

BEFORE THE NATIONAL GREEN TRIBUNAL

Original Application No. 98/2024 (SZ)

Earlier OA No. 158/2024(Principal Bench)

In the case of:

Tribunal on its own motion SUO
MOTU Based on the news item in
Bangalore Mirror dt : 10.01.2024 titled,
"Once upon a River..."

And

The Chief Secretary

State of Karnataka and Ors

...Respondents

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Place: Bangalore



Date : 12.08.2024

**Advocate for Karnataka State Pollution Control Board
(Respondent No. 2)**

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**REPLY ON BEHALF OF KARNATAKA STATE POLLUTION CONTROL
BOARD – RESPONDENT No. 2**

1. The present Original Application came to be registered by the Hon'ble NGT in the exercise of its suo moto power based on the news item titled 'Once Upon a River' published in Bangalore Mirror dated 10.01.2024.
2. The afore-said news item disclosed the poor quality of rivers across State of Karnataka. As per the said news item, the recent water quality analysis of 12 rivers in the State reveal that nine were having stretches with poor water quality (class D). The 12 rivers monitored under the central government's National Water Monitoring Programme (NWMP) include Arkavathi Lakshmantirtha, Tungabhadra, Bhadra, Cauvery, Kabini, Kagina, Krishna, Shimsha, Bhima, Netravati and Tunga. The cause of poor quality is stated to be rapid population growth, immense pressure from urbanisation, or inaction of authorities concerned.



3. The news item further revealed that under the afore-said programme, the water quality of these rivers is monitored at 38 locations and out of these, at 19 locations, water quality has been found to be under class 'D', suitable only for propagation of wildlife and fisheries. The water quality report released by the Karnataka State Pollution Control Board (KSPCB) for November 2023 showed that the biological oxygen demand of some of these stretches is as high as 8 mg/l, the faecal coliform level at some stations have reached 2,60,000 MPN/100 ML and total coliform bacteria has increased to 2,80,000 MPN/100 ml. The news article further highlighted the number of industries along the river stretches and failure on part of the authorities to ensure proper treatment of sewage generated by the city.
4. The Hon'ble Principal Bench, in light of its suo moto exercise of power, took up the issue had impleaded Karnataka State Pollution Control Board as Respondent No. 1, the matter was accordingly sent to Southern Bench and came to be registered as the present case.
5. It is relevant to state that the afore-said news article and present petition refer to the Polluted River stretches of Karnataka as identified by the Central Pollution Control Board (Hereinafter referred as 'CPCB') in 2017-18. The CPCB has identified 351 polluted river stretches across India out of which 17 belong to the State of Karnataka.

Subject matter has already been dealt by the Hon'ble NGT (PB) in OA No. 673/2018.

6. It is further significant to state that the subject matter of the present petition has already been dealt with by the Hon'ble Principal Bench in OA No. 673/2018. The mentioned OA No. 673/2018 was 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 : CPB". A copy of the order in OA No. 673/2018 dated 20.09.2018 has been enclosed as **Document No. 1** for the kind perusal of this Hon'ble Court.



7. On 22.02.2021, the Hon'ble NGT (PB) had finally disposed the matter by issuing the following directions:
- i. In the light of observations in Para 38 above, MoJS may devise an appropriate mechanism for more effective monitoring of steps for control of pollution and rejuvenation of all polluted river stretches in the country. The said mechanism may be called "National River Rejuvenation Mechanism" (NRRM) or given any other suitable name. NRRM may also consider the observations with regard to setting up of National/State/District Environment Data Grid at appropriate levels as an effective monitoring strategy.
 - ii. Chief Secretaries of all States/UTs and PCBs/PCCs must work in mission mode for strict compliance of timelines for commencing new projects, completing ongoing projects and adopting interim phyto/bio-remediation measures, failing which compensation in terms of earlier orders be deposited with the MoJS, to be utilised in the respective States as per action plan to be approved by the NRRM. Other steps in terms of action plans for abatement of pollution and rejuvenation of rivers, include preventing discharge or dumping of liquid and solid waste, maintaining flow, protecting floodplains, using treated sewage for secondary purposes, developing biodiversity parks, protecting water bodies, regulating ground water extraction, water conservation, maintaining water quality etc. be taken effectively. The process of rejuvenation of rivers need not be confined to only 351 stretches but may be applicable to all small, medium and big polluted rivers, including those dried up.
 - iii. The Chief Secretaries of all States/UTs may personally monitor progress at least once every month and the NRRM every quarter. (
 - iv. Directions of this Tribunal in earlier order, the last being dated 21.9.2020 are reiterated.
 - v. The NRRM and the Chief Secretaries of all the States/UTs may take into account the observations in Paras 24 to 38 above.



- vi. In view of discussion in para 38 above, it is made clear that accountability for failure to comply with the direction for payment of compensation will be of the concerned Chief Secretaries under Sections 25, 26, 28 and 30 of the NGT Act, 2010. The MoJS or any other aggrieved person will be free to take remedies by way of initiating prosecution or execution.

A Copy of the NGT order in OA No. 373/2018 dated 22.02.2021 has been enclosed as **Document No. 2** for the kind perusal of this Hon'ble Court.

Actions taken by KSPCB

8. It is relevant to state that upon the directions of the Hon'ble NGT (PB), action plans were prepared by respective State Governments as identified by the CPCB. At present, the KSPCB is submitting its monthly report to the Central Monitoring Committee.
9. The KSPCB is regularly reviewing the monthly progress reports from all the stakeholders such as BWSSB, KUIDFC, DMA and irrigation departments. The KSPCB is further continuously perusing with different stakeholders for providing STPs for the treatment of sewage generated from the cities located on the banks of polluted river stretches and to establish solid waste treatment facilities. It is noted that there is no industrial discharge into the rivers.
10. The Central Pollution Control board (CPCB) had reviewed the progress in the implementation of the action plan and has accordingly, in November 2022, CPCB prepared a report titled as '**Polluted River Stretches for Restoration of Water Quality**'. The report was prepared with the following purpose:
 - i. The water quality database generated over a period of time indicated that rivers/ river water is not polluted or contaminated throughout the length but only at few locations wherein the self- assimilative capacity of rivers is unable to restore the water quality are polluted.



These stretches/ locations on rivers are deeply impacted with various contaminants which are required to be captured and controlled.

- ii. To streamline the efforts and resource utilization for restoration of water quality to pristine level, identification of polluted river stretches was a prerequisite.
- iii. Since the year 2009, based on the river water quality monitored by State Pollution Control Boards & Pollution Control Committees, CPCB has been identifying polluted river stretches (PRS) in the country.
- iv. For identification of PRS, the water quality data for river monitoring locations with respect to Biochemical Oxygen Demand (BOD) parameter is considered. The locations/ stretches of rivers not meeting with the Primary water quality criteria for outdoor bathing for BOD i.e. more than 3 mg/L are identified as polluted locations or polluted stretches.

A copy of the report prepared by CPCB titled as 'Polluted River Stretches for Restoration of Water Quality' has been enclosed as **Document No. 3** for the kind perusal of this Hon'ble Court.

11. It is relevant to state that the afore-said report was prepared to analyze the water quality data of the years 2019 & 2021. In a positive note, it has been reported that there has been a decrease in the number of identified polluted river stretches which have shown improvement in the water quality that could be attributed to the efforts being made for the development for infrastructure for sewage management, industrial effluent management, waste management and enforcement of regulations for prevention and control of pollution in rivers.

12. The CPCB has hence reported that due to substantial improvement in the water quality five river stretches namely Kali, Yagachi, Malaprabha, Asangi Krishna and Kumaradhara have been deleted and have added another 5 rivers namely, Dakshina Pinakini, Tenpennai, Shravathi, Gangavalli and Aghanashini wherein KSPCB has pleaded to delist Tenpennai as the river stretch does not fall under the state of Karnataka Boundary and the CPCB has accordingly agreed to delist the Tenpennai river stretch. Further, the KSPCB has written to CPCB to also delist Sharavathi, Gangavalli,



Aghanashini, Krishna, Kagina and Nethravathi as the BOD value of the river has not crossed 3mg/litre in the last 4 years.

13. It is relevant to state that once the afore-said rivers are delisted, Karnataka will only have 10 Polluted River stretches. The action plan is being implemented to provide STPs for all cities located on the banks of Polluted River stretches. It is submitted before the CMC that the STPs which are under construction and are in proposed stage will be established by the end of December 2024.
14. It is relevant to state that the present status as of December 2023 as submitted to CMC by KSPCB shows that KSPCB has established 68 monitoring stations and river water quality is analyzed on monthly basis. It is further proposed to establish 77 Real Time Water Quality Monitoring stations all along the 17 polluted river stretches for continuous monitoring of water quality on real time basis.
15. The present application pertains to the same river stretches which is being monitored by the KSPCB as per the directions given by the Hon'ble NGT, New Delhi in OA No. 673/2018. The progress has already been made by the KSPCB and it is expected that the on-going establishment of STP will be completed as per the proposed status by the end of December 2024.

Place: Bangalore



Date : 12.08.2024

**Advocate for Karnataka State Pollution Control Board
(Respondent No. 2)**

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...Respondents

VERIFYING AFFIDAVIT

I, Vijaykumar T Kadakabhavi aged 58, years S/o Tammanna, Chief Environmental Officer, the authorized representative of Karnataka State Pollution Board in the instant application do hereby solemnly affirm and state on oath as follows:

1. I am the authorized representative of the Karnataka State Pollution Board as Respondent No. 3 in the instant petition. I know the facts of the case and hence swear to this affidavit.
2. I submit that the averments made in para-No. 1 to 15_ of the replies are true and correct to the best of my knowledge, information and belief.
3. I state that Annexure 1 to 3 produced, include certified copies and true copies of the originals.

I swear that the contents made out in the above paragraphs 1 to 3 are true and correct to the best of my knowledge, information, and belief.

Identified by

Advocate.

Place: 9/8/2024



DEPONENT

SWORN TO BEFORE ME

SWORN TO BEFORE ME

CHANDRASHEKHARIAH. S.

Advocate & Notary

9/7, Kemppegowda Street,

3rd Cross, Muthurayaswamy Extension,
Sunkadakatte, Bangalore - 560 091.

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Reg. No.....104 Date.....9/8/2024

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

DATED: 20TH SEPTEMBER, 2018.

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"¹.
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 Report², 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.

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

² <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.*³, 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.*⁴, 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.*⁵, (*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:

³ (1987) 4 SCC 463 ¶14

⁴ (1988) 1 SCC 471

⁵ (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.*⁶, 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"⁷, 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.*⁸, 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

⁶ (1997) 2 SCC 87

⁷(2009) 17 SSC 720

⁸ (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*⁹, 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

⁹ 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*¹⁰.

¹⁰O.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.*¹¹, 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

¹¹O.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.*¹², 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.*¹³, 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

¹²O.A.No. 101/2014

¹³O.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)¹⁴”, 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.*¹⁵, 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

¹⁴O.A. No. 138/2016 (T_{NHRC})

¹⁵ 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.¹⁶ 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.*¹⁷, 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.*¹⁸, 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

¹⁶ Hindon action plan prepared by CPCB is explained in para 46

¹⁷ O.A. No. 125/2018,

¹⁸ 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.*¹⁹, 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.*²⁰, 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

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

²⁰O.A.No. 173 of 2018

considered by the Hon'ble Supreme Court in *TechiTagi Tara Vs. Rajendra Singh Bhandari &Ors.*²¹ 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

²¹ (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.*,²² 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 *Techi 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),

²²O.A No. 56 (T_{HC}) 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 determined 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.²³ 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

²³ <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 |
| Grand Total | 45 | 16 | 43 | 72 | 175 | 351 |

| 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 | UMKHAHRAH | 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 NAGAR TO 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 | MOTHROWALA TO RAIWALA | 37.0 | I |
| | KICHHA | ALONG KICHHA | 28.0 | II |
| WEST BENGAL | VINDHADHARI | HAROA BRIDGE TO MALANCHA BURNING 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, DHEMA JI | 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 |
| | GUJARAT | DHADAR | KHOTDA TO CHANDPURA | 16.0 |
| 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 |
| MESHA | | ALONG SHAMLAJI | 4.0 | V |
| MINDHOLA | | ALONG SACHIN | 6.0 | V |
| NARMADA | | GARUDESHWAR TO BHARUCH | 5.0 | V |
| HIMACHAL PRADESH | SIRSA | NALAGARH TO SOLAN | 8 - 16 | III |
| | ASHWANI | ALONG YASHWANT NAGAR | 3.2 | V |
| | BEAS | KULLU TO DEHRAGOPIPUR | 6.0 | V |

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|-----------------|-----------------------|--|------------|-----|
| | 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 |

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| | 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 BOUNDRY | 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 | |

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| | 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 BANKLAGI | 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 |
| MEGHALAYA | WANGJING | WANGJING TO HEIROK | 4.1-4.3 | V |
| | 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 |
| MIZORAM | MYNTDU | JOWAI TO PAMHADEM | 5.2 | V |
| | 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 | |

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| | 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 BHUBHNEISHWAR, 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 BURTUKK | 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 |

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| | | 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:

- 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 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 19th December, 2018.



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

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

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

New Delhi
September 20, 2018

Item Nos. 01&02

Court No. 1

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

Original Application No. 593/2017

(With report of CMC dated 12.02.2021,
reports of OC dated 12.02.21 & 13.02.21)

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

Date of hearing: 22.02.2021

**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**

Respondent(s): Mr. D.P. Mathuria, Executive Director, NMCG
Mr. Raj Kumar, Advocate for CPCB
Mr. Pradeep Misra and Mr. Daleep Dhyani, Advocates for UPPCB
Ms. Madhumita Bhattacharjee, Advocate for State of West Bengal
Mr. Avijit Roy, Advocate for Assam PCB

ORDER

1. These two matters are being dealt with together in continuation of order dated 21.9.2020. **The first matter is follow up of judgment of the Hon'ble Supreme Court dated 22.02.2017 in Paryavaran Suraksha Samiti Vs. Union of India¹**, which mandates establishment and functioning of requisite ETPs/CETPs/STPs by 31.3.2018 and in default,

¹(2017) 5 SCC 326

to take coercive measures. The judgement also laid down rigid timelines, enforcement mechanism and sources of funding. Even in absence of the said judgement, doing so is the mandate of the Water (Prevention and Control of Pollution) Act, 1974. The said Act established Central and State Pollution Board for prevention, abatement and control of rivers and streams and to restore wholesomeness of watercourses and controlling discharge of domestic and industrial wastes. Penalties are provided for contravention of the provisions of the Act. The Constitution of India under Article 243 W read with 12th Schedule entrusts responsibility of “*public health, sanitation conservancy and solid waste management*” to Municipalities. The Hon’ble Supreme Court held that the States will provide necessary support to such local bodies. This is to be monitored by the PCBs and the Secretaries, Environment in States and thereafter by the NGT. This Tribunal has been accordingly monitoring compliance in the last four years but regrettably with little progress as will be shown by the statistics. We propose to direct further monitoring by the Executive authorities henceforth for the reasons in this order.

2. **The second matter relates to remedial action for rejuvenation of 351 identified polluted river stretches in the country**, for which major step is preventing discharge of industrial and domestic waste in rivers or drains connected thereto. On this aspect both the matter overlap. **Other steps include preventing dumping of solid waste, plastic, hazardous, bio-medical and electronic wastes, regulation of flood plain zones, by keeping catchment areas free from encroachments, maintaining environment flow by adopting appropriate water conservation practices and other steps, controlling extraction of ground water, afforestation etc.** The Tribunal required setting of River Rejuvenation Committees (RRCs) in all States for the purpose. They were

to prepare and execute action plans, with budgets and timelines to give effect to the mandate of law. The Chief Secretaries of all States/UTs are to monitor compliance at State level and the Central Monitoring Committee (CMC) headed by the Secretary Jal Shakti, GoI, with CPCB and NMCG is to monitor compliance at national level. The situation continues to be grim, as has been repeatedly observed by this Tribunal. The polluted river stretches include Ganga and Yamuna, which have been dealt with by separate orders, apart from some other rivers which have been dealt with by separate orders individually, to which reference will be made. **This is affecting aquatic life, safety of food chain on account of contamination of water and resulting in drinking water crisis in the country. There are also large number of deaths and diseases due to water contamination. Further monitoring is proposed to be by the authorities themselves in terms of directions at the end of the order.**

3. **We now proceed to give the procedural history of the two matters, the status reports filed and directions for future compliance.**

Original Application No. 593/2017

4. Since this matter is follow up of the judgement of the Hon'ble Supreme Court in **Paryavaran Suraksha Samiti Vs. Union of India**, supra, directions in the judgement are quoted below:

***“7. Having effectuated the directions recorded in the foregoing paragraphs, the next step would be, to set up common effluent treatment plants. We are informed, that for the aforesaid purpose, the financial contribution of the Central Government is to the extent of 50%, that of the State Government concerned (including the Union Territory concerned) is 25%. The balance 25%, is to be arranged by way of loans from banks. The above loans, are to be repaid, by the industrial areas, and/or industrial clusters. We are also informed that the setting up of a common effluent treatment plant, would ordinarily take approximately two years (in cases where the process has yet to be commenced).*”**

The reason for the above prolonged period, for setting up “common effluent treatment plants”, according to the learned counsel, is not only financial, but also, the requirement of land acquisition, for the same.

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

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

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.**

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

16. *It however needs to be clarified, that the instant directions and time lines, shall not in any way dilute any time lines and directions issued by Courts or Benches of the National Green Tribunal, hitherto before, wherein the postulated time lines would expire before the ones expressed through the directions recorded above. **It is clarified, that the time lines, expressed hereinabove will be relevant, only in situations where there are no prevalent time line(s), and also, where a longer period, has been provided for.***

(emphasis supplied)

5. The Tribunal issued notice to all States/UTs, PCBs/ PCCs, and sought status reports. It considered the status reports about the gaps in waste generation and setting up of requisite number of treatment plants. The CPCB was directed to prepare an action plan for compliance of the order of the Hon’ble Supreme Court 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, 21.05.2020 and 21.09.2020.**

6. By order of **28.08.2019 in OA 593/2017, 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 compensation regime discussed in the said order is quoted below:

"14. A report has also been prepared on the scale of environmental compensation to be recovered from individual/authorities for causing pollution or failure for preventing causing pollution, apart from illegal extraction of ground water, failure to implement Solid waste Management Rules, damage to environment by mining and steps taken to explore preparation of an annual environmental plan for the country. Extracts from the report which are considered significant for this order are:

"I. Environment Compensation to be levied on Industrial Units

Recommendations

The Committee made following recommendations:

1.5.1 To begin with, Environmental Compensation may be levied by CPCB only when CPCB has issued the directions under the Environment (Protection) Act, 1986. In case of a, band c, Environmental Compensation may be calculated based on the formula "EC= Pl x N x Rx S x LF", wherein, Pl may be taken as 80, 50 and 30 for red, orange and green category of industries, respectively, and R may be taken as 250. Sand LF may be taken as prescribed in the preceding paragraphs

1.5.2 In case of d, e and f, the Environmental Compensation may be levied based on the detailed investigations by Expert Institutions/Organizations.

1.5.3 The Hon'ble Supreme Court in its order dated 22.02.2017 in the matter of Paryavaran Suraksha Samiti and another v/s Union of India and others {Writ

Petition (Civil) No. 375 of 2012), directed that all running industrial units which require "consent to operate" from concerned State Pollution Control Board, have a primary effluent treatment plant in place. Therefore, no industry requiring ETP, shall be allowed to operate without ETP.

1.5.4 EC is not a substitute for taking actions under EP Act, Water Act or Air Act. In fact, units found polluting should be closed/prosecuted as per the Acts and Rules.

II. Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in NCR.

Table No. 2.1: Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in Delhi-NCR.

| Activity | State Of Air Quality | Environmental Compensation (₹) |
|---|------------------------------|---------------------------------------|
| Industrial Emissions | <i>Severe +/-Emergency</i> | <i>Rs 1.0 Crore</i> |
| | <i>Severe</i> | <i>Rs 50 Lakh</i> |
| | <i>Very Poor</i> | <i>Rs 25 Lakh</i> |
| | <i>Moderate to Poor</i> | <i>Rs 10 Lakh</i> |
| Vapour Recovery System (VRS) at Outlets of Oil Companies | | |
| i. Not installed | <i>Target Date</i> | <i>Rs 1.0 Crore</i> |
| ii. Non functional | <i>Very poor to Severe +</i> | <i>Rs 50.0 Lakh</i> |
| | <i>Moderate to Poor</i> | <i>Rs 25.0 Lakh</i> |
| Construction sites (Offending plot more than 20,000 Sq.m.) | <i>Severe +/-Emergency</i> | <i>Rs 1.0 Crore</i> |
| | <i>Severe</i> | <i>Rs 50 Lakh</i> |
| | <i>Very Poor</i> | <i>Rs 25 Lakh</i> |
| | <i>Moderate to Poor</i> | <i>Rs 10 Lakh</i> |
| Solid waste/ garbage dumping in Industrial Estates | <i>Very poor to Severe +</i> | <i>Rs 25.0 Lakh</i> |
| | <i>Moderate to Poor</i> | <i>Rs 10.0 Lakh</i> |
| Failure to water sprinkling on unpaved roads | | |
| a) Hot-spots | <i>Very poor to Severe +</i> | <i>Rs 25.0 Lakh</i> |
| b) Other than Hot-spots | <i>Very poor to Severe +</i> | <i>Rs 10.0 Lakh</i> |

III. Environmental Compensation to be levied in case of failure of preventing the pollutants being discharged in water bodies and failure to implement waste management rules:

Table No. 3.3: Minimum and Maximum EC to be levied for untreated/partially treated sewage discharge

| Class of the City/Town | Mega-City | Million-plus City | Class-I City/Town and others |
|-------------------------------|------------------|--------------------------|-------------------------------------|
| | | | |

| | | | |
|--|-------------------------|-------------------------|-----------------------|
| Minimum and Maximum values of EC (Total Capital Cost Component) recommended by the Committee (Lacs Rs.) | Min. 2000 Max. 20000 | Min. 1000 Max. 10000 | Min. 100 Max. 1000 |
| Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day) | Min. 2 Max. 20 | Min. 1 Max. 10 | Min. 0.5 Max. 5 |

Table No. 3.4: Minimum and Maximum EC to be levied for improper municipal solid waste management

| Class of the City/Town | Mega-City | Million-plus City | Class-I City/Town and others |
|--|-------------------------|--------------------------|-------------------------------------|
| Minimum and Maximum values of EC (Capital Cost Component) recommended by the Committee (Lacs Rs.) | Min. 1000 Max. 10000 | Min. 500 Max. 5000 | Min. 100 Max. 1000 |
| Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day) | Min. 1.0 Max. 10.0 | Min. 0.5 Max. 5.0 | Min. 0.1 Max. 1.0 |

3.3 Environment Compensation for Discharge of Untreated/Partially Treated Sewage by Concerned Individual/ Authority:

BIS 15-1172:1993 suggests that for communities with population above 100,000, minimum of 150 to 200 lpcd of water demand is to be supplied. Further, 85% of return rate (CPHEEO Manual on Sewerage and Sewage Treatment Systems, 2013), may be considered for calculation of total sewage generation in a city. CPCB Report on "Performance evaluation of sewage treatment plants under NRCD, 2013", describes that the capital cost for 1 MLD STP ranges from 0.63 Cr. to 3 Cr. and O&M cost is around Rs. 30,000 per month. After detail deliberations, the Committee suggested to assume capital cost for STPs as Rs. 1.75 Cr./MLD (marginal average cost). Further, expected cost for conveyance system is assumed as Rs. 5.55 Cr./MLD (marginal average cost) and annual O&M cost as 10% of the combined capital cost. Population of the city may be taken as per the latest Census of India. Based on these assumptions, Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:

EC= Capital Cost Factor x [Marginal Average Capital Cost for Treatment Facility x (Total Generation-Installed Capacity) + Marginal Average Capital Cost for Conveyance Facility x (Total Generation -Operational Capacity)]+ O&M Cost Factor x Marginal Average O&M Cost x (Total Generation- Operational Capacity) x No. of Days for which facility was not available + Environmental Externality x No. of Days for which facility was not available

Alternatively;

EC (Lacs Rs.)= [17.S{Total Sewage Generation - Installed Treatment Capacity)+ 55.S{Total Sewage Generation-Operational Capacity}] + 0.2(Sewage Generation-Operational Capacity) x N + Marginal Cost of Environmental Externality x (Total Sewage Generation-Operational Capacity) X N

Where; N= Number of days from the date of direction of CPCB/SPCB/PCC till the required capacity systems are provided by the concerned authority

Quantity of Sewage is in MLD

xxx xxxxxx

3.4 Environment Compensation to be Levied on Concerned Individual/Authority for Improper Solid Waste Management:

Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:

EC = Capital Cost Factor x Marginal Average Cost for Waste Management x (Per day waste generation-Per day waste disposed as per the Rules) + O&M Cost Factor x Marginal Average O&M Cost x (Per day waste generation-Per day waste disposed as per the Rules) x Number of days violation took place + Environmental Externality x N

Where;

Waste Quantity in tons per day (TPD)

N= Number of days from the date of direction of CPCB/SPCB/PCC till the required capacity systems are provided by the concerned authority

Simplifying;

EC (Lacs Rs.) = 2.4(Waste Generation - Waste Disposed as per the Rules) +0.02 (Waste Generation Waste Disposed as per the Rules) x N + Marginal Cost of Environmental Externality x

(Waste Generation - Waste Disposed as per the Rules) x N

XXX XXXXXX

IV. Environmental Compensation in Case of Illegal Extraction of Ground Water

4.5 Formula for Environmental Compensation for illegal extraction of ground water

The committee decided that the formula should be based on water consumption (Pump Yield & Time duration) and rates for imposing Environmental Compensation for violation of illegal abstraction of ground water. The committee has proposed following formula for calculation of Environmental Compensation (EC_{Gw}):

| |
|---|
| $EC_{Gw} = \text{Water Consumption per Day} \times \text{No. of Days} \times \text{Environmental Compensation Rate for illegal extraction of ground water } \{ECR_{Gw}\}$ |
|---|

Where water Consumption is in m^3/day and ECR_{Gw} in $Rs./m^3$

Yield of the pump varies based on the capacity/power of pump, water head etc. For reference purpose, yield of the pump may be assumed as given in **Annexure-VI**.

