2020 to submit action plans as per the format and compliance reports. Further, CPCB has also provided link of the report submitted to the Hon'ble NGT indicating observations/ shortcomings on action plans of reuse of treated sewage, to the SPCBs/PCCs. A copy of the correspondences is attached at **Annexure-II**.
- ii. Accordingly, action plan was received from the State of Punjab and revised action plans were received from Jammu and Kashmir (UT), Lakshadweep, Rajasthan (specific to Ajmer district), and Sikkim. Information is awaited from other States. **The gap analysis of action plans is attached as Annexure-III.**
- iii. 4 States/UTs (Arunachal Pradesh, Manipur, Uttar Pradesh, Uttarakhand) have not submitted any information till date.

##### **3.1.2 Compliance w.r.t. directions under Para 26 (i)**

- i. CPCB communicated to all SPCBs/PCCs to provide information on STPs inventory as per the format, vide letter dated 15/07/2020. A copy of letter is attached as Annexure-IV. Based on continuous follow-up, all

*SPCBs/PCCs have provided information on STPs and same is attached as Annexure-V.*

*ii. CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans through online portal of CPCB.”*

### **Going Forward**

34. **In view of the above reports finding a huge gap in utilisation of sewage treated water, further action needs to be taken by all the States/UTs to ensure updating and enforcement of the action plans for 100% utilization of the treated water for secondary purposes.**

35. Since the above issue is interrelated to the issue of operation of STPs, it will be appropriate that **this aspect is also now monitored by the CMC headed by the Secretary, Ministry of Jal Shakti and assisted by the CPCB and NMCG. Ministry of Urban Development may also nominate an officer of not below the rank of Joint Secretary in the said Committee.** OA No. 148/2016 need not be kept pending separately which stands disposed of as the subject will be henceforth considered in OA 593/2017 and OA 673/2018.

### **V. Directions:**

36. Accordingly, we issue following directions:

- i. All the States/UTs may address gaps in generation and treatment of sewage/effluents **by ensuring setting up of requisite number of functional ETPs, CETPs and STPs**, as directed by the Hon’ble Supreme Court in (2017) 5 SCC 326.
- ii. The timeline for commissioning of all STPs fixed by the Hon’ble Supreme Court, i.e., 31.03.2018, has long passed. The Hon’ble Supreme Court directed that the State PCBs must initiate prosecution of the erring Secretaries to the Governments, which

has also not happened. This Tribunal was directed to monitor compliance and in the course thereof, we direct that compensation may be recovered in the manner already directed in earlier orders (See, **Paras 5 and 6** herein), which may be deposited with the CPCB for restoration of the environment.

- iii. The unutilized capacity of the existing STPs may be utilized expeditiously.
- iv. The States/ UTs may ensure that the CETP, ETPs and STPs meet the laid down norms and remedial action be taken wherever norms are not met.
- v. It must be ensured that no untreated sewage/effluent is discharged into any water body. Prompt remedial action may be taken by the State PCBs/PCCs against non-compliant ETPs/CETPs by closing down or restricting the effluents generating activity, recovering compensation and taking other coercive measures following due process of law.
- vi. Directions outlined in **Paras 24-26** herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level.
- vii. Wherever action plans have not yet been finalized in respect of polluted river stretches or polluted coastal stretches, the same may be completed within one month from today. The execution of action plans may be overseen in the manner already directed in OA 673/2018 by River Rejuvenation Committees (**RRCs**). In the coastal areas, the said Committees may be known as 'River/Coastal Rejuvenation Committees'. The action plans must have provision for budgetary support in the manner laid

down by the Hon'ble Supreme Court or otherwise which aspect may also be monitored by the CMC.

- viii. Directions outlined in **Para 29** herein may be implemented by the concerned coastal States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.
- ix. Directions outlined in **Para 34 and 35** herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 148/2016 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.
- x. CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/effluents.
- xi. The monitoring by the CMC may have the target of reduction of pollution loads and improvement of water quality of rivers and coastal areas.
- xii. The CMC may also monitor the setting up of the bio-diversity parks, constructed wetlands and other alternative measures to reduce pollution load.
- xiii. The CMC may also monitor demarcation of flood plain zones.
- xiv. The treated sewage water may be duly utilized for secondary purposes by preparing appropriate action plans and reports in this regard be filed with the CPCB periodically.

- xv. CMC may submit its consolidated update report incorporating all the above, before the next date. Each action point mentioned in Para 26 may be individually covered, and summarized in a tabular format.

37. A copy of this order may be forwarded to the Chief Secretaries of all the States/UTs, CPCB, NMCG, all PCBs/ PCCs, Secretaries, Ministry of Jal Shakti and Ministry of Housing and Urban Development, by email.

List for further consideration on February 16, 2021.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

September 21, 2020

Original Application No. 593/2017

Original Application No. 673/2018

Original Application No. 829/2019

Original Application No. 148/2016

SN & DV

Item Nos. 01 to 03

Court No. 1

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

(By Video Conferencing)

**Original Application No. 593/2017**

Paryavaran Suraksha Samiti & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

**WITH**

**Original Application No. 673/2018**

*In Re:* News item published in “The Hindu” authored by Shri Jacob Koshiy, titled “More river stretches are now critically polluted: CPCB”

**WITH**

Original Application No. 829/2019

Lt. Col. Sarvadaman Singh Oberoi

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

**WITH**

**Original Application No. 148/2016**

Mahesh Chandra Saxena

Applicant(s)

Versus

South Delhi Municipal Corporation & Ors.

Respondent(s)

Date of hearing: 21.09.2020

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

## ORDER

### I. Original Application No. 593/2017

#### Review of proceedings before the Tribunal

1. Proceedings in this matter are a follow up of the judgment of the Hon'ble Supreme Court dated 22.02.2017 in **Paryavaran Suraksha Samiti Vs. Union of India**<sup>1</sup>, which mandates establishment and functioning of requisite ETPs/CETPs/STPs by 31.3.2018 and in default, to take coercive measures. This Tribunal has been mandated to monitor compliance. The pertinent directions therein are:

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

X

X

X

*10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating*

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<sup>1</sup> (2017) 5 SCC 326

**finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the “common effluent treatment plant” shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.**

- 11.** Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge **industrial pollutants and sewer, directly into rivers and water bodies.**
- 12.** We are of the view that in the manner suggested above, **the malady of sewer treatment, should also be dealt with simultaneously.** We, therefore, hereby direct that “sewage treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.
- 13.** We are of the view that **mere directions are inconsequential, unless a rigid implementation mechanism is laid down.** We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional “primary effluent treatment plants”, and the setting up of functional “common effluent treatment plants” within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned. **The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.** They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which

*shall evaluate the data and shall furnish the same to the Bench of the jurisdictional **National Green Tribunal**.*

**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.”**

***(emphasis supplied)***

2. The matter has been dealt with earlier, in light of status reports about the gaps in waste generation and treatment, and requisite number of treatment plants. Notices were issued to all State/UT PCBs/ PCCs, and status reports sought. The CPCB was directed to prepare an action plan for compliance of the order of the Hon’ble Supreme Court, monitor execution and file quarterly reports before this Tribunal and also upload the same on its website. Penal action was to be taken for failure in compliance of the orders of the Hon’ble Supreme Court by way of recovery of compensation and other coercive means. Orders passed by this Tribunal earlier include those dated 25.05.2017, 03.08.2018, 19.02.2019, 28.08.2019 and 21.05.2020.

3. It may be noted that the Tribunal is also simultaneously considering overlapping issues in several matters, including:

- **O.A. 673/2018:** remedial action for 351 identified polluted river stretches. **This matter now is, and will henceforth be, reviewed together with the present matter.**
- **O.A. 829/2019:** issue of coastal pollution on account of discharge of untreated effluents/sewage. *This matter now is reviewed together with the present matter, and will stand disposed of in terms of directions herein.*

- **O.A. 148/2016:** management of sewage treated water is involved. *This matter now is reviewed together with the present matter, and will stand disposed of in terms of directions herein.*
- **O.A. 1038/2018:** 100 identified polluted industrial clusters, in which the water pollution is caused mainly by discharge of untreated sewage/effluents.
- **O.A. 606/2018:** monitoring compliance of Solid and Liquid Waste Management, including river pollution. **The Tribunal interacted with Chief Secretaries of all the States/UTs, who appeared, in person, with progress reports on significant environmental issues.** They were directed to personally monitor ongoing compliance at least monthly through dedicated cells.

4. Further, in O.A. 673/2018, the Tribunal directed constitution of **River Rejuvenation Committees (RRC)** in all the States/UTs, headed by Chief Secretaries, to prepare and execute action plans for restoration of the polluted river stretches. The action plans envisage prevention of discharge of untreated effluents/sewage. Apart from O.A. 673/2018, which deals with the rejuvenation of 351 river stretches generally, the Tribunal is considering remedial action for control of pollution of certain rivers separately, under Supreme Court directions, or otherwise<sup>2</sup>.

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<sup>2</sup> These include (not an exhaustive list):

- M.C. Mehta V. UOI **O.A. No. 200/2014** (pollution of **Ganga**), see also 2017 NGTR (3) PB 1
- Manoj Mishra V. UOI, **O.A. No. 06/2012** (pollution of **Yamuna**)
- Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case) **O.A. No. 138/2016** (TNHRC) (pollution of river **Ghaggar**)
- Mahendra Pandey V. UOI & Ors. **O.A. No. 58/2017** (river **Ramganga**, a tributary of river Ganga)
- Sobha Singh & Ors. V. State of Punjab & Ors. O.A. 916/2018, and **O.A. No. 101/2014** (rivers **Sutlej and Beas**)
- Amresh Singh V. UOI & Ors. **O.A. No. 295/2016, Execution Application No. 32/2016** (rivers **Chenab and Tawi**)
- Nityanand Mishra V. State of M.P. & Ors. **O.A. No. 456/2018** (river **Son**)
- Doaba Paryavaran Samiti V. State of U.P. & Ors. **O.A. No. 231/2014** (river **Hindon**)

5. Whilst not necessary to refer to all previous orders, we start with the Tribunal's order of **28.08.2019, wherein for the first time, the Tribunal set up a compensation regime for default.** The Tribunal considered the CPCB reports dated 30.05.2019, 19.07.2019 and 14.08.2019 with compiled status of setting up of ETPs/ CETPs/STPs and methodology for assessment of environmental compensation. The Tribunal noted that **deficit in capacity of liquid waste treatment was 62 percent which was the major source of polluting rivers and water bodies.** In the said order, the following directions were issued:-

*“21. We may now sum up our directions:*

- (i) The Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water in the report dated 30.05.2019 is accepted and the same may be acted upon as an interim measure.*
- (ii) SPCBs/PCCs may ensure remedial action against non-compliant CETPs or individual industries in terms of not having ETPs/fully compliant ETPs or operating without consent or in violation of consent conditions. This may be overseen by the CPCB. CPCB may continue to compile information on this subject and furnish quarterly reports to this Tribunal which may also be uploaded on its website.*
- (iii) All the Local Bodies and or the concerned departments of the State Government have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment.**
- (iv) The CPCB needs to collate the available data base with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites and prepare a river basin-wise macro picture in terms of gaps and needed interventions.*
- (v) The Chief Secretaries of all the States/UTs may furnish their respective compliance reports on this subject also in O.A. No. 606/2018.**

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- Arvind Pundalik Mhatre V. MoEF&CC &Ors. **O.A. No. 125/2018** (river **Kasardi**)
  - Sudarsan Das V. State of West Bengal & Ors. **O.A. No. 173/2018** (river **Subarnarekha**)
  - Meera Shukla V. Municipal Corporation, Gorakhpur & Ors. **O.A. No. 116/2014** (rivers **Ami, Tapti, Rohani and Ramgarh lake**)
  - O.A. 426/2018, Mohammed Nayeem Pasha & Anr. v. The State of Telangana & Ors. (river Musi)
  - O.A. 50/2018, Nav Yuva Sanghatan & Ors. v. The Secretary, Narmada, Water Resources, Water Supply & Kalpsar Department & Ors. (river Tapi).

*List for further consideration on 21.05.2020, unless required earlier. A copy of this order be placed on the file of O.A. No. 606/2018 relating to all States/UTs and be sent to Chief Secretaries of all States/UTs, Secretary MoEF&CC, Secretary Jal Shakti and Secretary, MoHUA.”*

**(emphasis supplied)**

6. Thereafter on **21.05.2020**, wherein the Tribunal directed data collection by river basin; reduction of timelines; the Central Government to facilitate the State/UTs efforts; and CPCB to study extent of reduction of pollution load. The following directions were issued:-

“26. Summary of directions:

- i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.

**CPCB may further continue efforts on compilation of River Basin-wise data.** Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.

**Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.**

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.

- ii. ***The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.***
- iii. *During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.*
- iv. *Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. **The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected.** The CPCB may compile further information on the subject accordingly.*
- v. *Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court."*

## **Review of Compliance Status Reports**

### **CPCB Report dated 16.09.2020**

7. In light of the order of 21.05.2020, CPCB filed a report dated 16.09.2020. In substance, the report states that 1831 industries are working without ETP, 1123 with non-compliant ETPs, there are 62 non-compliant CETPs, 530 non-compliant STPs, several projects are still at proposal/construction stage, OCEMS data for 11 PCBs/PCCs is not in public domain, there is a gap in waste generated and treated and large number of dump sites are not scientifically managed resulting in contamination of water. **There is, thus, a need for more rigorous and continuous monitoring, including further steps for coercive measures to enforce rule of law and citizens' right to clean**

**environment. The authorities must ensure reduction in pollution load for meaningful good governance.**

8. The findings in the report include:-

**“A. 2.0 Compliance Status of ETPs, CETPs & STPs reported by SPCBs/PCCs**

- i. As per the data received from SPCBs/PCCs, out of total 64,484 number of industries requiring ETPs, 62,653 industries are operating with functional ETPs and **1,831 industries are operating without ETPs**. Show-cause notices and closure directions have been issued to 856 and 824 industries, respectively for operating without ETPs. Legal cases have been filed against 6 industries and action is under process for 145 industries. Out of 62,653 operational industries, 61,530 industries are complying with environmental standards and **1,123 industries are non-complying**. Show-cause notices and closure directions have been issued to 613 and 135 industries, respectively, for non-compliance. Legal cases have been filed against 13 industries and action is under process for 362 industries.
- ii. As per the data received from SPCBs/PCCs, there are total 191 CETPs, out of which 129 CETPs are complying with environmental standards and **62 CETPs are non-complying**. Show-cause notices and closure directions have been issued to 20 and 5 CETPs, respectively for non-compliance. Legal cases have been filed against 8 CETPs and action is under process for 29 CETPs.
- iii. As per the data received from SPCBs/PCCs, there are total 15,730 STPs (including municipal and other than municipal (non-municipal/stand-alone) STPs), out of which, 15,200 STPs are complying with environmental standards and **530 STPs are non-complying**. Show-cause notices and closure directions have been issued to 262 and 28 STPs, respectively, for non-compliance. Legal cases have been filed against 17 STPs and action is under process for 223 STPs.
- iv. As per the data received from SPCBs/PCCs, there are 84 CETPs in construction/proposal stage, whereas, for STPs, 1,081 projects (municipal and non-municipal) are under construction/proposal stage.
- v. As per the data received from SPCBs/PCCs, 15 SPCBs/PCCs (namely- Andhra Pradesh, Assam, Bihar, Goa, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Tamil Nadu, Telangana and West Bengal) are displaying OCEMS data in public domain. **The links provided by Gujarat and**

**Uttarakhand SPCBs are password protected and data is not available in public domain. The 4 SPCBs (namely, Chhattisgarh, Jammu & Kashmir, Punjab and Sikkim) have not provided appropriate web links. Further, Chandigarh PCC has clarified that OCEMS data will be displayed after upgradation of STPs. Karnataka SPCB has requested for time till 30.09.2020 to make the system operational. Mizoram SPCB has informed that there is no industry requiring OCEMS connectivity. Lakshadweep PCC informed that there is no industry in the Union Territory of Lakshadweep.**

OCEMS data of 11 SPCBs/PCCs (Andaman & Nicobar, Arunachal Pradesh, Daman & Diu, Dadra Nagar Haveli, Delhi, Manipur, Meghalaya, Nagaland, Rajasthan, Tripura and Uttar Pradesh) is not available in public domain.

## **B. 3.1 Sewage Management**

### **3.1.1 Compliance status w.r.t. the directions under Para 24 and 26 (iv)**

- i. CPCB requested all States/UTs vide email/letter dated 03.06.2020, 24.06.2020 and 24.08.2020 to submit action plans as per the format and compliance reports. Further, CPCB has also provided link of the report submitted to the Hon'ble NGT indicating observations/ shortcomings on action plans of reuse of treated sewage, to the SPCBs/PCCs. A copy of the correspondences is attached at **Annexure-II.**
- ii. Accordingly, action plan was received from the State of Punjab and revised action plans were received from Jammu and Kashmir (UT), Lakshadweep, Rajasthan (specific to Ajmer district), and Sikkim. Information is awaited from other States. **The gap analysis of action plans is attached as Annexure-III.**
- iii. 4 States/UTs (Arunachal Pradesh, Manipur, **Uttar Pradesh, Uttarakhand**) have not submitted any information till date.

### **3.1.2 Compliance w.r.t. directions under Para 26 (i)**

- i. CPCB communicated to all SPCBs/PCCs to provide information on STPs inventory as per the format, vide letter dated 15/07/2020. A copy of letter is attached as Annexure-IV. Based on continuous follow-up, all SPCBs/PCCs have provided information on STPs and same is attached as Annexure-V.
- ii. CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans through online portal of CPCB.

**C. 3.2 River basin-wise macro picture of ETPs, CETPs, STPs, MSW Facilities and Legacy Waste Sites**

*The Hon'ble NGT, in the matter of OA No. 593 of 2017, vide order 28.08.2019, directed CPCB to collect the data of ETPs, CETPs, STPs, MSW facilities and legacy waste sites and prepare a river-basin-wise macro picture in terms of gaps.*

*In compliance of the Hon'ble NGT's directions, CPCB has developed an online portal for the collection of river-basin wise information. The details of the river basins associated with the concerned states, as adopted from River Basin Classification, 2019 of Central Water Commission, is given at **Annexure-VI**. The portal, with modules for ETPs, CETPs and STPs, is operational and SPCBs/PCCs are in the process of using the same for submission of information.*

**3.2.1. Status of ETPs:**

*CPCB has been collecting the industry specific information related to river basin, locational coordinates (latitude & longitude), disposal point for trade effluent, treatment capacity & actual treatment, environmental compliance status, action taken by concerned authority in case of non-compliance, etc. Further, provision for capturing information regarding pollution load of four major water quality parameters i.e. pH, BOD, COD and TSS are being also incorporated. SPCBs/PCCs have been reminded to expedite the work for data submission, vide letter dated 12.05.2020, 30.07.2020 and 25.08.2020 (email). Copy of the correspondences is given at **Annexure-VII (a to c)**.*

*So far, information from 6 SPCBs/PCCs (namely; Delhi, Haryana, Daman & Diu, Mizoram, Odisha and Tripura) have been received through CPCB portal. Rest of the SPCBs/PCCs are under the process of compilation and submission of data. The data submitted by Haryana, Daman & Diu, Delhi and Odisha SPCB/PCC has some shortcomings, which were communicated vide letter dated 07.09.2020 & 09.09.2020. A Copy of the correspondences to concerned SPCBs/PCCs is given at **Annexure-VIII (a to d)**.*

**Although, to have the complete and clear picture, data from all the States/UTs is required, however, preliminary analysis based on the information received from 04 SPCBs/PCCs, is as follows:**

**a. River basin-wise disposal point of industrial units for the discharge of trade effluent:**

As per the river basin-wise information received from 04 SPCBs/PCCs (Delhi, Daman & Diu, Mizoram and Tripura), there are total 1,544 industrial units in these States/UTs. The river basin-wise number of units with respect to their effluent discharge points is summarized in the following table:

**Table No. 1: River basin-wise status of trade effluent generating units and their disposal points**

SI. No.	River Basin	State/ UT	Number of units w.r.t. their effluent disposal points									Total
			CETP	Canal	Drain	Land/ Irrigation	River	Sewer	STP	ZLD	Others	
1	Ganga	Delhi	817	1	571	0	0	26	1	3	0	1419
2	West flowing rivers from Tapi to Tadri	Daman & Diu	0	0	0	2	1	0	0	20	21	44
3	Minor river basins drainage to Bangladesh & Burma	Mizoram	0	0	61	0	0	0	0	0	0	61
		Tripura	4	0	2	I	2	0	0	0	II	20
Total			821	1	634	3	3	26	1	23	32	1544

**b. River basin-wise discharge of treated/partially treated effluents**

Based on the information received from Delhi, Daman & Diu, Mizoram and Tripura SPCB/PCC, river basin-wise quantum of treated/partially treated industrial effluents, is summarized in the following table:

**Table No. 2: River basin-wise status of discharge of treated/partially treated effluent at various disposal points**

SI. No.	River Basin	State/UT	Discharge Volume at the				Particular discharge point (KLD)					Total
			CETP	Canal	Drain	Land/irrigation	River	Sewer	STP	ZLD	Others	
1	Ganga	Delhi	6178	0	6721	0	0	177	195	6	0	13277
2	West flowing rivers from Tapi to Tadri	Daman & Diu	0	0	0	24	400	0	0	1210	233	1867
3	Minor river basins drainage to Bangladesh & Burma	Mizoram	0	0	43	0	0	0	0	0	0	43
		Tripura	545	0	2	18	1320	0	0	0	470	2355
Total			6723	0	6766	42	1720	177	195	1216	703	17542

**c. River basin-wise discharge of untreated/partially treated industrial trade effluent**

As per the available information for the 04 States/UTs, the Table No. 3 summarizes the river basin-wise status of the designed capacity of ETPs, daily average volume of effluent generation and Discharge of untreated/partially treated effluent (KLD).

**Table No. 3 River-basin wise industrial effluent generation and treatment**

SI. No.	River Basin	State/UT	Designed capacity of ETPs (KLD)	Daily Average Volume of Effluent Generation	Daily average volume of treated effluent (KLD)	Discharge of untreated/ partially treated effluent (KLD)
			(i)	(ii)	(iii)	(iv) = (ii) — (iii)
1	Ganga	Delhi	32358	13417	13338	79
2	West flowing rivers from Tapi to Tari	Daman & Diu	4351	1867	1867	0
3	Minor river basins drainage to Bangladesh & Burma	Mizoram	95	44	43	1
		Tripura	13869	2359	2355	4
Total			50673	17687	17603	84

**3.2.2 River basin-wise status of CETPs:**

So far, river basin-wise information of CETPs have been received from 6 SPCBs/PCCs (namely Chandigarh, Delhi, Mizoram and Tripura, Daman & Diu and Dadra Nagar Haveli). The Chandigarh, Mizoram Daman & Diu and Dadra Nagar Haveli, have informed that there is no CETP in their State/UT. The information from other SPCBs/PCCs is awaited.