Time duration will be the period from which pump is operated illegally.

In case of illegal extraction of ground water, quantity of discharge as per the meter reading or as calculated with assumptions of yield and time may be used for calculation of EC_{Gw} .

4.6 Environmental Compensation Rate (ECR_{Gw}) for illegal use of Ground Water:

The committee decided that the Environmental Compensation Rate (ECR_{Gw}) for illegal extraction of ground water should increase with increase in water consumption as well as water scarcity in the area. Further, ECR_{Gw} are kept relaxed for drinking and domestic use as compared to other uses, considering the basic need of human being.

As per CGWB, safe, semi-critical, critical and over-exploited areas are categorized from the ground water resources point of view (CGWB, 2017). List of safe, semi-critical, critical and over-exploited areas are available on the website of CGWB and can be accessed from <http://cgwa->

noc.gov.in/LandingPage/NotifiedAreas/CategorizationOfAssessmentUnits.pdf#ZOOM=150.

Environmental Compensation Rates (ECR_{Gw}) for illegal use of ground water (ECR_{Gw}) for various purposes such as drinking/domestic use, packaging units, mining and industrial sectors as finalized by the committee are given in tables below:

4.6.1 ECR_{Gw} for Drinking and Domestic use:

Drinking and Domestic use means uses of ground water in households, institutional activity, hospitals, commercial complexes, townships etc.

| SI. No. | Area Category | Water Consumption (m^3/day) | | | |
|--|----------------|---------------------------------|---------|----------|------------|
| | | <2 | 2 to <5 | 5 to <25 | 25 & above |
| Environmental Compensation Rate (ECR_{Gw}) in Rs./m^3 | | | | | |
| 1 | Safe | 4 | 6 | 8 | 10 |
| 2 | Semi Critical | 12 | 14 | 16 | 20 |
| 3 | Critical | 22 | 24 | 26 | 30 |
| 4 | Over-Exploited | 32 | 34 | 36 | 40 |
| Minimum EC_{Gw}=Rs 10,000/- (for households) and Rs. 50,000 (for institutional activity, commercial complexes, townships etc.) | | | | | |

4.6.2 ECR_{Gw} for Packaged drinking water units:

| SI. No. | Area Category | Water Consumption (m^3/day) | | | |
|--|----------------|---------------------------------|--------------|---------------|--------------|
| | | <200 | 200 to <1000 | 1000 to <5000 | 5000 & above |
| Environmental Compensation Rate (ECR_{Gw}) in Rs./m^3 | | | | | |
| 1 | Safe | 12 | 18 | 24 | 30 |
| 2 | Semi critical | 24 | 36 | 48 | 60 |
| 3 | Critical | 36 | 48 | 66 | 90 |
| 4 | Over-exploited | 48 | 72 | 96 | 120 |
| Minimum EC_{Gw}=Rs 1,00,000/- | | | | | |

4.6.3 ECR_{Gw} for Mining, Infrastructure and Dewatering Projects

| SI. No. | Area Category | Water Consumption (m^3/day) | | | |
|--|----------------|---------------------------------|--------------|---------------|--------------|
| | | <200 | 200 to <1000 | 1000 to <5000 | 5000 & above |
| Environmental Compensation Rate (ECR_{Gw}) in Rs./m^3 | | | | | |
| 1 | Safe | 15 | 21 | 30 | 40 |
| 2 | Semi critical | 30 | 45 | 60 | 75 |
| 3 | Critical | 45 | 60 | 85 | 115 |
| 4 | Over-exploited | 60 | 90 | 120 | 150 |
| Minimum EC_{Gw}=Rs 1,00,000/- | | | | | |

4.6.4 ECR_{Gw} for Industrial Units:

| SI. No. | Area Category | Water Consumption (m^3/day) | | | |
|---|---------------|---------------------------------|--------------|---------------|--------------|
| | | <200 | 200 to <1000 | 1000 to <5000 | 5000 & above |
| Environmental Compensation Rate (ECR_{Gw}) in | | | | | |
| 1 | Safe | 20 | 30 | 40 | 50 |
| 2 | Semi critical | 40 | 60 | 80 | 100 |
| 3 | Critical | 60 | 80 | 110 | 150 |

| | | | | | |
|--|----------------|----|-----|-----|-----|
| 4 | Over-exploited | 80 | 120 | 160 | 200 |
| Minimum EC_{Gw} = Rs 1,00,000/- | | | | | |

4.8 Recommendations

The committee has given following recommendations:

- The minimum Environmental Compensation for illegal extraction of ground water for domestic purpose will be Rs. 10,000, for institutional/commercial use will be 50,000 and for other uses will be 1,00,000.
- In case of fixation of liability, it always lies with current owner of the premises where illegal extraction is taking place.
- Time duration may be assumed to be one year in case where no evidence for period of installation of bore well could be established.
- For Drinking and Domestic use, where metering is not present but storage tank facility is available, minimum water consumption per day may be assumed as similar to the storage capacity of the tank.
- For industrial ground water use, where metering is not available, water consumption may be assumed as per the consent conditions. Further, where in case industry is operating without consent, water consumption may be calculated based on the plant capacity (on the recommendation of SPCB/PCC, if required). SPCB/PCC may bring the issue of illegal extraction of ground water in industries in to the notice of CGWA for appropriate action by CGWA.
- Authorities assigned for levy EC and taking penal action are listed below:

| S. No. | Actions | Authority |
|--------|---|--|
| 1. | To seal the illegal bore-well/tube-well to stop extraction of water and further closure of project | District Collector |
| 2. | To levy EC _{Gw} as per prescribed method | District Collector, |
| 3. | To levy EC on water pollution, as per the method prescribed in report of CPCB- "EC on industrial pollution" | CPCB/SPCB/PCC |
| 4. | Prosecution of violator | CGWA under EP Act SPCB/PCC under Air and Water Act |

- CGWA may maintain a separate account for collection and utilization of fund, collected through the prescribed methodology in this report.”

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.**

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)

7. Thereafter on **21.05.2020, 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."

8. The matter was last considered on 21.09.2020 in light of the CPCB report dated 16.09.2020 giving the river basin wise data and also the status of industrial and sewage pollution load. The consideration on this aspect in the order dated 21.09.2020 is as follows:-

“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 noncomplying**. 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 noncompliance. 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 | 1 | 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 |
| TOTAL | | 259 | 35 | 428 |

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 | 1 | 1 |
| 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. | Chalakydy | 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. | Girna | 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. | Karuwannoor | Kerala | 0 | 0 | 1 |
| 36. | Khira 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 |
| 74. | Titur | Maharashtra | 1 | 0 | 1 |
| 75. | Tuirial | Mizoram | 1 | 1 | 0 |
| 76. | Ulhas | Maharashtra | 3 | 0 | 3 |
| 77. | Umiam | Meghalaya | 1 | 1 | 1 |
| 78. | Una Khad | Himachal Pradesh | 1 | 0 | 0 |

| | | | | | |
|-----|--------------|----------------|-----|----|-----|
| 79. | Uppanaru | Tamil Nadu | 0 | 0 | 1 |
| 80. | Valapattanam | Kerala | 0 | 0 | 1 |
| 81. | Wainganga | Maharashtra | 5 | 3 | 5 |
| 82. | Wardha | Maharashtra | 3 | 2 | 2 |
| 83. | Wena | Maharashtra | 1 | 0 | 1 |
| 84. | Yamuna | Delhi | 41 | 2 | 3 |
| 85. | NA | Break-up given | 88 | 8 | 325 |
| | | TOTAL | 259 | 35 | 428 |

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

| State/UT | Waste processing facilities | Landfills | Dumpsites |
|------------------|-----------------------------|---------------------------|------------|
| 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 |
| Total | 88 | 8 | 325 |

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.

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."

Original Application No. 673/2018

9. The second matter being OA 673/2018 overlaps with the first on the subject of preventing water pollution. It relates to directions for abatement of pollution and rejuvenation of 351 polluted river stretches. The matter has been earlier dealt with mainly by orders dated 20.9.2018, 19.12.2018, 8.4.2019, 28.8.2019, 6.12.2019,

29.6.2020 and lastly on 21.9.2020. We may first refer to order dated 6.12.2019 which also makes reference to earlier orders:

“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’². 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 Report³, 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 to 5 xxxxxx.....xxx

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.⁴

“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,

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

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

⁴ State of Orissa v. Govt. of India, (2009) 5 SCC 492

industrial effluents are being poured in rivers. Sewage is also being directly put in rivers contributing to the river water pollution. We direct the Pollution Control Boards of the various States as well as the Central Pollution Control Board and various Governments to place before us the data and material with respect to various rivers in the concerned States, and what steps they are taking to curb the pollution in such rivers and to management as to industrial effluents, sewage, garbage, waste and air pollution, including the water management. We club the ending case of water management with this matter.⁵

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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).⁶ Following further information also needs to be noted:*

(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 water⁷. 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 GDP⁸. 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***

⁵ M.C. Mehta Vs Union of India- W.P. (Civil) No. 13029/1985 dated 25.11.2019

⁶ 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.

⁷Source: WRI Aqueduct; WHO Global Health Observatory

⁸Source: McKinsey & WRG, 'Charting our water future', 2009; World Bank; Times of India

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 people⁹ are facing acute water shortages. Critical groundwater resources – which account for 40% of our water supply – are being depleted at unsustainable rates.¹⁰*
- (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, and 21 major cities are expected to run out of groundwater as soon as 2020, affecting ~100 million people¹¹.**
- (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 2017. Of this, acute diarrhoeal diseases caused maximum deaths followed by viral hepatitis, typhoid and cholera.¹²**

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 2013.¹³**

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 Treatment Plants (CETPs), Sewage Treatment Plants (STPs), and adopting other anti-pollution measures, satisfactory situation has not been

⁹ Source: World Resource Institute

¹⁰ Source: World Resource Institute

¹¹ Source: UN Water, ‘Managing water under uncertainty and risk’, 2010; World Bank (Hindustan Times, The Hindu).

¹² <https://www.indiaspend.com/diarrhoea-took-more-lives-than-any-other-water-borne-disease-in-india-58143/>

¹³ <http://pib.nic.in/newsite/PrintRelease.aspx?relid=106612>

achieved. As per CPCB's report 2016¹⁴, 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.

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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 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. 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.”

The Tribunal has constituted a Committee headed by Niti Ayog on the subject to give a report within two months.

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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)**

¹⁴ http://www.sulabhervis.nic.in/Database/STST_wastewater_2090.aspx July 16, updated on December 6, 2016

- 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_{NHRC}), “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.”**

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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 sillage 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.

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.

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.

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:-

“

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 coordinate 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.**

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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.**¹⁵

“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.”¹⁶

“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.”¹⁷

“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

¹⁵ INDIAN COUNCIL FOR ENVIRO-LEGAL ACTION Vs. UNION OF INDIA AND OTHERS (1996) 5 SCC 281

¹⁶ A.P. Pollution Control Board II v. Prof. M.V. Nayudu, (2001) 2 SCC 62

¹⁷ M.C. Mehta v. Union of India, (2006) 3 SCC 399 – Public functionaries

*direction. It is their bounden duty to provide civic amenities, and also to see that self-created bankruptcy does not come in the discharge of the statutory obligation which are necessary for existence of human life. We have seen during the course of the arguments that one State is passing the burden upon the Centre and then it is stated on behalf of the Central Government that they have framed scheme and it for the State Governments to implement it. We expect not only the 'policy making' but also its 'implementation'. Let the States of Punjab, Haryana, Uttar Pradesh and the Government of NCT of Delhi respond, due to the air pollution, why the concerned Government and its concerned machinery, from top to bottom, should not be asked to compensate the citizens of Delhi and adjoining areas for various diseases which are being caused and sufferings and troubles which are being faced and the report indicates the life span is being shortened. Let show cause notice be issued to the various State Governments, and to the Chief Secretaries, to submit reply within six weeks. Let the matter be listed for consideration on 17.01.2020. The Chief Secretaries to the States of Punjab, Haryana, Uttar Pradesh and Government of NCT of Delhi be personally present on that date."*¹⁸

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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.*

¹⁸ 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.**

18. **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.”**

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 Court¹⁹ 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**

¹⁹Para 10-13 in *Paryavaran Suraksha Samiti Vs. Union of India*, *Supra*

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 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."

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 directed²⁰ 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 directed²¹ 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 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.

²⁰ (2017) 5 SCC 326

²¹ Order dated 28.08.2019 in Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors., O.A No. 593/2017

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.”²²

“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 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

²²O.A No. 200/2014 order dated 22.08.2019

to recover the said amount from erring officers/contractors.”

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

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://cpcb.nic.in/mcncngt-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.

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 / 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 V | Action Plans received w.r.to P-III to V | |
| 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 |
| Grand Total | 351 | 45 | 45 | 16 | 16 | 290 | 290 | 351 |

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 |
| DELHI | 1 | 1 | 0 | 1 | 1 | 0 |
| 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 | - | 1 |
| 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 |
| TOTAL | 61 | 45 | 16 | 61 | 01 | 60 |

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 |
| DELHI | YAMUNA | Not Recommended |
| GUJARAT | 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 |

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 — III 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.

| 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 P-1 / 0 | 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 |
| 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 |
| i & 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 | 13 | 14 |
| Madhya Pradesh | 22 | 3 | 3 | 1 | 1 | 18 | 17 | 21 |
| 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 |
| Grand Total | 351 | 45 | 45 | 16 | 16 | 290 | 282 | 343 |

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

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.

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.

10. In the last order dated 21.9.2020, it was observed and directed as follows:-

“

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

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.”

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.”

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.”***

CMC Report dated 12.02.2021

11. Accordingly, the Central Monitoring Committee has filed its report dated 12.02.2021 titled **‘3rd QUARTERLY REPORT OF THE CENTRAL MONITORING COMMITTEE (CMC) IN COMPLIANCE OF THE ORDER DATED 21.09.2020’**. The report refers to the correspondence with the States for preventing and controlling pollution in rivers/ water bodies/ lakes and ensuring that no untreated effluent/ sewage (beyond the prescribed standards) is allowed to be discharged from the ETPs/ CETPs/ STPs. Further reference has been made to the webinar held on 06.11.2020 to discuss approaches and models for waste management. Reference has also been made to discussion with the Niti Aayog to discuss business models to be adopted in Fecal Sludge and Septage Management (FSSM). Webinar held on 19.01.2021 for implementation of FSSM in cities and towns of Ganga basin has also been referred to. The report further mentions the meetings held by the CMC to monitor the progress on 30th September, 2020, 9th November, 2020 and 5th January, 2021 apart from other meetings with the Senior level Officials of the States/UTs to discuss States specific issues. It is further mentioned that the implementation of projects is being monitored in States which is reviewed at Central level. Progress reports were obtained in respect of action plans of States/UTs to prevent pollution of rivers/water bodies and to take action against the violators. **The CMC also sought information about coastal pollution**

from 13 States/UTs. Further, grievance module for addressing the issues of sewage/ effluent has been developed and made online on NMCG website, the States/ UTs have been directed to regularly monitor and update the status. Report also deals with use of treated water for secondary purposes.

12. The report thereafter gives the status as follows:

“Existing Sewage Infrastructure

48,004 MLD of sewage (from urban settlements) is being generated in 31 States/ UTs and 30,001 MLD capacity of STPs (1249 nos.) is existing which approximates to about 62% of sewage generation. Against the existing capacity, only 56% of the capacity is being utilized for treatment of municipal sewage. This leaves a gap of 17,027 MLD in treatment capacity. The details of sewage generation, existing sewage treatment capacity, its utilization and gap thereof is presented in Table-1.

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

| No. | State | Sewage Generation (in MLD) | Existing STP (capacity in MLD and No.) | Capacity Utilization (In MLD) | Gap in Treatment at present (in MLD) |
|-----|--|----------------------------|--|-------------------------------|---------------------------------------|
| 1 | Andhra Pradesh | 1463.20 | 515.85 (43 STPs) | 473.77 (91%) | 947.35 |
| 2 | Assam | 435.53 | 0 | 0 | 435.53 |
| 3 | Bihar | 651.5 | 230 (6 STPs) | 100 (44%) | 421.5 |
| 4 | Chhattisgarh | 600 | 73.1 (3 STPs) | 6 (8%) | 526.9 |
| 5 | Daman, Diu And Dadra Nagar Haveli | 21.2 | 17.21 (2 STPs) | 6.1 (35%) | 3.9 |
| 6 | Delhi | 3273 | 2715 (35 STPs) | 2432 (90%) | 558 |
| 7 | Goa | 112.53 | 78.35 (9 STPs) | 29 (37%) | 34.18 |
| 8 | Gujarat | 4003 | 3485 (73 STPs) | 2739 (78%) | 518 |
| 9 | Haryana | 1267 | 1892 (155 STPs) | 1189 (62%) | - |
| 10 | Himachal Pradesh | 163.5 | 120.5 (65 STPs) | 76.8 (64%) | 43 |

| | | | | | |
|--------------|----------------------------|------------------|---|--------------|------------------|
| 11 | Jammu & Kashmir | 523 | 139 (15 STPs) | 82.9 (60%) | 383.08 |
| 12 | Jharkhand | 452 | 108 (14 STPs) | 83% | 343.8 |
| 13 | Karnataka | 3356.5 | 2242 (125 STPs) | 1513.5 (67%) | 1114 |
| 14 | Kerala | 317 | 124.15 (13 STPs) | 91.12 (73%) | 192 |
| 15 | Madhya Pradesh | 2183.65 | 618.23 (23 STPs) | 472.6 (76%) | 1565.4 |
| 16 | Maharashtra | 9758 | 7747 (142 STPs) | 4207 (54%) | 2011 |
| 17 | Manipur | 115 | 27 (1 STP) | 9 (33%) | 88 |
| 18 | Meghalaya | 75 | 1.85 (8 STPs) | 1.82 (98%) | 73 |
| 19 | Mizoram | 68 | 10 (1 STP) | 0 | 58 |
| 20 | Nagaland | 44.3 | 25.4 (1 STP) | 0 | 18.9 |
| 21 | Odisha | 367 | 91 (5 STPs) | 70 (76%) | 276 |
| 22 | Puducherry | 88 | 56 (5 STPs) | 35 (62%) | 32 |
| 23 | Punjab | 2111 | 1628.5 (116 STP) | 80% | 482.5 |
| 24 | Rajasthan | 1551 | 999 (80 STPs) | 694.5 (69%) | 552 |
| 25 | Sikkim | 47.68 | 19.5 (7 STPs) | 60% | 28 |
| 26 | Tamil Nadu | 3673.3 | 1616 (66 STPs) | 919 (56%) | 1320 |
| 27 | Telangana | 2613 | 888 (31 STPs) | 735.8 (82%) | 1724.45 |
| 28 | Tripura | 82.5 | 8 (1 STP) | 3 (37%) | 74.5 |
| 29 | Uttarakhand | 329.3 | 379 (63 STPs) | 232.9 (61%) | - |
| 30 | Uttar Pradesh | 5500 | 3370 (106 STPs) | 2630.6 (78%) | 2130 |
| 31 | West Bengal | 2758 | 776.32 (47 STPs) + 910 MLD addl treatment through EKW | 289.89 (37%) | 1071.68 |
| Total | | 48,003.69 | 30,000.96 (1261 STPs) | 55.9% | 17,026.58 |

*State reported that 910 MLD of sewage is being treated by East Kolkata wetlands by natural process.”

In particular, poor capacity utilization of Chhattisgarh (8%), Manipur (33%), Daman Diu & Dadra Nagar Haveli (35%), Goa (37%), West Bengal (37%), Maharashtra (54%) and Tamil Nadu (56%) needs

consideration and attention for which Chief Secretaries of the concerned States have been apprised during the monthly review meetings as well as through D.O. letters from Secretary, Department of Water Resources, River Development & Ganga Rejuvenation. As many of the STPs are under-utilized due to pending house sewer connections, States have been requested to expedite the remaining works. The State of Assam does not have any existing treatment capacity while Tripura & Manipur has only one STP each. STPs at Nagaland and Mizoram are yet to be made operational. The compliance of existing STPs in Andhra Pradesh (90%), Delhi (90%), Telangana (82%), Punjab (80%) Gujarat (78%), Uttar Pradesh (78%), Madhya Pradesh (76%), Haryana (62%) and Odisha (76%) remains good. This needs to be maintained and continuously improved.