**3.2.3 River basin-wise status of STPs:**

CPCB has developed a portal to facilitate submission of river basin-wise data for STPs. CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans and river basin-wise data through portal. The information from SPCBs/PCCs is awaited.

**3.2.4 River basin-wise status of MSW Facilities and Legacy Waste Sites:**

CPCB developed the formats for collection of information regarding Municipal solid Waste (MSW) processing facilities, landfill sites and dumpsites from all the States/UTs, to ensure compliance with Hon'ble NGT Directions. The formats circulated to all States/UTs vide letter dated July 31, 2020 **Annexure-IX**. Information has been received from 10 States/UTs (namely;

Kerala, Maharashtra, Jammu & Kashmir, Himachal Pradesh, Mizoram, Tamil Nadu, Delhi, West Bengal, Meghalaya & Pondicherry). Out of the 10 states, Tamil Nadu has provided information for only dumpsites. On the basis of information, as submitted by States/UTs, the status is as follow:

**3.2.4.1 Status of MSW facilities and legacy waste sites**

a) State wise distribution of the SWM facilities is given in Table No. 4. River basin-wise distribution of the SWM facilities is given in Table No. 5.

**Table No. 4: State-wise Distribution of Solid Waste Management Facilities**

Sl. No.	Name of the State	Waste Processing	Landfill Sites	Dumpsite
1.	Delhi	40	2	3
2.	Himachal	52	0	15
3.	Jammu &	3	7	53
4.	Kerala	20	-	39
5.	Maharashtra	103	19	62
6.	Meghalaya	2	<b>1</b>	5
7.	Mizoram	26	1	5
8.	Puducherry	4	3	3
9.	Tamil Nadu	Not Provided	Not Provided	136
10.	West Bengal	9	2	107
<b>TOTAL</b>		<b>259</b>	<b>35</b>	<b>428</b>

**Table No. 5: River basin-wise Distribution of Solid Waste Management Facilities**

Sl. No.	River basin	Name of the State	Waste Processing	Landfill	Dumpsite
1.	Alur	Kerala	0	0	1
2.	Amravati	Maharashtra	0	0	1
3.	Anchar	Jammu & Kashmir	1	<b>1</b>	<b>1</b>
4.	Beas	Himachal Pradesh	5	0	3
5.	Bharthpuza	Kerala	0	0	1
6.	Bhatsa	Maharashtra	0	0	1
7.	Bhawani	Tamil Nadu	0	0	1
8.	Bindusar	Maharashtra	1	0	1
9.	Binwa Khud	Himachal Pradesh	0	0	1
10.	Bori	Maharashtra	1	0	1
11.	Cauvery	Tamil Nadu	0	0	3
12.	Chalakudy	Kerala	1	0	0
13.	Chandrabhaga	Maharashtra	1	1	1
14.	Chitra Puzha	Kerala	1	0	2
15.	Darna	Maharashtra	1	0	1
16.	Devanathi	Tamil Nadu	0	0	1
17.	Gandhari	Maharashtra	1	1	0
18.	Ganga	West Bengal	4	0	0

19.	Ghodnadi	Maharashtra	1	0	1
20.	Girnna	Maharashtra	1	0	2
21.	Godavari	Maharashtra	5	1	5
22.	Gomai	Maharashtra	1	0	1
23.	Grad	Jammu & Kashmir	0	0	1
24.	Haldi	West Bengal	2	2	0
25.	Hatheli Khud	Himachal Pradesh	1	0	1
26.	Hiwara	Maharashtra	1	0	1
27.	Indrayani	Maharashtra	2	1	2
28.	Jhelum	Jammu & Kashmir	0	2	2
29.	Kadalundi River	Kerala	1	0	2
30.	Kalam	Himachal Pradesh	1	0	0
31.	Kalyan creek	Maharashtra	3	1	1
32.	Kan	Maharashtra	0	0	1
33.	Kanhan	Maharashtra	3	0	2
34.	Karamana	Kerala	0	0	1
35.	Karuvannoor	Kerala	0	0	1
36.	Khir Ganga	Himachal Pradesh	1	0	0
37.	Kolar	Maharashtra	1	0	1
38.	Kora Puzha	Kerala	1	0	1
39.	Koringa	Puducherry	0	0	1
40.	Koyana	Maharashtra	1	1	1
41.	Krishna	Maharashtra	6	2	6
42.	Kundalika	Maharashtra	1	1	1
43.	Maharaza	Tamil Nadu	0	0	1
44.	Manjara	Maharashtra	1	1	1
45.	Markanda River	Himachal Pradesh	1	0	0
46.	Marna	Maharashtra	0	0	1
47.	Meenachil	Kerala	0	0	1
48.	Minkjai	Meghalaya	0	0	1
49.	Mithi	Maharashtra	0	0	1
50.	Mula	Maharashtra	38	0	1
51.	Nallathanni	Kerala	0	0	1
52.	Nira	Maharashtra	1	1	1
53.	Pabbar river	Himachal Pradesh	2	0	0
54.	Panchganga	Maharashtra	2	1	2
55.	Panzara	Maharashtra	1	0	1
56.	Patalganga	Maharashtra	2	0	2
57.	Pedhi	Maharashtra	0	0	1
58.	Pelhar	Maharashtra	1	0	1
59.	Penganga	Maharashtra	2	0	2
60.	Puzhakal	Kerala	0	0	1
61.	Rangavali	Maharashtra	1	0	1
62.	Ravi	Himachal Pradesh	1	0	1
63.	Ringre	Meghalaya	1	0	1
64.	Satluj	Himachal Pradesh	4	0	1
65.	Savitri	Maharashtra	0	0	1
Sl.	River basin	Name of the State	Waste	Landfill	Dumpsite
66.	SEER KHAD	Himachal Pradesh	1	0	0
67.	Sina	Maharashtra	1	0	1
68.	Sirsa	Himachal Pradesh	0	0	1
69.	Suketi Khad	Himachal Pradesh	1	0	0
70.	Swan river	Himachal Pradesh	1	0	0
71.	Tapi	Maharashtra	2	1	2
72.	Tawi	Jammu & Kashmir	0	0	1
73.	Tirur	Kerala	0	0	1

<b>74.</b>	<i>Titur</i>	<i>Maharashtra</i>	<i>1</i>	<i>0</i>	<i>1</i>
<b>75.</b>	<i>Tuirial</i>	<i>Mizoram</i>	<i>1</i>	<i>1</i>	<i>0</i>
<b>76.</b>	<i>Ulhas</i>	<i>Maharashtra</i>	<i>3</i>	<i>0</i>	<i>3</i>
<b>77.</b>	<i>Umiam</i>	<i>Meghalaya</i>	<i>1</i>	<i>1</i>	<i>1</i>
<b>78.</b>	<i>Una Khad</i>	<i>Himachal Pradesh</i>	<i>1</i>	<i>0</i>	<i>0</i>
<b>79.</b>	<i>Uppanaru</i>	<i>Tamil Nadu</i>	<i>0</i>	<i>0</i>	<i>1</i>
<b>80.</b>	<i>Valapattanam</i>	<i>Kerala</i>	<i>0</i>	<i>0</i>	<i>1</i>
<b>81.</b>	<i>Wainganga</i>	<i>Maharashtra</i>	<i>5</i>	<i>3</i>	<i>5</i>
<b>82.</b>	<i>Wardha</i>	<i>Maharashtra</i>	<i>3</i>	<i>2</i>	<i>2</i>
<b>83.</b>	<i>Wena</i>	<i>Maharashtra</i>	<i>1</i>	<i>0</i>	<i>1</i>
<b>84.</b>	<i>Yamuna</i>	<i>Delhi</i>	<i>41</i>	<i>2</i>	<i>3</i>
<b>85.</b>	<i>NA</i>	<i>Break-up given</i>	<i>88</i>	<i>8</i>	<i>325</i>
		<i>TOTAL</i>	<i>259</i>	<i>35</i>	<i>428</i>

- b) *The SWM facilities located in the ten states are spread over 84 river basins, a majority of them are significantly small.*
- c) *The information, regarding river basin in which a particular solid waste management facility is falling, has not been reported for 34% of the waste processing facilities, 22% of the landfills and 75% of the dumpsites. State wise number of states for which the river basin in which the waste management facility has not been provided is given in the Table No. 6.*

**Table No. 6: SWM facilities for which river basin has not been indicated**

<b>State/UT</b>	<b>Waste processing facilities</b>	<b>Landfills</b>	<b>Dumpsites</b>
Himachal Pradesh	31	No sanitary landfill site	7
Jammu & Kashmir	2	4	48
Kerala	16	Not provided	25
Maharashtra	7	1	1
Meghalaya	0	0	2
Mizoram	25	0	5
Puducherry	4	3	2
Tamil Nadu	Not provided	Not provided	128
West Bengal	3	0	107
<b>Total</b>	<b>88</b>	<b>8</b>	<b>325</b>

- d) ***The number of dumpsites (428) is substantially higher than the number of scientifically designed landfills (35). As no arrangement for collection and treatment of leachate is provided in these dumpsites, there is a high potential of contamination of surface and groundwater resources at these dumpsites.***
- e) *Capacity of one landfill site in Maharashtra is exhausted.*

- f) ***Fresh waste is reported to be dumped at 224 out of 428 dumpsites.***
- g) ***Disposal of legacy waste is not under consideration in 46 out of 428 dumpsites***
- h) ***Bio-remediation in 72 out of 428 dumpsites is not being done in accordance with CPCB guidelines.***
- i) *Ground water analysis report is not available for 215 out of the 259 waste processing sites, 26 out of 35 landfill sites, 222 of the 428 dumpsites.*
- j) *174 out of the 259 waste processing facilities, 16 out of 35 landfill sites and 422 out of 428 dumpsites have not provided leachate treatment facilities.*
- k) *Only 22 out of the 259 waste processing facilities, 14 out 35 landfill sites and 109 out of 428 dumpsites have confirmed that the leachate complies with the stipulated norms.*
- l) *Locational coordinates for waste processing facilities have not been provided for 60 out of 259 facilities and point of disposal for 214 out of 259 facilities; 8 out of 35 landfill sites and 20 out of 35 point of disposal of leacheates; 80 out of 428 dumpsites and 376 out of 428 point of disposal of leachates.”*

**Report of the Oversight Committee (OC) constituted by the Tribunal for the State of UP**

9. A separate report has been received on 18.09.2020 from the OC for the State of UP. The report has given the compliance status. Most of the directions have been found to be ‘not complied’ or ‘partially complied’ which is again a matter of concern. **Thus, the State of UP needs to address the OC recommendations for 100% treatment and reuse of treated water, ground water management, setting up of adequate number of OCEMs and preparing District Environment Plans. This may be monitored by the CMC as well.**

10. The OC recommendations are as follows:-

***“1. The action plan for 100% sewage treatment and action plan for reuse of the treated water should be prepared as directed by the Hon'ble NGT in its order. The Committee directed the Principal Secretary, Urban Development to submit the action plan to the CPCB immediately as they have already crossed the prescribed time limit. A copy of both the action plans should also be given to the committee.***

2. **The issue of Groundwater** is being dealt by Central Ground Water Board as per Supreme Court Orders. Recently some States including UP have passed their own legislations on the subject and created their own State Boards. In the light of the Supreme Court Order and the State Act, the Oversight Committee felt that the roles of Central Ground Water Board /Authority and State Ground Water Board/ Authority need to be clarified. Also, the Central Government needs to come out atleast with a legislation/model legislation on Ground water to ensure uniformity amongst States.

3. The Committee felt that though **there are complaints of reverse boring and consequent contamination of groundwater leading to widespread diseases and even mortality in affected areas, the issue has not been dealt with the seriousness that it deserves.** Presently Reverse Boring is dealt with alongwith other offences for polluting water sources under Section 24(1 a) of Water Pollution Act 1974 with penalty clause under Section 43. The Committee felt that specific provisions need to be done for Reverse Boring and the penalty amount needs to be increased because this act is similar to abetment to mass murder of the community.

4. **OCEMS for STPs:** CPCB has installed 36 real time monitoring stations all across the country out of which 21 are in Uttar Pradesh as part of the Online Continuous Effluent Monitoring System (OCEMS). The number of stations in Ganga is 15, 5 on its tributaries and 1 is on a drain. A central control room has been established at UPPCB HQs to do 24x7 monitoring of pollution data relating to these stations. The system was very effective in monitoring pollution in Ganga river during Kumbh and was widely appreciated. **The Committee feels that these stations be established in all Polluted River Stretches so that all gap areas are covered and major polluting sources are monitored on 24x7 basis.** UPPCB may be directed to ascertain the number of such stations required for ensuring monitoring of all such polluted river stretches in the State. A list regarding the location and tentative cost of setting up the stations alongwith likely sources of funding may be prepared by SPCB and submitted to the Committee within one month. The online monitoring stations will overcome the challenges of manual monitoring and prevent data fudging.

5. **OCEMS for industries:** The **State Pollution Control Board should ensure compulsory installation of Online Continuous Effluent Monitoring System (OCEMS) in all GPIs along with Pan-tilt Zoom Web Camera with open access to the department.** Consent to operate shall be provided only after such compliance.

6. Even after so much of emphasis **the District Environment Plan (DEP) has not been finalized yet.** UPPCB may be directed to get it implemented in all the

***Districts within a month, failing which adverse entries be recorded in the ACRs of concerned officers. The DEPs should focus inter alia on the working of ETPs, STPs and CETPs.***

7. As per the compliance report of UPPCB it is evident that they are continuously monitoring the STPs/ETPs/CETPs and have installed OCEEMS in the State for online monitoring still the same information is not reflected in the report of CPCB. Thus, it is directed that UPPCB should timely submit their progress report to the CPCB.

***8. Chief Secretary may be directed to take immediate steps to activate the district level Environment committee to meet regularly at least once in two weeks as directed by Hon'ble NGT. It will help to tackle the issues, adversely affecting the environment at an early stage."***

### **Going Forward**

11. The Tribunal has already issued directions vide orders dated 28.08.2019 and 21.05.2020 for ensuring that no untreated sewage/effluent is discharged into any water body and for any violation compensation is to be assessed and recovered by the CPCB so that the same can be utilized for restoration of the environment, complying with the principle of 'Polluter Pays' which has been held to be part of 'Sustainable Development' and part of right to life. Control of such pollution is crucial for environment, aquatic life, food safety and also human health. Since CMC headed by the Secretary, Ministry of Jal Shakti has taken over monitoring of abatement of pollution of polluted river stretches in the country in coordination with the Chief Secretaries who are heading the RRCs in the States, henceforth the monitoring of directions for ensuring requisite number of pollution control devices may also be monitored by the CMC with a view to enable compliance of mandate of law. **The CMC may give a consolidated quarterly report covering the status of compliance with regard to adequate number of pollution control equipments as well as steps taken for**

rejuvenation of rivers in terms of orders already passed in OA 673/2018 and in the light of observations in paras 7 and 9 above.

## **II. Original Application No. 673/2018**

### **Review of proceedings before the Tribunal**

12. As noted earlier, the issue for consideration in this matter is rejuvenation of 351 polluted river stretches causing threat to public health and the environment. The Tribunal has considered the matter on several occasions *suo motu* as well as on directions of the Hon'ble Supreme Court with regard to certain polluted river stretches, **including Ganga and Yamuna**. It is not necessary to refer to all such orders. We may only refer to the directions issued on 06.12.2019 and 29.06.2020 which are as follows.

13. Directions in order dated **06.12.2019**:

#### **“XII. Directions:**

47. *We now sum up our directions as follows:*

- i. 100% treatment of sewage may be ensured as directed by this Tribunal vide order dated 28.08.2019 in O.A. No. 593/2017 by 31.03.2020 atleast to the extent of in-situ remediation and before the said date, commencement of setting up of STPs and the work of connecting all the drains and other sources of generation of sewage to the STPs must be ensured. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as already directed vide order dated 22.08.2019 in the case of river Ganga i.e. Rs. 5 lakhs per month per drain, for default in in-situ remediation and Rs. 5 lakhs per STP for default in commencement of setting up of the STP.*
- ii. Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In default, compensation will be liable to be paid at the scale laid down in the order of this Tribunal dated 22.08.2019 in the case of river Ganga i.e. Rs. 10 lakhs per month per STP.*

- iii. *We further direct that an institutional mechanism be evolved for ensuring compliance of above directions. For this purpose, monitoring may be done by the Chief Secretaries of all the States/UTs at State level and at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB.*
- iv. ***For above purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance who may take assistance of CPCB and may give its quarterly report to this Tribunal commencing 01.04.2020.***
- v. *The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the Secretary level and ensuring appropriate adverse entries in the ACRs of erring officers. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an accountable person attached in his office for this purpose.*
- vi. *Monthly progress report may be furnished by the States/UTs to Secretary, Ministry of Jal Shakti with a copy to CPCB. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers.*
- vii. ***As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level.***
- viii. ***Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.***
- ix. *CPCB may finalize its recommendations for action plans relating to P-III and P-IV as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the execution of the action plans prepared by the States which may start forthwith, if not already started.*
- x. *The action plan prepared by the Delhi Government which is to be approved by the CPCB has to **follow the action points delineated in the order of this Tribunal dated 11.09.2019 in O.A. No. 06/2012.***
- xi. *Since the report of the CPCB has focused only on BOD and FC without other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification, **a survey may now be conducted with reference to all the said parameters** by involving the SPCB/PCCs within three months. Monitoring gaps be*

*identified and upgraded so to cover upstream and downstream locations of major discharges to the river. CPCB may file a report on the subject before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).*

- xii. *Rivers which have been identified as clean may be maintained.”*

**(emphasis supplied)**

14. Directions in order dated **29.06.2020**:

**“XII. Directions:**

45. *We reiterate our directions in order dated 6.12.2019 in the present matter, reproduced in Para 38 above, read with those in order dated 21.5.2020 in OA 873/2017 and direct CPCB and Secretary, Jal Shakti to further monitor steps for enforcement of law meaningfully in accordance with the directions of the Hon’ble Supreme Court and this Tribunal. **The monitoring is expected with reference to ensuring that no pollution is discharged in water bodies and any violation by local bodies or private persons are dealt with as per mandate of law as laid down in orders of the Hon’ble Supreme Court and this Tribunal without any deviation from timelines. The higher authorities must record failures in ACRs as already directed and recover compensation as per laid down scale. Every State/UT in the first instance must ensure that at least one polluted river stretch in each category is restored so as to meet all water quality standards upto bathing level. This may serve as a model for restoring the remaining stretches.”***

## **Review of Compliance Status Reports**

### **CPCB Report dated 15.09.2020**

15. Report of the CPCB filed on 15.09.2020 in pursuance of order dated 29.06.2020 in O.A. 673/2018 mentions the status of approval of action plans in a tabular form in Annexure -2 which is summed up as follows:-

“

- *All 61 action plans pertaining to Priority I and Priority II polluted river stretches submitted by 18 States & 2 UTs have been approved along with conditions by CPCB Task Team*
- *Out of 115 Action plans pertaining to P-III and P-IV polluted river stretches received from 24 States & 1 UT, 108 action plans pertaining to 22 States and 1 UT have been approved along with the conditions.*

- Total 169 action plans submitted by 24 States & 3 UTs have been approved by CPCB Task Team.”

Annexure-2 is reproduced below:-

**“State-wise Identified Polluted Rivers and the Status of Action Plans approved by CPCB in compliance to Hon’ble NGT Orders dated 20.09.2018, 19.12.2018, 08.04.2019, 6.12.2019 & 29.6.2020 in OA No. 673 of 2018 (as on 10.09.2020)**

Name of the State/UT	Total No. of Identified polluted River stretches (PRS)	Priority I & II PRS approved		Priority III PRS		Priority IV PRS		Priority V PRS*	Total Action Plans approved by CPCB Task Team
		Priority I	Priority II	Total Number	CPCB Task Priority III approved	Total Number	Priority IV approved		
Andhra Pradesh	5	0	0			2	2	3	2
Assam	44	3	1	4	4	3	3	33	11
Bihar	6	0	0	1	1			5	1
Chhattisgarh	5	0	0			4**	0	1	0
DD & DNH	1	1	0					0	1
Delhi	1	1	0					0	1
Goa	11	0	0	1	1	2	2	8	3
Gujarat	20	5	1	2	2	6	6	6	14
Haryana	2	2	0					0	2
Himachal Pradesh	7	1	1	1	1			4	3
J & K	9	0	1	2	2	2	2	4	5
Jharkhand	7	0	0			3**	0	4	0
Karnataka	17	0	0	4	4	7	7	6	11
Kerala	21	1	0			5	5	15	6
Madhya Pradesh	22	3	1	1	1	3	3	14	8
Maharashtra	53	9	6	14	14	10	10	14	39
Manipur	9	0	1					8	1
Meghalaya	7	2	0			3	3	2	5
Mizoram	9	0	0	1	1	3	3	5	4
Nagaland	6	1	0	1	1	2	2	2	4
Odisha	19	1	0	3	3	2	2	13	6
Puducherry	2	0	0			1	1	1	1
Punjab	4	2	0			1	1	1	3
Rajasthan	2	0	0	1	1			1	1
Sikkim	4	0	0					4	0
Tamil Nadu	6	4	0			1	1	1	5
Telangana	8	1	2	2	2	2	2	1	
Tripura	6	0	0					6	
Uttar Pradesh	12	4	0	1	1	2	2	5	7
Uttarakhand	9	3	1	1	1	4	4	0	9
West Bengal	17	1	1	3	3	4	4	8	9
<b>Grand Total</b>	<b>351</b>	<b>45</b>	<b>16</b>	<b>43</b>	<b>43</b>	<b>72</b>	<b>65</b>	<b>175</b>	<b>169</b>

\*Action plans pertaining to Priority V does not need approval by CPCB.

\*\* Action plans under consideration, upon receipt of RRC approved revised action plans from the respective State.”

16. The report further mentions that certain States sought omission of polluted river stretches from the list. In response, CPCB prepared a

criteria that a stretch can be deleted from the list of polluted river stretches if water quality complies with the criteria for two years. The report also mentions that in terms of order dated 06.12.2019, Central Monitoring Committee (CMC) has been constituted under the Chairmanship of Secretary, MoJS to review the status of compliance of implementation of action plans with the Chief Secretaries of all States/UTs, with the assistance of the CPCB and the NMCG.

### **CMC Report dated 15.09.2020**

17. Compliance status has been mentioned in the CMC report as follows:-

#### ***“Existing Sewage Infrastructure***

*In respect of the existing sewage infrastructure, **53,396 MLD of sewage (from urban settlements) is generated in 31 States/UTs and 29,556 MLD capacity of STPs exists (1212 nos.) which approximates to about 55% of sewage generation. Against the existing capacity, only 62% of the capacity is being utilized for treatment of municipal sewage (except for Andhra Pradesh, Tripura and West Bengal who have not reported the figures of utilization of existing capacity). Rest of the existing capacity remains unutilized because of various reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality on various counts. This leaves a gap of 24,144 MLD in treatment capacity for which States are regularly being asked to provide their inputs with regards to their plans to fill the gap including that for financing the creation of infrastructure. It is also important that operational STPs remain compliant to the STP outlet standards as per environmental norms. The data obtained from the States of Chhattisgarh, Daman, Diu and Dadra Nagar Haveli, Gujarat, Manipur, Odisha, Sikkim, Tripura, Uttarakhand and Uttar Pradesh shows that out of total 235 operational STPs in these States, 162 STPs are compliant to the outlet standards and a large number of STPs remain non-compliant to the environmental norms.** Other States have failed to report compliance of existing STPs to STP outlet standards. The States have assured that the same will be provided to CMC. The details of sewage generation, existing*

sewage treatment capacity, its utilization and gap thereof is presented in **Table-1**.

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

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present ( in MLD)
1	Andhra Pradesh	1384	515.45	-	868.55
2	Assam	703	0	0	703
3	Bihar	651.5	40 (2 STPs)	22 (55%)	611.5
4	Chhattisgarh	600	73.1 (3 STPs)	6 (8.2%)	526.9
5	Daman, Diu And Dadra Nagar Haveli	20.5	17.21 (2 STPs)	5.2 (30%)	3.29
6	Delhi	3273	2714 (35 STPs)	2455 (90%)	559
7	Goa	165	78.35 (9 STPs)	46.6 (59%)	86.65
8	Gujarat	3765	3378 (70 STPs)	2812 (83%)	387
9	Haryana	1454	1767	1466 (82%)	-
10	Himachal Pradesh	102.8	86.9	55.1 (63%)	15.9
11	Jammu & Kashmir	970	126.80 (11 STPs)	80.70 (63%)	843.2
12	Jharkhand	700	131 (19 STPs)	75 (57%)	569
13	Karnataka	3356.5	2561 (142 STPs)	1704 (66%)	795.5
14	Kerala	3759.28	124.135 (11 STPs)	81.325 (65%)	3634.935
15	Madhya Pradesh	2183.65	690.76 (25 STPs)	524.24 (75%)	1492.89
16	Maharashtra	9757	7746 (137 STPs)	4013 (51%)	2011
17	Manipur	114.054	27 (1 STP)	8 (29%)	87.05
18	Meghalaya	87.91	0	0	87.91
19	Mizoram	80	10 (1 STP)	0	70
20	Nagaland	44.3	25.4 (1 STP)	0	18.9
21	Odisha	439.49	91 (5 STPs)	70 (76%)	348.49
22	Puducherry	84	56	30 (52%)	28
23	Punjab	2111	1621.5 (115 STPs)	80%	456

24	<b>Rajasthan</b>	1712	966 (68 STPs)	43%	746
25	<b>Sikkim</b>	47.68	19.02 (6 STPs)	17 (89%)	28
26	<b>Tamil Nadu</b>	2070.855	1484.42 (56 STPs)	798.34 (53%)	586.435
27	<b>Telangana</b>	2453	920.1	810 (88%)	1532.9
28	<b>Tripura</b>	175	8 (1 STP)	-	167
29	<b>Uttarakhand</b>	329.33	355.13 (61 STPs)	203.9 (57%)	-
30	<b>Uttar Pradesh</b>	5500	3365.88 (105 STPs)	2566.55 (76%)	2134.11
31	<b>West Bengal (as per CPCB Report 2018)</b>	5303	557.64 (43 STPs)	-	4745.36
<b>Total</b>		<b>53,396.849</b>	<b>29,556.795</b>		<b>24,144.47</b>

*In particular, poor capacity utilization of Rajasthan (43%), Manipur (29%), Daman Diu & Dadra Nagar Haveli (30%), Chhattisgarh (8%), Maharashtra (51%), Puducherry (53%), Tamil Nadu (53%) needs consideration and attention for which Chief Secretaries of the concerned States have been apprised through D.O. letters from Secretary, Department of Water Resources, River Development & Ganga Rejuvenation. The States of Assam and Meghalaya do not have any existing treatment capacity while Tripura & Manipur has only one STP each. The compliance of existing STPs in Telangana (88%), Madhya Pradesh (75%), Delhi (90%), Gujarat (83%), Haryana (82%), Odisha (76%), Punjab (80%), Sikkim (89%), UP (76%), remains good. This needs to be maintained and continuously improved. Utilization has not been reported by Andhra Pradesh, West Bengal, Tripura, for which these States have been reminded.*

*Most of States do not have online system of monitoring the functioning of STPs, both in respect of quantity of sewage being treated and whether the treatment conforms to the environmental norms for STP outlet standards. Directions are required to be given to States to not only ensure that created capacity is optimally utilized by carrying out condition assessment of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months, but also putting in plans to upgrade STPs requiring upgradation so as to make them functional. In addition, it is also equally important that States must develop a modern technology based online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage*

**infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future.** Such a system will enable that health of sewage treatment facility is readily available, with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.

So far as monitoring of water quality of rivers by CPCB is concerned, **CPCB must continue to monitor all the parameters prescribed under "Primary Water Quality Criteria for Bathing Water" notified under Environment (Protection) Rules, 1986 (i.e. pH, DO, BOD, Faecal Coliform and Faecal Streptococci) as well as COD and other recalcitrant toxic pollutants having tendency for bio-magnification as prescribed under "Guidelines on Water Quality Monitoring - 2017" issued by MoEF&CC.** The monitoring will ensure that environmental standards are observed in respect of rivers and other water bodies."

18. The report gives State-wise details of the projects which are ongoing, under tendering, awaiting sanction and where DPRs are yet to be prepared. Further mention has been made of the status of bio-remediation projects as follows:

*"The status of in-situ bioremediation/ phyto-remediation in Polluted River Stretches being undertaken by the State was monitored. Most of the States have reported that they **do not have technical expertise as well as competency to take up in-situ bio-remediation/ phyto-remediation measures.** Further, it has been reported that due to lack of availability of vendors, appropriate agencies with proven capability to implement such works and non-availability of standard rates, the progress in this activity has been slow. **Accordingly, Andhra Pradesh, Assam, Gujarat, Kerala, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu, Tripura are yet to take up any such measures on the drains in the polluted river stretches.** Other States have taken up measures on pilot basis only which they propose to evaluate based on the results obtained before works in other reaches are taken. Uttar Pradesh, West Bengal have reported that works have been taken up in 42 drains and 10 drains respectively in their State.*

*Further, Hon'ble NGT's vide its order dated 05.3.2020 (hearing on 18.2.2020) in the matter OA No. 06 of 2012 Manoj Mishra & ors while considering the report of Yamuna Monitoring Committee on "Approach to in-situ bio- remediation/ phyto-remediation of sewage in drains of Delhi", has observed and directed that CPCB report on "Alternate technologies for management of WW drains" be revised and circulated to MoUD, MoJS, NMCG and Govt. of Delhi, UP, Haryana for formulation of Policy for alternate technologies for waste water drain management. The same has already been informed to the States for their guidance to enable them to take decisions in implementation.*

*State wise status of bio-remediation/ phyto-remediation projects is given below.*

19. The status of Industrial Pollution Management has been mentioned as follows:-

**8. Industrial Pollution Management in the State/ UTs:**

*"So far as measures for abatement of industrial pollution are concerned, the State-wise details about number of water polluting industries, industries having ETPs, quantity of effluent discharge, treatment capacity of ETPs and number of ETPs and CTPs is given in **Table-7**. It can be seen from the information provided by the States that only Delhi, Dadra and Nagar Haveli and Kerala have all the industries with functional ETPs. In respect of Andhra Pradesh, Kerala, Bihar, Jharkhand and Assam, data submitted by States has been observed to be inconsistent and needs to be further clarified by the States.*

*All the industries located in catchment of Polluted River Stretches in State of Gujarat, Delhi, Odisha, Maharashtra, Sikkim, Meghalaya, Jharkhand and Bihar have been provided with functional ETPs. The compliance status of these ETPs is being reviewed and will be taken up in subsequent meetings of CMC."*

20. Finally State specific issues have been mentioned. The report also gives the status of Solid Waste Management, Ground Water Augmentation Afforestation, Floodplain and E-flow Management and Scrutiny of Action Plans for P-II and P-IV.

**Observations and recommendations in the CMC report:**

21. The observations and recommendations in the report are as follows:

*“States are regularly submitting Monthly Progress Reports, in the requisite formats, by the stipulated dates. However, **quality of information provided in MPR in respect of a few States is wanting and needs to be improved.** As MPRs are one of an important document which provides requisite status in respect of various activities being undertaken as per approved Action Plans, the quality of information is important for meetings of CMC and further reporting to Hon“ble NGT. MPR before being submitted should therefore, necessarily be studied by senior officers in States and so certified.*

- *Most of States have informed that the progress of ongoing works has been severely affected due to COVID-19 pandemic which has impacted issues related to mobilization of skilled and unskilled manpower as well as supply of materials besides site works. Site works often reportedly get affected due to lockdown kind of situations whenever the same is under enforcement. The project completion timelines, therefore, are getting impacted due to these factors also.*
- *States have failed to report specific reasons for delay in grounding the projects as well identification of officials responsible for the delays. The necessary reporting from the States is being taken up and will be followed up in future review meetings.*
- *States have reported about financing difficulties being faced by them on account of resource crunch due to COVID-19 situation. States, reportedly are trying to arrange funding for priority projects and will be apprising the status in subsequent meetings of the CMC. The process of sanctioning of projects, being dependent on funding, is getting affected due to pandemic situation.*
- ***Considering financial limitations, States/ UTs may take up STP projects on Hybrid Annuity Model, which, as a business model, enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue.** It will help ULBs to tap the external market funding for development & operation of sewage infrastructure, apart from quality treatment services. NMCG has prepared model tender documents for development of STPs through HAM and recently these documents have also been approved by NITI Aayog.*
- ***One City- One Operator concepts offer integrating the rehabilitation and Operation & Maintenance of the existing treatment infrastructure along with development & operation of new STPs.** This concept can be integrated with HAM model, as is being done in many projects under Namami Gange.*

- Government of India has also introduced **National Faecal Sludge & Septage Management (FSSM) Policy in 2017 to emphasize the importance of treating the faecal sludge from on-site sanitation system**. Some State Governments have also issued State level FSSM policies/ guidelines. Nearly 25 Faecal Sludge Treatment Plants (FSTPs) are operational and another 400 are in the offing in the country. Other States must consider adopting State level FSSM policies/ guidelines for regulating the handling, treatment and disposal of faecal sludge.
- Many of the States/ UTs have also been looking for alternatives beyond conventional STPs for treatment the sewage/ faecal sludge. States may consider implementation of FSTPs and/or co-treatment of faecal sludge in existing STPs, or may judiciously adopt any other alternate treatment technology, in towns wherever feasible.
- Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD. States, in such situations, may consider to adopt installation of **decentralized modular STPs; which offer advantages in form of lesser time involved in commissioning of systems, less land footprints, easy operations; instead of conventional centralized STPs based on techno-commercial considerations**. This will also enable them to comply to NGT stipulated timelines.
- States have created assets for treatment of sewage and capacity of **STPs so created is not being optimally utilised due to many reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality etc**. A large number of STPs remain non-compliant to STPs outlet norms. States must ensure optimum utilization of the existing treatment infrastructure and also ensure compliance of the plants with regard to the environment norms. For this purpose, States may carry condition assessment studies of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months so as to identify the reasons of sub-optimum utilization and dysfunctionality of existing STPs. This will help them in finalizing plans to upgrade STPs requiring upgradation so as to make them functional.
- States do not have an online monitoring system in place to monitor (both quantity and quality of treated water) the health of existing sewerage infrastructure. States must consider to develop an online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future. Such a system will enable that health of sewage treatment facility is readily available,

*with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.*

- **53 projects** with capacity of about **867.46 MLD** in Polluted River Stretches are expected to be completed by December 2020. The concerned States must ensure that monthly monitoring and regular watch on the progress of these projects is to be maintained, so that the completion timelines are strictly complied and projects commissioned in time.
- **41 projects** are likely to be completed during time window of January 2021-March 2021. Progress of these projects is also required to be continuously monitored at State level so that lag, if any, in adhering to the timelines is avoided.
- State of Maharashtra, Telangana & Gujarat have to ensure that decision on tenders already called by State are finalized and the pending land acquisition issues for many STPs are sorted out urgently.”

## **Report of OC dated 16.09.2020 for the State of UP**

22. In O.A. 673/2018, a separate report has been filed by the Oversight Committee constituted by this Tribunal for the State of UP making following recommendations:

**“1. Only 45% of the total Sewage Generation of 4292 MLD in the catchment areas of these 12 Polluted River Stretches is being treated. To check this 2336 MLD untreated discharge from going in the rivers, all the 324 drains flowing in these rivers need to be tapped, the treatment capacity be increased by increasing the number of STPs, In situ remediation of untreated sewage be done as an interim measure and E Flow of these rivers need to be maintained above a prescribed level.**

**2. Out of total 324 drains in 12 polluted river stretches, 289 are untapped till date. Plan details along with timelines and corresponding physical and financial progress regarding tapping of these 289 drains be filed by the Govt. before NGT within a month.**

**3. Out of total 4292 MLD sewage generated in the catchment area of these 12 polluted rivers stretches, only 1956 MLD is treated in 79 STPs. That leaves a gap of 2336 MLD untreated sewage discharge. DPRs have been prepared/sanctioned for 47 new STPs for 1796 MLD. The**

**DPRs for remaining 540 MLD gap should be immediately prepared and sanctioned by the State. Out of 47 STPs sanctioned, only in 26 construction has started. The progress appears to be very slow. The State Govt. should file the physical and financial progress of STP capacity augmentation before NGT along with definite timelines within a month.**

4. Progress of in situ remediation as an interim measure also is not satisfactory. **In 37 untapped drains falling in Priority 1, only one drain was found under Phyto Remediation during inspection. CPCB has already given notice for EC for Rs 18 Crore.** The proposed timelines for in situ remediation along with details of project approval and financial approvals for these 289 untapped drains be filed by the Govt before NGT within a month.

5. **Though minimum E Flow is being maintained in River Ganga, no such study had taken place in these stretches.** Now IIT Delhi is doing a study in 8 perennial rivers out of these 12 Stretches and its report will come by December 2020. Irrigation Department needs to adhere to the timelines regarding study and post study action plan to maintain minimum E Flows in these river stretches.

6. **The State government should deposit the Performance Guarantee of Rs.15 crore as mandated by NGT.**

7. Monitoring of Grossly Polluting Industries needs to be stepped up. **Out of 386 identified GPIs, 87 were issued show cause notices. Total EC imposed was Rs 20.62 crore, out of which approx. Rs 10 crore has been realised. UPPCB should issue notices to all defaulters and also realize the balance EC. 1092 GPIs in Ganga Basin are connected 24x7 to Central Control Room at Lucknow through OCEMS. It yielded excellent results during Kumbh.** Same system needs to be followed in these stretches. This will increase transparency and accountability in the pollution reporting of these GPIs.

8. Regarding demarcation of floodplain zones, identification survey is going on and after it the notification pillars will be set up. This entire exercise is expected to get completed by October, 2020. **The Committee feels that Irrigation Department should closely monitor it to adhere to the timelines.**

#### **Regarding Gomti (O.A 24/2018)**

1. The sewage treatment capacity of Gomti needs to be augmented at Lucknow. **The present treatment capacity is 438 MLD against requirement of 784 MLD. The gap of 346 MLD is proposed to be filled up in 3 Phase-160 MLD in Phase1, 102 MLD in Phase2 and 85 MLD in Phase3. So far Phase 2 comprising of Bijnor STP (80 MLD) and Ghaila STP (22MLD) is pending for sanction with NMCG. DPR for Phase3 (Bharwara 85 MLD) is under preparation. The State Govt should immediately get these STPs sanctioned and ensure that work commences as per timelines prescribed by NGT.**

2. *In the interim, NGT had directed that in situ remediation measures be taken up to check the discharge of untreated water in the river. Unfortunately, despite two pilots having been taken in the past, no in situ remediation has been initiated. CPCB/SPCB may impose and realize EC as directed by NGT on this count.*
3. ***There are many flaws in Waste Management Processing Plant in Lucknow managed by M/s Eco Green. During the inspection visits in June, 2020 it was found that in landfill site area along with the inert material, urban solid waste was also present. No 'waste to energy' work had been started in the treatment unit. ETP was non-operational and its O&M was unsatisfactory. The leachates was getting collected around it. Such negligence is unacceptable. SPCB must issue show cause notice within a fortnight to Nagar Nigam and impose EC for violations of Environmental norms with liberty to the Nagar Nigam to realize it from the Operator along with such penal action as they deem fit.***

#### **General Recommendations:**

1. ***Sewerage Network:*** *The Hon'ble NGT vide order dated 22.08.2019 had directed to complete ongoing sewerage network work by 1.07.2020 and after that it was directed that payment of environmental compensation of Rs. 10 lakhs per month would be deposited with CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries. Accordingly, CPCB shall initiate imposition of EC and issue notices within 15 days. Principal Secretary Urban Development should personally monitor the progress of tapping of untapped drains.*
2. ***Phytoremediation/bioremediation:*** *The Hon'ble Tribunal directed phytoremediation/bioremediation to be done as an interim measure until tapping of drains is complete. In case of non-compliance beyond 1.11.2019, penalty of 5 lakh per drain per month was to be imposed by CPCB. CPCB must submit report regarding how much EC has been realized out of total imposed EC of Rs 18 crore on 120 drains for non-compliance of this order for the period 1.11.2019 to 31.1.2020.*
3. ***STPs:*** *Vide order dated 22.08.2019 it was stated that with regard to sewerage works/STP under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per STP per month to CPCB will apply. Accordingly, CPCB shall calculate EC and send notices to defaulters in the next 15 days. It shall also explain why notices have not been issued in this regard so far.*
4. ***Timelines:*** *The oversight committee is concerned that the progress on ground is minimal and timelines keep on getting shifted. The State government, while keeping in mind the NGT directions, must provide firm timelines for completion of work within one month to the Committee with reference to the following issues:*
  - *Tapping of untapped drains*

- STP/CETPs installation in the State
  - Action Plan for treated water
  - Complete demarcation of Floodplain zones in Phase I
  - Detailed mapping of legacy waste and standardization of process for remediation
  - Completion of project for conserving and sustainably managing Floodplain Wetland
5. **OCEMS for STPs:** CPCB has installed 36 real time monitoring stations all across the country out of which 21 are in Uttar Pradesh as part of the Online Continuous Effluent Monitoring System (OCEMS). The number of stations in Ganga is 15, 5 on its tributaries and 1 is on a drain. A central control room has been established at UPPCB HQs to do 24x7 monitoring of pollution data relating to these stations. The system was very effective in monitoring pollution in Ganga river during Kumbh and was widely appreciated. **The Committee feels that these stations be established in all Polluted River Stretches so that all gap areas are covered and major polluting sources are monitored on 24x7 basis. UPPCB may be directed to ascertain the number of such stations required for ensuring monitoring of all such polluted river stretches in the State. A list regarding the location and tentative cost of setting up the stations alongwith likely sources of funding may be prepared by SPCB and submitted to the Committee within one month. The online monitoring stations will overcome the challenges of manual monitoring and prevent data fudging.**
  6. **OCEMS for industries:** The State Pollution Control Board should ensure compulsory installation of Online Continuous Effluent Monitoring System (OCEMS) in all industrial units along these polluted river stretches along with Pan-tilt Zoom Web Camera with open access to the department. Consent to operate shall be provided only after such compliance.
  7. **Green Belts:** The Irrigation Department should coordinate with Forest Department of the State to identify vacant areas /flood planes on the banks of these river stretches which may be developed as Green Belts. An action plan regarding this may be submitted by Irrigation Department to Department of Forest, Uttar Pradesh within two months. Moreover, the Plantation model of Gautam Budh Nagar developed under Public-Private Partnership can be replicated in other districts of the State (Refer Annexure VII).
  8. **Flood Plain Zones:** The Irrigation Department, Uttar Pradesh and Central Water Commission need to expedite work related to identification and demarcation of floodplain zones. There is lack of coordination at the field level between Irrigation Department and Revenue Department for correction of records. Chief Secretary should ensure coordination between the two departments so that floodplains are jointly demarcated, revenue records corrected accordingly, encroachments removed and pillars are fixed. The progress in this

**matter be monitored in Chief Secretary's monthly review meeting and informed to NGT regularly in the quarterly report.**

9. **Cleaning of Ghats:** The State government must ensure cleaning and maintenance of ghats by organizing local people, NGOs and professional agencies. The copy of the action taken with documentary evidences to be submitted to the Committee.
10. **Crematoria:** In order to prevent disposal of dead bodies into these rivers, provision of crematoria in rural areas is necessary. The existing scheme of construction of crematoria in villages handled by Panchayati Raj Department needs to be strengthened.
11. **Idol Immersion:** The Committee recommends **banning of idol immersion in all these rivers in Uttar Pradesh.** Chief Secretary may be asked to issue directions to concerned department for creation of artificial ponds, if found absolutely necessary (as done in NCR-Delhi region for preventing pollution in river Yamuna) for idol immersion during traditional festivals like Ganesh Chaturthi and Durga Puja specifying prior permission of District Administration and strict timelines pertaining to religious days only.
12. **Ground Water Recharge:** The Committee recommends steps to be taken for **ground water recharge by digging of ponds and establishing drain network to tap excess runoff during rainfall.** Such simple interventions have been taken up in district Mathura, Uttar Pradesh to increase groundwater level and rejuvenate water bodies (Refer Annexure VIII).
13. **Replication of Success stories:** The Committee also recommends replication of **successful waste management models such as that of Vengurla town in Sindhurdurg district, Maharashtra in small towns of Uttar Pradesh.** This town has converted a landfill into a waste management park, generates revenue from waste and has paved way for Sustainable Development.
14. **Floating Barriers:** In order to restrict and regulate waste into rivers, the committee recommends **use of floating barriers as being used on Cooum River in Chennai.**
15. **Improvement in Capacity Utilisation of existing STPs:** The Committee feels that there is no point establishing new STPs/CETPs without reforming the operational performance of existing STPs/CETPs. **There is lot of scope for improving the efficacy and functioning of the current STPs/CETPs. They need to be continuously monitored on a 24x7basis.All the STPs in the State should be equipped with SCADA, connected with a central control room, continuously monitored 24x7 , their performance analysed on day to day basis, problem areas like maintenance issues be addressed without any delay and accountability be fixed for non performance/suboptimal performance. The Committee appreciates the One**