Many of the States such as Haryana, Uttarakhand, Uttar Pradesh, Delhi, Madhya Pradesh, West Bengal, Tamil Nadu, Karnataka are installing online monitoring systems for capturing the real time data of the existing STPs. In November 2020, Madhya Pradesh has developed an "Env Alert app" and the same has been placed on Google play store and a WhatsApp group "M.R STP Cap. Utilization" has also been framed for day-to-day monitoring of STPs by the senior officials of the State. As reported by the State, this has led to improvement in the utilization capacities of the existing STPs as well as regular monitoring of projects under construction. Other States have been requested to adopt such measures for monitoring the performance of the already developed sewerage infrastructure.

Further, many States such as Meghalaya, Mizoram, Nagaland, Tripura are opting for alternate sewage treatment such as Faecal Sludge Treatment Plants, bio-digester/ bio-remediation/ phyto-remediation over the conventional treatment technologies for treatment of sewage/ septage in their States. Details of the same are provided in **para 7 and 8**.

Water Quality in Polluted River Stretches

The water quality data presented by the States during period since January 2020 up to December 2020 has been analyzed and the same has been summarized in **Table-2**.

It is seen from the above table that following river polluted stretches have now been reporting BoD levels which are conforming to bathing standard."

13. The details of on-going projects, projects under tendering, projects awaiting sanction of DPRs and at proposal stage are mentioned in Table-3,4,5 and 6 as follows:-

“Table 3: Details of on-going projects

| No. | State | Completion By | | | |
|-----|---|---|---|----------------------------|--|
| | | January 2021- March 2021 | April 2021- December 2021 | January 2022- June 2022 | Beyond June 2022 |
| 1 | Andhra Pradesh | 2 STPs of 7 MLD | 29 STPs of 328.4 MLD | 1 STP of 123 MLD | 15 MLD STP |
| 2 | Bihar | 12 projects of 355.5 MLD. Revised timeline to be provided | | | |
| 3 | Chhattisgarh | - | 6 STPs of 238 MLD | - | - |
| 4 | Daman, Diu And Dadra Nagar Haveli | - | - | - | - |
| 5 | Delhi | - | 1 STP of 318 MLD (new) | - | STPs of 950.8 MLD |
| 6 | Goa | | 5 STPs of 35.5 MLD including sewer networks | | 3 STPs of 43 MLD – work not started due to issues by locals. |
| 7 | Gujarat | 23 STPs of 426.72 MLD | 44 STPs of 571.68 MLD | 4 STPs of 116.6 MLD | 10 STPs of 125.4 MLD |
| 8 | Haryana | 15 STPs of 59.45 MLD | 19 STPs of 168.75 MLD | 2 STPs of 45 MLD | 2 STPs of 180 MLD |
| 9 | Himachal Pradesh | 5 STPs of 26 MLD | 10 STPs of 7.9 MLD | 6 STPs of 6.1 MLD | 5 STPs of 8.26 MLD |
| 10 | Jammu & Kashmir | 2 STPs of 61.2 MLD | 4 STPs of 17.6 MLD | 4 STPs of 13.21 MLD | - |
| 11 | Jharkhand | - | 3 STPs of 89 MLD | - | - |
| 12 | Karnataka | 21 STPs of 427.17 MLD | 9 STPs of 197.3 MLD | 21 STPs of 115.67 MLD | 4 STPs of 16.07 MLD |
| 13 | Kerala | STP/ETP/FSTP of 0.331 MLD | STP of 0.01 MLD | | |
| 14 | Madhya Pradesh | 15 STPs of 212 MLD | 2 STPs of 22.25 MLD | 19 STPs of 212.5 MLD | |
| 15 | Maharashtra | 10 STPs of 141.5 MLD | 5 STPs of 110.26 MLD | 2 STPs of 13 MLD | - |
| 16 | Manipur | - | - | 2 STPs of 17 MLD | - |
| 17 | Meghalaya | 115 KLD Septage Treatment Plant | | | |
| 18 | Mizoram | Sewer | - | - | - |
| 19 | Nagaland | | sewer connections in | - | - |
| 20 | Odisha | 2 STPs of 56 MLD | 48 MLD STP | - | - |

| | | | | | |
|----|-----------------------------|---------------------------------|--------------------------------|-------------------------------|--------------------|
| 22 | Punjab | 6 STPs of 27.5 MLD | 12 STPs of 49.2 MLD | 4 STPs of 67.5 MLD | 8 STPs of 109 MLD |
| 23 | Rajasthan | 29 STPs of 126 MLD | 15 STPs of 113.5 MLD | 4 STPs of 59.5 MLD | 12 STPs of 141 MLD |
| 24 | Sikkim | 2 STPs of 3 MLD | - | - | 3.25 MLD STP |
| 25 | Tamil Nadu | 18 STPs of 244 MLD | 8 STPs of 203.46 MLD | 6 STPs of 450.53 MLD | 16.71 MLD STP |
| 26 | Telangana | 2 STPs of 16.45 MLD | 12 STPs of 73.96 MLD | 3 STPs of 120 MLD | - |
| 27 | Tripura | - | - | 8 MLD STP | - |
| 28 | Uttarakhand | 3 STPs of 8.9 MLD | 3 STPs of 23.7 MLD | 1 STP of 28 MLD | |
| 29 | Uttar Pradesh | 6 STPs of 122.01 MLD | 21 STPs of 523.55 MLD | 7 STPs of 161.5 MLD | 3 STPs of 80 MLD |
| 30 | West Bengal | 1 STP of 24 MLD | 4 STPs of 47.75 MLD | 6 STPs of 271.5 MLD | - |
| | Total (except Bihar) | 163 STPs of 1989.211 MLD | 214 STPs of 3187.77 MLD | 93 STPs of 1828.61 MLD | 1688.49 MLD |

Table 4: Projects under Tendering and works to be awarded

| No. | State | STPs in Tendering |
|-----|--|---|
| 1 | Andhra Pradesh | 6 STPs of 52.4 MLD |
| 2 | Bihar | 7 projects of 149.5 MLD |
| 3 | Chhattisgarh | 5 STPs of 40.5 MLD |
| 4 | Daman, Diu And Dadra Nagar Haveli | 1 STP of 7 MLD |
| 5 | Gujarat | 59 STPs of 445 MLD |
| 6 | Himachal Pradesh | 8 STPs of 33.31 MLD |
| 7 | Jharkhand | 15 MLD STP - Sanctioned |
| 8 | Karnataka | 14 STP, 1 UGD for STP, 144 MLD 15 STP, 57.366 MLD (work order given) |
| 9 | Kerala | Projects for treatment of 55.8 MLD effluent |
| 10 | Madhya Pradesh | STPs of 53.4 MLD |
| 11 | Puducherry | 2 STPs of 6 MLD |
| 12 | Punjab | 43 STPs of 388 MLD |
| 13 | Telangana | 17 STPs of 376.5 MLD |

| | | |
|-----------|----------------------|---------------------------------|
| 14 | Uttar Pradesh | 24 STPs of 568.1 |
| 15 | West Bengal | 9 STPs of 122.36 MLD |
| | Total | Projects of 2514.236 MLD |

Table 5: Projects awaiting sanctioning of the DPR

| No. | State | STPs awaiting sanctioning of DPR |
|------------|----------------------------|---|
| 1 | Assam | 2 STPs of 4 MLD |
| 2 | Bihar | 4 projects |
| 3 | Chhattisgarh | 1 STP of 35 MLD |
| 4 | Delhi | 14 STPs in Najafgarh zone (of which 7 STPs) |
| 5 | Himachal Pradesh | 2 STPs of 4 MLD |
| 6 | Jammu & Kashmir | STPs of 59.9 MLD |
| 7 | Jharkhand | STPs of 184 MLD |
| 8 | Karnataka | 29 STP of 134.846 MLD |
| 9 | Kerala | Treatment Plants of 0.71 MLD |
| 10 | Manipur | STP of 49 MLD |
| 11 | Telangana | 31 STPs of 1098.17 MLD |
| 12 | Sikkim | 0.72 MLD STP |
| 13 | Uttarakhand | STPs of 67 MLD |

Table 6: Projects in Proposal stage (DPR to be prepared)

| No. | State | STPs in proposal stage |
|------------|--|---|
| 1 | Andhra Pradesh | STPs of 1215 MLD in proposal stage |
| 2 | Assam | 17 STPs of 163 MLD |
| 3 | Bihar | 20 Projects of which 5 DPR prepared |
| 4 | Daman, Diu And Dadra Nagar Haveli | 1 STP of 16 MLD |
| 5 | Delhi | 42 decentralized STPs and Mori Gate STP |

| | | |
|----|----------------------------|---|
| 6 | Gujarat | 19 STPs of 472.3 MLD |
| 7 | Haryana | 8 STPs of 64 MLD (for future) |
| 8 | Himachal Pradesh | 22 STPs of 32 MLD |
| 9 | Jammu & Kashmir | STPs of 47.9 MLD |
| 10 | Jharkhand | STP of 43 MLD |
| 11 | Karnataka | 23 STP of 72.136 MLD;3 FSSM, 4.5 cum |
| 12 | Kerala | STP/ETP/FSTP of 2.776 MLD |
| 13 | Madhya Pradesh | 1 scheme at DPR Stage |
| 14 | Maharashtra | 58 STPs of 3569.82 MLD - Proposed |
| 15 | Meghalaya | STP of 0.105 MLD |
| 16 | Punjab | 53 STPs of 183.5 MLD |
| 17 | Sikkim | 6 STPs of 10.61 MLD |
| 18 | Tamil Nadu | DPRs prepared and are being prepared on cluster basis |
| 19 | Telangana | 13 STPs of 99.85 MLD |
| 20 | Uttarakhand | STPs of 39.25 MLD |
| 21 | West Bengal | 12 STPs of 228.89 MLD |

14. Status of bio-remediation/Phytoremediation has been given as follows:-

“Table-7: Status of bio-remediation/ Phytoremediation projects

| No. | State | Action Taken |
|------------|-----------------------|-------------------------------------|
| 1 | Andhra Pradesh | No information provided in the MPR. |

| | | |
|---|---|--|
| 2 | Assam | GMDA has taken up scheme for treatment of polluted water of Borsola Beel through Bioremediation. RFP document for 'Treatment of Polluted Water of Borsola Beel through Bio-remediation' will be floated after approval of RFP document. GMDA has taken up a scheme for de-siltation and cleaning of Borsola Beel and the physical progress of the work as on 05.11.2020 is 100%. Govt. of has accorded Administrative approval for the scheme treatment of polluted water of Sarusola Beel and notice inviting RFP will be floated shortly. Tender Notice has been floated for the scheme 'Cleaning of Sarusola Beel' in compliance with Hon'ble NGT order amounting to Rs. 47.61 Lakh. GMDA has taken up a scheme on Bioremediation measures for Silsako Beel. Govt. has accorded Administrative approval amounting to Rs. 921.00 Lakh (Rupees Nine Hundred Twenty One Lakh) for the scheme. Finalization of draft RFP document is under process. GMDA has taken up cleaning activities in Silsako Water body through removal of water – hyacinths and floating garbage along with de-siltation of the water body with the help of machineries. |
| 3 | Bihar | Bio-mining/bioremediation work has been initiated at Bairiya, Patna and Muzaffarpur for disposal of legacy waste. UD&HD, GoB has issued Work Order dated-24.09.2020 to the successful bidder for In-situ treatment through bio-remediation of drains joining Ganga and other polluted rivers for 89 drains. Work has been started in all 89 drains. |
| 4 | Chhattisgarh | All the households in polluted river stretches have on-site sanitation systems, either twin pits or septic tanks. The State has implemented phytorid treatment in all ULBs. |
| 5 | Daman Diu & Dadra Nagar Haveli | Phyto-remediation and Bioremediation proposal for the 13 identified drain has been received from NEERI and the same is under process. The drain near Rajiv Gandhi Setu, Daman is being taken up for in-situ treatment on pilot basis. Another drain near Kabra Industrial Estate, Kachigam, Daman is proposed for in-situ treatment. |
| 6 | Delhi | Integrated Drain Management Cell (IDMC) has been formed for remediation and management of all drains in Delhi. Drain owing agencies have submitted their action plan and started its implementation. The waste water in Kushak Nala running through NDMC areas is under bio-remediation and the water quality parameters are being monitored. Delhi Cantonment Board has started implementation of bio-remediation plan w.e.f 11.06.2020. |
| 7 | Goa | Conventional method of septic-tank / soak-pit is adopted by individual housing / complexes, wherever underground sewer network did not exist. In villages or hinterland-areas (i.e. pocket settlement areas), stand alone soak-pit / septic-tanks system ensures effective treatment of domestic-sewage. |

| | | |
|----|----------------------------|---|
| 8 | Gujarat | State has implied in-situ treatment towards legacy waste management (Pirana dumping site). Pilot project for in-situ remediation at Ankleshwar and Kheda municipalities are under implementation and after positive reviews, the same shall be replicated in 7 municipalities. |
| 9 | Haryana | ULB Department has started bio/phyto remediation works in the drains in Municipal Corporation, Yamuna Nagar – Jagadhri, as a pilot project, which will be replicated at other places. Municipal Corporation of Sonapat has also invited tenders for the bio/phyto remediation of drains. Similarly, Municipal Corporations of Gurugram and Faridabad are in the process of preparing the proposals for bio/phyto remediation. Municipal Corporation of Panipat has already floated the tenders for the process in their jurisdiction. GMDA has also initiated a pilot project as an interim treatment for untreated discharge of Leg I via geo-synthetic dewatering tubes in consultation with CPCB. PHED has undertaken the in-situ phyto/bio remediation in its new STPs at Indri and Beri. |
| 10 | Himachal Pradesh | In-situ Phytoremediation technique is being applied in nallahs for treatment of water. The work of in-situ remediation in Priority-I (Sukhna Nallah) has been started and civil work and plantation work is completed and construction of polishing tank is under progress. The tender work in-situ remediation in Jattan Wala Nallah (catchment of Priority-II river stretch) has been awarded and work is in progress. |
| 11 | Jammu & Kashmir | Tenders for in-situ bio-remediation of drains floated, work yet to commence. |
| 12 | Jharkhand | Preparation of DPR to adopt in-situ remediation at drains at identified ULBs viz. Chas, Ranchi, Mango and Aditypur, involving CSIR-NEERI and tendering is under process from competent authority from approx. 120 MLD of waste water will be treated. |
| 13 | Karnataka | Drains contributing to the pollution of the 17 Polluted River Stretches have been identified. Status of bioremediation or any other insitu remediation not provided. |
| 14 | Kerala | In situ primary treatment were proposed for the river stretches Bharathapuzha and Pamba in the action plans. |
| 15 | Madhya Pradesh | In-situ bio-remediation for Nagda and Mandideep town has been initiated as pilot project to be adopted a model for replication in other towns of the State. |
| 16 | Maharashtra | Demonstration project has been started by MPCB for in-situ treatment of wastewater at Kotwali village drain on Vashisthi River to explore the possibilities and viability of the interim measures. |
| 17 | Manipur | DPR submitted to NRCD for in-situ treatment through Bio-remediation of 16.75 MLD. |

| | | |
|----|-------------------|---|
| 18 | Meghalaya | PMC of Smart City has prepared the feasibility report for Nallah in-situ treatment for the drain falling within the ADB and has been approved and accepted report by RRC for Umkhrach & Umshyrpi. Preparation of DPR for the bio-remediation of remaining drains has been communicated to the PMC for finalization of terms & conditions. DPR has been completed and for remaining rivers and the Water Resources Department is seeking fund for implementing the same. |
| 19 | Mizoram | For the treatment of sewage, in-situ remediation such as onsite grey-water management systems in rural areas and setting up of improved septic tanks and Bio-digesters for black water management in the catchment areas of the polluted rivers are in process. |
| 20 | Nagaland | Phytoremediation and Faecal Sludge and Septage Management Plants are proposed in all the ULBs. DPR to be completed by November 2020. Bioremediation is adopted for treatment of legacy waste along 1 km buffer stretch of river Dhansiri |
| 21 | Odisha | H & UD Department has identified Drains contributing to river pollution. |
| 22 | Puducherry | All the drains reaches the rivers Sankaraparani and Arasalar were identified and in-situ remediation of providing grills gratings and bar screen are provided to all the 172 drains. |
| 23 | Punjab | The work for in-situ remediation of the Sirhind Choe (near Bhadson, District Patiala), with the demonstration of Constructing Wet Land Technology has been completed. The performance of the technology is under evaluation and will be replicated in rest of the drains in depending upon its success. In-situ remediation of Bhulana drain carried out by Punjab Pollution Control Board with installing bioremediation, phyto-remediation enhanced through Nano Bubble Technology on Pilot basis and is under evaluation. WSP based STP at Bhulath has been upgraded by adding Nano Bubble Technology. The performance of the technology is under evaluation and will be replicated in rest of the drains in depending upon its success. The work on piloting low cost ecofriendly on 500 KLDSTP for Banur, based on modified constructed wetland approach, is near completion |
| 24 | Rajasthan | The State has implemented bioremediation treatment for legacy waste, for which tenders have been invited. Drain identified for contribution in River Chambal in Kota Region. |
| 25 | Sikkim | No tangible information is provided |
| 26 | Tamil Nadu | No details have been provided. The State has proposed for incinerator installation to process plastic waste. |

| | | |
|----|----------------------|---|
| 27 | Telangana | HMWSSB has entrusted for preparation of DPRs for In-situ remediation for 5 drains leading to lakes to NEERI, Hyderabad. NEERI has submitted DPR for Kokapet drain of 1.0 MLD Capacity. It is under implementation stage by NEERI. For balance 4 drains, DPRs are received from NEERI which are under sanction stage. In-Situ remediation is proposed only in priority I&II and in priority III to V stretches it is not feasible as Flat terrain is not available, Steep slope gradient leading to high velocity and Flow of greater than 5 MLD |
| 28 | Tripura | As reported in the MPRs, the State has directed all ULBs to adopt in-situ bioremediation and phytoremediation of sewage in drains. 210 drains and land identified. Tender for Bio remediation of 5 drains as pilot basis in Agartala has been completed. |
| 29 | Uttar Pradesh | Bio-remediation is being done in 42 drains of Prayagraj. |
| 30 | Uttarakhand | DPR for treatment of 19 drains by bioremediation approved and is under tendering. |
| 31 | West Bengal | Work started as pilot project for drains for Ganga & Churni river stretches. |

15. The report gives the details of **alternate technology adopted or proposed to be adopted by the States/ UTs for treatment of sewage through the Septage Treatment Plants taking lesser time in commissioning compared to the conventional STPs** as follows:-

“Faecal Sludge Treatment Plants

States are taking up projects for treatment of sewage through Septage Treatment Plants, which takes up lesser time in construction as compared to conventional STPs or are implementing co-treatment facilities in the existing STPs. Chhattisgarh has reported that 100% septage management scheme has been achieved in all the cities under polluted river stretches. Maharashtra has installed 15 FSTPs with total capacity of 290 KLD along polluted river stretches. Similarly, Odisha is implementing Septage Management System in a phased manner in all its ULBs, 10 FSTPs in 10 ULBs of 440 KLD have been commissioned, 82 Nos. in 82 ULBs of 1367 KLD are under construction. Tamil Nadu also proposes to establish 49 FSTPs, of which 5 FSTPs have been completed and co-treatment facility at 38 STPs have been facilitated. In Telangana, co-treatment of septage from the Septic Tanks of individual and community septic tanks in the existing 6 STPs have been completed and about 26 million liters of septage has been treated so far at these cotreatment plants, thereby preventing the pollution of lakes to that extent. 2 FSTPs have been completed in Uttar Pradesh.

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a. Decentralized/ modular STPs

*Decentralized modular STPs are assets that can be created for sewage management of smaller capacity. **These tailored systems, being pre-fabricated and involves minimal on-site civil construction and hydro-electro-mechanical installations, are easy to install, take significantly less time in commissioning (only few months) and easy to operate being compact systems.** Accordingly, they are suited in situations where sewage generation is say less than 2 MLD, water quality profile permits tailoring the modular STP system specific to the requirements of site water quality and time available for commissioning the system is less. Many of States can therefore adopt such systems in situations instead of conventional STPs (which take much longer time, not less than 24 months, for construction) based on evaluation of techno-commercial merits. Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD.*

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16. The details of Industrial Pollution Management is mentioned as follows:-

“Table-8: Statement on Industries and Treatment Capacity established in States/ UTs

| State | Stretch | No. of Industries(Water Polluting) | Current Effluent Discharge (MLD) | No. of Industries having ETPs | Treatment Capacity of ETPs (MLD) | CETPs (Nos. and Capacity in MLD) |
|------------|---------|------------------------------------|----------------------------------|-------------------------------|----------------------------------|---|
| Gujarat | State | 12815 | NA | 12700 | NA | Existing CETPs : 34 of 755.259 MLD, Proposed/Under construction: 16 of 263.35 MLD, Under expansion: 3, Capacity: 45.5 MLD |
| Tamil Nadu | State | 11445 | 2835.7 | 11445 | NA | Existing-36 of 87.350 MLD capacity. Proposed- 10 (41MLD) 1497 units connected to CETP. |
| | PRS | 1770 | 452.696 | 1770 | NA | Existing - NA Proposed- 10 CETPs (41MLD) |
| Haryana | PRS | 3729 | 126 | 3729 | - | Existing- 19 CETPs of 190.1 MLD capacity. Proposed- 11 CETPs 141.5 MLD capacity Under Construction: 1 CETP of 6 MLD |

| | | | | | | |
|------------------|-------|-------|--------|-----------------------|------|--|
| Karnataka | State | 3503 | 1339 | 3287 | 4523 | Existing - 10 CETPs of 5.875 MLD installed capacity; Operational Capacity = 3.445 KLD (59%); 733 units connected Under construction = 2 (in Bidar and Yadgir), Expression of Interest issued = 1 |
| Delhi | UT | 1516 | 36 | 1516 (100%) | - | Existing - 13 CETPs of capacity 212.3MLD of which 2 are complying, 11 non complying. All CETPs have OLMS installed. Upgradation of CETPs has been proposed. |
| Goa | State | NIL | | | | |
| Odisha | State | 1031 | 886 | 1030 | 886 | NIL |
| Tripura | PRS | 179 | 0.0144 | 18 ETPs- Installed | - | 1 CETP of 500 KLD capacity installed |
| Maharashtra | State | 16597 | 2100 | 16597 | NA | Existing CETPs: 26 nos. (244.85 MLD) Under Construction-2CETPs, Proposed: 2 CETP at Nashik and Kolhapur |

| | | | | | | |
|------------------|---------|-------------------------------------|----------------------------------|-------------------------------|----------------------------------|--|
| Himachal Pradesh | State | 2773 | 45.67 | 955 | 35.1 | Existing: 25 MLD CETP at Baddi. (468 units connected) Proposed: 2 MLD at Poanta Sahib Under Construction: 5 MLD at Kala Amb |
| Jammu & Kashmir | State | 450 | 17 | 239 | - | 2 CETPs of 1.05 MLD functional, 1 CETP under trial, 10 CETP under construction and 10 CETP proposed |
| Uttarakhand | State | 830 | 145 | 830 | 175 | Existing-3 (13.2MLD) Proposed- 3 CETPs of 18 MLD |
| State | Stretch | No. of Industries(Water Polluting) | Current Effluent Discharge (MLD) | No. of Industries having ETPs | Treatment Capacity of ETPs (MLD) | CETPs (Nos. and Capacity in MLD) |
| Uttar Pradesh | State | 1648 | 850.5 | 1404 | NA | Existing – 7 (58.60 MLD) (NC-01/07 operational) Under Construction – 01No. (20 MLD)/ 3 Nos. of 26.65 MLD Sanctioned – 2 Nos. of (6.65 MLD) |

| | | | | | | |
|-----------|---------|--------------------------|---------|------|---------|--|
| Rajasthan | State | 1199 | - | 1167 | 3173.61 | 16 CETPs (14 Operational, 01 under construction and 01 closed) Capacity - 159.88MLD |
| Assam | State | 2641 | - | 2134 | - | - |
| Sikkim | State | 63 | 1.926 | 63 | 3.385 | NIL |
| Meghalaya | State | 260 | 3.5 | 254 | - | - |
| DDDNH | UT/PR S | 262 | 6.54 | 262 | 11.39 | NIL |
| Nagaland | State | 5 | 102 KLD | 3 | 102 KLD | 2 Units of 30KLD is under process |
| Manipur | State | Non-polluting industries | - | - | - | 5 industrial units are connected to 1 non-functional CETP of 400 KLD |
| Mizoram | State | 56 | 0.0438 | 56 | 0.099 | NIL |

| | | | | | | |
|----------------|-------|------|-------|------|-------|--|
| Punjab | State | 4055 | 402 | 1760 | 398 | Existing – 4 CETPs of 20.535 MLD. Under Construction – 3 CETPs: 50 MLD -91% work completed & 40 MLD at Ludhiana-completed , 0.15 MLD at Jalandhar- status quo against court orders, hearing date on 15.02.2021 |
| Madhya Pradesh | State | 1186 | 25100 | 1186 | 28000 | Existing: 3 CETPs of 9.1 MLD |
| Jharkhand | State | 190 | - | 187 | - | Existing : 2 Nos. of 25.05 KLD Under Construction: 3.5 MLD at Ranchi, Tupadana Industrial Cluster. |
| Bihar | State | 219 | NA | 212 | - | Existing : NA Under Construction/ Proposed: There are 52 industrial areas under control of BIADA, 5 Industrial Areas were identified in first Phase for construction of CETPs – Fathua, Hajipur-Vaisali-Bela, Barai, Bhagalpur, Patliputra. DPR for all Industrial area except for Patliputra was finalized and in first three calls for Bid submission no bidder responded. |