**Operator One City scheme followed by UP, which will certainly help in focusing responsibility.**

16. **Phyto Remediation:** *Phyto remediation measures have not been realistically tried. The DPR of Rs 1796 crores for 459 drains sent to NMCG appears to be excessive. It needs to be reviewed. It appears that these estimates are prepared by engineers and not by environmentalists. If instead of civil construction, natural solutions are proposed, the project can be prepared at a fraction of the cost proposed currently and may be more efficacious.* A few demonstration projects regarding phyto remediation at a relatively much lower cost could be taken up with the help of environment experts so that these proposed projects could be realistically remodeled.
17. **Bio-Plastics:** *Use of bio-plastics/bio-degradables in every sector viz. domestic and industrial sectors is a viable solution to prevent rivers from choking and warding off adverse implications on biodiversity. The State government may develop plans for switching to bio-plastics/bio-degradables at macro level within six months.*
18. **Awareness Generation:** *The residents of different districts are contended to see the clean water of all the rivers during the lockdown period. In view of this, the Committee suggests conducting mass awareness campaigns and media-based water consciousness campaigns that make people sensitive towards the environment as well as show that they are an integral part of the solution. Further, "One Drop project" can be followed to create awareness about environment.*
19. **Floating barrier:** *In the year 2015, Alpha MERS developed an indigenous design of floating trash barrier for controlling hyacinth and trash from flowing in water. The barrier made of steel and aluminium with a high tensile strength claims to have an ability to survive in both polluted water bodies and change in water levels. For the first time in November 2017 these barriers were deployed in Cooum river in Chennai. Currently, the barriers have been deployed at eight locations in Cooum river (NDTV,2018)*
20. **CETPs: None of the polluting industries should be allowed to run without properly functioning CETP/ETP.** *Regarding 7 CETPs in the State, it was reported that all were functional and achieving norms. UPPCB has to continuously monitor their performance and shut down the cluster if the CETP performance is not compliant with environment norms. Special focus to be kept on tanneries and textile industries. Moreover, the implementation of new CETPs at Jajmau and Unnao and upgradation of CETP at Mathura and Banthar is already quite delayed. Timelines for implementation be strictly followed and accountability be fixed for delay. All GPIs to compulsorily install OCEMS within 2 months with open access to UPPCB so that there are no gaps in monitoring. No consent to operate be issued by UPPCB without verifying compliance. All new distilleries to compulsorily have ZLD.*

21. **FSSTPs:** There has been considerable delay in implementation of all FSSTP Plants underway in 60 AMRUT towns. The process needs to be expedited. **The procurement process with specifications be standardized. List of vendors be circulated and whole process should be put on GeM portal to ensure transparency and cut down delay.** Regarding faecal sludge management following steps to be undertaken:
- a) **The percentage of households connected to main sewer is just 1015% in the State.** U.P Jal Nigam to be asked about the current status of sewer connections in the State and analyse the gaps.
  - b) At a number of places, toilets constructed under Swachh Bharat for ODF are not connected to sewerage network. . It is required that these toilets be connected to either the sewerage network or arrangements be made to periodically transfer there faecal sludge to nearby FSSTP plants.
  - c) It is required that **FSSTP Plants be built on priority at designated STPs and arrangements for transfer of Faecal sludge from non network areas be implemented at the earliest in order to have better and effective sewage management.** The State Govt should share the action plan for implementation of the FSTP Policy at the earliest with NGT.
  - d) It is recommended that in households wherein sewer connections are not present, the concerned authority must ensure that the households are connected to FSSTP plant.
22. **One city one operator model for sewage management:** The State government started "one city one operator" model wherein single company operates, maintains and manages sewage treatment and network infrastructure in the city. Implementation of such models has made operation and maintenance easy as there can be no shifting of responsibility and the entire process is under the command of one company. However, it is needed that proper monitoring of these operators and the plants managed by them is done in each city so as to assess the efficacy of STP plants. Urban Development Department must submit an evaluation report in this regard within three months.
23. **Encroachment along drains:** At many places in the State there are encroachments in the flood plains of drains. **For example more than 300-400 encroacher households are living in the flood plain of Kukrail drain in Lucknow city.** In the absence of any regular toilet facilities, their faecal matter/grey water is washed away directly in the river Gomti, which also supplies drinking water to Lucknow city.. The State government needs to take steps for removing such encroachments on priority by rehabilitating these households under the "Housing for All" programme.
24. **Floodplain Zones:** The process of demarcation of Floodplain zones is quite slow. There is lack of co-ordination at the field level between Irrigation Department and Revenue Department for correction of revenue records. Chief Secretary should ensure coordination between the Departments so that the floodplains are jointly demarcated, revenue records corrected

accordingly, pillars are erected and encroachments are removed in these floodplains. The progress may be monitored in Chief Secretary's monthly review meeting and informed to NGT regularly in the quarterly report.

25. **River side Mining: Reckless sand mining in river beds leads to erosion and environmental degradation.** There has to be compulsory demarcation of boundaries of all mineral leases before permission be given for mining. Mining should be as per EIA notification, 2006, MOEF notification dated 15.01.2016 and Sustainable Sand Mining Management Guidelines, 2016. **DMS /SSPs be made fully accountable for ensuring compliance of the directions.** In case of illegal mining, besides seizure of vehicles and all mining equipment, exemplary penalty be levied. CPCB should work out SOPs for levying penalty which should include besides cost of material mined out, cost of ecological damage also. All mining sites should compulsorily install CCTV cameras. Regular patrolling by Police and night monitoring through Drones.
26. **Groundwater Recharge: Over drawal of groundwater adversely affects the E Flow of rivers. Out of 820 blocks, UP has 280 blocks in the OCS category** (82-overexploited, 47-critical and 151- semi critical). No consent to operate be given by UPPCB without taking NOC from CGWA. State has recently enacted its own State Ground Water Act, 2019 and set up its own State Ground Water Authority. One of the reasons for poor implementation of Ground Water Act is lack of manpower at field level. The State should provide enough manpower at field level for proper enforcement.
27. **Rejuvenation of water bodies:** Rejuvenated water bodies lead to constant recharge of ground water as also proper E Flow in the rivers. The State Government may prepare an action plan by 31.07.2020 as per NGT directives mentioning the number of identified water bodies, location details, water quality status, compliance status, prioritization and detailed action plans. All the ponds should be identified and geo-tagged. In case of non-compliance, CPCB would issue notice for compensation for Rs.1 lakh/month.
28. **Bio Diversity Parks: Development of Bio Diversity Parks in the vicinity of rivers lead to continuous recharge of aquifers and maintenance of E Flow of the rivers.** CPCB may circulate Guidelines for Biodiversity parks to the States to enable them to develop these Parks.
29. **Monsoon Discharge:** The Committee reiterates the direction of Hon'ble NGT vide order dated 14.07.2020 in O.A.985/2019 which states that CPCB has to issue strict directions to ensure that no authority allows discharge of polluted sewage or polluted effluents directly into a water channel or stream even during the monsoon season.
30. **Success story of river Tamsa in Ayodhya should be circulated among all the District Magistrates and they**

***should be asked to identify and take up similar activities, with the involvement of local public, that may help in improvising the water bodies/ rivers / groundwater or environment in any manner that too with the minimum financial burden.***

31. *All these rivers throughout have multitudes of temples on both banks. Floral offerings from the devotees of these temples invariably find their place in these rivers. **IIT Kanpur has come out with a low price model wherein they convert these flowers into incense sticks (Agarbattis) which can be used in these temples itself. This way the flowers are recycled and it saves expenditure on incense sticks as well.** This model is being used in Kashi Vishwanath temple at present. It could be used elsewhere to lessen river pollution.*
32. ***Monitoring Mechanism:*** *The Committee finds that a number of problems are coordination problems among various departments. Such issues can easily be resolved **if there is a regular monthly meeting at the CS level, which unfortunately is not happening. The Committee requests the CS to hold a monthly monitoring meeting as laid down in the monitoring framework submitted by the State Govt before NGT.***

## **Consideration of CMC and OC reports**

23. The CMC report states that it addressed communication to all the Chief Secretaries and explained Hybrid Annuity Model (**HAM**) based PPP projects, One City One Operator (**OCOO**) concept, as implemented for sewerage intervention projects under Namami Gange programme as well as Faecal Sludge and Septage Management (**FSSM**) concept. The business model for liquid waste management has in-built mitigation mechanism against time & cost overrun, improper design, sub-optimal operation and failure to meet the performance standards. As a business model, HAM enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue. States were also facilitated by holding a Webinar on “Mainstreaming Faecal Sludge & Septage Management in Ganga Basin”, which was attended by officials from

almost all the States. The Webinar also included a session on experience of Odisha which has taken up FSSM extensively, besides initiatives taken by NMCG in these directions. States were urged to consider the implementation of FSTPs and/ or co-treatment of faecal sludge in existing STPs, in all towns wherever feasible, so that dumping of the faecal sludge in water bodies/ land and thereby polluting them, can be avoided. The States/UT Administrations were specifically requested to ensure that **at least one polluted river stretch in each category is restored to meet all water quality standards up to bathing level** as ordered by this Tribunal. This may serve as a “model” with a view to replicate the efforts for restoring the remaining stretches. **States have failed to report reasons for delay in grounding the projects as well identification of officials responsible for the delays.** The necessary reporting from the States is being taken up and will be followed up in future review meetings.

### **Going Forward**

24. **We have duly considered the CPCB, CMC and OC reports as above and noted the gaps and recommendations. We accept the recommendations of the Committees already quoted above that the States should furnish quality information and comply with the directions of this Tribunal in terms of orders dated 06.12.2019 and 29.06.2020. The violation of mandate of 100% treatment of sewage may be visited with the assessment and recovery of compensation and violation of timelines for setting up of pollution control devices may also be likewise strictly enforced with the compensation regime in place. There is also need for fully utilizing and augmenting the existing infrastructure as already noted above.**

25. **The States/UTs may consider using HAM as a business model as well as OCOP concept, FSSM Policy, alternative models for treatment of sewage/faecal sludge, decentralized STPs and also strengthen the online monitoring system. We are also of the view that flood plain zones of all the rivers need to be mapped and demarcated and encroachments removed therefrom. The same be utilized for plantation, creation of bio-diversity parks and constructed wetlands or other recreational purposes, consistent with the environmental concern. We agree with the OC that river side mining needs to be regulated. To reduce the timelines for setting up of STPs, many States/UTs are consuming time in preparing DPRs whereas model DPRs can be prepared and used for shortening the timelines. Similarly, SOPs need to be prepared for the timeline to be taken in setting up of STPs as well as for maintenance and operation of existing STPs particularly those not meeting the norms. Number of monitoring stations also needs to be suitably increased. We are also of the view that the State RRCs must function effectively and the Chief Secretaries must hold monthly meetings as it is found from the report of the OC for the State of UP that the Chief Secretaries may not be doing so. Huge failures of the States/UTs may show poor governance as far as environment is concerned which may need to be remedied. As found by the CMC, neither delay is explained nor accountability is fixed for the failure of the concerned officers which is not a happy situation.**

26. While dealing with the control of pollution of River Ganga, the Tribunal noted that following action points for monitoring:

- i. *Setting up of STPs, Interception and Division (I&D) of drains and preventing untreated sewage and effluents*
- ii. *Use of treated water*
- iii. *Use of sludge manure*
- iv. *Status of septage management*
- v. *Compliance in relation to industries*
- vi. *Installation of STPs/treatment facilities in Hotels/Ashrams and Dharmshalas.*
- vii. *Water quality monitoring of river Ganga and its tributaries.*
- viii. *Maintenance of environmental flow in river Ganga.*
- ix. *Disposal of Bio-medical waste.*
- x. *Compliance of Solid Waste Management (SWM) Rules, 2016.*
- xi. *Preparation of maps and zoning of flood plains.*
- xii. *Mining activity under supervision of the concerned authorities.*
- xiii. *Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.*

**CMC/RRCs/ OC for UP may conduct further monitoring keeping in mind the above action points.**

**III. Original Application No. 829/2019, It. Col. Sarvadaman Singh Oberoi v. Union of India & Ors.**

**Review of proceedings before the Tribunal**

27. OA 829/2019 deals with remedial action against pollution of sea water along the Indian Coastal areas. The Tribunal, vide order dated 03.12.2019, noted the problem and sought a report from the Central Pollution Control Board (CPCB), after referring to the observations of the Hon'ble Supreme Court in *Indian Council for Enviro Legal Action v. UOI*, (1996) 3 SCC 212 that degradation of coastal areas was a matter of serious concern and affected aesthetic and environment which required Environmental Management Plans to ensure that coastal water remains fit for human and aquatic life. It was observed that major source of pollution is municipal sewage and effluents in the same manner as polluted river stretches. The National Coastal Zone Management Authority (NCZMA) has been constituted but the problem of marine pollution continues. CPCB report dated 11.03.2020 was considered on **29.06.2020**. It was found that in most of the coastal areas there was

non-compliance with regard to the water quality parameters on account of untreated sewage and industrial effluents being discharged into the marine waters through river systems. Apart from untreated effluents/sewage, there was lack of management of hazardous waste, bio-medical waste, municipal solid waste, plastic waste, e-waste and C&D waste which also affected the marine water quality. Integrated Coastal Management Plans were required with the assistance of NCSCM and MoEF&CC. The Tribunal accordingly directed that concerned departments of all the concerned States/UTs may implement the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and ensure 100% treatment of sewage/effluents in the same manner in which the Tribunal has issued directions for preventing untreated sewage and effluents being discharged into the rivers in OA 673/2018. **The Tribunal directed the State PCBs/PCCs/Chief Secretaries to take remedial action and file their reports with the CPCB so that the CPCB could file a consolidated action taken report.**

#### **Review of CPCB Report dated 10.09.2020**

28. **Accordingly, CPCB has filed its action taken report dated 10.09.2020** mentioning the directions issued to the 13 Coastal State PCBs/PCCs as follows:

***“A. That the directions under Section 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974 shall be issued to all the concerned local bodies /urban bodies/municipalities/authorities in the coastal States/UTs within 15 days from the date of issuance of these directions:***

- i. To set up a sewerage system for sewage collection, conveyance, treatment and its disposals to cover the entire local/urban coastal area within the respective jurisdiction.*
- ii. To develop adequate capacity of sewage treatment using conventional STPs or any other technology and ensure to*

*comply with the discharge norms as prescribed by the coastal SPCBs/PCCs under consent mechanism prescribed under Water (Prevention & Control of Pollution) Act, 1974.*

- iii. For ensuring treatment and use of treated sewage for non-potable purposes such as industrial process, railways & bus cleaning, flushing of toilets through dual piping, construction activities, horticulture and irrigation etc.*
- iv. To set up requisite facilities for collection, transportation, treatment and disposal of Municipal Solid Waste, Plastic Waste, Construction and Demolition Waste generated as well as bio-mining of the existing legacy dumpsites in accordance with the Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016 and Construction & Demolition Waste Management Rules, 2016 as amended respectively, notified under the Environment (Protection) Act, 1986, in the coastal areas within the respective jurisdiction of the State/UT.*
- v. For periodic cleaning and removal of plastic waste/solid waste in coastal areas to prevent marine pollution and for ensuring its safe disposal in accordance with the provisions notified under the Environment (Protection) Act, 1986.*
- vi. To submit a time bound action plan for management of sewage, municipal solid waste, plastic waste, C & D waste generated in the respective jurisdiction of the local/urban bodies in coastal areas as mentioned in afore-said paras, within a period of two months from the date of issuance of the directions dated 31/8/2020.*

**B. Directed all the 13 Coastal SPCBs/PCCs shall:**

- i. Ensure proper treatment and disposal of industrial effluent generated from water polluting industries located in the coastal States/UTs by ensuring installation of captive ETPs or disposal of industrial effluent through CETPs by prescribing PETP Standards under consent mechanism and for safe disposal or utilization of treated effluents in accordance with the disposal modes permitted under Environment (Protection) Act, 1986.*
- ii. Ensure proper treatment and disposal of industrial hazardous waste generated from hazardous waste generating industries located in the coastal States/UTs and to ensure requisite infrastructure for environmentally sound management of generated hazardous waste in accordance with the Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016 as amended notified under the Environment (Protection) Act, 1986.*
- iii. Associate with National Centre for Coastal Research (NCCR), Chennai under Ministry of Earth Sciences for monitoring and assessment of coastal waters within the jurisdiction of the coastal States/UTs up to 5 km from shore and to evolve*

*strategies for protection of the coastal areas in association with Coastal Zone Management Authority in the State.*

- iv. Prepare time bound comprehensive action plans along with implementing agencies in consultation with the respective Coastal Zone Management Authority for control of coastal Pollution in States/UTs, and submit to CPCB within three months from the date of issuance of these directions i.e. by 25th November 2020.”*

### **Going Forward**

29. While the CPCB report mentions the directions issued to 13 Coastal State PCBs/PCCs but compliance of such directions needs to be monitored. We have dealt with OA Nos. 593/2017 and 673/2018, dealing with the setting up of ETPs/ STPs/CETPs and preventing discharge of untreated effluents/sewage into the rivers hereinabove. **The subject of coastal pollution needs to be dealt with in the same manner as polluted river stretches by preparing action plans of each States/UTs which may also be monitored by the Central Monitoring Committee (CMC) simultaneously with the 351 polluted river stretches and the said subject may also be covered in the next report of the CMC. As already mentioned, the CMC is to be headed by the Secretary, Ministry of Jal Shakti and assisted by the CPCB and NMCG and at the States/UTs level, the Chief Secretaries have to monitor the compliance status and give reports to and interact with the CMC.**

OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.

#### **IV. Original Application No. 148/2016, Mahesh Chandra Saxena V. South Delhi Municipal Corporation & Ors.**

## **Review of proceedings before the Tribunal**

30. The issue of utilization of sewage treated water is incidental to setting up and operation of STPs. In view of shortage of clean water for drinking purposes, use of treated water for secondary purposes results in more clean water being available for drinking purposes. In absence of proper planning, fresh water is used for secondary purposes, which needs to be avoided. Vide order dated 11.09.2019, the Tribunal noted:

***“1. ... ... Delhi is an urbanized city state having a population of about 20 millions which is expected to increase to 23 million by the year 2021. Present total water requirement for domestic purposes for population of 20 million @ 60 GPCD works out to 1200 MGD. Present average potable water production by Delhi Jal Board is about 936 MGD and includes about 80-85 MGD of ground water. Thus, there is a gap of 204 MGD. Only 81.3 households have piped water supply. Reuse of water both in domestic and industrial sectors is essential. Around 150 billion liters of sewage water is produced in India annually. 70% of Singapore drinks treated sewage water.<sup>3</sup> There appears to be no satisfactory plan with any of the States/Union Territories (UTs) in the country. This Tribunal monitored the matter with reference to the NCT of Delhi for more than two years and passed several orders.***

***2. Finally, on 27.11.2018, the Tribunal considered the report of the Delhi Jal Board (DJB) dated 16.11.2018 to the effect that 460 MGD waste water was being treated but reuse of such water was not being ensured.***

***3. As per CPCB's report 2016<sup>4</sup>, it has been estimated that 61,948 million liters per day (mld) sewage is generated from the urban areas of which treatment capacity of 23,277 mld is currently existent in India. Thereby the deficit in capacity of waste treatment is of 62%. There is no data available with regard to generation of sewage in the rural areas. To remedy this situation orders have been passed by the Hon'ble Supreme Court<sup>5</sup> as well as this Tribunal<sup>6</sup> directing 100% treatment of the sewage and industrial effluents by installing requisite ETPs/CETPs/STPs. Proper utilization of treated water has implications not only to save***

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<sup>3</sup> Second interim report dated 31.07.2019 of Monitoring Committee constituted under O.A. No. 496/2016.

<sup>4</sup>[http://www.sulabhenviis.nic.in/Database/STST\\_wastewater\\_2090.aspx](http://www.sulabhenviis.nic.in/Database/STST_wastewater_2090.aspx) July 16, updated on December 6, 2016

<sup>5</sup> Paryavaran Suraksha Samiti Vs. Union of India, (2017) 5 SCC 326

<sup>6</sup> Paryavaran Suraksha Samiti Vs. Union of India, O.A No. 593/2017 order dated 28.08.2019

potable water but also to prevent illegal extraction of groundwater and conservation of water bodies. Timelines have been laid down for ensuring treatment of sewage and effluents for preventing pollution of river Ganga<sup>7</sup> as well as other polluted river stretches which will result in more treated water being available.

4. **Having regard to the necessity to ensure utilization of treated waste water to reduce pressure on the ground water resources throughout the country, the Tribunal directed all the States/UTs in India to prepare and furnish their action plans within three months to the Central Pollution Control Board (CPCB) so that CPCB could review the same and issue further directions.**

5. Report dated 01.05.2019 furnished by the CPCB was considered by this Tribunal on 10.05.2019 and it was noted that some of the States did not furnish their action plans and the action plans furnished by some of the States needed improvements. The Tribunal directed that the States/UTs which had not yet furnished their action plans may do it by 30.06.2019 and such action plans may have monitoring mechanism for coordination with the local bodies which will be the responsibility of the Chief Secretaries of the States/UTs.

6. ....