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|----------------|-------|------|---------|-------------------------|---------|--|
| West Bengal | State | 454 | 1360.60 | 454(400 SPIs & 54 GPIs) | 1360.60 | Existing: 20 MLD CETP, Under Construction: 4 module of 20 MLD |
| Kerala | State | 1401 | 156.3 | 5166 | - | Existing- 8 CETPs of 12.4 MLD. 64 units connected. |
| Telangana | State | 2178 | 603 | 1519 | 593.85 | Existing- 4 Nos. of 7 MLD capacity operational. Under Construction – 1 CETP of 480 KLD |
| Andhra Pradesh | State | 1069 | 4494.33 | 1069 | - | Existing-7 CETP of (31 MLD) total capacity having 330 units as members |
| Puducherry | UT | 96 | 4.75 | 95 | 4.75 | NIL |

VI. Status of Solid Waste Management, Ground Water Augmentation, Afforestation, Floodplain and E-flow Management

State-wise status of solid waste management, hazardous and plastic waste management, ground water management, good irrigation practices adopted by farmers, installation of rain water harvesting, protection and management of Floodplain Zones and maintenance of minimum E-flow in the river stretches as per the Action Plan and MPR submitted by the States is placed at Annexure- V. States of Andhra Pradesh, Goa, Haryana, Jammu & Kashmir, Maharashtra, Karnataka, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal have major gap in solid waste treatment facilities and have taken up projects for establishment of processing facilities, which are at various stages of implementation. These States need to ensure timely completion of the projects and ensure optimum utilization of their infrastructures. The status and progress will continue to be monitored in subsequent meetings of Central Monitoring Committee.

VII. Scrutiny of Action Plans for P-II and P-IV:

As reported by CPCB, all the Action Plans for Polluted river stretches in Priority I-IV have been approved with conditions.

VIII. Model River Stretch identified by the State

As directed by NGT, States have identified Model River to be taken up for rejuvenation in the first phase. States of Andhra Pradesh, Chhattisgarh, Jammu & Kashmir, Kerala, Mizoram, Rajasthan, Telangana and Uttar Pradesh are yet to identify Model River to be rejuvenated, the model of which can be replicated in rejuvenation of other river stretches. The identification and implementation of various strategies for rejuvenation of model river stretch assumes particular significance as it can translate as best ground to test the efficacy of various interventions so that such approach and models can be taken for implementation in other reaches. The experience gained out of such implementation will also help in wider dissemination of good and successful practices amongst the States. Accordingly, the State of Andhra Pradesh, Chhattisgarh, Jammu & Kashmir, Kerala, Mizoram, Rajasthan, Telangana and Uttar Pradesh may complete identification of Model River for rejuvenation and direct the concerned State officials to implement various interventions in coordinated manner as per Action Plan for rejuvenation of the model river.

Details as reported in the MPRs are in Table-9 as below.

Table-9: Status of Model Rivers Identified by State

| No. | State | Model River Identified |
|------------|-----------------------------------|-------------------------------|
| 1 | Andhra Pradesh | - |
| 2 | Assam | Digboi River |
| 3 | Bihar | Harbaura River |
| 4 | Chhattisgarh | - |
| 5 | Daman, Diu And Dadra Nagar Haveli | Damanganga |
| 6 | Delhi | Yamuna |
| 7 | Goa | Sal River |
| 8 | Gujarat | Sabarmati River |
| 9 | Haryana | Both Yamuna & Ghaggar |
| 10 | Himachal Pradesh | Beas River |
| 11 | Jammu & Kashmir | - |
| 12 | Jharkhand | Swarnrekha River |
| 13 | Karnataka | Tungabhadra River |
| 14 | Kerala | - |
| 15 | Madhya Pradesh | Khan River |
| 16 | Maharashtra | Chandrabhaga River |
| 17 | Manipur | Nambul River |
| 18 | Meghalaya | Nonbah River |
| 19 | Mizoram | - |
| 20 | Nagaland | Chathe River |
| 21 | Odisha | Kathajodi river |
| 22 | Puducherry | Sankarabarani River |
| 23 | Punjab | Beas River |
| 24 | Rajasthan | - |
| 25 | Sikkim | Maney Khol River |
| 26 | Tamil Nadu | Bhavani River |
| 27 | Telangana | - |

| | | |
|----|---------------|--------------|
| 28 | Tripura | Haora River |
| 29 | Uttarakhand | Ganga River |
| 30 | Uttar Pradesh | - |
| 31 | West Bengal | Karola River |

IX. Status of Preparation/Submission of Action Plan for Coastal Pollution

Subsequent to the Hon^{ble} NGT order dated 21.09.2020, CPCB has issued a reminder vide letter dated 10.12.2020 to all the concerned coastal States/ UTs (except Andhra Pradesh) to submit the Action Taken Report and Time Bound Comprehensive Action Plan to CPCB for control of coastal/ marine pollution within the jurisdiction of the State/UT. Also, reminder was issued to Andhra Pradesh State to submit the Action Taken Report for ensuring compliance to directions dated 31.08.2020 issued under section 18(1)(b) of Water (Prevention & Control of Pollution) Act, 1974 by CPCB. Till 28.01.2021, Andhra Pradesh and Kerala State have submitted Time Bound Comprehensive Action Plan whereas Goa and Kerala State have submitted only the Action Taken Report. Remaining coastal States/ UTs viz Lakshwadeep, Daman, Diu & Nagar Haveli, Andaman & Nicobar, West Bengal, Tamil Nadu, Maharashtra, Karnataka, Gujarat, Odisha and Puducherry have yet not submitted the requisite information. Status of submission of Action Plan by States is as given Table-10 below.

Table-10: Status of Submission of Action Plans for Coastal Pollution by States

| No. | State | Status |
|-----|--------------------------|---|
| 1 | Andhra Pradesh | Action Plan Submitted to CPCB and under consideration of CPCB |
| 2 | Daman, Diu & Dadra Nagar | - |
| 3 | Goa | - |
| 4 | Gujarat | - |
| 5 | Karnataka | - |
| 6 | Kerala | Action Plan Submitted to CPCB and under consideration of CPCB |
| 7 | Maharashtra | - |

| | | |
|----|-------------------|---|
| 8 | Odisha | - |
| 9 | Puducherry | - |
| 10 | Tamil Nadu | - |
| 11 | West Bengal | - |
| 12 | Andaman & Nicobar | - |
| 13 | Lakshadweep | - |

X. Development of Grievance portal

*As per directions of Hon^{ble} NGT, it was directed that CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/ effluents. **Accordingly, NMCG has developed an online module on its website for submission of grievances and redressal of grievances with regards to illegal discharge of sewage/ effluents. The url of portal is <https://nmcg.nic.in/ngtgrievance.aspx> and has been operational with effect from January 2021.** Chief Secretaries of all the 31 States/UTs have been directed to regularly monitor and to address the issues within a stipulated time period. The status report in this regard shall be incorporated from next submission onwards.*

XI. Reutilization of Treated water

*Acknowledging the importance of **safe reuse of treated waste water (SRTW) in India as well as prioritizing the same in planning and management due to rapid urbanisation and increased wastewater generation and also with an aim towards increased water security, the action plan for Reuse of Treated Waste Water has been undertaken at national level in Ministry of Jal Shakti.** The introduction of the concept of SRTW into water resource strategies and policies could provide additional resources for multiple uses and water security for fast growing cities, industry, agriculture and the environment. So far, India has no national policy regarding SRTW, except for a few State policies viz., Gujarat, Maharashtra, Tamil Nadu and Haryana. Accordingly, National Mission for Clean Ganga Ministry of Jal Shakti in collaboration with the Indo-German „Support to Ganga Rejuvenation“ project (GIZ-SGR) and the India-EU Water Partnership (IEWP) has initiated formulation of National Policy on Safe Reuse of Treated Water (SRTW). The policy development is based on a comprehensive consultation process by engaging relevant*

stakeholders under a dedicated steering group. The stakeholders involved included MoEF&CC, MoHUA, industries, ULBs and representations from pioneering States (Maharashtra, Gujarat, Haryana, UP). **The policy development process is supported by European and national experts bringing in best international practice.** Based on extensive consultations during various Consultation meetings, 1st Draft Working document has been prepared. Further consultation for finalisation of National Policy is underway.

State-wise details of re-utilization of treated water as reported by the State is provided in Table-11 below.

Table-11: Status of Re-utilisation of Treated Water by States

| State | Status |
|-------------------------|---|
| Andhra Pradesh | 321.81 MLD of treated wastewater is being reused. |
| Assam | Being done by P&RD Department for rural areas. No further details provided. |
| Bihar | Treated sewage water of STP having capacity 100 MLD or above will be used by Water Resource Department and less than 100 MLD will be used by Minor Water Resource Department for agriculture purposes. |
| Chhattisgarh | Treated waste water will be utilized after the completion of construction of STPs. |
| DDDNH | Treated water is used daily for road washing, horticulture, soil compaction, irrigation etc. |
| Delhi | 90 MGD is being used for various purposes e.g. horticulture, irrigation, DTC depot etc. |
| Goa | Part utilization has been proposed for (i) release of STP-treated water at Colva into Sal-river so as to maintain the flow, (ii) flushing of St. Inez creek, (iii) social forestry, (iv) private plantation, (v) dust-suppression measures etc. |
| Gujarat | Gujarat Government has framed Policy for Reuse of Treated Waste Water (TWW) wherein targets have been set for use of 70% of the treated wastewater by 2025 and 100% of treated wastewater by 2030. 643 MLD of treated waste water is used by MC and Municipalities. |
| Haryana | State has prepared a draft policy for reuse of treated waste water and an action plan for reuse of treated sewage and as per the plan, approx. 80% of treated sewage will be reutilized by 2024-2025. Treated waste water will be used for the farming purpose. |
| Himachal Pradesh | JSV is providing facility for bulk water user at all the STPs to enable drawing the effluent for reuse. |

| | |
|--------------------------|---|
| Jammu and Kashmir | Reuse of Treated Water through Pumping Plant with Rising Main to Railway Station Katra for cleaning and washing purpose, Horticulture purpose at Air force station, at Army Unit for cleaning and washing purpose have been proposed. |
| Jharkhand | Water will be used for irrigation, fish farming, landscaping, cooling water for power plants and oil refineries, toilet flushing, public parks, dust control, artificial lakes, construction etc. |
| Karnataka | Quantity of treated water reused in Bengaluru = 427.5 MLD; other than Bengaluru = 106.65 MLD. It is to be used for recharge of lakes, use in industrial establishments, by horticulture departments, used in gardening etc. |
| Kerala | Utilization of the treated effluent for irrigation, gardening, industries, construction and recharge are being explored. |
| Madhya Pradesh | At present 84.96 MLD of treated water is being used or irrigation/gardening purpose (including STP of 35 MLD, Bhopal under AMRUT scheme) |
| Maharashtra | The Infrastructure Projects are mandated by MPCB to recycle 60% of treated sewage for secondary use by providing dual pipeline for different class of users like Thermal Power Plants, Industrial Units, Construction activities, non-potable municipal uses, Agriculture-Irrigation, etc. depending on its availability. |
| Manipur | No information provided. |
| Meghalaya | Stand-alone ETPs are operational in 260 number of hotels/guesthouse/health care centers /Industries and treated wastewater are reuse for gardening/cleaning purpose. |
| Mizoram | Action Plan for sewage treatment including recycle and reuse of treated waste water was submitted to the State Govt. |
| Nagaland | Treated water is to be used for agricultural farms, sprinkling the road construction sites, flushing/cleaning of the sewage drains |
| Orissa | 806 MLD treated industrial wastewater are being recycled/ reused in the process or being utilized for plantation/ irrigation purposes. Bulk users have been identified for utilization of treated water for the STPs under commissioning. |
| Puducherry | 15.3 MLD treated wastewater is been in use for Industrial usage, Silk cotton trees, Coconut Plantation, Construction activities, Watering the road side plantation |
| Punjab | The Government of Punjab has Notified "The State Treated Waste Water Policy 2017" to promote recycling and reuse of treated sewerage for non-potable applications. Till date, 47 number projects have been completed by Department of Soil & Water Conservation, Punjab for using 243.3 MLD treated wastewater of STPs. These projects have been implemented by laying underground pipeline system for irrigation water conveyance covering an area of 7652 hectares. The Department further proposes to utilize 1238.8 MLD of treated wastewater from 164 existing, under progress and proposed/new STPs for irrigation purposes for an agricultural area of 37,683 hectares. Others relevant Departments are also exploring various options to promote utilization of the treated wastewater of STPs for non-potable use such as domestic use, construction activities, industrial processes, urban landscaping & green belts, etc. |

| | | | |
|-------------------|--|--------------------------|---|
| Rajasthan | No information provided. | | |
| Sikkim | Treated effluent is to be utilized in cooling towers, irrigation of green belt, evaporation or flushing purposes. | | |
| Tamil Nadu | Tamil Nadu Government has notified Promotion of Use of Treated Waste Water policy during December 2019 to maximize the collection & treatment of sewage generated and reuse of treated waste water on a sustainable basis, thereby reducing dependency on fresh water resources. At present Memorandum of Understanding (MoU) has been executed between the ULB and the user agency for the re-use of secondary treated effluent water (STEW). 80.5 MLD of treated wastewater is being reused for cooling purpose, Agricultural use to farmers association, MRF Industrial use, to maintain the TDS level of Tanners for Agro- forestry etc. | | |
| | Some of details are given in Table-11.1 below. | | |
| S. No | Name of the ULB | Quantity (in MLD) | Usage/ Purpose |
| 1 | Nagapattinam | 2.00 | M/s KVK Power for cooling purpose |
| 2 | Dindugul | 5.00 | To maintain the TDS level of Tanners as well for Agro-forestry. |
| 3 | Tirunelveli | 24.00 | Nanguneri SEZ for Industries |
| 4 | Perambalur | 3.00 | MRF Industrial use |
| 5 | Ramanathapuram | 3.00 | NTC Infra |
| 6 | Coimbatore | 15.00 | Agricultural use to farmers association |
| 7 | Pollachi | 11.50 | Agricultural use to farmers association |
| 8 | Chinnamannur | 3.00 | Agricultural use |
| 9 | Karur | 7.00 | Agricultural use |
| 10 | Arakkonam | 7.00 | MRF Industrial use |
| | <p>As per the Policy, following is proposed.</p> <ul style="list-style-type: none"> • The treated wastewater is to be utilized for eco-parking, greenery development and avenue plantation and the remaining will be disposed into the river after meeting the standards. • Industries having ZLD system are reusing the treated wastewater in the process. • Domestic grey water has been recharged into the ground through Individual soak pit constructed at individual households and filtered grey water from community soak pits are being utilized for agricultural purpose in Rural areas. | | |

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| Telangana | Govt. of Telangana has released a policy for reuse of the treated water. 56 MLD has been reused. |
| Tripura | AMC is using treated waste water from the Barjala (Near Lankamura) STP for watering of gardens & open space in Agartala city, road watering in dry seasons, irrigation of agricultural fields etc. |
| Uttar Pradesh | No information provided. |
| Uttarakhand | Treated water of 95 MLD capacity at Jagjeetpur is used for irrigation through canal system. |
| West Bengal | <i>Treated Wastewater Re-use Policy of Urban West Bengal</i> has been notified by Urban Development & Municipal Affairs Department of Government of West Bengal in June 2020. Department has identified Kalyani Town as a model for reuse of the treated water generated at Kalyani STP under KMDA. DPR is under preparation. |

17. The report concludes with the observations and recommendations as follows:-

XII. Observations and Recommendations

Besides State specific issues highlighted under para-V of this report, following observations and recommendations are made.

- *States are regularly submitting Monthly Progress Reports, in the requisite formats, by the stipulated dates. However, information provided in MPR on water quality aspects in respect of a few States may need to be regularly provided base on the data being collected by State Pollution Control Boards. 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 during monthly meetings of CMC that the progress of ongoing works continues to be impacted due to COVID-19 pandemic on account of labour mobilization issues, financial resource availability besides site works. The project completion timelines, therefore, are getting impacted due to these factors also*
- *The compliance of existing STPs in Andhra Pradesh (90%), Delhi (90%), Telangana (82%), Punjab (80%) Gujarat (78%), Uttar Pradesh (78%), Madhya Pradesh (76%), Haryana (62%) and Odisha (76%) remains good. This needs to be maintained and continuously improved.*
- *Many of the States such as Haryana, Uttarakhand, Uttar Pradesh, Delhi, Madhya Pradesh, West Bengal, Tamil Nadu, Karnataka are installing online monitoring systems for capturing the real time data of the existing STPs. In November 2020, Madhya Pradesh has developed an "Env Alert app" and the same has been placed on Google play store and a WhatsApp group "M.R STP Cap. Utilization" has also been*

framed for day-to-day monitoring of STPs by the senior officials of the State. As reported by the State, this has led to improvement in the utilization capacities of the existing STPs as well as regular monitoring of projects under construction. Other States may consider adopting such measures for monitoring the performance of the already developed sewerage infrastructure.

- The river polluted stretches reporting BoD levels conforming to bathing standard have been given in para-3. The efforts need to be continued to ensure that these stretches which reportedly fall under cleaner category shall continue to remain clean and should not slip back to polluted stretches. Efforts made by State in this directions need to continue and propagated amongst other States through the framework of Central Monitoring Committee.
- Similarly, river stretches having BoD levels which are slightly higher than limit of 3m/l and accordingly fall under Priority-V are low hanging fruits which can be easily transformed into clean stretches by concerted efforts and less investments. Focus of the States may remain on these stretches which can provided primary treatments to control the pollution levels.
- During the period w.e.f August to December 2020, States except Rajasthan have reported that 59 sewerage projects (STPs) have been completed and are under commissioning adding a total capacity of 1116.885 MLD. These sewerage infrastructure plants are under commissioning. Rajasthan has reported that 15 STPs of 45.5 MLD have been completed and made operational in the State in 2020 during January to December 2020.
- **STPs of around 8859 MLD treatment capacity are under-construction in the on-going projects in the States/ UTs. States of Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttarakhand, Uttar Pradesh and West Bengal will be able to complete 163 projects with capacity of about 1989.211 MLD in the States/ UTs by March 2021. The progress of these projects have to be regularly monitored using appropriate progress monitoring mechanism (eg., creation of Whatsapp group) similar to one established by Madhya Pradesh so that lag in completion of timeline is avoided.**
- Among on-going projects, **States may have to review the project timelines in detail so as to assess if any further reduction in completion timelines schedule in respect of projects scheduled for completion during the period beyond April 2021 as indicated in par – 5 of this report is possible.**
- **There are 242 projects under tendering in Andhra Pradesh, Bihar, Chhattisgarh, DDDNH, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Puducherry, Punjab, Uttar Pradesh and West Bengal, while a large no. of projects are awaiting sanction of the DPR or DPR is yet to be prepared. 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 this.

- Observations continued from 2nd Quarterly Report of Central Monitoring Committee:
 - Considering financial limitations, **States/ UTs have been advised to 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. The documents have been made available to States as per their requests also.**
 - “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.** More than 30 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.**
 - 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 suboptimum utilization and dysfunctionality of existing STPs. This will help them in finalizing plans to upgrade STPs requiring upgradation so as to make them functional.

- **Most of the 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.
 - **There is need to have a separate paradigm in urban planning for river cities.** As the urban system is key to impact the health of rivers and urbanization is likely to grow in future, this needs to be given due importance and urban river management plans need to be developed. Mainstreaming river and water body health into Master Plan is suggested to have long term perspective and enable legal support at municipal level for several of these activities.”

Compliance Status with regard to directions of this Tribunal dated 21.9.2020 in OA 829/2019 (coastal pollution) and OA 148/2016 (use of treated sewage for secondary purposes)

18. It may be noted that the Tribunal has considered overlapping issues in above matters as follows:

- **O.A. 829/2019:** issue of coastal pollution on account of discharge of untreated effluents/sewage. This matter was

disposed of on 21.09.2020 with the following operative directions:-

*“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.”

- **O.A. 148/2016:** management of sewage treated water is involved. This matter was also disposed of on 21.09.2020 with the following operative directions:-

“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.”*

19. Accordingly, the CMC has in its report dealt with the issue of coastal pollution and reutilization of treated water in Para IX and XI already quoted above.

Separate order in respect of some polluted rivers for further monitoring by the concerned Executive authorities

20. Apart from the said matter, the Tribunal is considering/has considered the remedial action for control of pollution of certain rivers separately, under Supreme Court directions, or otherwise²³. Further reference to the orders in the said matters will be made later. After monitoring the remedial action, the Tribunal has directed the Chief Secretaries of the concerned States to take over further monitoring as will be shown from paras 32 to 35. **Consistently with the said approach, this course of action needs to be followed for monitoring prevention of discharge of waste in rivers and water bodies as well as preventing pollution and rejuvenating the polluted river stretches.**

Reports from some States/Oversight Committee for UP

21. Though some States have also filed their individual reports, it is not necessary to refer to the same as they are covered in the above report of CMC. However, report of an Oversight Committee constituted by this

²³ 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**)
- 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).