**“7. It is well known that absence of plan for reuse of treated water affects recharge of ground water and also results in fresh water being used for purposes for which treated water can alternatively be used. Proper plans for reuse of waste water can add to availability of potable water which is many times denied this basic need or has to travel long distances to fetch clean water. This being a substantial question of environment, direction is issued to the States/UTs which have not yet submitted their action plans to do so latest by 30.06.2019, failing which the Tribunal may have to consider coercive measures, including compensation for loss to the environment. The plans may include a monitoring mechanism in the States for coordination with the local bodies. This will be the responsibility of the Chief Secretaries of all the States/UTs.**

8 The issue is also connected with the rejuvenation of 351 river stretches. The States/UTs may include this subject in the deliberations with the Central Monitoring Committee constituted in terms of orders dated 08.04.2019 in 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 and order dated 24.04.2019 in O.A.606/2018, Compliance of Municipal Solid Waste Management Rules, 2016. **The Chief Secretaries may also include this subject in their reports to this Tribunal in pursuance of orders passed in O.A. No. 606/2018 on 16.01.2019 and further orders in their presence.”**

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<sup>7</sup> O.A No. 200/2014

31. The report of the CPCB dated 15.05.2020 was considered on **21.05.2020**, wherein the gap analysis was given as follows:

### **“3.0 GAP ANALYSIS**

*As per Hon'ble NGT Directions dated 10.5.2019, suggestive measures for action plan for use of treated sewage was uploaded on CPCB's website. The same was also sent to all States/UTs vide letter dated 16.07.2019. CPCB had directed all States / UTs to cover the following action points in the Action Plan to be prepared for use of treated sewage:*

- i. Estimation of quantity of present and projected sewage generation,*
- ii. Estimation of Present and planned treatment capacity*
- iii. Identification of Bulk users (Irrigation, horticulture, Industries, PWD and Railways etc) and to quantify the usage*
- iv. Estimation of quantity of treated sewage to be used by the bulk users*
- v. Specification time lines to meet the target.*

*Accordingly, action plan submitted by 31 States / UTs were assessed based on its adequacy in addressing the above-mentioned points. The overview of the assessment is given in Table-1. Following are the major observations based on the assessment:*

- i. 06 States/ UTs (Andhra Pradesh, Delhi, Puducherry, Haryana, Tamil Nadu, Madhya Pradesh) have addressed all the five action points as listed above in their action plan.***
- ii. 10 States/UTs have partially addressed the above- listed action points in their action plan. 09 States / UTs (Gujrat, Chhattisgarh, Jharkhand, Goa, Daman & Diu, Dadar Nagar Haveli, Jammu and Kashmir, Maharashtra and Rajasthan) have identified bulk users However, quantity of treated sewage to be used by these bulk-users as well as timelines for meeting these targets have not been specified. Chandigarh has not estimated the presented / projected qty of Sewage generation and not specified timelines for meeting the target.***
- iii. 08 States / UTs (Assam, Bihar, Himachal Pradesh, Mizoram, Nagaland, Meghalaya, Orissa and West Bengal) have submitted very limited information in the action plan.***
- iv. Action plan received from 03 States (Kerala (Trivandrum), Karnataka (Bangalore), Telangana (Hyderabad) are city specific. Action plan for treated sewage reuse in the state not provided.***
- v. Apart from above, it has been informed 4 States / UTs that due to local terrain and technical issues and***

**action plan could not be conceptualized., 02 UTs (Lakshadweep, Andaman and Nicobar Islands) do not have STPs and having only septic management. Fecal Sludge Treatment Plant has been planned in these UTs. 02 States (Sikkim, Tripura) have high water table and therefore plan to discharge treated water to rivers.**

**vi. 5 States/ UTs (Arunachal Pradesh, Manipur, Uttar Pradesh, Uttarakhand, Punjab) have not submitted any information.**

CPCB's observations on the action plan submitted by the individual states/UTs have been enumerated in Table 1.

Additional observations on the action plan submitted by the States /UTs are as follows:

- i. Only 14 States/UTs (Andhra Pradesh, Daman & Diu, Delhi, Gujarat, Haryana, Himachal Pradesh, J&K, Madhya Pradesh, Maharashtra, Nagaland, Rajasthan, Tripura, Puducherry, A&N) have estimated present quantity of Sewage generated in their States/UTs.**
- ii. Only 3 States/UTs (Haryana, Himachal Pradesh, Jammu & Kashmir) have adequate capacity of Sewage treatment w.r.t to present quantity of sewage generated.**
- iii. Major bulk users identified include- Irrigation, horticulture,, Rejuvenation of water bodies, Construction, Recreation, Railways, Vehicles and Coach washing, firefighting, recreation and industry.**
- iv. 13 States/UTs (Andhra Pradesh, Maharashtra, Chhattisgarh, Goa, Delhi, Rajasthan, Tamil Nadu, Puducherry, Odisha, Madhya Pradesh, Gujarat, Haryana, Jharkhand) plan to use treated sewage in industries which include Steel Plant, Thermal Power Plant, Refineries and Railways.**
- v. Percentage of reuse of treated sewage planned maximum in Haryana (80 %) followed by Puducherry (55 %), Delhi (50 %), Chandigarh (35 %), Tamil Nadu (25%), Madhya Pradesh (20 %), Andhra Pradesh (5 %).**
- vi. NCT of Delhi has set target to increase their re usage from 12.5 % to 60 %. In future, utilization of 341 MGD treated sewage are proposed for drinking purpose (197 MGD), Irrigation (112 MGD) and 10 MGD in rejuvenation of water bodies.**
- vii. Time-line specified by States/UTs for implementation of Action Plan varies between 2020 -2030.”**  
**(emphasis supplied)**

32. The Tribunal issued following directions:

***“24. Accordingly, we direct that States which have not addressed all the action points may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. All the States may take steps accordingly. The CPCB may compile further information on the subject. The compliance for action plans will be the responsibility of the Secretaries of Urban Development/other concerned, including Irrigation & Public Health, Local Bodies, Rural Development Departments of all the States/UTs and to be overseen by the Chief Secretaries. The Ministry of Jal Shakti and Ministry of Housing and Urban Affairs, Government of India may also monitor and coordinate the situation appropriately in the interest of water qualities of rivers, lakes, water bodies and protection of groundwater.”***

#### **Review of CPCB Report dated 16.09.2020**

33. **Accordingly, the CPCB has filed its report dated 16.09.2020** detailing the compliance status as follows:

##### ***“3.1.1 Compliance status w.r.t. the directions under Para 24 and 26 (iv)***

- i. CPCB requested all States/UTs vide email/letter dated 03.06.2020, 24.06.2020 and 24.08.2020 to submit action plans as per the format and compliance reports. Further, CPCB has also provided link of the report submitted to the Hon'ble NGT indicating observations/ shortcomings on action plans of reuse of treated sewage, to the SPCBs/PCCs. A copy of the correspondences is attached at **Annexure-II**.
- ii. Accordingly, action plan was received from the State of Punjab and revised action plans were received from Jammu and Kashmir (UT), Lakshadweep, Rajasthan (specific to Ajmer district), and Sikkim. Information is awaited from other States. **The gap analysis of action plans is attached as Annexure-III.**
- iii. 4 States/UTs (Arunachal Pradesh, Manipur, Uttar Pradesh, Uttarakhand) have not submitted any information till date.

##### **3.1.2 Compliance w.r.t. directions under Para 26 (i)**

- i. CPCB communicated to all SPCBs/PCCs to provide information on STPs inventory as per the format, vide letter dated 15/07/2020. A copy of letter is attached as Annexure-IV. Based on continuous follow-up, all

*SPCBs/PCCs have provided information on STPs and same is attached as Annexure-V.*

*ii. CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans through online portal of CPCB.”*

### **Going Forward**

34. **In view of the above reports finding a huge gap in utilisation of sewage treated water, further action needs to be taken by all the States/UTs to ensure updating and enforcement of the action plans for 100% utilization of the treated water for secondary purposes.**

35. Since the above issue is interrelated to the issue of operation of STPs, it will be appropriate that **this aspect is also now monitored by the CMC headed by the Secretary, Ministry of Jal Shakti and assisted by the CPCB and NMCG. Ministry of Urban Development may also nominate an officer of not below the rank of Joint Secretary in the said Committee.** OA No. 148/2016 need not be kept pending separately which stands disposed of as the subject will be henceforth considered in OA 593/2017 and OA 673/2018.

### **V. Directions:**

36. Accordingly, we issue following directions:

- i. All the States/UTs may address gaps in generation and treatment of sewage/effluents **by ensuring setting up of requisite number of functional ETPs, CETPs and STPs**, as directed by the Hon'ble Supreme Court in (2017) 5 SCC 326.
- ii. The timeline for commissioning of all STPs fixed by the Hon'ble Supreme Court, i.e., 31.03.2018, has long passed. The Hon'ble Supreme Court directed that the State PCBs must initiate prosecution of the erring Secretaries to the Governments, which

has also not happened. This Tribunal was directed to monitor compliance and in the course thereof, we direct that compensation may be recovered in the manner already directed in earlier orders (See, **Paras 5 and 6** herein), which may be deposited with the CPCB for restoration of the environment.

- iii. The unutilized capacity of the existing STPs may be utilized expeditiously.
- iv. The States/ UTs may ensure that the CETP, ETPs and STPs meet the laid down norms and remedial action be taken wherever norms are not met.
- v. It must be ensured that no untreated sewage/effluent is discharged into any water body. Prompt remedial action may be taken by the State PCBs/PCCs against non-compliant ETPs/CETPs by closing down or restricting the effluents generating activity, recovering compensation and taking other coercive measures following due process of law.
- vi. Directions outlined in **Paras 24-26** herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level.
- vii. Wherever action plans have not yet been finalized in respect of polluted river stretches or polluted coastal stretches, the same may be completed within one month from today. The execution of action plans may be overseen in the manner already directed in OA 673/2018 by River Rejuvenation Committees (RCCs). In the coastal areas, the said Committees may be known as 'River/Coastal Rejuvenation Committees'. The action plans must have provision for budgetary support in the manner laid

down by the Hon'ble Supreme Court or otherwise which aspect may also be monitored by the CMC.

- viii. Directions outlined in **Para 29** herein may be implemented by the concerned coastal States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.
- ix. Directions outlined in **Para 34 and 35** herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 148/2016 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.
- x. CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/effluents.
- xi. The monitoring by the CMC may have the target of reduction of pollution loads and improvement of water quality of rivers and coastal areas.
- xii. The CMC may also monitor the setting up of the bio-diversity parks, constructed wetlands and other alternative measures to reduce pollution load.
- xiii. The CMC may also monitor demarcation of flood plain zones.
- xiv. The treated sewage water may be duly utilized for secondary purposes by preparing appropriate action plans and reports in this regard be filed with the CPCB periodically.

- xv. CMC may submit its consolidated update report incorporating all the above, before the next date. Each action point mentioned in Para 26 may be individually covered, and summarized in a tabular format.

37. A copy of this order may be forwarded to the Chief Secretaries of all the States/UTs, CPCB, NMCG, all PCBs/ PCCs, Secretaries, Ministry of Jal Shakti and Ministry of Housing and Urban Development, by email.

List for further consideration on February 16, 2021.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

September 21, 2020  
Original Application No. 593/2017  
Original Application No. 673/2018  
Original Application No. 829/2019  
Original Application No. 148/2016  
SN & DV

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

Original Application No. 673/2018

(With Report dated 18.11.2019)

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

Date of hearing: 29.11.2019  
Date of uploading of order: 06.12.2019

**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**  
**HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER**

**ORDER**

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**I. The issue: Remedial action for 351 polluted river stretches in India:**

1. This order is in continuation of order dated 08.04.2019 on the subject of remedial action to tackle the problem of pollution of rivers in India which is manifested in the form of 351 identified polluted river stretches based on the data compiled by the Central Pollution Control Board (CPCB) on the basis of analysis of samples by the State Pollution Control Boards (State PCB) as per National Water Quality Monitoring Programme (NWQMP) undertaken by the CPCB. We may note that overlapping issues have also been dealt with *inter-alia* by orders dated 16.01.2019 in O.A. No. 606/2018, dated 22.08.2019 in O.A. No. 200/2014, dated 28.08.2019 in O.A. No. 593/2017, dated 11.09.2019 in O.A. No. 06/2012 and order dated 22.11.2019 in O.A. No. 138/2016.
2. The Tribunal earlier considered the matter by way of a chamber meeting on 10.09.2018 with the participation of all the Members of the Tribunal and the representatives of CPCB, the Ministry of Water Resources (MoWR), the Ministry of Environment, Forest & Climate Change (MoEF&CC), the NITI Aayog, the National Mission for Clean Ganga (NMCG), Ministry of Housing and Urban Affairs (MoHUA), States of Maharashtra, Gujarat, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Bihar, Punjab, Uttar Pradesh, NCT of Delhi and the

Union Territory of Daman & Diu. (Some of the participants participated by video conferencing).

3. Present proceedings were initiated based on a news item dated 17.09.2018 in 'The Hindu' under the heading "More river stretches are now critically polluted: CPCB"<sup>1</sup>. According to the news item, 351 polluted river stretches have been identified by the Central Pollution Control Board (CPCB). 117 such stretches are in the States of Assam, Gujarat, and Maharashtra. The CPCB has apprised the concerned States of the extent of pollution in the rivers. Most polluted stretches are from Powai to Dharavi – with Biochemical Oxygen Demand (BOD) 250 mg/L; the Godavari - from Someshwar to Rahed – with BOD of 5.0-80 mg/L; the Sabarmati – Kheroj to Vautha – with BOD from 4.0-147 mg/L; and the Hindon – Saharanpur to Ghaziabad – with a BOD of 48-120 mg/L. The CPCB has a programme to monitor the quality of rivers by measuring BOD. BOD greater than or equal to 30mg/L is termed as 'Priority-I', while that between 3.1-6 mg/L is 'Priority-V'. The CPCB considers BOD less than 3mg/L an indicator of a healthy river. In its 2015 Report<sup>2</sup>, the CPCB had identified 302 polluted stretches on 275 rivers, spanning 28 States and six Union Territories. The number of such stretches had now increased to 351 in 2018.
4. The world's major civilizations developed along rivers, which have both united and divided human beings. Water is life, our life and that of others too. Without water there would be no human civilization,

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<sup>1</sup><https://www.thehindu.com/news/national/more-river-stretches-critically-polluted-cpcb/article24962440.ece>

<sup>2</sup><http://cpcb.nic.in/cpcb/RESTORATION-OF-POLLUTED-RIVER-STRETCHES.pdf>

indeed there would be no life. We use water to drink, navigate, fish, wash, cool down, cook, travel, water plants etc.<sup>3</sup>

5. It is true that almost all the civilizations appeared on the banks of the big rivers. It shows how vital water is for our survival. The entire life is based on water, from birth to death. The civilization grew slowly on the soil of river Ganga which is considered holy and expanded to Sindhu and Sarasvati regions. The order of rivers in the Nadhi Sukta (RV 10-75) clearly shows east ward march of Indian civilization.
6. The Hon'ble Supreme Court noticed the level of degradation of rivers in India and apathy of the authorities as follows:

***“58. Rivers in India are drying up, groundwater is being rapidly depleted, and canals are polluted. Yamuna in Delhi looks like a black drain. Several perennial rivers like Ganga and Brahmaputra are rapidly becoming seasonal. Rivers are dying or declining, and aquifers are getting over pumped. Industries, hotels, etc. are pumping out groundwater at an alarming rate, causing sharp decline in the groundwater levels. Farmers are having a hard time finding groundwater for their crops e.g. in Punjab. In many places there are serpentine queues of exhausted housewives waiting for hours to fill their buckets of water. In this connection John Briscoe has authored a detailed World Bank Report, in which he has mentioned that despite this alarming situation there is widespread complacency on the part of the authorities in India.”***<sup>4</sup>

***“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***

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<sup>3</sup>[http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Venice/pdf/special\\_events/bozza\\_scheda\\_DOW05\\_1.0.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Venice/pdf/special_events/bozza_scheda_DOW05_1.0.pdf)

<sup>4</sup> State of Orissa v. Govt. of India, (2009) 5 SCC 492

***rivers and to management as to industrial effluents, sewage, garbage, waste and air pollution, including the water management. We club the ending case of water management with this matter.***<sup>5</sup>

7. It is not necessary to multiply similar observations in series of judgments in the context of several rivers including river Ganga. This has affected Indian civilization as a whole what to talk of aquatic life, loss of biodiversity and affecting food safety. Needless to say that remedial action has to be taken on the principle of 'Intergenerational Equity' also. The fact that 351 river stretches are identified as polluted is a matter of serious concern. This shows that the concern expressed while enacting the Water Act has remained unaddressed. In fact the number of polluted river stretches may go up if the relevant data is considered.

**Magnitude of water pollution:**

8. The Water (Prevention and Control of Pollution) Act, 1974 (Water Act) prohibits use of any stream or well for disposal of polluted matter. Any person doing so is liable to be prosecuted and punished by imprisonment. Article 48A of the Constitution casts a duty on the State to protect and improve the environment. Article 51A imposes a fundamental duty on every citizen to protect and improve the environment. The Stockholm Declaration (1972) recommended prevention of pollution by adopting the 'Precautionary Principle', the 'Polluter Pays Principle' and the principle of 'Sustainable Development'. Statement of objects and reasons for The Water Act is as follows:

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<sup>5</sup> M.C. Mehta Vs Union of India- W.P. (Civil) No. 13029/1985 dated 25.11.2019

***“The problem of pollution of rivers and streams has assumed considerable importance and urgency in recent years as a result of the growth of industries and the increasing tendency to urbanisation. It is, therefore, essential to ensure that the domestic and industrial effluents are not allowed to be discharged into the water courses without adequate treatment as such discharges would render the water unsuitable as source of drinking water as well as for supporting fish life and for use in irrigation. Pollution of rivers and streams also causes increasing damage to the country's economy.***

A Committee was set up in 1962 to draw a draft enactment for the prevention of water pollution. The report of the Committee was circulated to the State Governments and was also considered by the Central Council of Local Self-Government in September, 1963. This Council resolved that a single law regarding measures to deal with water pollution control, both at the Centre and at the State levels, may be enacted by the Union Parliament. A Draft Bill was accordingly prepared and put up for consideration at a joint session of the Central Council of Local Self-Government and the Fifth Conference of the State Ministers of Town and Country Planning held in 1965. In pursuance of the decision of the joint session, the Draft Bill was considered subsequently in detail by a Committee of Ministers of Local Self-Government from the States of Bihar, Madras, Maharashtra, Rajasthan, Haryana and West Bengal.

Having considered the relevant local provisions existing in the country and recommendations of the aforesaid Committees, the Government came to the conclusion that the existing local provisions are neither adequate nor satisfactory. ***There is, therefore, an urgent need for introducing a comprehensive legislation which would establish unitary agencies in the Centre and States to provide for the prevention, abatement and control of pollution of rivers and streams, for maintaining or restoring wholesomeness of such water courses and for controlling the existing and new discharges of domestic and industrial wastes.”***

9. The Hon’ble Supreme Court issued directions in several matters that it is the duty of the State to ensure access to clean drinking water which was part of right to life. Pollution of water in any form was required to be prevented. Reference may be made to the observations of Hon’ble Supreme Court in the context of pollution of river Pallar<sup>6</sup> and river Noyyal<sup>7</sup> in Tamil Nadu. In *M.C. Mehta Vs. Union of India*

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<sup>6</sup>*Vellore Citizen’ Welfare Forum v. Union of India*, (1996) 5 SSC 647

<sup>7</sup> (2009) 9 SCC 737

&Ors.,<sup>8</sup> directions to enforce the statutory provisions by the municipal bodies and the industries by stopping discharge of untreated sewage and effluents in River Ganga were issued by the Hon'ble Supreme Court. It was noted that the water pollution caused serious diseases, including Cholera and Typhoid. Water pollution could not be ignored and adequate measures for prevention and control are necessary. It was also observed that the educational institutions must teach atleast for one hour in a week lessons relating to protection and improvement of environment. Awareness should be created by organizing suitable awareness programs. Likewise, the issue of Calcutta tanneries was considered in *M.C Mehta Vs. Union of India And Ors.*<sup>9</sup>, (Calcutta Tanneries' Matter). The tanneries were directed to be shifted by adopting the 'Precautionary Principle' so as to prevent discharge of effluents in the River Ganga. In view of dangerous potential of pollution, it has been laid down that even the State cannot grant any exemption for discharge of pollutants in water in violation of 'Precautionary' principle.<sup>10</sup>

10. This Tribunal also considered the issue of pollution of river Yamuna, in *Manoj Mishra Vs. Union of India*<sup>11</sup>, river Ganga in *M.C. Mehta Vs. Union of India*<sup>12</sup>, river Ramganga which is a tributary of river Ganga in *Mahendra Pandey Vs. Union of India & Ors.*<sup>13</sup>, rivers Sutlej and Beas in the case of *Sobha Singh & Ors. Vs. State of Punjab & Ors.*<sup>14</sup>, river Son in *Nityanand Mishra Vs. State of M.P. & Ors.*<sup>15</sup>, river Ghaggar in *Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto*

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<sup>8</sup> (1988) 1 SCC 471

<sup>9</sup> (1997) 2 SSC 411

<sup>10</sup> A.P. Pollution Control Board II v. Prof. M.V. Nayudu, (2001) 2 SCC 62 ¶ 45

<sup>11</sup> O.A. No. 6/2012, 2015 ALL(I) NGT REPORTER (1) (DELHI) 139, order dated 13.01.2015

<sup>12</sup> O.A No. 200 of 2014, 2017 NGTR (3) PB 1, order dated 22.08.209

<sup>13</sup> O.A. No. 58/2017

<sup>14</sup> O.A.No. 101/2014

<sup>15</sup> O.A. No. 456/2018

Case)<sup>16</sup>, river Hindon in *Doaba Paryavaran Samiti Vs. State of U.P. & Ors.*<sup>17</sup>, river Kasardi in *Arvind Pundalik Mhatre Vs. Ministry of Environment, Forest and Climate Change & Ors.*<sup>18</sup>, River Ami, Tapi, Rohani and Ramgarh lake in *Meera Shukla Vs. Municipal Corporation, Gorakhpur & Ors.*<sup>19</sup>, rivers Chenab and Tawi in the case of *Amresh Singh Vs. Union of India & Ors.*<sup>20</sup> and *Subarnarekha in Sudarsan Das Vs. State of West Bengal & Ors.*<sup>21</sup> and *Paryavaran Surakhsha*<sup>17</sup> and issued directions from time to time.

11. In spite of above, in flagrant violation of law of the land, polluted water in the form of sewage, industrial effluents or otherwise has continued to be discharged in the water bodies including the rivers or the canals meeting the rivers. Violation of law is not only by private citizens but also statutory bodies including the local bodies and also failure of the regulatory authorities in taking adequate steps. There is no corresponding coercive action posing danger to rule of law when large scale violation of law is not being remedied. This leads to lawlessness.
12. It will be appropriate to note the crisis situation in the country on the subject of availability of potable water. The matter has been considered in the report of Niti Aayog on Composite Water Management Index (CWMI).<sup>22</sup> Following further information also needs to be noted:

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<sup>16</sup>O.A. No. 138/2016 (T<sub>NHRC</sub>), order dated 22.11.2019

<sup>17</sup> O.A. No. 231/2014

<sup>18</sup> O.A. No. 125/2018,

<sup>19</sup> O.A. No. 116/2014,

<sup>20</sup> Execution Application No. 32/2016 in O.A. No. 295/2016,

<sup>21</sup>O.A. No. 173 of 2018

<sup>17</sup>Order dated 28.08.2019 in O.A. 593/2017 on the subject of preventing untreated sewage and effluents being discharged in rivers.

<sup>22</sup> Niti Ayog on "Composite Water Management Index", June 2018, [https://niti.gov.in/writereaddata/files/document\\_publication/2018-05-18-Water-Index-Report\\_vS8-compressed.pdf](https://niti.gov.in/writereaddata/files/document_publication/2018-05-18-Water-Index-Report_vS8-compressed.pdf).

(i) India is suffering from the worst water crisis in its history and millions of lives and livelihoods are under threat. Currently, 600 million Indians face high to extreme water stress and about two lakh people die every year due to inadequate access to safe water<sup>23</sup>. The crisis is only going to get worse. By 2030, the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people and an eventual ~6% loss in the country's GDP<sup>24</sup>. As per the report of National Commission for Integrated Water Resource Development of MoWR, the water requirement by 2050 in high use scenario is likely to be a milder 1,180 BCM, whereas the present-day availability is 695BCM. The total availability of water possible in country is still lower than this projected demand, at 1,137BCM. Thus, there is an imminent need to deepen our understanding of our water resources and usage and put in place interventions that make our water use efficient and sustainable.

(ii) India is undergoing the worst water crisis in its history. Already, more than 600 million people<sup>25</sup> are facing acute water shortages. Critical groundwater resources – which account for 40% of our water supply – are being depleted at unsustainable rates.<sup>26</sup>

(iii) Most states have achieved less than 50% of the total score in the augmentation of groundwater resources, highlighting the growing national crisis—54% of India's groundwater wells are declining,

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<sup>23</sup>Source: WRI Aqueduct; WHO Global Health Observatory

<sup>24</sup>Source: McKinsey & WRG, 'Charting our water future', 2009; World Bank; Times of India

<sup>25</sup> Source: World Resource Institute

<sup>26</sup> Source: World Resource Institute

and 21 major cities are expected to run out of groundwater as soon as 2020, affecting ~100 million people<sup>27</sup>.

(iv) With nearly 70% of water being contaminated, India is placed at 120th amongst 122 countries in the water quality index.

13. As per statistics mentioned before the Lok Sabha on April 6, 2018, waterborne diseases such as cholera, acute diarrhoeal diseases, typhoid and viral hepatitis continue to be prevalent in India and have caused 10,738 deaths, over the last five years since 2013. Of this, acute diarrhoeal diseases caused maximum deaths followed by viral hepatitis, typhoid and cholera.<sup>28</sup>

14. As per 'National Health Profile' published by Central Bureau of Health Investigation, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, a total of 1535 Deaths due to Acute Diarrhoeal Diseases was reported during the year 2013.<sup>29</sup>

#### **Main Causes of Pollution of Rivers**

15. As already noted, well known causes of pollution of rivers are dumping of untreated sewage and industrial waste, garbage, plastic waste, e-waste, bio-medical waste, municipal solid waste, diversion of river waters for various purposes affecting e-flow, encroachment of catchment areas and floodplains, over drawl of groundwater, river bank erosion on account of illegal sand mining. In spite of directions to install Effluent Treatment Plants (ETPs), Common Effluent

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<sup>27</sup> Source: UN Water, 'Managing water under uncertainty and risk', 2010; World Bank (Hindustan Times, The Hindu).

<sup>28</sup> <https://www.indiaspend.com/diarrhoea-took-more-lives-than-any-other-water-borne-disease-in-india-58143/>

<sup>29</sup> <http://pib.nic.in/newsite/PrintRelease.aspx?relid=106612>

Treatment Plants (CETPs), Sewage Treatment Plants (STPs), and adopting other anti-pollution measures, satisfactory situation has not been achieved. As per CPCB's report 2016<sup>30</sup>, it has been estimated that 61,948 million liters per day (mld) sewage is generated from the urban areas of which treatment capacity of 23,277 mld is currently existent in India. Thereby the deficit in capacity of waste treatment is of 62%. There is no data available with regard to generation of sewage in the rural areas.

16. Effective governance is the need of the hour. If pollution does not stop, the industry has to be stopped. If sewage dumping does not stop, local bodies have to be made accountable and the heads of local bodies are to be prosecuted. We may also note that local bodies have been held to be liable to be prosecuted for violation of provisions of the Water Act by a recent judgment of the Hon'ble Supreme Court dated 26.11.2019 in Criminal Appeal No. 1734 of 2019 in Karnataka State Pollution Control Board Vs B. Heera Naik.
17. Steps have also to be taken for awareness and public involvement. Water being scarce and necessary for human existence, a Welfare State cannot plead lack of funds for such overriding need for existence of human life<sup>31</sup>. Thus, requisite budgetary provision has to be made.
18. Procedures for remedial action have to be shortened so that there is no delay to check pollution wherever found. The Tribunal vide Order dated 18.10.2019 in **Compliance of Municipal Solid Waste**

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<sup>30</sup> [http://www.sulabhenvi.nic.in/Database/STST\\_wastewater\\_2090.aspx](http://www.sulabhenvi.nic.in/Database/STST_wastewater_2090.aspx) July 16, updated on December 6, 2016

<sup>31</sup> *Municipal Council, Ratlam vs. Vardhichand* (1980) 4 SCC 162 and *B.L. Wadhera v. Union of India and Ors.* (1996) 2 SCC 594

**Management Rules, 2016 and other environmental issues- O.A.**

**No. 606/2018** while dealing with the issue of procedures of DPRs and tendering process, observed:

*“8. Expeditionary compliance of directions for clearance of legacy waste sites as well as stopping of discharge of untreated sewage and directions on associated subjects require immediate implementation for protection of environment and public health by curtailing undue delay. As suggested, necessary technologies need to be standardized with cost breakups for operation and maintenance, including procurement. Besides this, the service providers need to be identified and empaneled. This exercise may also require the concerned authorities to explore business models.”*

The Tribunal has constituted a Committee headed by Niti Ayog on the subject to give a report within two months.

19. As per laid down standards, river water is considered to be fit for bathing when it meets the criteria of having Bio-chemical Oxygen Demand (BOD) less than 3.0 mg/L, Dissolved Oxygen more than 5.0 mg/L and Faecal Coliform bacteria to be less than 500 MPN/100 ml.
20. As already noted, according to latest assessment by the CPCB, there are 351 polluted river stretches in India i.e. where the BOD content is more than 3mg/L. The plan of CPCB is to target enhancement of river flow. The plan for restoration of polluted river stretches is proposed to be executed through two-fold concepts. One concept is to target enhancement of river flows through interventions on the water sheds/catchment areas for conservation and recharge of rain water for subsequent releases during lean flow period in a year. This concept will work on dilution of pollutants in the rivers and streams to reduce concentration to meet desired level of water quality. Other concept is of regulation and enforcement of standards in conjunction with the available flow in rivers /streams and allocation of discharges


with stipulated norms. The fact remains that designed result has not been achieved and more and more polluted rivers stretches are being added to the list. Apart from pH, D.O., COD and BOD, if other standards such as Faecal Coliform etc. are also ascertained, number of polluted stretches will further go up.

**II. Order of the Tribunal dated 20.09.2018 requiring preparation of Action Plans by States/UTs – Preventing discharge of sewage and effluents, dumping of waste, maintaining flood plain zones and e-flow, restoring water quality to bathing standards – timeline : preparation of plans in two months and execution in six months for bringing water quality of rivers to bathing standards:**

21. In view of above, this Tribunal found it necessary to take up the matter and direct preparation and execution of river action plans to control pollution and restore water quality of the river as per norms within reasonable time. Accordingly, vide order dated 20.09.2018 proceedings were initiated as already mentioned para 3 above. It may be noted that there have been successful river cleaning programmes in other countries such as relating to river Thames (England), Rhine (Germany) and Danube (France). There being no reason as to why our polluted river stretches also cannot be restored, the Tribunal issued following directions:

- “
- i) *All States and Union Territories are directed to prepare action plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e BOD < 3 mg/L and FC < 500 MPN/100 ml) within six months from the date of finalisation of the action plans.*
  - ii) *The action plans may be prepared by four-member Committee comprising, Director, Environment, Director, Urban Development., Director, Industries., Member Secretary, State Pollution Control Board of concerned State. This Committee will also be the Monitoring Committee for execution of the action plan. The Committee may be called ‘River Rejuvenation Committee’ (RRC). The RRC will function under the overall supervision and coordination of Principal Secretary, Environment of the*

concerned State/ Union Territory.

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- iii) *The action plan will include components like identification of polluting sources including functioning/ status of STPs/ETPs/CETP and solid waste management and processing facilities, quantification and characterisation of solid waste, trade and sewage generated in the catchment area of polluted river stretch. The action plan will address issues relating to; ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river and plantation on both sides of the river. Setting up of biodiversity parks on flood plains by removing encroachment shall also be considered as an important component for river rejuvenation. The action plan should focus on proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP) and emphasis should be on utilization of treated sewage so as to minimize extraction of ground or surface water. The action plan should have speedy, definite or specific timelines for execution of steps. Provision may be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/ Committee and out of Central Schemes.*
  - iv) *The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.*
  - v) *The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate action plan, as directed.*
  - vi) *All States and Union Territories are required to send a copy of Action Plan to CPCB especially w.r.t Priority I & Priority II stretches for approval.*
  - vii) *The States and the Union Territories concern are directed to set up Special Environment Surveillance Task Force, comprising nominees of District Magistrate, Superintendent of Police, Regional Officer of State Pollution Control Board and one person to be nominated by District Judge in his capacity as Chairman of Legal Services Authority on the pattern of direction of this Tribunal dated 07.08.2018, in Original Application No. 138/2016 (T<sub>NHRC</sub>), “Stench Grips Mansa’s Sacred Ghaggar River (Suo-Motu Case).*

- ix) *The Task Force will also ensure that no illegal mining takes place in river beds of such polluted stretches.*
- x) *The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievement and failure may also be published on such website. The Committee may consider suitably rewarding those contributing significantly to the success of the project.”*

22. The Tribunal noted that data compiled by CPCB on polluted river stretches indicated that such river stretches were classified in 5 categories as follows:-

**I. Criteria for Priority I**

- (a) Monitoring locations exceeding BOD concentration 30 mg/L has been considered as it is the standard of sewage treatment plant and in river it appears without dilution.(River locations having water quality exceeding discharge standards for BOD to fresh water sources)
- (b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.
- (c) Monitoring locations exceeding 3 mg/L BOD are not meeting desired water quality criteria but does not affect to Dissolved Oxygen level in water bodies. If BOD exceeds 6mg/L in water body, the Dissolved Oxygen is reduced below desired levels.
- (d) The raw water having BOD levels upto 5 mg/L are does not form complex chemicals on chlorination for municipal water supplies. Hence the water bodies having BOD more than 6 mg/L are considered as polluted and identified for remedial action.

**II. Criteria for Priority II**

- (a) Monitoring locations having BOD between 20-30 mg/L.
- (b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

**III. Criteria for Priority III**

- (a) Monitoring locations having BOD between 10-20 mg/L.
- (b) All monitoring locations exceeding BOD concentration 6 mg/L on all occasions.

**IV. Criteria for Priority IV**

- (a) Monitoring locations having BOD between 6-10 mg/L.

**V. Criteria for Priority V**

- (a) Monitoring locations having BOD between 3-6 mg/l.
- (b) The locations exceeding desired water quality of 3mg/l BOD.

23. Table showing location and categories have been reproduced in the said order and reference to the same will also be made in the later part of this order. The action plans were directed to cover the following:-

**A) Source Control**

Source control includes industrial pollution control and treatment and disposal of domestic sewage as detailed below:-

**(a) Industrial pollution control**

- (i) Inventorisation of industries
- (ii) Categories of industry and effluent quality
- (iii) Treatment of effluents, compliance with standards and mode of disposal of effluents
- (iv) Regulatory regime.

**(b) Channelization, treatment, utilization and disposal of treated domestic sewage.**

- (i) Identification of towns in the catchment of river and estimation of quantity of sewage generated and existing sewage treatment capacities to arrive at the gap between the sewage generation and treatment capacities;
- (ii) Storm water drains now carrying sewage and sullage joining river and interception and diversion of sewage to STPs,
- (iii) Treatment and disposal of septage and controlling open defecation,
- (iv) Identification of towns for installing sewerage system and sewage treatment plants.

**(B) River catchment/Basin Management-Controlled ground water extraction and periodic quality assessment**

- (i) Periodic assessment of groundwater resources and regulation of ground water extraction by industries particularly in over exploited and critical zones/blocks.
- (ii) Ground water re-charging /rain water harvesting
- (iii) Periodic ground water quality assessment and remedial actions in case of contaminated groundwater tube wells/bore wells or hand pumps.
- (iv) Assessment of the need for regulating use of ground water for irrigation purposes.

**(C) Flood Plain Zone.**

- (i) Regulating activities in flood plain zone.
- (ii) Management of Municipal, Plastic, Hazardous, Bio-medical and Electrical and Electronic wastes.
- (iii) Greenery development- Plantation plan.

**(D) Ecological/Environmental Flow (E-Flow)**

- (a) Issues relating to E-Flow
- (b) Irrigation practices

**(E)** Such other issues which may be found relevant for restoring water quality to the prescribed standards.

**III. Order dated 19.12.2018 reviewing the progress of execution of order dated 20.09.2018:**

24. On review of the matter on 19.12.2018 to consider status of compliance of order dated 20.09.2018, we found that 16 States/UTs had prepared action plans, but the same were are not complete. Base line data was not been given. Preparation of action plans was assigned to third parties. Details of STPs etc. were not given. Timelines given were too long. Status of e-flow was not been given. Action plans were not proposed to be placed on websites to involve educational and other institutions and the public at large. The said States/ UTs were directed to give revised reports on or before 31.01.2019 to CPCB after complying with the deficiencies. The CPCB was to examine the action plans and, if they met the scientific and technical yardstick, to approve the same and convey it to the respective States/UTs. The States/ UTs, after approval were to

place/host these action plans on the respective websites giving clear timelines for execution indicating the agencies responsible for execution along with the matching budgetary provisions. By way of last opportunity, we extended the time for preparation of action plans till 31.01.2019 with the stipulation that for delay thereafter, compensation for damage to the environment would 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. The payment was to be the responsibility of the Chief Secretaries of the States/Administrators of the UTs and the amount could be recovered from the erring officers. The CPCB was to prominently place the names of the defaulting States and UTs and a notice to this effect on its website.

25. The SPCBs and Pollution Control Committees of UTs were to display the quality of the water of polluted river stretches on their respective websites within one month alongwith action taken, if any, which was to be revised every three months. The CPCB was also to display the water quality of the river stretches and action/inaction by such States on its websites. It was made clear that BOD will not be the sole criteria to determine whether a particular river stretch is a polluted river stretch but would also include Faecal Coliform (FC) bacteria as one of the criteria for such classification or otherwise. CPCB was to devise within two weeks a mechanism for classification wherein two criteria pollutants, that is BOD and FC, shall henceforth be basis of classification in Priority Classes besides pH, D.O. and COD. Further direction in the order dated 19.12.2018 was that any incomplete action plan would be treated as non-compliance. It was

made necessary to furnish Performance Guarantees to ensure implementation of action plans within the above stipulated time to the satisfaction of Central Pollution Control Board in the sum of:

- (i) Rs. 15 crore for each of Priority I & II stretches
- (ii) Rs. 10 crore for each of Priority III stretches
- (iii) Rs. 5 crore for each of Priority IV & V stretches.

**IV. Order dated 16.01.2019 in O.A. No. 606/2018 requiring Chief Secretaries of all the States/UTs to appear before this Tribunal after fully acquainting themselves on the subject of Polluted River Stretches, apart from other significant environmental issues and subsequent directions:**

26. While noticing large scale violation of environmental norms particularly with regard to waste and sewage management in the country, this Tribunal directed the Chief Secretaries of all the States/UTs to appear before this Tribunal in person after acquainting themselves with the status of compliance of environmental laws on such issues and action plans for remedying the situation. Accordingly, all the Chief Secretaries appeared on various dates and this Tribunal directed further remedial action including with regard to the restoration of polluted river stretches in terms of the action plans of the States/UTs within six months. The said period of six months is complete in respect of most of the States and Chief Secretaries are required to be present on the dates already fixed. Thus, all the States/UTs have had sufficient notice of their respective failures to comply with the statutory obligations and any further failure has to be viewed seriously and visited with requirement to pay compensation already stipulated.

**V. Order dated 08.04.2019 extending time for execution of action plans till 31.03.2021 and requiring Central Monitoring Committee (CMC) to prepare a National Plan for Rejuvenation of Polluted River Stretches as per prescribed timeline:**

27. The matter was thereafter taken up on 08.04.2019 in light of consolidated and updated report filed by the CPCB on 05.04.2019 to the effect that 28 States and 3 Union Territories had constituted River Rejuvenation Committees (RRCs). The CPCB constituted a 'Task Team' for scrutiny of the action plans under the Chairmanship of Member Secretary, CPCB. CPCB received 41 out of 45 action plans with reference to P-I, 14 out of 16 action plans with reference to P-II and total 182 action plans were received with reference to P-III to P-V polluted river stretches. 6 out of 61 action plans in respect of P-I and P-II were not received from the States of Assam (P-I: 3 viz., Bharalu, Borsola, Silsako) and P-II:1 (Sorusola)), Manipur (P-II: 1 viz., Nambu) and Uttar Pradesh (P-I: viz., river Hindon). It was submitted that the action plan in respect of River Hindon was required to be implemented by the Government of Uttar Pradesh in compliance of the NGT Orders in Original Application No. 231/2014 & Original Application No.66/2015.

28. The Tribunal further observed:-

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34. *As already noted, pollution of 351 river stretches has caused serious threat to safety of water and environment. On account of use of polluted water in irrigation, there is threat to food safety. On account of consumption of polluted water in absence of any other source of drinking water being available and partly on account of ignorance of the persons consuming such water, health of human being is threatened, apart from the aquatic flora and fauna, animals wild and domestic who may consume such water. It is therefore, necessary to have regular hygienic survey of the rivers particularly with reference to pathogenic organisms having impact on human health directly or indirectly. It is also important to note that biological health of the rivers is an important aspect. Much of the important biodiversity is lost on account of severe pollution in the rivers. There has to be a regular study of the Indian rivers with regard to biological health and its diversity. We understand that bio-mapping of rivers and setting biological goals/criteria is part of River Rejuvenation*

Programmes in some countries. There is threat to the environmental rule of law of the country.

35. *These are substantial questions relating to the environment. For enforcing legal right to clean environment, which is also a fundamental right, this Tribunal has to pass appropriate orders for relief to the victims of pollution and for restoration of the environment even in absence of an identified victim. All the States and UTs have been duly put to notice of the present case.*
36. *In this endeavor, this Tribunal directed constitution of RRCs by the concerned States/UTs by including Departments of Environment, Urban Development, Industries and the Pollution Control Boards/Pollution Control Committees and further directions to the Chief Secretaries of the States/UTs to monitor the progress. At the national level, CPCB has been required to assist the Tribunal by way of compiling the data and furnishing its views. A copy of order dated 29.09.2018 was directed to be forwarded to the Niti Ayog, Ministry of Water Resources, Ministry of Environment, Forest & Climate Change, Ministry of Housing and Urban Affairs, National Mission for Clean Ganga, apart from other authorities as the said authorities were represented in a chamber meeting before this Tribunal to consider the problem of pollution of rivers.*
41. ***We accept the proposal of CPCB to revise the scale of performance guarantee with regard to timeline. We also accept the suggestions of CPCB to extend the timeline for execution of action plans to the extent that upper limit for execution of the action plans will be two years from 01.04.2019 and the monitoring of the action plans may be done not only at the level of the Chief Secretaries of the States/UTs but also by the CPCB.***
42. *We direct that CPCB with SPCBs and PCCs to launch nationwide programme on biodiversity monitoring and indexing of the rivers to assess the efficacy of river cleaning programme. Further, for safety of human health and maintaining sanctity of the rivers, regular hygienic surveys of the rivers should be carried out with reference to fecal coliform and fecal streptococci, as indicated in the primary water quality criteria for bathing waters. Nodal agency will be CPCB.*
43. ***Having given due consideration to the serious issue and inadequacy of success achieved so far, we find it necessary to constitute a Central Monitoring Committee to undertake a national initiative by way of preparation and enforcement of a national plan to make river stretches pollution free comprising a senior representative of NITI Aayog, Secretaries Ministry of Water Resources, Ministry of Urban Development, Ministry of Environment, Forest and Climate Change, Director General, National Mission for Clean Ganga and Chairman CPCB. Chairman CPCB will be the nodal authority for coordination. Senior most among them will preside over the deliberations.***

- 44. The Central Monitoring Committee will also co-ordinate with the RRCs of the States and oversee the execution of the action plans, taking into account the timelines, budgetary mechanism and other factors. Chief Secretaries of States will be the nodal agency at State level. The Chief Secretaries of the States may undertake review of progress of RRCs by involving concerned Secretaries of Department of Urban Development, Environment, Industries, Irrigation and Public Health, Health etc.**
- 45. We also direct the MoEF& CC to consider a policy for giving environmental awards to outstanding persons (natural and juristic) and Institutions/States and introducing dis-incentives for non compliant states. Such scheme may be framed preferably before 30.06.2019.**

29. The composition of Central Monitoring Committee (CMC) was modified vide orders dated 24.04.2019 and 17.05.2019 in O.A. 606/2018 to the effect that other important issues be also considered by the CMC and having regard to the significance of the issues involved, the deliberations of CMC may be presided over by the Cabinet Secretary if viable and if possible, PMO may depute an observer at important deliberations.

**VI. Report of CMC dated 11.06.2019 and order dated 18.07.2019 disapproving the same for not being in conformity with the orders of this Tribunal:**

30. The CMC meeting was held on 11.06.2019 without taking cognizance of further orders dated 24.04.2019 requiring other issues also to be taken up for consideration and order dated 17.05.2019 requesting the Cabinet Secretary to preside over the deliberation<sup>32</sup>. Accordingly, the Tribunal observed that the CMC may now give its report by 31.08.2019 and if no such report was furnished, the Tribunal may proceed without the benefits of such report. MoEF & CC moved an application before this Tribunal seeking extension of time for furnishing of CMC report being I. A. 551/2019 disposed of on

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<sup>32</sup> Order dated 18.07.2019 in O.A. No. 606/2018 (State of J&K)

04.09.2019. It was observed that report may be furnished by 31.10.2019. No such further report has been received till date. We, thus, have no option but to proceed to deal with the matter without waiting further for such report. Certainly, the Tribunal is deprived of assistance which was expected from senior authorities in Central and State Governments on vital issues of public interest due to apathy shown by the concerned officers. We also note that the MoEF&CC has not given any further response even in terms of Para 45 of the order dated 08.04.2019.