Tribunal for State of UP headed by Justice SVS Rathore, former Judge of Allahabad High Court at Lucknow have also filed two separate reports - in O.A. No. 593/2017 and O.A. No. 673/2018.

22. The report in O.A. No. 593/2017 filed on 13.02.2021 gives the status of compliance of the STPs, ETPs, CETPs, use of treated water and concludes with the following recommendations:-

“Recommendations:

In view of the above we recommend as follows:

1. *Recovery position of EC is not good. Strict steps should be taken to accelerate the process of EC recovery.*
2. *Action plans for reuse of treated water have not been finalized yet. They may be prepared expeditiously and implemented with strict timelines.*
3. *There are many non-operational STPs under rehabilitation. The process may be expedited. It is also suggested that wherever old STPs are under operation on UASB technology, they may be upgraded to latest technology like SBR technology.*
4. *Steps have been taken to address gaps in generation and treatment of sewage/effluents by setting up functional ETPs, CETPs and STPs in the state. However city wise evaluation of requirements of STPs/ETPs/CETPs has not been done so far*
5. *The capacity utilisation of existing STPs may be improved by identifying the bottlenecks and plugging them in each case.*
6. *The operation and maintenance of STPs/ETPs/CETPs and their respective distribution system should be improved for optimal results. The working of operators under One City One Operator Scheme needs to be continuously evaluated and this evaluation may be linked with their payment and renewal system.”*

23. The report in O.A. No. 673/2018 filed on 12.02.2021 concludes with the following recommendations:-

“RECOMMENDATIONS BY THE OVERSIGHT COMMITTEE

1. *Out of total 339 drains in 12 polluted river stretches, 257 are untapped till date. Untreated sewage is flowing into the rivers and no interim measure has been taken to prevent this. Plan details along with timelines and corresponding physical and financial progress regarding*

tapping of these 257 drains be filed by the Govt before NGT within a month.

2. *Out of total 5500 MLD sewage generated in the State of these 12 polluted river stretches, only 2630 MLD is treated in operational 100 STPs. There exist a gap of 2870 MLD. Currently, 38 STPs with capacity of 887.06 MLD are under construction while 24 STPs with capacity of 568.10 MLD are proposed. The progress in construction and project implementation appears to be slow. The State Govt should file the physical and financial progress of STP capacity augmentation before NGT along with definite timelines within a month. 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, UPPCB/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.*
3. *Progress of in situ remediation as an interim measure appears to be not satisfactory. In the meeting held by Oversight Committee on 5.2.2021 no information could be furnished by the concerned authorities which suggests that no action has been taken in this regard. CPCB had given notice for EC for inaction by authorities for ensuring bio/phytoremediation for Rs 18 Crore which has also been not deposited. 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. Further, the proposed timelines for in situ remediation along with details of project approval and financial approvals for these 257 untapped drains be filed by the Govt before NGT within a month.*
4. *It has been observed that e-flow is being maintained in River Ganga while study was in progress with reference to other perennial rivers. The report of the study was expected to be received by Dec, 2020 from IIT, Delhi. However, till date no report has been received by the Department. It is recommended that Irrigation Dept. must pursue the matter and ensure post study action.*
5. *Monitoring of Grossly Polluting Industries needs to be stepped up. UPPCB should issue notices to all defaulters and also realize the EC imposed earlier. GPIs in all polluted river stretches be connected to Central Control Room at Lucknow through OCEMS. This shall ensure accountability in the pollution reporting of the GPIs.*
6. *The State government has not yet deposited the Performance Guarantee of Rs.15 crore as mandated by*

NGT. Chief Secretary, UP must ensure compliance in this matter.

7. *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.*
8. *The work of floodplain demarcation is still under progress. It is suggested that pillars be fixed in all the stretches and notification be done within six months.*
9. *The residents of different districts were 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.*
10. *The Committee recommends Mining Dept., UP to submit a detailed report about status of illegal sand mining in all the 12 polluted stretches in the State. Information regarding enforcement and action taken by the Dept. to control illegal sand mining must be elaborated.*
11. *The sewage treatment capacity of Lucknow needs to be augmented for improving the water quality of river Gomti. 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.*
12. *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.*
13. *There are many flaws in Waste Management Processing Plant in Lucknow managed by M/s Eco Green. During the inspection visits it was found that waste processing plant at Shiveri was non-operational. No 'waste to energy' work had been started in the treatment unit. 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.”

Consideration of the Reports and further directions:

24. We have given careful consideration to the data furnished by way of above reports and found that the progress achieved is insubstantial. We note discrepancy in the data in the current report compared to the data in the last report dated 15.09.2020. In the last report, the data of sewage generation was mentioned to be 53,396.84 MLD while in the current report it is mentioned as 48,000 MLD. Explanation in the report is that the earlier information was incomplete and the current report gives the correct figure.

It is seen that huge gap in generation and treatment of sewage continues. Capacity is said to be only 62% but the entire capacity is not utilised. Utilised capacity is only 44% as per data furnished by the CPCB in OA 95/2018, *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors*, to be referred later. As per last report, 1831 industries were working without any ETP in violation of law. 1123 ETPs were non functional. 62 CETPs and 530 STPs were non-compliant. Several projects are still at tender/DPR stage with no interim remediation arrangement. This statistic relates to the urban areas of the entire country, including the towns on the banks of rivers in question. No statistics have been given about the gap in generation and treatment of the sewage in rural areas. While the report mentions that the National FSSM Policy has been introduced in 2017 and some States have also issued their State Level Policies, the FSTPs operational are said to be only about 30 and in the offing about 400 which are hardly sufficient to address the huge gap. Credible database needs to be compiled in this regard and comprehensive action plan prepared to ensure that there is no gap in the waste generation and treatment. Execution of the

action plan has to be planned having in mind the requirements of the urban and rural areas separately. The policy must include utilization of biosolids for using as composting need to be duly ensured. The observations and recommendations in the report on issues not expressly dealt with need to be duly followed.

To address the huge gap in generation and treatment of waste, requisite number of treatment plants need to be in place at the earliest, including modular STPs wherever necessary. The plants already set up need to be functional and compliant. The ongoing projects have to be completed within the stipulated timelines. Pending such treatment interim measures for phyto/bio-remediation needs to be taken to ensure compliance of the provisions of the Water Act prohibiting discharge of any contaminant in water bodies.

Thus, huge water pollution is taking place as per official data with no effective adverse action against polluters, though it is crime under the law of land in the same way as homicide and assault. Pollution is resulting in deaths and diseases but with no punishment and no protection to the victims posing serious threat to rule of law requiring protection of innocent and punishment of guilty by the State. Emergent and stringent measures are necessary for discharge of Constitutional duties by the States concerned otherwise it is tolerating and ignoring lawlessness. Repeated directions to shorten tendering/DPR procedures have remained uncomplied as also fixing accountability of officers responsible for the situation.

25. Thus, further action is required in mission-mode at all levels to discharge constitutional obligation of providing pollution free environment and also to protect public health. Scarce sources of drinking water and

irrigation are required to be maintained free from contamination. This is basic constitutional obligation of the authorities under the Constitution being linked to 'Right to Life'. Without this being done in a meaningful manner, there can be no sustainable development. **There is need for stringent enforcement by way of adverse measures, including recovery of compensation for continuing violation and adverse entries in the record of defaulting officers. Accountability for those who are entrusted the responsibility to comply with these directions must be fixed on the principle of good governance to enforce rule of law to protect rights of citizens.**

26. We find that the river water quality has been analyzed without taking into account one of the major components of river pollution i.e. fecal coliform. **The river water quality is declared 'fit for bathing' only with reference to BOD, without concern of the fecal coliform, which does not represent true picture and such course is thus against the law.** This may be duly remedied. **There is need for compiling an annual progress report in terms of improvement of water quality by reducing pollution load. The progress should be evaluated depending on extent of reduction of pollution load, in comparison to the earlier period. Such annual progress report must be put in public domain and appropriate action taken for inadequate progress after finding out the persons responsible for such failure and other causes, if any.** Adequate number of monitoring stations need to be installed in a timebound manner for the purpose of monitoring water quality.

27. One major step for monitoring is compiling data in transparent manner. The Tribunal has already directed, vide order dated 05.02.2021 in OA 95/2018, *Aryavart Foundation v. M/s Vapi Enviro Ltd. & Ors.*, that

National/State/District Environment Data Grids be established which will go a great way in compiling data and monitoring compliance. **There is also need to take further steps for enhancing the utilization of treated waste water. The gap in generation of treated water and its utilization needs to be addressed expeditiously and monitored in terms of quantity and quality.**

28. There is further need to re-engineer the administrative processes adopted and giving of the contracts, as earlier mentioned. **The time consuming DPRs and approval processes in the administration needs to be avoided and speedy action taken based on model DPRs and laid down standards.** It is a matter of regret that, as per official statistics, 56% of total generated sewage remains untreated and finds its way into the water bodies which is a crime under the law of the land for the last 47 years. This remains a constant threat to contamination of potable water. **Similar is the position with regard to the water pollution from other sources, including industries and dumping of solid and other waste.**

29. **Demarcation and protection of 'flood plain zones' keeping them free from encroachment is another challenge which needs to be tackled on war-footing by designating responsible and accountable officers to ensure that in the interregnum till requisite water treatment equipment are set up. Interim steps for sewage treatment need to be taken to reduce the pollution load.**

Need for improved Monitoring Mechanism in the light of Notification dated 07.10.2016 issued by the Ministry of Water Resources, River Development, and Ganga Rejuvenation

30. The Ministry of Water Resources, River Development, and Ganga Rejuvenation has issued Notification dated 07.10.2016 in respect of

management of River Ganga under the Environment (Protection) Act, 1986 called **“River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016”** (the Ganga Order) constituting authorities at National, State and District Levels called ‘National Ganga Council’, ‘Empowered Task Force on River Ganga’, ‘State Ganga Rejuvenation, Protection and Management Committee’ and ‘District Ganga Committees’. Further, ‘National Mission for Clean Ganga’ (NMCG) has been constituted. The object of the said notification is to **abate pollution and rejuvenate river Ganga, maintain e-flow, restrict activities on the river banks and other allied issues.** Steps to be taken are exhaustively laid down, apart from providing safety audit and conferring statutory authority to issue directions on related matters, including in respect of tributaries of River Ganga. The National Ganga Council is headed by the Hon’ble Prime Minister and the ‘Empowered Task Force’ is headed by the Jal Shakti Minister. The ‘State Ganga Committees’ are headed by the Chief Secretaries of the States. The ‘District Ganga Committees’ are headed by the District Magistrates. The NMCG is headed by its Director General with representatives of Central Ministries and State Governments. There is also a provision for setting up monitoring centers. Powers of the NMCG include issuance of directions to State Ganga Committees and District Ganga Committees or Local Authorities for rejuvenation of River Ganga and connected issues. It can frame a policy and direct its implementation. The Ganga safety audit is to be conducted by the National Ganga Council. It is to publish an annual report. The functioning of District Ganga Committees can be overseen by the NMCG either directly or through the State Ganga Committees. Every District Ganga Committees is also to prepare plan for protection of River Ganga and its tributaries and their

river beds and District Ganga Committees also to prepare its own budget and give monthly and annual reports.

31. **As noted earlier, protecting the rivers from pollution is a National necessity. Pollution of rivers has resulted in worst water crisis in the country.** This requires control of domestic and industrial pollution, utilization of treated sewage for secondary purposes to prevent use of potable water for such purposes, protecting the catchment areas, regulating activities in flood plains zones, maintaining e-flow which includes conserving the ground water. All these steps are duly mentioned in the Notification dated 07.10.2016 as necessary for control of pollution and rejuvenation of Ganga. This Tribunal in its earlier orders, including orders dated **20.09.2018, 19.12.2018, 08.04.2019, 06.12.2019 29.06.2020 and 21.09.2020, dealt with preparation and execution of action plans for all the 351 polluted river stretches almost on same pattern.** The compensation regime has been laid down not only for delay in finalizing action plans but also **for delay in commencing and completing the projects** on the pattern of regime applicable to Ganga. Similarly, in connected matter (OA 593/2017) relating to setting up of requisite numbers of ETP, CETP and STPs (including modular STPs wherever necessary) as per mandate of law under the Water Act and the judgment of the Hon'ble Supreme Court in *Paryavaran Suraksha*, supra, also compensation regime has been laid down and compliance of direction of the Hon'ble Supreme Court for rigid implementation mechanism for ensuring compliance by 31.03.2018 has been overseen, as mentioned earlier. Finally, this aspect of monitoring for setting up of all requisite ETPs, CETPs and STPs **(including modular STPs wherever necessary)** within the timelines and for also taking other steps for control of pollution and rejuvenation of 351 polluted river stretches was left to the CMC to be

headed by the Secretary, Ministry of Jal Shakti along with the NMCG and CPCB. At the State levels, directions have been issued for constituting River Rejuvenation Committee for preparation and execution of the action plans to be overseen by the Chief Secretaries of all the States by constituting 'environment cells' directly under them. The status reports given by the CMC constituted by this Tribunal have already been quoted above.

32. As mentioned earlier, apart from larger issues of control of pollution and rejuvenation of 351 river stretches, the Tribunal separately dealt with control and rejuvenation of some rivers separately including **Yamuna, Hindon, Ganga and Satluj**. River Yamuna which is tributary of Ganga was earlier subject matter of consideration before the Hon'ble Supreme Court and later the monitoring was entrusted to this Tribunal. The Tribunal gave detailed directions dated 13.01.2015 and 07.12.2017. The Tribunal also constituted an independent Monitoring Committee. **The said matter was finally disposed of on 27.01.2021 wherein the status of compliance under each head of action plan was duly mentioned.** It was further noted that clear roadmap already stands laid out and further success depended on the matter being taken seriously by the Administrative Authorities. **Accordingly, the Chief Secretaries were directed to take over the monitoring** as follows:

*“23. Accordingly, we direct that in terms of directions of the Hon'ble Supreme Court and earlier orders of this Tribunal, henceforth **the Chief Secretary, NCT of Delhi, in coordination with other authorities (such as, Additional Chief Secretary Urban Development, DDA, IDMC, DPCC, DJB) and the Chief Secretaries of Haryana and UP may personally monitor the progress, by evolving effective administrative mechanism to handle grim situation caused by years of neglect.** Causes of failure of existing mechanism and remedial measures required be addressed in the light of reports of the Committee. This needs to be further overseen at National level by the Central Monitoring Committee,*

headed by Secretary Jalshakti, which also includes NMCG and CPCB, in terms of earlier orders of this Tribunal. To give effect to the orders of the Hon'ble Supreme Court, the Tribunal has already directed constitution of River Rejuvenation Committees (RRCs) in all the States/UTs by order passed in OA No. 673 of 2018 in Re: News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted : CPCB, to be headed by the Environment Secretaries of States/UTs, to prepare and execute action plans for restoration of the polluted river stretches, under the oversight of the Chief Secretaries of the States/UTs. Such action plans are already in place. **The RRCs of Delhi, Haryana and UP may accordingly monitor execution of the action plans with proper inter-departmental coordination, to remedy the polluted stretches of river Yamuna in their respective jurisdiction, subject to oversight of the Chief Secretaries on quarterly basis, who may thereafter give their quarterly reports to the Central Monitoring Committee (CMC) headed by the Secretary, Jal Shakti in terms of order dated 21.09.2020 in O.A. No. 673/2018, supra.**"

33. In dealing with the river Satluj, vide order dated 22.01.2021 in O.A. No. 916/2018, *Sobha Singh & Ors. v. State of Punjab & Ors.*, the Tribunal also constituted a Monitoring Committee which oversaw preparation and execution of action plan. **The Tribunal finally concluded that once the roadmap was clear the ownership must be taken over by the Chief Secretary, Punjab.** The direction is as follows:-

"17. Accordingly, as already directed earlier, the ownership of the issue may now be taken over by the Chief Secretary, Punjab who may, having regard to seriousness of the issue, affecting health and environment, personally monitor progress of compliance atleast once in a month and also evolve an appropriate administrative mechanism to handle the grim situation. We may also note that the RRCs headed by Environment Secretaries in all the States/UTs have already been directed to monitor execution of action plans for the polluted river stretches on continuous basis. The RRC Punjab may also accordingly monitor execution of action plans for Sutlej and Beas rivers in continuation of 5th report of the Monitoring Committee, referred to above, subject to overall oversight of the Chief Secretary. The Chief Secretary while reviewing the status of various issues may focus on timely completion of the ongoing works. Quarterly reports be sent by the Chief Secretary to the CMC in terms of the order dated 21.09.2020 in OA 673/2018 which deals with the subject of restoration of 351 polluted river stretches, including the rivers in question."

34. Similar course was adopted for river Hindon, vide final order dated 02.02.2021 in O.A. No. 231/2014, *Doaba Paryavaran Samiti v. State of U.P & Ors.*, as follows:-

“14. Accordingly, as already directed earlier, the ownership of the issue may now be taken over by the Chief Secretary, UP, who may, having regard to seriousness of the issue, affecting health and environment, personally monitor progress of compliance atleast once in a month and also evolve an appropriate administrative mechanism to handle the grim situation. We may also note that the RRCs headed by Environment Secretaries in all the States/UTs have already been directed to monitor execution of action plans for the polluted river stretches on continuous basis. The RRC UP may also accordingly monitor execution of action plans for Hindon, subject to overall oversight of the Chief Secretary. The Chief Secretary while reviewing the status of various issues may focus on timely completion of the ongoing works. Quarterly reports be sent by the Chief Secretary to the CMC in terms of the order dated 21.09.2020 in OA 673/2018 which deals with the subject of restoration of 351 polluted river stretches, including the rivers in question.”

35. While dealing with the issue of control of pollution and rejuvenation of river Ganga, vide order dated 08.02.2021 in O.A. No. 200/2014, *M.C. Mehta v. Union of India & Ors.*, the Tribunal issued following **direction on the subject of recovery of compensation after specified date for failure to take steps within the prescribed timelines:-**

“14. At the cost of repetition, it may be mentioned that inspite of the fact that Water (Prevention and Control of Pollution) Act, 1974 was enacted 47 years back, to give effect to the decision in Stockholm Conference in the year 1972, the water pollution remains rampant. Though water pollution is a serious criminal offence under the law of the land, the authorities have failed to take stringent action against the violators. In a way the major violators remain State-authorities, who are constitutionally under obligation to ensure treatment of sewage before the same is discharged into the rivers and drains connected thereto which is not fully happening. The effect of water pollution on health and food safety is well known. Water is scarce and large population remains deprived of access to drinking water but still steps to prevent pollution of sources of drinking water are inadequate. The Hon’ble Supreme Court in its judgment in

Paryavaran Suraksha vs. Union of India & Ors., (2017) 5 SCC 326 discussed the problem in detail and fixed a firm deadline of 31.03.2018 by which all necessary CETPs/STPs/ETPs should be in place failing which coercive action, including prosecution of State authorities was mandated. **The States continue to violate the directions of the Hon'ble Supreme Court and give their own convenient deadlines which are thereafter further relaxed at will. This can hardly be held to be conducive to the environmental rule of law. The sewage treatment is less than 50% (the sewage generation from the urban population of the country is reported to be about 70000 MLD and treatment capacity about 27000 MLD)**²⁴ which is a matter of serious concern. The Tribunal has issued repeated directions. Till it is remedied, the goal of sustainable development is far cry.

15. The environmental law principles, which this Tribunal is mandated to apply under sections 20 and 15 of the NGT Act, 2010, are – ‘sustainable development’, ‘precautionary’ and ‘polluter pays’. These principles, accepted in Stockhome conference, have been held to be part of right to life under article 21 of the Constitution in *Vellore Citizens’ Welfare Forum v. Union of India*, (1996) 5 SCC 647. In *Hanuman Laxman*, (2019) 15 SCC 401, (paras 142-156), significance of environmental rule of law has been highlighted to achieve sustainable development goals for prosperity, health and well being. **This requires filling of gap between law and enforcement.** In *T.N. Godavarman Thirumulpad v. Union of India*, (2002) 10 SCC 606, at page 621, it was observed that the State has to

“forge in its policy to maintain ecological balance and hygienic environment. Article 21 protects right to life as a fundamental right. Enjoyment of life and its attainment including the right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore, **hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment.** Environmental protection, therefore, has now become a matter of grave concern for human existence. Promoting environmental protection implies maintenance of the environment as a whole comprising the man-made and the natural environment. Therefore, there is constitutional imperative on the Central Government, State Governments and bodies like municipalities, not only to ensure and safeguard proper environment but also an imperative duty to take adequate measures to promote, protect and improve the man-made environment and natural environment.”

²⁴ As per report of the CPCB dated 30.09.2020 quoted in the order of this Tribunal dated 05.02.2021 in OA 95/2018, *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.*

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19. In view of above, control of pollution of river Ganga needs to be taken seriously at all levels in Uttarakhand, UP, Bihar, Jharkhand and West Bengal. In absence thereof, the desired result of rejuvenation of river Ganga which is dream of every Indian will remain unfulfilled. **As observed earlier, the Hon'ble Supreme Court has monitored the subject for 34 years (1985-2014) and finally transferred the matter to this Tribunal in the year 2014. Though certain steps have been taken, the tables and compliance summary filed by NMCG quoted above show that with respect to various projects, the matter is still at the tender/DPRs stage and progress in completing the ongoing projects in a timely manner remains a challenge, inspite of availability of funds, supported by the Government of India initiatives.**

20. xxxxxx.....xxx.....

21. While removing already raised constructions from the floodplain zones may be dealt with separately, there is need to atleast identify and take protective measures. All remedial measures have already been outlined in the earlier orders of this Tribunal and need not be repeated. As earlier observed, the desirable situation is that not a drop of pollution is discharged into the river Ganga, but in any case, **every next report must show decreasing trend of pollution load which needs to be quantified by the NMCG in a tabular form giving the extent of pollution load on a particular date and reduction achieved in terms of gap after steps for treatment.** Stopping pollution is as much necessary as stopping any other heinous crimes of homicides and assaults as pollution is acknowledged cause of deaths and diseases and deprivation of access to drinking water.

22. xxxxxx.....xxx.....

23. **With regard to the recovery of laid down compensation, it is made clear that the compensation must be faithfully paid by the concerned States by way of deposit to the CPCB which can thereafter be spent for restoration in the same State, as per action plan prepared for the purpose by the State and approved by the NMCG, after due evaluation on the pattern of orders earlier passed by this Tribunal²⁵. NMCG may monitor compliance. Control of pollution of river Ganga will be incomplete without controlling pollution of all the tributaries and drains connected thereto.**

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27. Further progress reports may be furnished by the concerned five States to the NMCG on or before 30.06.2021

²⁵ Vide order dated 22.01.2021 in OA 916/2018, Sobha Singh v. State of Punjab & Ors.

showing status as on 15.6.2021. NMCG may give its consolidated progress report with its recommendations to this Tribunal by 15.07.2021 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF, with liberty to the States to file their response to such report. The NMCG report may inter alia specify reduction in pollution load, if any achieved during the interregnum, and if not, suggest further measures to achieve such reduction.”