31. We may however consider the report dated 11.06.2019. The report proposes timelines as per following table:

**Table 8. Targets proposed by CMC for management of Sewage, Industrial Effluent, Waste and other aspects with timelines up to Year 2024**

TASK	PRESENT*	As per Hon'ble NGT (2021)	2022 (Proposed)	2024 (Proposed)
<b>Sewage Management</b>				
• Treatment capacity	35 %	100%	75%	90 %
• Utilisation of treated wastewater	< 2 %	---	20 %	50 %
<b>Industrial Effluent Management</b>				
• Treatment Capacity	98 %	100%	100 %	100 %
• Utilisation of treated effluent	20 %	---	30 %	40 %
• Reduction of fresh water use	---	---	10 %	25 %
<b>Solid Waste Management</b>				
• Collection	80 %	100%	100 %	100 %
• Treatment	26 %	100%	75 %	100 %
<b>E-Flow Management</b>				
• Lean Flow	---	15-20%	15-20%	15-20%

\* As per estimates at CPCB

32. The above timelines being in conflict with the mandate of environmental law, the Constitutional guarantees in terms of the judgments of the Hon’ble Supreme Court and earlier orders of this

Tribunal, cannot be accepted. Vide order dated 18.07.2019 in O.A. No. 606/2018 (J&K), Para 47, this Tribunal noted that proceedings dated 11.06.2019 did not meet the mandate of this Tribunal. Further the Tribunal had already fixed specific timelines which the Committee could not change. The Committee was expected to facilitate the directions of this Tribunal and not to nullify the same. As already noted, the issue is a major concern for the people of the country. Discharge of untreated sewage is a criminal offence and affects right to life. Failure to enforce the law cannot be condoned by giving long timelines unconditionally. Apart from the timelines fixed in the order dated 08.04.2019, timelines given by the Hon'ble Supreme Court for 100% sewage in *Paryavaran Suraksha, (2017) 5 SCC 326* have expired. This Tribunal has directed that compensation will be payable if 100% sewage is not ensured even till 31.03.2020. In the context of river Ganga, outer timeline for ensuring that all the requisites STPs are set up is 31.12.2020 and interim in-situ remediation is 31.10.2019 and for Yamuna also somewhat similar timeline has been fixed.

33. We may note the observations of the Hon'ble Supreme Court:

*“26. Enactment of a law, but tolerating its infringement, is worse than not enacting a law at all. The continued infringement of law, over a period of time, is made possible by adoption of such means which are best known to the violators of law. Continued tolerance of such violations of law not only renders legal provisions nugatory but such tolerance by the enforcement authorities encourages lawlessness and adoption of means which cannot, or ought not to, be tolerated in any civilized society. Law should not only be meant for the law-abiding but is meant to be obeyed by all for whom it has been enacted. A law is usually enacted because the legislature feels that it is necessary. It is with a view to protect and preserve the environment and save it for the future generations and to ensure good quality of life that Parliament enacted the anti-pollution laws, namely, the Water Act, Air Act and the Environment (Protection) Act, 1986. These Acts and Rules*

*framed and notification issued thereunder contain provisions which prohibit and/or regulate certain activities with a view to protect and preserve the environment. When a law is enacted containing some provisions which prohibit certain types of activities, then, it is of utmost importance that such legal provisions are effectively enforced. If a law is enacted but is not being voluntarily obeyed, then, it has to be enforced. Otherwise, infringement of law, which is actively or passively condoned for personal gain, will be encouraged which will in turn lead to a lawless society. Violation of anti-pollution laws not only adversely affects the existing quality of life but the non-enforcement of the legal provisions often results in ecological imbalance and degradation of environment, the adverse effect of which will have to be borne by the future generations.*<sup>33</sup>

*“45..... The Government could not pass such orders of exemption having dangerous potential, unmindful of the fate of lakhs of citizens of the twin cities to whom drinking water is supplied from these lakes. Such an order of exemption carelessly passed, ignoring the “precautionary principle”, could be catastrophic.”*<sup>34</sup>

*“61. .... If the laws are not enforced and the orders of the courts to enforce and implement the laws are ignored, the result can only be total lawlessness. It is, therefore, necessary to also identify and take appropriate action against officers responsible for this state of affairs. Such blatant misuse of properties at large-scale cannot take place without connivance of the officers concerned. It is also a source of corruption. Therefore, action is also necessary to check corruption, nepotism and total apathy towards the rights of the citizens.”*<sup>35</sup>

*“15. .... 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*

<sup>33</sup> INDIAN COUNCIL FOR ENVIRO-LEGAL ACTION Vs. UNION OF INDIA AND OTHERS (1996) 5 SCC 281

<sup>34</sup> A.P. Pollution Control Board II v. Prof. M.V. Nayudu, (2001) 2 SCC 62

<sup>35</sup> M.C. Mehta v. Union of India, (2006) 3 SCC 399 – Public functionaries

*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.”<sup>36</sup>*

34. In view of above observations, the timeline proposed in the minutes of CMC dated 11.06.2019 cannot be accepted and the timeline already laid down will have to be strictly adhered to with the consequences as stipulated therein.

**VII. Order dated 22.08.2019 – Directions regarding control of pollution of river Ganga in pursuance of orders of Hon’ble Supreme Court in (2015) 12 SCC 764 and orders of this Tribunal:**

35. Vide order dated 22.08.2019 in *Original Application 200/2014*, dealing with the pollution of river Ganga, the Tribunal issued directions and laid down coercive measures to be taken for discharge of untreated sewage in river Ganga:-

*“16.....As already observed by this Tribunal including in the order dated 14.05.2019 that River Ganga being National River with distinct significance for the country, even a drop of pollution therein is a matter of concern. **All the authorities have to be stringent and depict zero tolerance to the pollution of River Ganga. Wherever STPs are not operating, immediate bioremediation and/or phyto-remediation may be undertaken if feasible. To avoid procedural delay of tender processes, etc. specifications and norms for undertaking such activities may be specified in consultation with the CPCB as was earlier directed in our order dated 29.11.2018.** Performance guarantees may be required to be furnished for ensuring timely performance. It needs to be ensured that setting up of STPs and sewerage network to be completed and carried out so as to avoid any idle capacities being created. Performance guarantees may be taken for preventing such defaults.*

<sup>36</sup> M.C. Mehta Vs Union of India- W.P. (Civil) No. 13029/1985 dated 25.11.2019

17. **Wherever the work has not commenced, it is necessary that no untreated sewage is discharged into the River Ganga. Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.**

15. **With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019.”**

VIII. **Order dated 28.08.2019 in O.A. No. 593/2017, Paryavaran Suraksha Samiti Vs. Union of India, in pursuance of Hon’ble Supreme Court judgment in (2017) 5 SCC 326, for 100% treatment of sewage:**

36. **Vide order dated 28.08.2019, the Tribunal held:-**

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15. **It is clear from the order of the Hon’ble Supreme Court<sup>37</sup> that the responsibility of operating STPs under Article 243W and item 6 of Schedule XII to the Constitution is of local bodies who have to evolve norms to recover funds for the purpose which is to be supervised by the States/UTs. The norms were to be finalized upto 31.03.2017 to be implemented from the next year, i.e 01.04.2018. In absence thereof, the States/UTs have to cater to the financial requirement from its own resources. The States/UTs are to prioritize the cities, towns, villages discharging effluents/sewage directly into the water bodies. Industrial activity without proper treatment**

<sup>37</sup>Para 10-13 in *Paryavaran Suraksha Samiti Vs. Union of India*, *Supra*

**plants (ETPs and CETPs) is not to be allowed by the State PCBs and the Secretaries, Environment of the States/UTs are to be answerable. Thus, the source for financial resources for the STPs, stands finalized under the binding judgment of the Hon'ble Supreme Court. Authorities and persons accountable are identified. Rigid implementation has been laid down. This Tribunal has been required to monitor compliance of the directions and timelines.**

16. It is in this background that the present report needs to be appraised and further directions given. As regards the Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water is accepted as an interim measure. With regard to setting up of STPs, while we appreciate the extensive work of the CPCB based on information furnished by States/UTs, the challenge remains about verification of the said data on the one hand and analysis of the steps taken and required on the other. There is already a database available with the CPCB with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites. This needs to be collated and river basinwise macro picture needs to be prepared by the CPCB in terms of need for interventions, existing infrastructure and gaps therein. The States have given timelines which need to be effectively monitored both by the CPCB and the Chief Secretaries in terms of its execution.
17. **As already noted, prevention of pollution of water is directly linked to access to potable water as well as food safety. Restoration of pristine glory of rivers is also of cultural and ecological significance. This necessitates effective steps to ensure that no pollution is discharged in water bodies. Doing so is a criminal offence under the Water Act and is harmful to the environment and public health. 'Precautionary' principle of environmental law is to be enforced. Thus, the mandate of law is that there must be 100% treatment of sewage as well as trade effluents. This Tribunal has already directed in the case of river Ganga that timelines laid down therein be adhered to for setting up of STPs and till then, interim measures be taken for treatment of sewage. There is no reason why this direction be not followed, so as to control pollution of all the river stretches in the country. The issue of ETPs/CETPs is being dealt with by an appropriate action against polluting industries. Setting up of STPs and MSW facilities is the responsibility of Local Bodies and in case of their default, of the States. Their failure on the subject has to be adequately monitored. Recovery of compensation on 'Polluter Pays' principle is a part of enforcement strategy but not a substitute for compliance. It is thus necessary to issue directions to all the States/UTs to enforce the compensation regime, latest with effect from 01.04.2020. We may not be taken to be condoning any past violations. The States/UTs have to enforce recovery of compensation from 01.04.2020 from the defaulting local bodies. On failure of the States/UTs,**

***the States/UTs themselves have to pay the requisite amount of compensation to be deposited with the CPCB for restoration of environment. The Chief Secretaries of all the States may furnish their respective compliance reports as per directions already issued in O.A. No. 606/2018.***

21. We may now sum up our directions:-

***(iii) All the Local Bodies and or the concerned departments of the State Government have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment.”***

**IX. Order dated 11.09.2019 – Directions in pursuance of orders of Hon’ble Supreme Court in (2012) 13 SCC 736 and dated 24.04.2017 in W.P. No. 725/1994 “And Quite Flows Maily Yamuna” and earlier orders of this Tribunal regarding control of pollution of river Yamuna:**

37. Vide the order dated 11.09.2019, in Original Application No. 06/2012, dealing with river Yamuna, the Tribunal observed as follows:

***“12. One of the major concerns of this Tribunal is that repeated directions remain un-complied and inspite of largescale failures, no accountability is fixed. There is huge loss to public exchequer for which no action is taken. Timelines are conveniently and unilaterally changed. Officers indulge in blame game in shifting responsibility from one to another. There is failure at higher levels in monitoring and taking actions. If this continues, it is difficult to expect any positive change for long. This requires paradigm shift in approach adopted so far. The approach to be adopted is to have clear time- bound plan with flexibility and due to accountability for failure by way of departmental action and monetary compensation. The rescheduled timelines have to be compressed so as to complete every action by December, 2020 except where shorter timelines are specified in this order or are otherwise possible. If any contract permits longer timeline, it is clearly in violation of binding orders of the Tribunal which has attained finality. Violation thereof is per se criminal offence. Such longer timeline has to be consistent with orders of the Tribunal and compressed within 31.12. 2020. Failing to do so may invite criminal prosecution NMCG may also monitor the compliance. The***

**Chief Secretaries of Delhi, Haryana and U.P. have to personally see the compliance and have to set up Monitoring Cell directly under them. Vice Chairman, DDA can also monitor and coordinate with Chief Secretary, Delhi. All other departments can monitor subject to overall directions of the Chief Secretaries. This can avoid shifting of responsibilities once ownership is with highest authorities in the State. Monthly review reports may be shared with the Monitoring Committee and also placed on websites of concerned States. Failure and successes of the individual involved may be specifically recorded and reflected in service record of the concerned officer. Stock taking may be done by the Chief Secretaries of the failure and successes so far and appropriate actions be initiated against those who have been responsible for the failure. Nodal Officers may be identified in respect of different projects clearly defining the responsibilities. Wherever there is misappropriation of funds, criminal case has to be registered. Posting of Officers entrusted with the responsibility may be reviewed from time to time depending on their responsibility. Procedure for giving of contracts may be shortened and standardized at State level and if possible at National level by NMCG and CPCB. Giving of contracts should be based on successful credentials instead of mere lowest rates. Pollution load at entry and exist point of each concerned State may or at entry points of each drains need to be recorded periodically. The Chief Secretaries of Delhi, Haryana and U.P. may furnish action taken reports in this regard at the time of their personal appearance before this Tribunal in O.A. 606/2018.**

13. *Priorities need to be planned. The first step is to ensure that no pollutant is discharged into the river or drains connected thereto. Projects of setting up and upgradation of STPs including setting up of interceptors, laying of sewerage line network etc. have to be completed within strict timelines. Pending such action, immediate bioremediation and/or phytoremediation or any other alternative remediation measure may be undertaken as an interim measure. Pollution of river or water bodies is a criminal offence which needs to be checked by setting up ETPs/CETPs/STPs. The Hon'ble Supreme Court has directed<sup>38</sup> that establishment and proper functioning of ETPs/CETPs/STPs in the country be ensured. This is to enforce the right of access to water. It has been noted by the Hon'ble Supreme Court that water pollution is the cause of various diseases and also affects food safety apart from affecting the environment as such. Following the said judgment, this Tribunal has directed<sup>39</sup> that "All the local bodies have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize*

<sup>38</sup> (2017) 5 SCC 326

<sup>39</sup> Order dated 28.08.2019 in Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors., O.A No. 593/2017

for restoration of the environment.” While dealing with the pollution of river Ganga, this Tribunal directed:

“Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.

With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019.”<sup>40</sup>

“15. A. (iv):

e). DJB to complete the task of setting up of STPs by 31.12.2020.

g) Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.01.2020, failing which the Govt. of NCT of Delhi may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs, sewerage network and its connectivity. For delay of the work, the Chief Secretary, Govt. of NCT Delhi must identify the officers responsible and assign specific accountability. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers for delay in setting up of STPs, sewerage network and its connectivity by the concerned head of the department.

h) The Govt. of NCT, Delhi will be liable to pay Environment Compensation if defaults take place as under:

i. The operational deficiencies of the existing STPs must be rectified within three months failing which

<sup>40</sup>O.A No. 200/2014 order dated 22.08.2019

- Environmental compensation of Rs. 5 Lacs per month for STP shall be deposited with CPCB.*
- ii. *With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Yamuna and Rs. 10 lakhs per month to CPCB per incomplete STP, sewerage network and its connectivity will apply.*
  - iii. *With regard to the situation where works with regard to STP, sewerage network and its connectivity have not yet started, the Govt. of NCT, Delhi has to pay an Environmental Compensation at the rate of Rs. 10 lakhs per month per STP, Sewerage network and its connectivity after 31.12.2020 for the delay in setting up of the same. It will be open to Govt. of NCT of Delhi to recover the said amount from erring officers/contractors.”*

38. This Tribunal has also dealt with the issue of remediation of legacy waste sites at Delhi vide order dated 19.11.2019 in O.A. No. 519/2019 in a time bound manner. Dealing with the delayed action in the matter of river Yamuna, this Tribunal directed that longer timelines are not desirable having regard to serious consequences of the pollution of rivers and the Chief Secretaries of the concerned States must directly take ownership and responsibility of the projects for cleaning of the rivers. It was also observed that procedures for giving contracts need to be shortened and standardized.

39. Again, on 22.11.2019, dealing with the prevention of pollution of river Ghaggar, the Tribunal directed that all concerned States/UTs must ensure installation of STPs till 31.12.2020 in default of which they will be liable to pay compensation at the rate of Rs. 10 lakhs per month per STP and till then *in-situ* remediation must be done.

40. From the above, it is clear that this Tribunal has fixed specific timelines in view of object of the law and repeated failures of the authorities which has resulted in continuing pollution of rivers

adversely affecting the environment and the public health. It is not desirable to prolong the problem on any ground. The apparent conflict in above timelines needs to be clarified. Vide order dated 08.04.2019 in the present matter, timeline for final execution of all steps of action plan stands extended till 31.03.2021 after which compensation is to be recovered from the defaulting States and action is to be against the erring officers. Vide order dated 22.08.2019 in the case of river Ganga, outer timeline for compliance is 31.12.2020. In terms of order dated 28.08.2019 in Paryavaran Suraksha Samiti, outer timeline for 100% sewage treatment is 31.03.2020. We clarify that since order in Paryavaran Suraksha was passed on 28.08.2019 and all concerned have been put to notice, it is desirable that 100% treatment of sewage takes place as directed atleast to the extent of in situ remediation and commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as directed vide order dated 28.08.2019, supra. The timelines for Ganga, Yamuna or other rivers covered by specific orders will stand, as already directed. Timeline for completing all steps of action plan till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In view of this, the timelines proposed by the CMC cannot be accepted, as observed earlier. The States/UTs may take necessary steps accordingly.

**X. Consolidated status report dated 18.11.2019 filed by the CPCB on the Status of Preparation and Execution of Action Plans:**

41. Consolidated status report has been filed by CPCB on 18.11.2019 with reference to the present matter as well as dealing with the *Musi*

River in the State of Telangana (O.A. 426/2018) and with regard to coastal pollution (O.A. 829/2019). Separate orders are passed in O.A. 426/2018 with regard to Musi River and O.A. 829/2019 dealing with the coastal pollution. The present order deals with the issue of 351 polluted river stretches.

42. We may now refer to the report of the CPCB on the subject of 351 polluted river stretches. Extracts from the report are:

**“i) Status on Approval of Action Plans for Restoration of Identified Polluted River Stretches: -**

61 out of 61 total action plans were received as on 06.09.2019 and 60 action plans have been approved along with the conditions. **Revised action plan for restoration of River Yamuna within Delhi State is awaited from Delhi State Government.** Minutes of all the eight Task Team meetings were also uploaded in CPCB website at <https://cpco.nic.in/mcngt-restoration/>. Also, minutes of all the eight task team meetings were also communicated to the concerned authorities for further necessary action at their end. State-wise status of action plans received, action plans approved with conditions by CPCB Task Team w.r.t Priority I & Priority II Polluted River Stretches are annexed at **Annexure-V, Annexure-VI and Annexure-VII**. All the action plans already approved by CPCB Task Team also uploaded by the concerned States/UTs and web links have been provided in CPCB website at <https://cpcb.nic.in/mcncit-restoration/> for having access to the general public.

**ii) Criteria for Prioritization of Polluted River Location**

In pursuance to Hon'ble NGT order dated 19.12.2018 and to devise a mechanism for classification of polluted river stretch by considering two criteria pollutants such as Bio-chemical Oxygen Demand (BOD) and Faecal Coliform (FC), CPCB has prepared "draft criteria for prioritization of polluted river location". The draft criteria was circulated to all the concerned stakeholders mainly State Pollution Control Boards (SPCBs) and the Pollution Control Committees (PCCs) vide CPCB letter dated 09.01.2019, for providing comments or views by January 2019. Based on the comments received from stakeholders, the draft criterion has been finalised and appraised to Hon'ble NGT on 29.7.2019 (Copy enclosed as **Annexure-VIII**). Afore-said finalised criteria also uploaded in CPCB website at [https://cpcb.nic.in/wqm/Guidelines wqm-23.07.2019](https://cpcb.nic.in/wqm/Guidelines/wqm-23.07.2019).

**iii) Submission of Performance Guarantee by the States/UTs for ensuring timely implementation of approved**

**action plans for rejuvenation of identified polluted river stretches: -**

As per Hon'ble NGT order dated 8.4.2019, States/ UTs are required to submit performance guarantee as per revised scale i.e. No. of Polluted River Stretches in a State/UT > 10, 5 to 10 & < 5, the performance guarantee to be submitted in Rupees is 15 Crore, 10 Crore & 5 Crore respectively. **Till date, 09 States (viz., Goa, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Manipur, Odisha, Puducherry, West Bengal and 02 UTs (Viz., Daman, Diu and Dadra Nagar Haveli, Delhi) out of 31 States/UTs have submitted Performance/ Bank Guarantee to CPCB.** State-wise details of performance guarantee or bank guarantees submitted is annexed at **Annexure-IX**.

**iv) Review meeting with 11 States/UTs for review of action plans falling under Priority III to V classes**

As per Hon'ble NGT Order dated 20.09.2018, all States and Union Territories are required to send a copy of RRC approved action plan to CPCB especially w.r.to only Priority I & Priority II stretches for approval. The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.

The States/UTs which are not required to submit action plans to CPCB seeking approval, CPCB convened a review meeting on 12.09.2019 in CPCB with such 11 States/UTs for reviewing the RRC approved action plans for restoration of polluted river stretches falling under Priority III to V classes in the respective States. 09 out of 11 States/UTs have attended the meeting. CPCB reviewed the action plans and suggested necessary improvements in light of the Hon'ble NGT order dated 20.09.2018. The minutes of the review meeting were also communicated to all the concerned States/UTs vide CPCB letter dated 14.10.2019 (Copy annexed as **Annexure-X**) with a request to take necessary actions.

Following general suggestions were made for incorporation in the prepared action plans and thereafter for taking approval of RRC constituted by the respective State Government or UT Administration for implementation of action plans in respect of P-III to P-V polluted river stretches: -

- (i) Identification of polluting sources including drains contributing to river pollution
- (ii) Map showing Polluted River, its tributaries, drains, major towns, industrial estates, location of STPs/CETPs
- (iii) Functioning status of STPs/ETPs/CETPs and solid waste management and processing facilities in the catchment area of the identified polluted river stretch;
- (iv) Detailed gap analysis w.r.t town-wise water consumption (including ground water consumption), sewage generation,

existing infrastructure in the catchment area and the gap analysis;

(v) Detailed gap analysis w.r.t industrial water consumption, wastewater generation, existing infrastructure for treatment of industrial effluent (both captive ETPs/CETPs and their performance assessment), gap analysis;

(vi) Quantification and characterisation of waste (such as solid waste, industrial hazardous waste, bio-medical waste, E-Waste), STP sludge management, existing infrastructure and detailed gap analysis;

(vii) Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;

(viii) Aspects such as ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river (by having watershed management provisions), plantation on both sides of the river, setting up biodiversity parks on flood plains by removing encroachment., proper interception and diversion of sewage carrying drains to Sewage Treatment Plant (STP), upgradation of existing sewage treatment plants if not in a position to comply with effluent discharge norms, emphasis on utilization of treated sewage so as to minimize extraction of ground or surface water be included,

(ix) Speedy, definite or specific timelines for execution of action plans and the estimated budget including the monitoring agency

(ix) Achievable goals with specific timelines for restoration of water quality of polluted rivers.

(x) Organisation-wise action plans with timelines and the estimated budget for implementation of action plans.

**v) Format for obtaining status on implementation of Action plans for restoration of polluted River Stretches**

In order to assess the progress on implementation of action plans already approved by CPCB, a format seeking status on implementation of action plans for restoration of polluted river stretches has been communicated to the Chief Secretaries of concerned States/UTs and State Pollution Control Boards/ Pollution Control Committees, vide CPCB letter dated 26.9.2019. A copy of CPCB letter dated 26.09.2019 along with the format circulated is annexed at **Annexure-XI**. As on 06.11.2019, filled in formats have been received from 3 States/UTs viz Daman, Diu, Dadra & Nagar Haveli, Andhra Pradesh and Meghalaya.

**State-wise Identified Polluted Rivers and the Status of Action Plans received by CPCB in compliance to Hon'ble NGT Orders dated 20.09.2018, 19.12.2018 and 08.04.2019 in OA No. 673 of 2018 (as on 07.11.2019)**

Name of the State /	Total No. of	Priority I Identified Polluted River stretches	Priority II Identified Polluted River stretches	Priority — III to V Identified Polluted River stretches	Total Action
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UT	Identified Polluted  River stretches (PRS)	No. of P-I PRS	Action Plans received w.r.to P-I	No. of P-II PRS	Action Plans received w.r.to P-II	No. of P-III to V	Action Plans received w.r.to P-III to V	Plans Received
Andhra Pradesh	5	0	0	0	0	5	5	5
Assam	44	3	3	1	1	40	40	44
Bihar	6	0	0	0	0	6	6	6
Chhattisgarh	5	0	0	0	0	5	5	5
DD & DNH	1	1	1	0	0	0	0	1
Delhi	1	1	1	0	0	0	0	1
Goa	11	0	0	0	0	11	11	11
Gujarat	20	5	5	1	1	14	14	20
Haryana	2	2	2	0	0	0	0	2
Himachal Pradesh	7	1	1	1	1	5	5	7
J & K	9	0	0	1	1	8	8	9
Jharkhand	7	0	0	0	0	7	7	7
Karnataka	17	0	0	0	0	17	17	17
Kerala	21	1	1	0	0	20	20	21
Madhya* Pradesh	22	3	3	1	1	18	18	22
Maharashtra	53	9	9	6	6	38	38	53
Manipur	9	0	0	1	1	8	8	9
Meghalaya	7	2	2	0	0	5	5	7
Mizoram	9	0	0	0	0	9	9	9
Nagaland	6	1	1	0	0	5	5	6
Odisha	19	1	1	0	0	18	18	19
Puducherry	2	0	0	0	0	2	2	2
Punjab	4	2	2	0	0	2	2	4
Rajasthan	2	0	0	0	0	2	2	2
Sikkim	4	0	0	0	0	4	4	4
Tamil Nadu	6	4	4	0	0	2	2	6
Telangana**	8	1	1	2	2	5	5	8
Tripura	6	0	0	0	0	6	6	6
UP	12	4	4	0	0	8	8	12
Uttarakhand	9	3	3	1	1	5	5	9
West Bengal	17	1	1	1	1	15	15	17
<b>Grand Total</b>	<b>351</b>	<b>45</b>	<b>45</b>	<b>16</b>	<b>16</b>	<b>290</b>	<b>290</b>	<b>351</b>

**Note:-**

- \* **MP State have submitted one combined action plan for river Kolar & River Kaliasot**
- \*\* **Telangana State submitted one action plan for river Manjeera & River Nakkavagu**

**State-wise status of action plans received and the action plans approved by CPCB Task Team w.r.to Priority I & Priority II Polluted Rivers (as on 07.11.2019)**

NAME OF THE STATE/UT	Total Identified Polluted River Stretches (PRS) Priority-I & Priority II	Identified PS Priority-II	Identified PRS Priority-II	No. of Action Plans Received	Action Plans Not Approved	Total Action Plans Approved
ASSAM	4	3	1	4	-	4
DAMAN, DIU AND DADRA NAGAR HAVELI	1	1	0	1	-	1
<b>DELHI</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>
GUJARAT	6	5	1	6	-	6
HARYANA	2	2	0	2	-	2
HIMACHAL PRADESH	2	1	1	2	-	2
JAMMU & KASHMIR	1	0	1	1	-	1
KERALA	1	1	0	1	-	1
MADHYA PRADESH	4	3	1	4	-	4
MAHARASHTRA	15	9	6	15	-	15
MANIPUR	1	0	1	1	-	1
MEGHALAYA	2	2	0	2	-	2
NAGALAND	1	1	0	1	-	<b>1</b>
ODISHA	1	1	0	1	-	1
PUNJAB	2	2	0	2	-	2
TAMIL NADU	4	4	0	4	-	4
TELANGANA	3	1	2	3	-	3
UTTAR PRADESH	4	4	0	4	-	4
UTTARAKHAND	4	3	1	4	-	4
WEST BENGAL	2	1	1	2	-	2
<b>TOTAL</b>	<b>61</b>	<b>45</b>	<b>16</b>	<b>61</b>	<b>01</b>	<b>60</b>

**State-wise & River-wise recommendations of Task Team - Action Plans for Restoration of Identified Polluted River Stretches- as per Hon'ble NGT Orders dated 20.09.2018, 19.12.2018 & 08.04.2019 ( Status as on 07.11.2019)**

STATE	RIVER NAME	Status
ASSAM	BHARALU	Recommended subjected to conditions
	BORSOLA	Recommended subjected to conditions
	SILSAKO	Recommended subjected to conditions
	SORUSOLA	Recommended subjected to conditions
DAMAN, DIU AND DADRA NAGAR HAVELI	DAMANGANGA	Recommended subjected to conditions
<b>DELHI</b>	<b>YAMUNA</b>	<b>Not Recommended</b>
	AMLAKHADI	Recommended subjected to conditions

	BHADAR	Recommended subjected to conditions
	BHOGAVO	Recommended subjected to conditions
	KHARI	Recommended subjected to conditions
	SABARMATI	Recommended subjected to conditions
	VISHWAMITRI	Recommended subjected to conditions
HARYANA	GHAGGAR	Recommended subjected to conditions
	YAMUNA	Recommended subjected to conditions
HIMACHAL PRADESH	SUKHANA	Recommended subjected to conditions
	MARKANDA	Recommended subjected to conditions
JAMMU & KASHMIR	DEVIKA	Recommended subjected to conditions
KERALA	KARAMANA	Recommended subjected to conditions
MADHYA PRADESH	CHAMBAL	Recommended subjected to conditions
	KHAN	Recommended subjected to conditions
	KSHIPRA	Recommended subjected to conditions
	BETWA	Recommended subjected to conditions
MAHARASHTRA	GODAVARI	Recommended subjected to conditions
	KALU	Recommended subjected to conditions
	KUNDALIKA	Recommended subjected to conditions
	MITHI	Recommended subjected to conditions
	MORNA	Recommended subjected to conditions
	MULA	Recommended subjected to conditions
	MUTHA	Recommended subjected to conditions
	NI RA	Recommended subjected to conditions
	VEL	Recommended subjected to conditions
	BHIMA	Recommended subjected to conditions
	INDRAYANI	Recommended subjected to conditions
	MULA-MUTHA	Recommended subjected to conditions
	PAWANA	Recommended subjected to conditions
	WAINGANGA	Recommended subjected to conditions
	WARDHA	Recommended subjected to conditions
MANIPUR	NAMBUL	Recommended subjected to conditions
MEGHALAYA	UMKHRAH	Recommended subjected to conditions
	UMSHYRPI	Recommended subjected to conditions
NAGALAND	DHANSIRI	Recommended subjected to conditions
ODISHA	GANGUA	Recommended subjected to conditions
PUNJAB	GHAGGAR	Recommended subjected to conditions
	SUTLEJ	Recommended subjected to conditions
	CAUVERY	Recommended subjected to conditions
	SARABANGA	Recommended subjected to conditions
TAMIL NADU	THIRUMANIMUTHAR	Recommended subjected to conditions
	VAS I STA	Recommended subjected to conditions
TELANGANA	MUSI	Recommended subjected to conditions
	MANJEERA	Recommended subjected to conditions
	NAKKAVAGU	Recommended subjected to conditions
UTTAR PRADESH	HINDON	Recommended subjected to conditions
	KALINADI	Recommended subjected to conditions
	VARUNA	Recommended subjected to conditions
	YAMUNA	Recommended subjected to conditions
UTTARAKHAND	BHELA	Recommended subjected to conditions
	DHELA	Recommended subjected to conditions
	SUSWA	Recommended subjected to conditions
	KICHHA	Recommended subjected to conditions
WEST BENGAL	VINDHADHARI	Recommended subjected to conditions

	MAHANANDA	Recommended subjected to conditions
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CPCB has reviewed action plans w.r.t. Priority I and Priority II polluted river stretches. **So far, 60 action plans out of 61 Priority I and Priority II polluted river stretches pertaining to 18 States & 1 UT have been approved by CPCB Task Team in 08 Task Team meetings conducted till date.** Action Plan of River Yamuna in Delhi Stretch is not approved by CPCB Task Team till Date. Status along with date of approval of Action plans for Priority — I &II polluted river stretches is given in Table below.

Task Team Meeting	Date of Meeting	Action Plans approved	
		STATE	No of Action
III	11 - 12.02.2019	GUJARAT	6
		HARYANA	2
		HIMACHAL PRADESH	2
		KERALA	
		MADHYA PRADESH	2
		PUNJAB	2
		TELANGANA	3
		WEST BENGAL	2
IV	28.03.2019	DD, DNH	1
		JAMMU & KASHMIR	1
		MADHYA PRADESH	2
		MAHARASHTRA	15
		ODISHA	1
V	24.04.2019	TAMIL NADU	4
VI	31 05.2019	UTTAR PRADESH	4
VII	16.07.2019	UTTARAKHAND	4
VIII	06.09.2019	ASSAM	4
		MANIPUR	1
		MEGHALAYA	2
		NAGALAND	1
Total Action Plans Approved			60

With respect to Priority — Ill to V polluted river stretches, action plans for **282 out of 290** polluted river stretches have been submitted to CPCB. Kerala (07) and Madhya Pradesh (01) have not submitted Action Plans under these priorities. State- wise status is given in **Annexure I**.

A meeting is scheduled on 12.09.2019 in CPCB, inviting eleven SPCBs/PCCs for presentation to review the RRC approved action plans for polluted river stretches falling under Priority III to V classes. Only Priority III to V polluted river stretches exist in these States/ UTs.

	Total No. of	Priority I Identified Polluted River stretches	Priority II Identified Polluted River stretches	Priority — III to V Identified Polluted River stretches	Total Action

<i>State / UT</i>	<i>Identified Polluted River stretches (PRS)</i>	<i>No. of P-I PRS</i>	<i>Action Plans received w.r.to P-I</i>	<i>No. of P-II PRS</i>	<i>Action Plans received w.r.to p-II</i>	<i>No. of P-III to P-V</i>	<i>Action Plans received w.r.to P-III to P-V</i>	<i>Plans Received</i>
<i>Andhra Pradesh</i>	5	0	0	0	0	5	5	5
<i>Assam</i>	44	3	3	1	1	40	40	44
<i>Bihar</i>	6	0	0	0	0	6	6	6
<i>Chhattisgarh</i>	5	0	0	0	0	5	5	5
<i>DD &amp; DNH</i>	1	1	1	0	0	0	0	1
<i>Delhi</i>	1	1	1	0	0	0	0	1
<i>Goa</i>	11	0	0	0	0	11	11	11
<i>Gujarat</i>	20	5	5	1	1	14	14	20
<i>Haryana</i>	2	2	2	0	0	0	0	2
<i>Himachal Pradesh</i>	7	1	1	1	1	5	5	7
<i>i &amp; K</i>	9	0	0	1	1	8	8	9
<i>Jharkhand</i>	7	0	0	0	0	7	7	7
<i>Karnataka</i>	17	0	0	0	0	17	17	17
<i>Kerala</i>	21	1	1	0	0	20	13	14
<i>Madhya Pradesh</i>	22	3	3	1	1	18	17	21
<i>Maharashtra</i>	53	9	9	6	6	38	38	53
<i>Manipur</i>	9	0	0	1	1	8	8	9
<i>Meghalaya</i>	7	2	2	0	0	5	5	7
<i>Mizoram</i>	9	0	0	0	0	9	9	9
<i>Nagaland</i>	6	1	1	0	0	5	5	6
<i>Odisha</i>	19	1	1	0	0	18	18	19
<i>Puducherry</i>	2	0	0	0	0	2	2	2
<i>Punjab</i>	4	2	2	0	0	2	2	4
<i>Rajasthan</i>	2	0	0	0	0	2	2	2
<i>Sikkim</i>	4	0	0	0	0	4	4	4
<i>Tamil Nadu</i>	6	4	4	0	0	2	2	6
<i>Telangana</i>	8	1	1	2	2	5	5	8
<i>Tripura</i>	6	0	0	0	0	6	6	6
<i>UP</i>	12	4	4	0	0	8	8	12
<i>Uttarakhand</i>	9	3	3	1	1	5	5	9
<i>West Bengal</i>	17	1	1	1	1	15	15	17
<b>Grand Total</b>	<b>351</b>	<b>45</b>	<b>45</b>	<b>16</b>	<b>16</b>	<b>290</b>	<b>282</b>	<b>343</b>

43. According to the report of the CPCB, the action plans have been finalised for all the States/UTs. The CPCB has however made certain suggestions in the action plans with regard to category P-III to P-V polluted river stretches as follows:-

“

- (i) Identification of polluting sources including drains contributing to river pollution
- (ii) Map showing Polluted River, its tributaries, drains, major towns, industrial estates, location of STPs/CETPs
- (iii) Functioning status of STPs/ETPs/CETPs and solid waste management and processing facilities in the catchment area of the identified polluted river stretch;
- (iv) Detailed gap analysis w.r.t town-wise water consumption (including ground water consumption), sewage generation, existing infrastructure in the catchment area and the gap analysis;
- (v) Detailed gap analysis w.r.t industrial water consumption, wastewater generation, existing infrastructure for treatment of industrial effluent (both captive ETPs/CETPs and their performance assessment), gap analysis;
- (vi) Quantification and characterisation of waste (such as solid waste, industrial hazardous waste, bio-medical waste, E-Waste), STP sludge management, existing infrastructure and detailed gap analysis;
- (vii) Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;
- (viii) Aspects such as ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river (by having watershed management provisions), plantation on both sides of the river, setting up biodiversity parks on flood plains by removing encroachment., proper interception and diversion of sewagecarrying drains to Sewage Treatment Plant (STP), upgradation of existing sewage treatment plants if not in a position to comply with effluent discharge norms, emphasis on utilization of treated sewage so as to minimize extraction of ground or surface water be included,
- (ix) Speedy, definite or specific timelines for execution of action plans and the estimated budget including the monitoring agency
- (x) Achievable goals with specific timelines for restoration of water quality of polluted rivers.
- (xi) Organisation-wise action plans with timelines and the estimated budget for implementation of action plans”

44. CPCB has also prepared a format for obtaining status on implementation of the action plans which has been sent to all the States and UTs on 26.09.2019. However, only 03 States/UTs have furnished information in the said format till 06.11.2019. The action plan prepared by the Delhi Government which is to be approved by the CPCB has to follow the action points delineated in the order of this Tribunal dated 11.09.2019 in O.A. No. 06/2012.

45. It is observed that the report of the CPCB has focused only on BOD and FC. It has not taken other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification. Further, monitoring gaps in terms of number of

stations have to be identified, upgraded and upscaled so to cover upstream and downstream locations of major discharges to the river. In this view of the matter, CPCB may also ascertain whether there are any other rivers falling in the category of polluted river stretches.

**XI. Consideration of the matter for the present order:**

46. The report of CPCB shows the status of compliance. As already noted, the action plans have been prepared with respect to 351 river stretches by the concerned States/UTs with regard to category P-I & P-II (the most polluted river stretches), the action plans have been duly recommended by CPCB with certain changes. The said action plans are reported to be complete with respect to necessary components for river rejuvenation including identification of drains, their interception, setting up of STPs, utilization of treated water, identification of flood plain zones, maintaining e-flow, etc. **Let the same be executed by 31.03.2021 as already directed. No case is made out to extend the laid down timeline unconditionally.** As noted earlier, situation of water pollution is grim in the country and there has been deterioration inspite of the Water Act which was enacted way back in 1974 which was intended to bring about any improvement. This Tribunal has repeatedly put all authorities to notice in the light of earlier orders of the Hon'ble Supreme Court on the subject. Directions were also issued for budgetary support as part of the action plans which has been done in indicative terms. There can be no plea of lack of funds on issue threatening the existence of human beings. We have thus no option except to be strict about the timelines already laid down. We are also of the view that adherence to the **timelines must be monitored by the Chief Secretaries of all the**

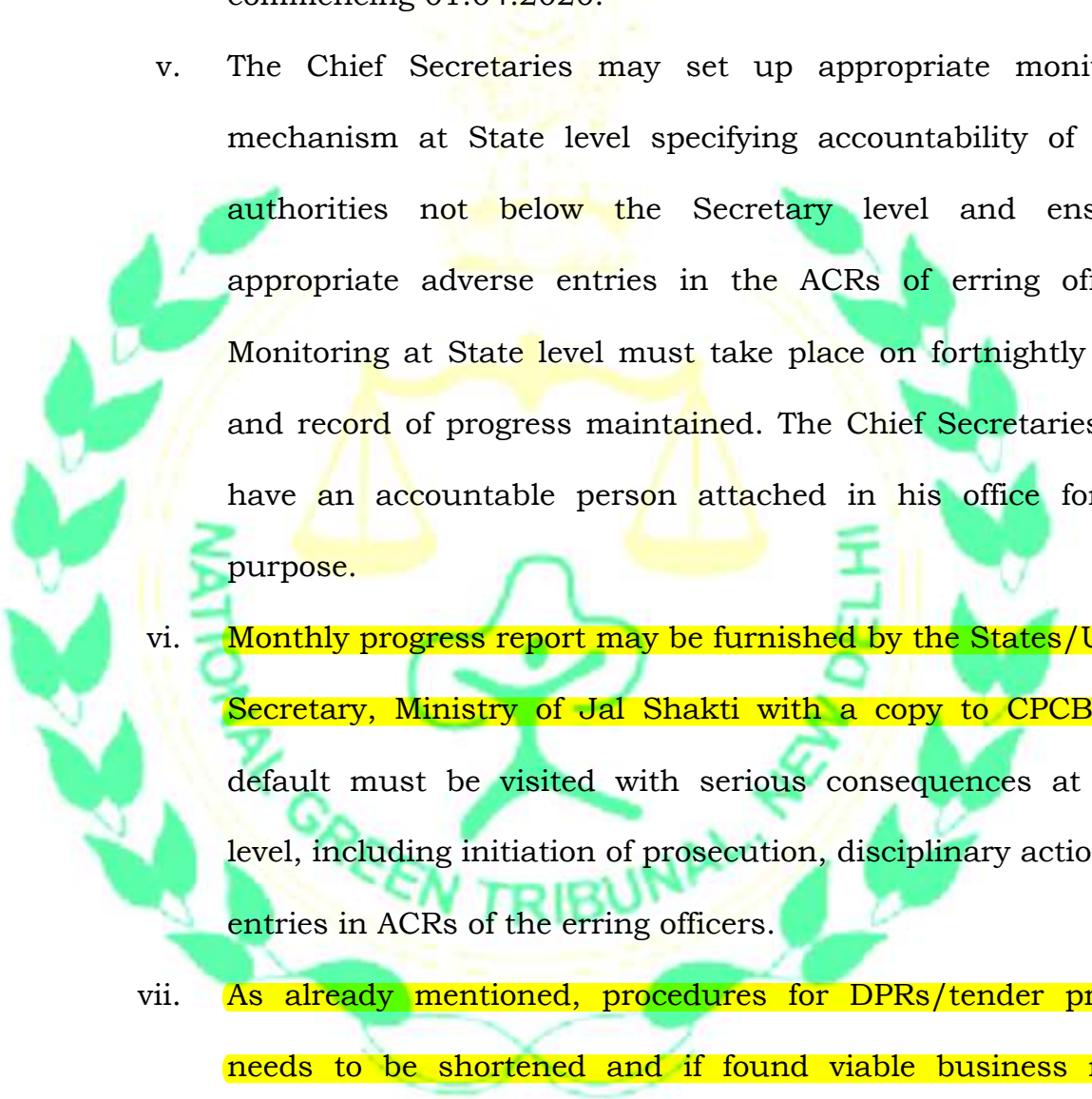
States/UTs and should also be monitored at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB. For this purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance and may give its quarterly report to this Tribunal commencing from 01.04.2020. The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the secretary level and ensuring appropriate adverse entries in the ACRs. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an accountable person attached in his office for this purpose. Monthly progress report may be furnished to Secretary, Ministry of Jal Shakti with a copy to CPCB. Steps for in situ remediation as an interim measure may be ensured as directed above as per laid down timeline. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers. As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level. Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.

CPCB may after scrutiny finalize the action plans relating to P-III and P-IV also as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the execution of the action plans prepared by the States which may start forthwith, if not already started.

## **XII. Directions:**

47. We now sum up our directions as follows:

- i. 100% treatment of sewage may be ensured as directed by this Tribunal vide order dated 28.08.2019 in O.A. No. 593/2017 by 31.03.2020 atleast to the extent of in-situ remediation and before the said date, commencement of setting up of STPs and the work of connecting all the drains and other sources of generation of sewage to the STPs must be ensured. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as already directed vide order dated 22.08.2019 in the case of river Ganga i.e. Rs. 5 lakhs per month per drain, for default in in-situ remediation and Rs. 5 lakhs per STP for default in commencement of setting up of the STP.
- ii. Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In default, compensation will be liable to be paid at the scale laid down in the order of this Tribunal dated 22.08.2019 in the case of river Ganga i.e. Rs. 10 lakhs per month per STP.
- iii. We further direct that an institutional mechanism be evolved for ensuring compliance of above directions. For this purpose, monitoring may be done by the Chief Secretaries of all the States/UTs at State level and at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB.

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- iv. For above purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance who may take assistance of CPCB and may give its quarterly report to this Tribunal commencing 01.04.2020.
- v. The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the Secretary level and ensuring appropriate adverse entries in the ACRs of erring officers. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an accountable person attached in his office for this purpose.
- vi. Monthly progress report may be furnished by the States/UTs to Secretary, Ministry of Jal Shakti with a copy to CPCB. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers.
- vii. As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level.
- viii. Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.
- ix. CPCB may finalize its recommendations for action plans relating to P-III and P-IV as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the

execution of the action plans prepared by the States which may start forthwith, if not already started.

- x. The action plan prepared by the Delhi Government which is to be approved by the CPCB has to follow the action points delineated in the order of this Tribunal dated 11.09.2019 in O.A. No. 06/2012.
- xi. Since the report of the CPCB has focused only on BOD and FC without other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification, a survey may now be conducted with reference to all the said parameters by involving the SPCB/PCCs within three months. Monitoring gaps be identified and upgraded so to cover upstream and downstream locations of major discharges to the river. CPCB may file a report on the subject before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).
- xii. Rivers which have been identified as clean may be maintained.

A copy of this order be sent to Secretaries, Ministry of Jal Shakti and MoEF, NMCG, CPCB, the Chief Secretaries of all the States/UTs, and SPCBs/PCCs by e-mail.

List for further consideration on 22.04.2020.

Adarsh Kumar Goel, CP

S.P Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

Saibal Dasgupta, EM

December 06, 2019  
Original Application No. 673/2018  
SN & DV

Concurrence of Justice K. Ramakrishnan, Judicial Member and Mr.  
Saibal Dasgupta, Expert Member has been received by e-mail.

(Court Master)