36. The Tribunal, vide order dated 05.02.2021 in O.A. No. 95/2018, *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.* dealt with pollution of River Daman Ganga in Gujrat on account of inadequately functional CETP at Vapi. While considering the said issue, **the Tribunal obtained an audit-report on functioning of monitoring mechanism by State PCBs and found that the State PCBs were not as effective as required under the law.** They lacked manpower as well as the equipment. **Till revamping of the State PCBs takes place, it is difficult to expect effective monitoring from them to comply with the direction of the Hon’ble Supreme Court in *Paryavaran Suraksha*, supra for effective measures against polluters. The Tribunal also directed considering setting up of environment data grids.** Relevant observations from the said order are:-

*“10. We have given due consideration to the report, which shows startling state of affairs tested on the touchstone of ‘Sustainable Development’ principle, accepted in Stockholm conference and which has been held to be part of right to life under article 21 of the Constitution in *Vellore Citizens’ Welfare Forum v. Union of India*, (1996) 5 SCC 647.*

11. Some of the significant observations include failure to fill up key positions, to acquire necessary equipment, to arrange continuous training, to prepare State Environment policy, to specify industries-siting criteria, making inventory of grossly polluting industries, not specifying standards of inlet to the CETPs and hazardous waste, inaction against identified polluters, taking steps for bridging gaps in law and enforcement with regard to liquid and solid waste (of different kinds), including non-functional and noncompliant ETSPs, STPs and CETPs, inadequate monitoring of environmental compliance in Class II towns and coastal areas, failure to compile and

analyse data and filing annual reports, inefficiency shown by inaction against serious violations of environmental norms. Needless to say that such sorry state of affairs is reflection of poor governance, making environmental rule of law far from reality.

12. The environmental law principles, which this Tribunal is mandated to apply under sections 20 and 15 of the NGT Act, 2010, are – ‘sustainable development’, ‘precautionary’ and ‘polluter pays’. In *Hanuman Laxman*, (2019) 15 SCC 401, (paras 142-156), significance of environmental rule of law has been highlighted to achieve sustainable development goals for prosperity, health and well being. **This requires filling of gap between law and enforcement.** In *T.N. Godavarman Thirumulpad v. Union of India*, (2002) 10 SCC 606, at page 621, it was observed that the State has to

“forge in its policy to maintain ecological balance and hygienic environment. Article 21 protects right to life as a fundamental right. Enjoyment of life and its attainment including the right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore, **hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment.** Environmental protection, therefore, has now become a matter of grave concern for human existence. Promoting environmental protection implies maintenance of the environment as a whole comprising the man-made and the natural environment. Therefore, there is constitutional imperative on the Central Government, State Governments and bodies like municipalities, not only to ensure and safeguard proper environment but also an imperative duty to take adequate measures to promote, protect and improve the man-made environment and natural environment.”

13. In *A.P. Pollution Control Board v. Prof. M.V. Nayudu*, (1999) 2 SCC 718, at page 732, it was observed “..**Good governance is an accepted principle of international and domestic laws.It includes the need for the State to take the necessary “legislative, administrative and other actions” to implement the duty of prevention of environmental harm...**”. In *Techi Taga Tara*, supra, the Hon’ble Supreme Court referred to several Committees on **need for revamping the regulatory bodies by appointing persons of outstanding ability and high reputation to the State PCBs and equipping them with laboratories and other equipment for performing statutory functions.** Apart from the Tribunal being approached under sections 14 and 15 by aggrieved parties, pointing out degradation of environment and inaction of the statutory regulators, the

Hon'ble Supreme Court has required this Tribunal to monitor compliance of such statutory obligations for protecting environment. This is not possible unless the statutory regulators are effective. Significant issues so referred by the Hon'ble Supreme Court include a) liquid waste management, (2017) 5 SCC 326, Paryavaran Suraksha vs. Union of India & Ors. wherein it was directed that requisite STPs, ETPs, CETPs must be set up by 31.3.2018, failing which coercive measures may be taken against concerned authorities, to enforce statutory mandate of the Water (Prevention and Control of Pollution) Act enacted in 1974, prohibiting any water pollution, making it a criminal offence. b) compliance of solid waste management rules. Vide order dated 2.9.2014 in WP 888/1996, Almitra H. Patel Vs. Union of India & Ors. on the file of the Supreme Court, the issue has been referred to this Tribunal for monitoring compliance of Solid Waste Management Rules. c) In (2015) 12 SCC 764, MC Mehta v. UOI, issue of rejuvenation of Ganga stands referred to this Tribunal. d) Vide order dated 24.7.2017 in WP 725/1994, 'And quite flows Yamuna', rejuvenation of Yamuna stands referred to this Tribunal. It is not necessary to refer to several other orders. Finding that statutory regulators were not effective and serious damage was continuing, the Tribunal has appointed independent monitoring Committees²⁶ on several issues.

In substance, monitoring of the enacted environmental laws including the Water Act, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986 and Rules framed thereunder needs to be reviewed and made effective in the interest of protection of environment and public health. This is not possible unless the regulatory bodies are duly manned and equipped and function efficiently. The report shows that it is not happening and there are huge gaps. With such gaps, it is only a dream to expect clean environment – fresh water or fresh air. Irreversible degradation of environment is bound to result in avoidable deaths and diseases and loss of scarce and good quality water, air and soil and biodiversity.

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²⁶ To monitor compliances with regard to:

- (i) River Ghaggar in OA No. 138/2016 (TNHRC), Stench Grips Mansa's Sacred Ghaggar River
- (ii) River Sutlej in OA 916/2018, Sobha Singh v. State of Punjab & Ors.
- (iii) River Yamuna in OA 06/2012, Manoj Mishra v. UOI & Ors.
- (iv) River Musi in OA 426/2018, Mohammed Nayeem Pasha & Anr. v. State of Telangana & Ors.
- (v) River Ganga in OA 200/2014, M.C. Mehta v. Union of India & Ors.
- (vi) River Jojari in OA 329/2015, Gram Panchayat Araba v. State of Rajasthan & Ors.
- (vii) CETP in Taloja District in OA 125/2018, Arvind Pundalik Mhatre v. Ministry of Environment, Forest and Climate Change & Ors.
- (viii) District Environment Plan in OA 360/2018 Shree Nath Sharma v. Union of India & Ors.
- (ix) 'Rat Hole' coal mining in OA 110(THC)/2012, Threat to Life Arising Out of Coal Mining in South Garo Hills District v. State of Meghalaya & Ors.
- (x) Solid waste management rules in OA 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues.

17. As earlier observed, damage to environment is directly linked to the public health and neglecting compliance of environmental norms results in deaths and injuries. Violation of environmental norms needs to be taken as seriously as preventing crimes of homicides and assaults. It is more serious as the victims may be wide spread and unidentified. The consequences may even affect future generations. The compliance status is directly linked to effectiveness of monitoring which requires that the key office bearers of statutory regulators and oversight bodies are qualified, competent and reputed and exclusively dedicated to such work, instead of devoting part time, while simultaneously holding other positions. In this regard, the Tribunal has made observations vide order dated 02.02.2021 in OA 231/2014, *Doaba Paryavaran Samiti v. State of U.P & Ors*, finding that the Member Secretary of the PCB in UP was only devoting part-time, while holding several other positions. Adequate and well-equipped laboratories and effective machinery for implementation of "Polluter Pays" principle for assessment and collection of compensation is another important aspect of environmental governance.

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20. **Further, for improving monitoring and planning, authentic data needs to be compiled at all levels. Initiative will have to be taken consistent with Digital India initiatives by the MoEF/MoJS/MoUD/CPCB and based on such policy decisions, the Environment departments of all States/UTs will have to compile data in their respective jurisdiction, preferably Districtwise. On that basis District Environment Data Grid (DEDG), State Environment Data Grid (SEDG) and National Environment Data Grid (NEDG) can be set up and continuously updated. The Grid can be connected to online monitoring systems. Comprehensive Environment Pollution Index (CEPI) is being prepared limited to the Industrial Area but the Grid can cover larger areas and aspects and can be source of research and planning. It can also facilitate monitoring of and be in sync with other government initiatives such as National Mission for Clean Ganga, Swachh Bharat and Jalshakti Abhiyan etc. Based on such data, it may also be easier to study 'carrying capacity' of different areas to plan siting policy for various activities.**

22. xxxxxx.....xxx.....

(i) to (vii). xxxxxx.....xxx.....

(viii) Consistent with Digital India initiatives, MoEF&CC/MoJS/CPCB may consider setting up and periodically updating National Environment Data Grid (NEDG) linked to the State Environment Data Grids (SEDGs) DEDGs and further linked to available portals

like online air/water quality, Sameer and other monitoring stations to facilitate analysis, research and planning on the subject. It may be further interlinked to initiatives like NMCG/Swachh Bharat/Jal Jeevan Mission.”

Conclusion

37. **In view of the above, we are of opinion that the monitoring by the Tribunal cannot be unending and must now be taken over by the concerned authorities. The roadmap stands laid out. Action plans have been prepared for remediation of all the 351 identified polluted river stretches. Gaps have been identified for ETPs/CETPs/STPs (including modular STPs wherever necessary). Timelines are clear. Sources of funding are clear in the Supreme Court order. HAM model is also available as per Govt. of India Policy mentioned in the report of the CMC. Alternative conventional methods of bio/phytoremediation are also available as mentioned in the report of the CMC. Existing treatment capacity is not fully utilised. New projects, already ongoing or those yet to commence need to be expedited. Consequences for delay in terms of compensation and administrative measures have been clearly mentioned. The river rejuvenation committees in the States/UTs, as per directions of the Chief Secretaries may perform their obligations accordingly which may be monitored by the Central Monitoring Committee, headed by Secretary, Jal Shakti, as directed earlier.**

38. We find that the monitoring mechanism introduced as per directions of this Tribunal in the form of RRCs at the States level and CMC at the Central level is to an extent identical to the monitoring mechanism laid down under the River Ganga Rejuvenation, Protection and Management Authorities Notification 2016. **However, mechanism under the 2016 notification being statutory and exhaustive, it will be better that the**

same is adopted for all the river stretches as issues involved are common. The Empowered Task Force on river Ganga headed by Union Minister of Jal Shakti may exercise all powers and discharge all functions in relation to all the polluted river stretches in the same manner as the functions entrusted to it under the River Ganga 2016 order for control of pollution and rejuvenation of polluted river stretches. This is necessary so that the Nation/Central Monitoring Mechanism can be effective, in view of continuing failure of statutory mechanism under the Water Act for preventing pollution of water, resulting in pollution of almost all the rivers and water bodies in the country, posing serious threat to availability of potable water for drinking purposes as well as for safety of food chain. Hardly any accountability has been fixed for such serious failures. **It will be open to the MoJS to issue any further appropriate statutory order to give effect to the above directions under the EP Act. The National/Central Mechanism may enforce the earlier directions of this Tribunal for collecting compensation for the failure to commence or complete the projects for setting up of sewage treatment equipments or taking steps for interim remediation measures. This is necessary for accountability for the failure to obey the law. The compensation so assessed may be deposited in a separate account to be used for rejuvenation of the polluted river stretches in the same manner as directed in the case of Ganga quoted above. As directed vide order dated 19.12.2018 in OA 673/2018, responsibility to pay compensation on behalf of the States/UTs will be of the Chief Secretaries. As per scheme of the NGT Act, every order of NGT is executable as a decree of Civil Court²⁷.**

²⁷ Section 25 of the NGT Act, 2010 read with Section 51 of the CPC providing for mode of execution which include civil imprisonment.

Further, failure to comply order of the NGT is an offence punishable with imprisonment upto three years or fine upto Rs. 10 crores with additional fine for continuing offence after conviction.²⁸ If the offence is by a Government Department, Head of the Department is deemed to be guilty.²⁹ Cognizance of the offence can be taken by a Court on a complaint of Central Government or any other person who has given notice to the Central Government or its authorized representative. The complaint can be filed before a Court of Magistrate of first class. It is, thus, necessary in view of continuing violation of NGT order, requiring payment of compensation to reiterate the direction of responsibility for payment of compensation, to be of the Chief Secretaries and in default, their liability to be proceeded against for coercive measures for execution or by way of prosecution as per NGT Act, 2010.

39. Our directions are summed up as follows:

- (i) In the light of observations in Para 38 above, MoJS may devise an appropriate mechanism for more effective monitoring of steps for control of pollution and rejuvenation of all polluted river stretches in the country. The said mechanism may be called “National River Rejuvenation Mechanism” (NRRM) or given any other suitable name. NRRM may also consider the observations with regard to setting up of National/State/District Environment Data Grid at appropriate levels as an effective monitoring strategy.
- (ii) Chief Secretaries of all States/UTs and PCBs/PCCs must work in mission mode for strict compliance of timelines for

²⁸ Section 26

²⁹ Section 28

commencing new projects, completing ongoing projects and adopting interim phyto/bio-remediation measures, failing which compensation in terms of earlier orders be deposited with the MoJS, to be utilised in the respective States as per action plan to be approved by the NRRM. Other steps in terms of action plans for abatement of pollution and rejuvenation of rivers, including preventing discharge or dumping of liquid and solid waste, maintaining eflow, protecting floodplains, using treated sewage for secondary purposes, developing biodiversity parks, protecting water bodies, regulating ground water extraction, water conservation, maintaining water quality etc. be taken effectively. The process of rejuvenation of rivers need not be confined to only 351 stretches but may be applicable to all small, medium and big polluted rivers, including those dried up.

- (iii) The Chief Secretaries of all States/UTs may personally monitor progress at least once every month and the NRRM every quarter.
- (iv) Directions of this Tribunal in earlier order, the last being dated 21.9.2020 are reiterated.
- (v) The NRRM and the Chief Secretaries of all the States/UTs may take into account the observations in Paras 24 to 38 above.
- (vi) In view of discussion in para 38 above, it is made clear that accountability for failure to comply with the direction for payment of compensation will be of the concerned Chief Secretaries under Sections 25, 26, 28 and 30 of the NGT Act, 2010. The MoJS or any other aggrieved person will be free to take remedies by way of initiating prosecution or execution.

The applications are disposed of in above terms.

A copy of this order be forwarded to Secretary, MoJS, MoEF&CC, GoI, CPCB, Chief Secretaries and State PCBs/PCCs of all States/UTs by e-mail for compliance.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. Nagin Nanda, EM

February 22, 2021
Original Application No. 593/2017
(W.P.(Civil) No. 375/2012)
& Original Application No. 673/2018
SN



**POLLUTED
RIVER
STRETCHES
FOR
RESTORATION
OF WATER
QUALITY- 2022**

POLLUTED RIVER STRETCHES FOR RESTORATION OF WATER QUALITY



WATER QUALITY MANAGEMENT (I) DIVISION
Central Pollution Control Board (CPCB)
Ministry of Environment, Forests & Climate Change (MoEF & CC)
Parivesh Bhawan, East Arjun Nagar,
Delhi – 110032
November, 2022

PREFACE

The water quality of aquatic resources has been one of the major environmental concerns. It is important that effective actions are taken to control water pollution that adversely affects water bodies. Water bodies need to be regularly monitored to assess the quality and help formulating appropriate plan of actions. CPCB has been assessing water quality of aquatic resources in the country in association with State Pollution Control Boards & Pollution Control Committees under National Water Quality Monitoring Network (NWMP). At present, the network consists of 4484 locations spread in 28 States and 7 Union Territories across the country.

As part of a periodic assessment of water quality of rivers in the country, CPCB identifies polluted river stretches (PRS) considering Bio-Chemical Oxygen Demand (BOD) as a criteria parameter. The analysis helps in preparation and implementation of appropriate action plans for restoration of identified polluted river stretches.

This study 'Polluted River Stretches for Restoration of Water Quality – 2022' is a report based on the aforementioned periodic analysis of water quality data generated. To give a brief overview, of the 603 rivers assessed, there are 311 Polluted stretches in 279 rivers in 30 States & Union Territories. On a positive note, the number of polluted river stretches has decreased from 351 in year 2018 to 311 in year 2022. Further, marked improvement in previously identified 180 PRS has been observed, and 106 of these PRS no longer remain in the list of PRS.

Going forward, concerted efforts of Central and State Government organizations with effective public participation are required for further improvement in river water quality in India. I am optimistic that this study will be of use to all concerned stakeholders and agencies in taking remedial measures to achieve our collective goal of restoration of identified Polluted River Stretches.

Dr. Prashant Gargava
Member Secretary

November, 2022

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EXECUTIVE SUMMARY

Central Pollution Control Board (CPCB) executes National Water Quality Monitoring Programme (NWMP) for assessment of water quality of aquatic resources in the country. The assessment indicates that organic and microbial contamination of aquatic resources is a major concern for both rivers and static water bodies.

The present study is a periodic assessment of water quality of rivers in the country which is reflected in exceedances observed with respect to criteria parameter, Bio-Chemical Oxygen Demand (BOD) and identification of polluted river stretches/ locations where water quality is required to be restored with distinctive interventions and time targeted action plans.

CPCB initiated the exercise of identifying polluted river stretches (PRS) in the country since 2009 based on the river water quality monitored during the years 2002 - 2008 in 29 States/ UTs, and afterwards reports were brought out in 2015 based on assessment of water quality data monitored during the years 2009-2012 in 27 States/ UTs and in 2018 based on water quality data of the years 2016 & 2017 in 31 States/ UTs. Total 150 PRS on 121 rivers, 302 PRS on 275 rivers and 351 PRS on 323 rivers were identified & reported in year 2009, 2015 and 2018. The present assessment is based on the river water quality data of the years 2019 & 2021 excluding monitored data of year 2020 being the pandemic year.

It is observed that in the year 2015, 70% of rivers monitored (275 out of 390) were identified as polluted whereas, in the year 2022, only 46% of rivers monitored (279 out of 603) were identified as polluted.

As per latest assessment, out of 1920 locations on rivers monitored during 2019 & 2021, 1103 locations (57%) were observed complying with BOD criteria of less than 3.0 mg/L, notified for Outdoor bathing.

A comparative assessment of the PRS identified in present study with previous assessment of PRS in 2018 reveals that total number of PRS have decreased in number from 351 (in 2018) to 311 (in 2022). Significant reduction in number of PRS are observed in Priority V.

Detailed assessment indicates that improvement in water quality has been observed in 180 polluted river stretches identified during year 2018. Out of 180 PRS, 106 river stretches are

removed from the earlier identified list of polluted stretches due to compliance of BOD criteria i.e value less than 3.0 mg/ L. These stretches are located in Andhra Pradesh (5), Assam (22), Goa (7), Gujarat (8), Himachal Pradesh (1), Jammu & Kashmir (2), Jharkhand (3), Karnataka (4), Kerala (11), Madhya Pradesh (7), Maharashtra (1), Mizoram (7), Nagaland (2), Odisha (10), Puducherry (1), Punjab (1), Sikkim (4), Tripura (5), Uttarakhand (1) and West Bengal (4).

Due to improvement in water quality priority class of 74 previously identified polluted river stretches has been shifted to lower priority class. These stretches are in the States/ UTs of Assam (3), Chhattisgarh (2), Daman, Diu & Dadra Nagar Haveli (1), Goa (2), Gujarat (3), Himachal Pradesh (1), Jammu & Kashmir (3), Jharkhand (1), Karnataka (6), Kerala (4), Madhya Pradesh (4), Maharashtra (21), Manipur (1), Meghalaya (3), Nagaland (3), Odisha (1), Punjab (1), Tamil Nadu (3), Telangana (4), Uttar Pradesh (1), Uttarakhand (2) and West Bengal (4).

Priority class of 108 polluted river stretches identified in both the assessment years of 2018 and 2022 remained same indicating no improvement/ change in their water quality. Out of 108, 27 are identified in P – I, 02 in P – II, 08 in P – III, 04 in P – IV and 58 identified in P- V Class. No change in priority class indicates no further impact of pollution on water quality despite of increased activities with time in the catchment area of river like population, industrial growth, agricultural activity to cope up with demand resulting in increased quantity of sewage, solid waste, industrial effluent and agricultural run- off etc.

The decrease in number of identified polluted river stretches which have shown improvement in the water quality could be attributed to the efforts being made for development for infrastructure for Sewage management, industrial effluent management, waste management and enforcement of regulations for prevention and control of pollution in rivers.

1. INTRODUCTION

1.1 BACKGROUND

The Water (Prevention and Control of Pollution) Act 1974 enacted to maintain wholesomeness of aquatic resources. The Water Quality Management in India is performed under the provision of Water (Prevention and Control of Pollution) Act, 1974. The basic objective of this Act is to maintain and restore the wholesomeness of national aquatic resources by prevention and control of water pollution.

Water quality monitoring is therefore an imperative prerequisite in order to assess the extent of maintenance and restoration of water bodies. Central Pollution Control Board (CPCB) has established a network of monitoring stations on aquatic resources across the country. The monitoring of water quality initiated during 1977-78 under Global Environmental Monitoring System (GEMS) and gradually increased the network to cover all the aquatic resources in the country viz. Rivers, Lakes, Tanks, Ponds, Drains, Water Treatment Plant, Sewage Treatment Plants, coastal waters, wetlands and ground water under National Water Quality Monitoring Programme (NWMP).

The present monitoring network comprises of 4484 locations in 28 States and 7 Union Territories spread over the country (no network in Andaman and Nicobar Islands). The monitoring network covers 2108 locations on Rivers, 713 on stagnant water bodies (Lakes, Ponds and Tanks), 64 on Creeks/marine, 1235 on Wells and 364 on other water bodies (drains, canals, WTPs/STPs).

Subsequently through a wide network of water quality monitoring, water quality data is generated. During September 2018, CPCB had identified 351 Polluted river stretches in 31 States/ UTs considering water quality data for Biochemical Oxygen Demand (BOD) parameter generated in the year 2016 and 2017. Upon intervention of Hon'ble NGT, action plans were prepared by State Governments and UT Administrations for rejuvenation of 351 Polluted river stretches identified by CPCB. Concerned State/ UT Government departments are implementing the action plans and the progress is being reviewed periodically by the River Rejuvenation Committee (RRC) at State Level and Central Monitoring Committee (CMC) constituted under the Chairmanship of Secretary, Ministry of Jal Shakti at Central Level.

1.2 PURPOSE OF REPORT

The water quality database generated over a period of time indicated that rivers/ river water is not polluted or contaminated throughout the length but only at few locations wherein the self-assimilative capacity of rivers is unable to restore the water quality are polluted. These stretches/ locations on rivers are deeply impacted with various contaminants which are required to be captured and controlled.

To streamline the efforts and resource utilization for restoration of water quality to pristine level, identification of polluted river stretches was a prerequisite.

Since the year 2009, based on the river water quality monitored by State Pollution Control Boards & Pollution Control Committees, CPCB has been identifying polluted river stretches (PRS) in the country.

For identification of PRS, the water quality data for river monitoring locations with respect to Biochemical Oxygen Demand (BOD) parameter is considered. The locations/ stretches of rivers not meeting with the Primary water quality criteria for outdoor bathing for BOD i.e. more than 3 mg/L are identified as polluted locations or polluted stretches.

1.3 PROPOSED APPROACH AND METHODOLOGY

- River Water quality monitoring at identified locations is done by collecting and analysing river samples w.r.t various field observations, physico-chemical, bacteriological, Metals and Pesticide parameters on monthly basis as per The Guidelines for Water Quality Monitoring, 2017 issued by Ministry of Environment, Forest & Climate Change (MoEF & CC).
- The water quality data generated is submitted by SPCBs/ PCCs through online data entry portal namely Environmental Water Quality Data Entry System - EWQDES and stored centrally at CPCB server.
- For identification of polluted river stretches, the water quality data for river monitoring locations is reviewed and the monitoring locations non-compliant with the desired criteria for Bio-chemical Oxygen Demand (BOD) i.e. > 3.0 mg/L are identified as polluted locations. Two or more polluted locations identified on a river in a continuous sequence are considered as a stretch and defined as Polluted River Stretch.

1.4 CRITERIA FOR IDENTIFICATION AND CLASSIFICATION OF PRS

The locations/ stretches of rivers not meeting with the Primary water quality criteria for outdoor bathing for BOD parameter i.e. more than 3 mg/L are identified as polluted locations or polluted stretches.

- **If there is a single location on river, rivulet or stream and the location is not complying to BOD, it is identified as Polluted Location.**
- **Two or more polluted locations identified on a river in a continuous sequence are considered as a stretch and defined as Polluted River Stretch.**

PRS are categorized under five Priority Classes (I to V) on the basis of maximum BOD level observed. The criteria for prioritisation of river stretches is given below:

Priority – I

- ◆ Monitoring locations exceeding BOD concentration 30.0 mg/ L

Priority – II

- ◆ Monitoring locations having BOD between 20.0 – 30.0 mg/ L

Priority – III

- ◆ Monitoring locations having BOD between 10.0 – 20.0 mg/ L

Priority – IV

- ◆ Monitoring locations having BOD between 6.0 – 10.0 mg/ L

Priority – V

- ◆ Monitoring locations having BOD between 3.0 – 6.0 mg/ L

2. STATUS OF POLLUTED RIVER STRETCHES IN INDIA

The water quality data for years 2019 and 2021 is analyzed and monitoring locations exceeding the water quality criteria are identified as polluted locations. Water quality data for the year 2020 has not been considered in the exercise as data generated in year 2020 may not reflect the actual water quality as most commercial and industrial activities were restricted due to lockdown in the country in light of COVID 19 pandemic.

Upon reviewing water quality data of 1920 locations monitored during the year 2019 and 2021, it was observed that 817 river locations were exceeding the Primary Water Quality Criteria for Outdoor Bathing for the parameter BOD i.e. more than 3 mg/L. The list of 817 river locations is given in **Annexure I**. The polluted locations in a continuous sequence were defined as polluted river stretches. Based on the assessment, 311 polluted river stretches have been identified on 279 rivers in 30 States and Union Territories. The list of 279 polluted rivers and 324 rivers on which no polluted stretches were identified are provided in **Annexure II & III** respectively. The priority wise number of river stretches are given in Table 1 below.

Table - 1: Priority wise Number of Polluted River Stretches

| Priority Class | Number of polluted river Stretches |
|----------------|------------------------------------|
| I | 46 |
| II | 16 |
| III | 39 |
| IV | 65 |
| V | 145 |
| Total | 311 |

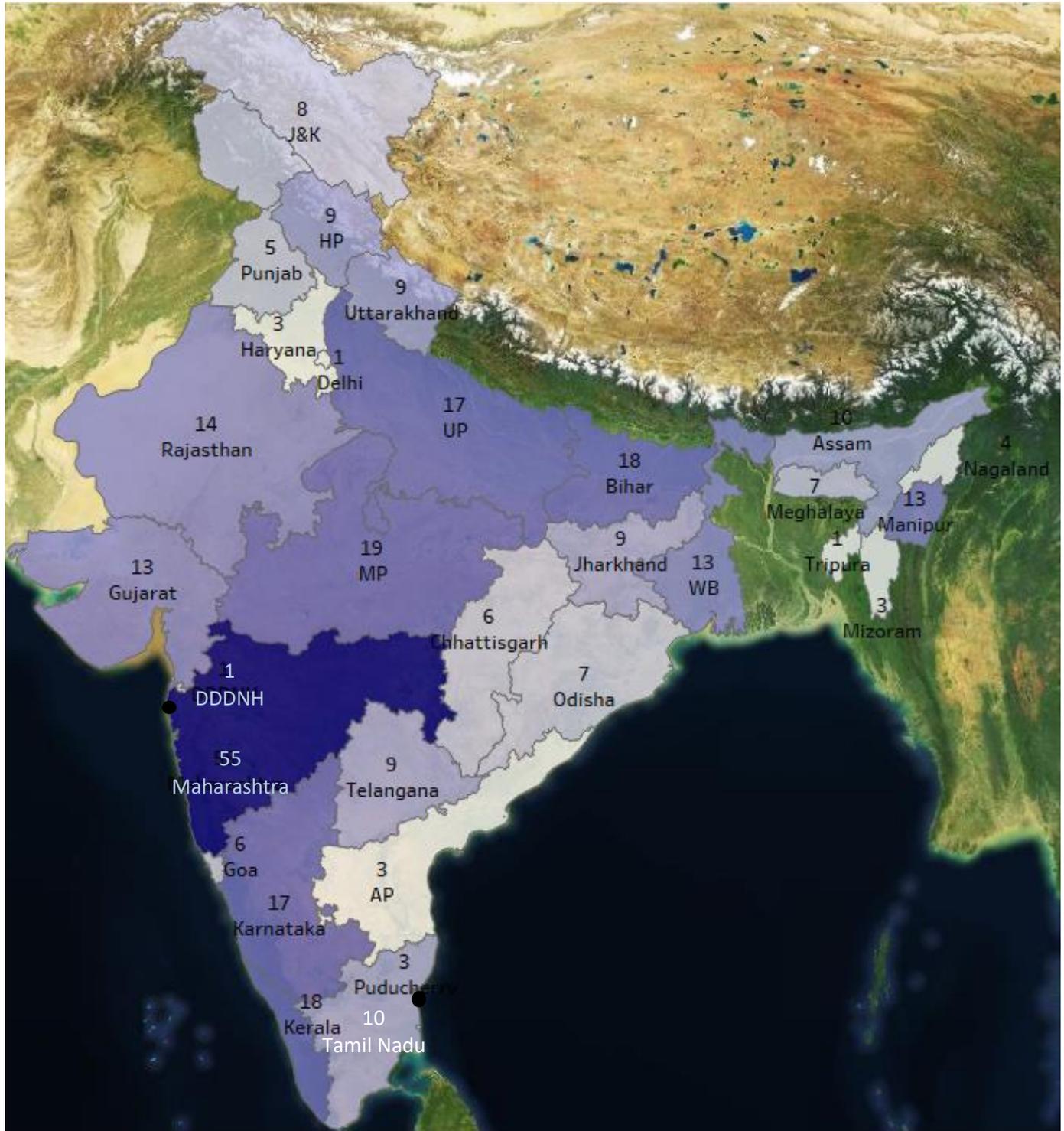
Based on the assessment, it is observed that, the state of Maharashtra has highest number of polluted river stretches i.e. 55, followed by Madhya Pradesh (19), Bihar (18), Kerala (18), Karnataka (17), Uttar Pradesh (17), Rajasthan (14), Gujarat (13), Manipur (13), West Bengal (13), Assam (10), Tamil Nadu (10), Himachal Pradesh (9), Jharkhand (9), Telangana (9), Uttarakhand (9), Jammu & Kashmir (8), Meghalaya (7), Odisha (7), Chhattisgarh (6), Goa (6), Punjab (5), Nagaland (4), Andhra

Pradesh (3), Haryana (3), Mizoram (3), Puducherry (3), Daman and Diu, Dadra and Nagar Haveli (1), Delhi (1) and Tripura (1). State-wise & Priority wise number of PRS are given in **Table - 2**. A pictorial illustration for number of polluted river stretches identified in state-wise manner is given at **Figure - 1**.

Table – 2: State-wise & Priority wise number of Polluted River Stretches

| S No. | STATE/UNION TERRITORY | PRIORITY CLASS | | | | | TOTAL No. of PRS |
|--------------------|--|----------------|-----------|-----------|-----------|------------|---------------------|
| | | I | II | III | IV | V | |
| 1. | ANDHRA PRADESH | 1 | | | 1 | 1 | 3 |
| 2. | ASSAM | 1 | | | | 9 | 10 |
| 3. | BIHAR | | 1 | 2 | 7 | 8 | 18 |
| 4. | CHHATTISGARH | | 1 | | 2 | 3 | 6 |
| 5. | DAMAN AND DIU, DADRA AND NAGAR HAVELI | | | 1 | | | 1 |
| 6. | DELHI | 1 | | | | | 1 |
| 7. | GOA | | | | 1 | 5 | 6 |
| 8. | GUJARAT | 6 | 1 | 1 | 1 | 4 | 13 |
| 9. | HARYANA | 2 | 1 | | | | 3 |
| 10. | HIMACHAL PRADESH | 4 | | | 1 | 4 | 9 |
| 11. | JAMMU & KASHMIR | | | 2 | 4 | 2 | 8 |
| 12. | JHARKHAND | | | 1 | 2 | 6 | 9 |
| 13. | KARNATAKA | 3 | | | 3 | 11 | 17 |
| 14. | KERALA | | | 1 | 2 | 15 | 18 |
| 15. | MADHYA PRADESH | 2 | | 1 | 5 | 11 | 19 |
| 16. | MAHARASHTRA | 4 | 5 | 18 | 17 | 11 | 55 |
| 17. | MANIPUR | | | | 2 | 11 | 13 |
| 18. | MEGHALAYA | 2 | | | 1 | 4 | 7 |
| 19. | MIZORAM | | | | 2 | 1 | 3 |
| 20. | NAGALAND | | | 1 | | 3 | 4 |
| 21. | ODISHA | 1 | | | 3 | 3 | 7 |
| 22. | PUDUCHERRY | | 1 | 1 | 1 | | 3 |
| 23. | PUNJAB | 3 | | | | 2 | 5 |
| 24. | RAJASTHAN | 2 | | 1 | 4 | 7 | 14 |
| 25. | TAMIL NADU | 4 | 1 | 1 | 1 | 3 | 10 |
| 26. | TELANGANA | 1 | 1 | 2 | | 5 | 9 |
| 27. | TRIPURA | | | | | 1 | 1 |
| 28. | UTTAR PRADESH | 6 | | 1 | 2 | 8 | 17 |
| 29. | UTTARAKHAND | 2 | 2 | 4 | | 1 | 9 |
| 30. | WEST BENGAL | 1 | 2 | 1 | 3 | 6 | 13 |
| GRAND TOTAL | | 46 | 16 | 39 | 65 | 145 | 311 |

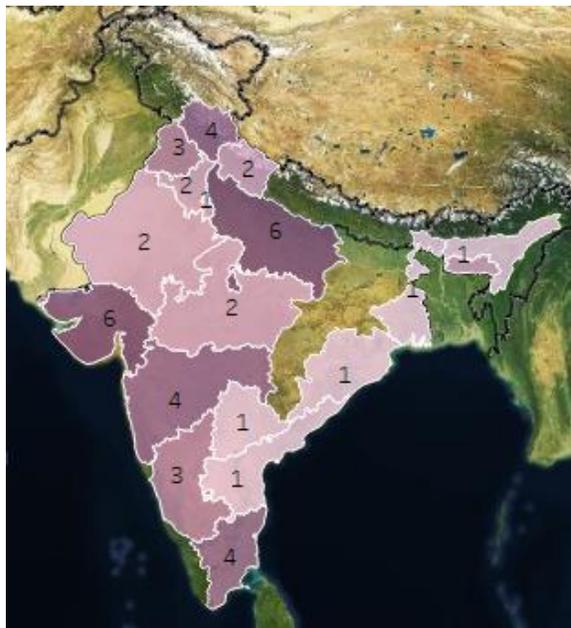
Figure 1: Number of polluted river stretches identified in States/ UTs



2.1 PRS IDENTIFIED UNDER PRIORITY CLASS – I

46 Polluted river stretches have been identified in Priority Class – I (Refer **Annexure – IV**) in 18 States/ UTs with highest number i.e. 06 in Gujarat & Uttar Pradesh; 04 in Himachal Pradesh, Maharashtra & Tamil Nadu; 03 in Karnataka & Punjab; 02 in Haryana, Madhya Pradesh, Meghalaya, Rajasthan & Uttarakhand and 01 each in Telangana, Andhra Pradesh, Assam, Delhi, West Bengal and Odisha.

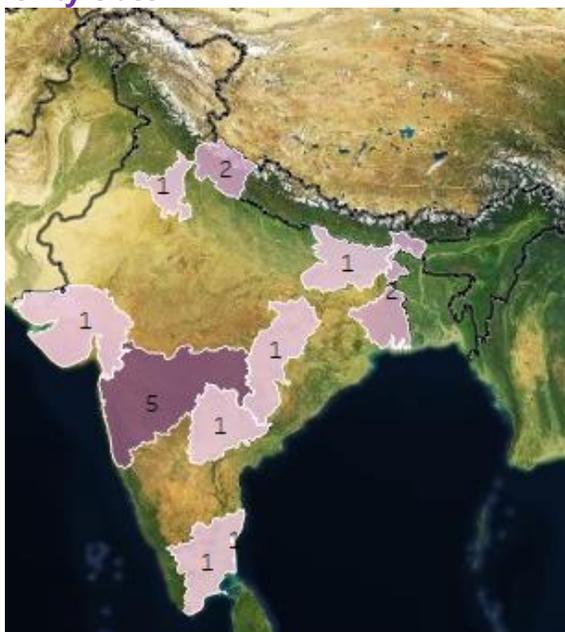
Figure 2: Number of polluted river stretches identified in States/ UTs in Priority class I



2.2 PRS IDENTIFIED UNDER PRIORITY CLASS – II

16 Polluted river stretches have been identified in Priority Class – II (Refer **Annexure – V**) in 10 States/ UTs with highest number i.e. 05 in Maharashtra; 02 in Uttarakhand & West Bengal and 01 each in Bihar, Chhattisgarh, Gujarat, Haryana, Puducherry, Tamil Nadu and Telangana. Detailed list is provided in

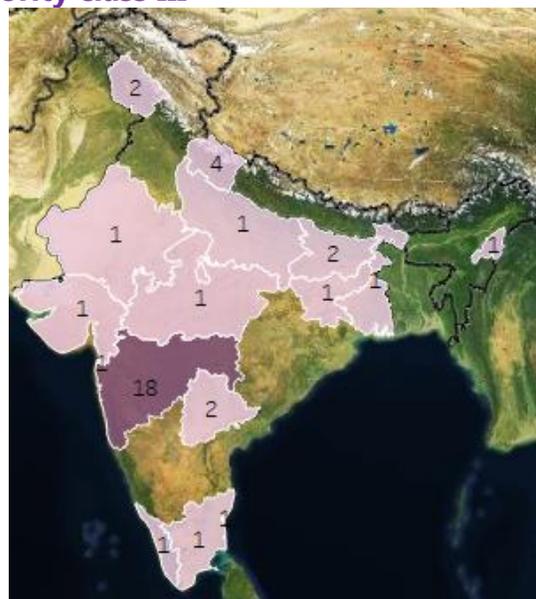
Figure 3: Number of polluted river stretches identified in States/ UTs in Priority class II



2.3 PRS IDENTIFIED UNDER PRIORITY CLASS – III

39 Polluted river stretches have been identified in Priority Class – III (Refer **Annexure – VI**) in 16 States/ UTs with highest number i.e. 18 in Maharashtra; 04 in Uttarakhand; 02 in Bihar, Jammu & Kashmir & Telangana and 01 each in Dadra Nagar Haveli, Gujarat, Jharkhand, Kerala, Madhya Pradesh, Nagaland, Puducherry, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

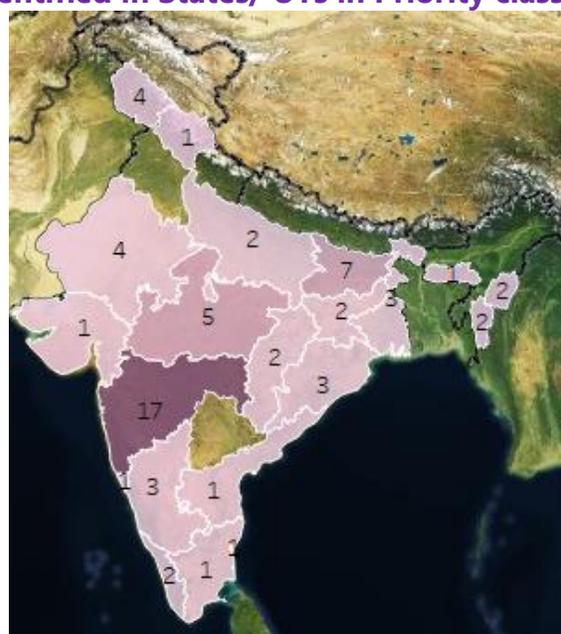
Figure 4: Number of polluted river stretches identified in States/ UTs in Priority class III



2.4 PRS IDENTIFIED UNDER PRIORITY CLASS – IV

65 Polluted river stretches have been identified in Priority Class – IV (Refer **Annexure – VII**) in 21 States/ UTs with highest number i.e. 17 in Maharashtra; 07 in Bihar; 05 in Madhya Pradesh; 04 in Jammu & Kashmir & Rajasthan; 03 in Karnataka, Odisha & West Bengal; 02 in Chhattisgarh, Jharkhand, Kerala, Manipur, Mizoram & Uttar Pradesh and 01 each in Andhra Pradesh, Goa, Gujarat, Himachal Pradesh, Meghalaya, Puducherry and Tamil Nadu.

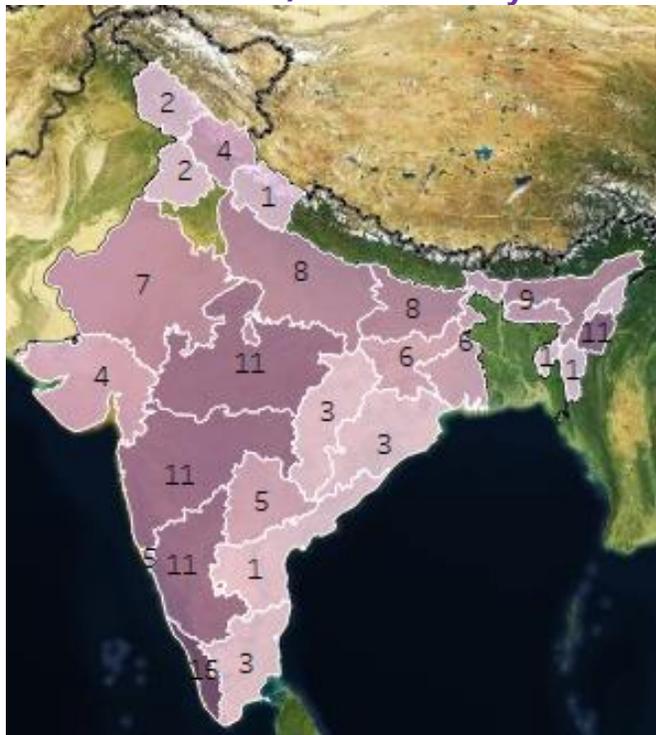
Figure 5: Number of polluted river stretches identified in States/ UTs in Priority class IV



2.5 PRS IDENTIFIED UNDER PRIORITY CLASS – V

145 Polluted river stretches have been identified in Priority Class – V (Refer **Annexure – VIII**) in 26 States/ UTs with highest number i.e. 15 in Kerala; 11 in Madhya Pradesh, Maharashtra & Manipur; 09 in Assam; 08 in Bihar & Uttar Pradesh; 07 in Rajasthan; 06 in Jharkhand & West Bengal; 05 in Goa & Telangana; 04 in Gujarat, Himachal Pradesh & Meghalaya; 03 in Chhattisgarh, Nagaland, Odisha & Tamil Nadu; 02 in Jammu & Kashmir & Punjab and 01 each in Andhra Pradesh, Mizoram, Tripura and Uttarakhand.

Figure 6: Number of polluted river stretches identified in States/ UTs in Priority class V



3. STATE-WISE ASSESSMENT OF RIVER WATER QUALITY & IDENTIFICATION OF POLLUTED RIVER STRETCHES

3.1 WATER QUALITY OF RIVERS IN ANDHRA PRADESH

Water Quality of 16 rivers (Refer **Annexure I**) in Andhra Pradesh was monitored at 41 locations during the year 2019 and 2021, out of which, 4 locations on 3 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 3 polluted rivers are Gostani, Upputeru, Vasishta. Details of polluted river stretches identified are given in table below.

Table - 3: Number of Polluted River Stretches in Andhra Pradesh

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------|----------------------------------|-------------------------|----------------|
| 1. | GOSTANI | ALONG VILLAGE VENDRA | 8.6 | IV |
| 2. | UPPUTERU | ALONG CHINAGOLLAPALEM VILLAGE | 3.4 | V |
| 3. | VASISHTA | ALONG NARASAPURAM | 58.0 | I |

3.2 WATER QUALITY OF RIVERS IN ARUNACHAL PRADESH

Water Quality of 03 rivers (Refer **Annexure I**) in Arunachal Pradesh was monitored at 3 locations during the year 2019 and 2021. All the monitored locations were found complying to the prescribed Water Quality Criteria with respect to BOD.

3.3 WATER QUALITY OF RIVERS IN ASSAM

Water Quality of 60 rivers (Refer **Annexure I**) in Assam was monitored at 86 locations during the year 2019 and 2021, out of which, 11 locations on 10 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 10 polluted rivers are Bega, Bharalu, Burhidihing, Dhansiri, Digboi, Kharsang, Kulsi, Mora Bharali, Pagldia, Tocklai. Details of polluted river stretches identified are given in table below.

Table - 4: Number of Polluted River Stretches in Assam

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED(mg/L) | PRIORITY CLASS |
|-------|-------------|----------------------------------|------------------------|----------------|
| 1. | BEGA | ALONG MANGALDOI | 3.9 | V |
| 2. | BHARALU | ALONG ULUBARI | 76.0 | I |
| 3. | BURHIDIHING | ALONG MARGHERITA | 3.6 | V |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED(mg/L) | PRIORITY CLASS |
|-------|--------------|---|------------------------|----------------|
| 4. | DHANSIRI | ALONG BOKAJAN AND NUMALIGARH | 3.5 | V |
| 5. | DIGBOI | IOCL OIL TOWN TO LAKHIPATHAR RESERVE FOREST | 5.2 | V |
| 6. | KHARSANG | ALONG KHARSANG | 3.3 | V |
| 7. | KULSI | ALONG CHAYGAON | 3.2 | V |
| 8. | MORA BHARALI | ALONG MORA BHARALI | 3.6 | V |
| 9. | PAGLDIA | ALONG NALBARI TOWN | 3.4 | V |
| 10. | TOCKLAI | ALONG KUMAR KAIBARTA GAON | 4.8 | V |

3.4 WATER QUALITY OF RIVERS IN BIHAR

Water Quality of 21 rivers (Refer **Annexure I**) in Bihar was monitored at 95 locations during the year 2019 and 2021, out of which, 45 locations on 18 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 18 polluted rivers are Bagmati, Burhi Gandak/ Sikraha, Daha, Dhous, Gandak, Ganga, Gangi, Ghaghara, Harbora, Kamala, Kohra, Lakhandei, Manusmar, Parmar, Punpun, Ramrekha, Sirsiya, Sone. Details of polluted river stretches identified are given in table below.

Table - 5: Number of Polluted River Stretches in Bihar

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------------------|--|-------------------------|----------------|
| 1. | BAGMATI | ALONG SIRNIA | 3.6 | V |
| 2. | BURHI GANDAK/ SIKRAHNA | NARKATIAGANJ TO PAKRIDAYAL | 10.0 | IV |
| 3. | DAHA | GOPALGANJ TO SIWAN | 10.0 | IV |
| 4. | DHOUS | ALONG MADHUVAPUR | 5.6 | V |
| 5. | GANDAK | ALONG REWAGHAT | 3.8 | V |
| 6. | GANGA | ALONG BUXAR, PATNA, FATWAH AND BHAGALPUR | 7.9 | IV |
| 7. | GANGI | AT ARA | 8.0 | IV |
| 8. | GHAGHARA | ALONG REVELGANJ | 3.6 | V |
| 9. | HARBORA | ALONG NARKATIAGANJ | 8.0 | IV |
| 10. | KAMALA | ALONG DARBHANGA | 5.0 | V |
| 11. | KOHRA | ALONG MANJHAULIA | 8.0 | IV |
| 12. | LAKHANDEI | ALONG SITAMARHI | 11.0 | III |
| 13. | MANUSMAR | ALONG SITAMARHI | 6.0 | V |
| 14. | PARMAR | ALONG JOGBANI | 3.4 | V |
| 15. | PUNPUN | ALONG PUNPUN | 10.0 | IV |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------|-------------------------------------|-------------------------|----------------|
| 16. | RAMREKHA | HARINAGAR | 12.0 | III |
| 17. | SIRSIYA | RAXAUL | 30.0 | II |
| 18. | SONE | KOELWAR | 4.0 | V |

3.5 WATER QUALITY OF RIVERS IN CHHATTISGARH

Water Quality of 08 rivers (Refer **Annexure I**) in Chhattisgarh was monitored at 29 locations during the year 2019 and 2021, out of which, 12 locations on 6 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 6 polluted rivers are Arpa, Hasdeo, Kelo, Kharoon, Mahanadi, Seonath. Details of polluted river stretches identified are given in table below.

Table - 6: Number of Polluted River Stretches in Chhattisgarh

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------|-------------------------------------|-------------------------|----------------|
| 1. | ARPA | BILASPUR | 9.6 | IV |
| 2. | HASDEO | CHAMPA | 3.4 | V |
| 3. | KELO | RAIGARH | 3.9 | V |
| 4. | KHAROON | ALONG RAIPUR | 28.5 | II |
| 5. | MAHANADI | SHIVRINARAYAN TO PORATH | 3.8 | V |
| 6. | SEONATH | RAJNANDGAON TO JHENGHARI | 6.4 | IV |

3.6 WATER QUALITY OF RIVERS IN DAMAN AND DIU, DADRA AND NAGAR HAVELI

Water Quality of river Damanganga in Daman and Diu, Dadra and Nagar Haveli was monitored at 10 locations during the year 2019 and 2021 (Refer **Annexure I**), out of which, 6 locations were found non-complying to the prescribed Water Quality Criteria with respect to BOD. Details of polluted river stretch identified are given in table below.

Table - 7: Number of Polluted River Stretches in Daman and Diu, Dadra and Nagar Haveli

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------|-------------------------------------|-------------------------|----------------|
| 1. | DAMANGANGA | ALONG DAMAN | 14.8 | III |

3.7 WATER QUALITY OF RIVERS IN DELHI

Water Quality of river Yamuna in Delhi was monitored at 8 locations during the year 2019 and 2021 (Refer **Annexure I**) and all the monitored locations were found non-complying to the prescribed Water Quality Criteria with respect to BOD. Details of polluted river stretch identified are given in table below.

Table - 8: Number of Polluted River Stretches in Delhi

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------|----------------------------------|-------------------------|----------------|
| 1. | YAMUNA | PALLA TO OKHLA D/S | 83.0 | I |

3.8 WATER QUALITY OF RIVERS IN GOA

Water Quality of 6 rivers (Refer **Annexure I**) in Goa was monitored at 30 locations during the year 2019 and 2021, out of which, 10 locations on 6 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 6 polluted rivers are Kalna, Khandepar, Mandovi, Mapusa, Sal, Zuari. Details of polluted river stretches identified are given in table below.

Table - 9: Number of Polluted River Stretches in Goa

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------|----------------------------------|-------------------------|----------------|
| 1. | KALNA | ALONG CHANDEL | 4.0 | V |
| 2. | KHANDEPAR | ALONG KHANDEPAR | 4.2 | V |
| 3. | MANDOVI | ALONG AMONA | 3.7 | V |
| 4. | MAPUSA | ALONG KARASWADA | 5.0 | V |
| 5. | SAL | KHAREBAND TO ASSOLNA | 6.0 | V |
| 6. | ZUARI | PANCHAWADI TO MARCAIM | 6.4 | IV |

3.9 WATER QUALITY OF RIVERS IN GUJARAT

Water Quality of 25 rivers (Refer **Annexure I**) in Gujarat was monitored at 64 locations during the year 2019 and 2021, out of which, 25 locations on 13 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 13 polluted rivers are Amlakhadi, Bhadar, Bhogavo, Bhukhi Khadi, Damanganga, Dhadar, Khari, Mahi, Mindhola, Sabarmati, Shedhi, Tapi, Vishwamitri. Details of polluted river stretches identified are given in table below.

Table - 10: Number of Polluted River Stretches in Gujarat

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------------|----------------------------------|-------------------------|----------------|
| 1. | AMLAKHADI | ALONG ANKLESHWAR | 49.0 | I |
| 2. | BHADAR | ALONG JETPUR | 258.6 | I |
| 3. | BHOGAVO | ALONG SURENDRANAGAR | 6.0 | V |
| 4. | BHUKHI KHADI | ALONG VAGRA | 3.9 | V |
| 5. | DAMANGANGA | ALONG KACHIGAON AND ALONG CHANOD | 5.3 | V |
| 6. | DHADAR | ALONG KOTHADA | 33.0 | I |
| 7. | KHARI | ALONG LALI VILLAGE | 195.0 | I |
| 8. | MAHI | KOTNA TO MUJPUR | 12.0 | III |
| 9. | MINDHOLA | ALONG SACHIN | 28.0 | II |
| 10. | SABARMATI | RAYSAN TO VAUTHA | 292.0 | I |
| 11. | SHEDHI | ALONG KHEDA | 6.2 | IV |
| 12. | TAPI | ALONG NIZHAR | 3.4 | V |
| 13. | VISHWAMITRI | ALONG KHALIPUR VILLAGE | 38.0 | I |

3.10 WATER QUALITY OF RIVERS IN HARYANA

Water Quality of 3 rivers (Refer **Annexure I**) in Haryana was monitored at 22 locations during the year 2019 and 2021, out of which, 20 locations on 3 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 3 polluted rivers are Ghaggar, Markanda, Yamuna. Details of polluted river stretches identified are given in table below.

Table - 11: Number of Polluted River Stretches in Haryana

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------|--|-------------------------|----------------|
| 1. | GHAGGAR | BHAGWANPUR TO SURAJPUR; ALONG KALA AMB, ALONG CHANDRAPURA, ALONG SIRSA | 206.0 | I |
| 2. | MARKANDA | ALONG NARAINGARH | 29.0 | II |
| 3. | YAMUNA | HATHNIKUND TO PALLA AND PALWAL TO HASANPUR | 43.0 | I |

3.11 WATER QUALITY OF RIVERS IN HIMACHAL PRADESH

Water Quality of 37 rivers (Refer **Annexure I**) in Himachal Pradesh was monitored at 136 locations during the year 2019 and 2021, out of which, 19 locations on 9 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 9 polluted rivers are Ashwini

Khad, Bald, Giri, Markanda, Pabbar, Ratta, Shikari Khad, Sirsa, Sukhana. Details of polluted river stretches identified are given in table below.

Table - 12: Number of Polluted River Stretches in Himachal Pradesh

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------------|--|-------------------------|----------------|
| 1. | ASHWINI KHAD | MATHOLI TO BHOG | 80.0 | I |
| 2. | BALD | ALONG BADDI | 40.0 | I |
| 3. | GIRI | ALONG YASHWANT NAGAR AND ALONG DADAHU | 4.8 | V |
| 4. | MARKANDA | SALANI TO RAMPUR JATTAN | 4.0 | V |
| 5. | PABBAR | ALONG SWARAKUDDU | 4.6 | V |
| 6. | RATTA | ALONG NALAGARH | 8.0 | IV |
| 7. | SHIKARI KHAD | ALONG ROHRU | 4.6 | V |
| 8. | SIRSA | ALONG NALAGARH | 40.0 | I |
| 9. | SUKHANA | ALONG PARWANOO | 72.0 | I |

3.12 WATER QUALITY OF RIVERS IN JAMMU & KASHMIR

Water Quality of 15 rivers (Refer **Annexure I**) in Jammu & Kashmir was monitored at 58 locations during the year 2019 and 2021, out of which, 19 locations on 8 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 8 polluted rivers are Banganga, Basanter, Chuntkol, Devak, Gawkadal, Jhelum, Lidder, Tawi. Details of polluted river stretches identified are given in table below.

Table – 13: Number of Polluted River Stretches in Jammu & Kashmir

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------|-------------------------------------|-------------------------|----------------|
| 1. | BANGANGA | ALONG KATRA | 6.2 | IV |
| 2. | BASANTER | ALONG SAMBA | 4.2 | V |
| 3. | CHUNTKOL | AT MAULANA AZAD BRIDGE | 11.2 | III |
| 4. | DEVAK | ALONG UDHAMPUR | 10.0 | IV |
| 5. | GAWKADAL | ALONG SHERGARHI | 3.2 | V |
| 6. | JHELUM | SRINAGAR TO BARAMULLA | 7.8 | IV |
| 7. | LIDDER | ALONG PAHALGAM | 7.0 | IV |
| 8. | TAWI | ALONG JAMMU | 14.0 | III |

3.13 WATER QUALITY OF RIVERS IN JHARKHAND

Water Quality of 20 rivers (Refer **Annexure I**) in Jharkhand was monitored at 62 locations during the year 2019 and 2021, out of which, 19 locations on 9 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 9 polluted rivers are Bokaro, Damodar, Garga, Harmu, Jumar, Katri, Kharkhai, Koina, Subarnarekha. Details of polluted river stretches identified are given in table below.

Table - 14: Number of Polluted River Stretches in Jharkhand

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------------|---|-------------------------|----------------|
| 1. | BOKARO | ALONG JARANGDIH | 3.9 | V |
| 2. | DAMODAR | ALONG TELMUCHO, ALONG JARANGDIH, ALONG RAMGARH | 3.5 | V |
| 3. | GARGA | ALONG TELMUCHO | 4.9 | V |
| 4. | HARMU | ALONG RANCHI | 10.1 | III |
| 5. | JUMAR | NAGRI TO BHUTI | 5.3 | V |
| 6. | KATRI | ALONG MOONIDIH | 3.6 | V |
| 7. | KHARKHAI | ALONG SONARI | 8.0 | IV |
| 8. | KOINA | ALONG MANOHARPUR | 3.1 | V |
| 9. | SUBARNAREKHA | ALONG RANCHI, ALONG MURI, ALONG JAMSHEDPUR | 10.0 | IV |

3.14 WATER QUALITY OF RIVERS IN KARNATAKA

Water Quality of 30 rivers (Refer **Annexure I**) in Karnataka was monitored at 107 locations during the year 2019 and 2021, out of which, 41 locations on 17 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 17 polluted rivers are Aghanashini, Arkavathi, Bhadra, Bhima, Cauvery, Dakshinak Pinakini, Gangavali, Kabini, Kagina, Krishna, Lakshmantirtha, Netravathi, Sharavathi, Shimsha, Thenpennai, Tunga, Tungabhadra. Details of polluted river stretches identified are given in table below.

Table - 15: Number of Polluted River Stretches in Karnataka

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-------------|-------------------------------------|-------------------------|----------------|
| 1. | AGHANASHINI | ALONG KUMATA | 3.3 | V |
| 2. | ARKAVATHI | HESARAGHATTA TO KANAKPURA | 39.0 | I |
| 3. | BHADRA | BHADRAVATHI TO HOLEHUNNUR | 7.0 | IV |
| 4. | BHIMA | GANGAPUR TO YADGIR | 4.0 | V |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------------------|---|-------------------------|----------------|
| 5. | CAUVERY | ALONG SRI RANGAPATTANNA | 6.0 | V |
| 6. | DAKSHINAK PINAKINI | ALONG MUGALUR | 111.0 | I |
| 7. | GANGAVALI | ALONG ANKOLA | 3.4 | V |
| 8. | KABINI | ALONG NANJANAGUD | 3.8 | V |
| 9. | KAGINA | ALONG GOLA K | 3.1 | V |
| 10. | KRISHNA | ALONG UGARKHURD, ALAMATTI TO TINTANI, ALONG DEVASAGAR | 4.7 | V |
| 11. | LAKSHMANTIRTHA | ALONG HUNSUR | 5.6 | V |
| 12. | NETRAVATHI | ALONG DHARMASTALA | 6.0 | V |
| 13. | SHARAVATHI | ALONG HONNAVARA | 3.3 | V |
| 14. | SHIMSHA | YEDIYAR TO MADDUAR | 9.5 | IV |
| 15. | THENPENNAI | ALONG KODIYALAM | 72.0 | I |
| 16. | TUNGA | ALONG SHIVAMOGGA | 6.0 | V |
| 17. | TUNGABHADRA | KUDLI TO MYLARA, ULLANUR TO HOCHCHALLI | 6.2 | IV |

3.15 WATER QUALITY OF RIVERS IN KERALA

Water Quality of 49 rivers (Refer **Annexure I**) in Kerala was monitored at 75 locations during the year 2019 and 2021, out of which, 25 locations on 18 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 18 polluted rivers are Ayroor, Chalakudy, Chitthrapuzha, Kadalundy, Kadambayar, Kallai, Kalpathi Puzha, Karmana, Korayar, Mamom, Manimala, Neyyar, Pamba, Periyar, Pullur, Thirur, Uppala, Vamanapuram. Details of polluted river stretches identified are given in table below.

Table - 16: Number of Polluted River Stretches in Kerala

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------------|---|-------------------------|----------------|
| 1. | AYROOR | ALONG ERNAKULAM | 5.5 | V |
| 2. | CHALAKUDY | ALONG PULICKALKA-DAVU | 3.3 | V |
| 3. | CHITTHRAPUZHA | ALONG IRUMPANAM | 3.2 | V |
| 4. | KADALUNDY | ALONG TIRURANGADI | 3.4 | V |
| 5. | KADAMBAYAR | MANCKAKADAVU TO BRAHMAPURAM | 4.4 | V |
| 6. | KALLAI | ALONG KALLAI | 4.6 | V |
| 7. | KALPATHI PUZHA | ALONG KALPATHI | 3.3 | V |
| 8. | KARMANA | ALONG ARUVIKARA AND ALONG MOONNATTUMUKKU | 10.2 | III |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-------------|---|-------------------------|----------------|
| 9. | KORAYAR | ALONG KANJIKODE | 3.5 | V |
| 10. | MAMOM | ALONG MAMAM | 4.6 | V |
| 11. | MANIMALA | ALONG THONDRA | 3.1 | V |
| 12. | NEYYPAR | ARUVIPURAM TO AMARAVILA | 6.5 | IV |
| 13. | PAMBA | ALONG PAMBA AND ALONG MANNAR | 3.9 | V |
| 14. | PERIYAR | ALONG ALWAYS-ELOOR, ALONG PURAPPALLIKAVU, ALONG KALAMASSERY | 3.9 | V |
| 15. | PULLUR | ALONG PULLUR | 3.8 | V |
| 16. | THIRUR | ALONG TITUR | 3.2 | V |
| 17. | UPPALA | ALONG MAJBAIL | 3.3 | V |
| 18. | VAMANAPURAM | ALONG VAMANAPURAM | 6.3 | IV |

3.16 WATER QUALITY OF RIVERS IN MADHYA PRADESH

Water Quality of 48 rivers (Refer **Annexure I**) in Madhya Pradesh was monitored at 158 locations during the year 2019 and 2021, out of which, 33 locations on 19 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 19 polluted rivers are Betwa, Bichia, Chambal, Chamla, Hiran, Johila, Kaliasot, Kanhan, Khan, Kshipra, Kunda, Mahi, Malei, Mandakini, Newaj, Parvati, Sone, Tapi, Wardha. Details of polluted river stretches identified are given in table below.

Table - 17: Number of Polluted River Stretches in Madhya Pradesh

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------|--|-------------------------|----------------|
| 1. | BETWA | MANDIDEEP TO VIDISHA AND ALONG KANJIYA | 7.3 | IV |
| 2. | BICHIA | ALONG REWA | 4.0 | V |
| 3. | CHAMBAL | NAGDA TO GANDHISAGAR | 72.0 | I |
| 4. | CHAMLA | ALONG BADNAGAR | 3.4 | V |
| 5. | HIRAN | ALONG JABALPUR | 7.8 | IV |
| 6. | JOHILA | ALONG NAROJABAD | 7.7 | IV |
| 7. | KALIASOT | ALONG MANDIDEEP | 3.9 | V |
| 8. | KANHAN | ALONG CHINDWARA | 7.8 | IV |
| 9. | KHAN | INDORE TO SANWER | 46.0 | I |
| 10. | KSHIPRA | ALONG UJJAIN | 18.0 | III |
| 11. | KUNDA | ALONG KHARGONE | 4.2 | V |
| 12. | MAHI | ALONG BAJNA | 5.0 | V |
| 13. | MALEI | ALONG JAORA | 4.0 | V |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------|----------------------------------|-------------------------|----------------|
| 14. | MANDAKINI | ALONG CHITRAKUT | 3.2 | V |
| 15. | NEWAJ | SHUJALPUR TO RAJGARH | 3.5 | V |
| 16. | PARVATI | ALONG BATAODAPAR | 3.7 | V |
| 17. | SONE | ALONG DEORA | 6.1 | IV |
| 18. | TAPI | ALONG BURHANPUR | 6.0 | V |
| 19. | WARDHA | ALONG BANGON | 4.0 | V |

3.17 WATER QUALITY OF RIVERS IN MAHARASHTRA

Water Quality of 56 rivers (Refer **Annexure I**) was Maharashtra is monitored at 156 locations during the year 2019 and 2021, out of which, 147 locations on 55 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 55 polluted rivers are Amba, Amravati, Bhatsa, Bhima, Bindusara, Bori, Burai, Chandrabhaga, Darna, Ghod, Girna, Godavari, Gomai, Hiwara, Indrayani, Kalu, Kan, Kanhan, Kolar, Koyna, Krishna, Kundalika, Manjeera, Mithi, Mor, Morna, Muchkundi, Mula, Mula-Mutha, Mutha, Nira, Panzara, Patalganga, Pawana, Pedhi, Pehlar, Penganga, Purna, Rangavali, Savitri, Sina, Surya, Tansa, Tapi, Titur, Ulhas, Urmodi, Vaitarna, Vashisti, Vel, Venna, Waghur, Wainganga, Wardha, Wena. Details of polluted river stretches identified are given in table below.

Table - 18: Number of Polluted River Stretches in Maharashtra

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------------|---|-------------------------|----------------|
| 1. | AMBA | ALONG ROHA | 4.9 | V |
| 2. | AMRAVATI | ALONG DHULE | 3.4 | V |
| 3. | BHATSA | SHAHAPUR TO BHIWANDI | 10.0 | IV |
| 4. | BHIMA | PUNE TO SOLAPUR | 38.0 | I |
| 5. | BINDUSARA | ALONG BEED | 4.8 | V |
| 6. | BORI | ALONG JALGAON | 3.4 | V |
| 7. | BURAI | ALONG DHULE | 9.2 | IV |
| 8. | CHANDRABHAGA | ALONG GURSALE | 13.5 | III |
| 9. | DARNA | BHAGUR TO CHEHEDI | 16.5 | III |
| 10. | GHOD | ALONG SHIRUR | 11.5 | III |
| 11. | GIRNA | MALEGAON TO JALGAON | 18.0 | III |
| 12. | GODAVARI | GANGAPR DAM TO MADHESWAR DAM, ALONG NANDUR, KAIGAON TO DHALEGAON, NANDED TO INTERSTATE BORDER | 28.0 | II |
| 13. | GOMAI | ALONG SHAHADA | 3.6 | V |
| 14. | HIWARA | ALONG PACHORA | 3.8 | V |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------|---|-------------------------|----------------|
| 15. | INDRAYANI | MOSHIGAON TO ALANDIGAON | 15.5 | III |
| 16. | KALU | ALONG KALYAN | 8.0 | IV |
| 17. | KAN | ALONG SAKRI | 6.5 | IV |
| 18. | KANHAN | PARSEONI TO KUHI | 22.0 | II |
| 19. | KOLAR | ALONG WAREGAON | 4.8 | V |
| 20. | KOYNA | ALONG KARAD | 7.5 | IV |
| 21. | KRISHNA | ALONG MAHABALESHWAR AND ALONG SATARA | 11.0 | III |
| 22. | KUNDALIKA | ALONG ROHA | 17.0 | III |
| 23. | MANJEERA | ALONG LATUR | 7.5 | IV |
| 24. | MITHI | ALONG MAHIM | 50.0 | I |
| 25. | MOR | ALONG PADALSHE | 9.8 | IV |
| 26. | MORNA | ALONG AKOLA | 10.4 | III |
| 27. | MUCHKUNDI | ALONG LANJA | 12.0 | III |
| 28. | MULA | AUNDHGAON TO BOPODI | 28.0 | II |
| 29. | MULA-MUTHA | MUNDHAWA TO THEUR | 22.0 | II |
| 30. | MUTHA | ALONG PUNE CITY | 50.0 | I |
| 31. | NIRA | SAROLA TO SANGAVI | 15.0 | III |
| 32. | PANZARA | ALONG PANZARA | 8.5 | IV |
| 33. | PATALGANGA | KHOPOLI TO KHARPADA | 11.0 | III |
| 34. | PAWANA | SANGAVIGAON TO DAPODI | 26.0 | II |
| 35. | PEDHI | ALONG BHATKULI | 10.0 | IV |
| 36. | PEHLAR | AT PEHLAR | 7.0 | IV |
| 37. | PENGANGA | MEHKAR TO UMARKHED | 7.2 | IV |
| 38. | PURNA | ASEGAON TO AKOLA | 6.8 | IV |
| 39. | RANGAVALI | ALONG NAVAPUR | 11.5 | III |
| 40. | SAVITRI | ALONG MAHAD | 50.0 | I |
| 41. | SINA | ALONG MOHAL | 8.4 | IV |
| 42. | SURYA | GARVASHET TO MASVAN | 11.0 | III |
| 43. | TANSA | ALONG VILLAGE DAKEWALI | 4.0 | V |
| 44. | TAPI | RAVER TO SHAHADA | 18.5 | III |
| 45. | TITUR | ALONG CHALISGAON | 11.5 | III |
| 46. | ULHAS | BADLAPUR TO MOHANE | 4.0 | V |
| 47. | URMODI | ALONG NAGTHANE | 6.8 | IV |
| 48. | VAITARNA | ALONG GANDHARE VILLAGE | 4.0 | V |
| 49. | VASHISTI | ALONG CHIPLUN | 4.0 | V |
| 50. | VEL | ALONG SHIKRAPUR | 9.0 | IV |
| 51. | VENNA | MAHABALESHWAR TO MAHULI | 7.2 | IV |
| 52. | WAGHUR | ALONG JALGAON | 11.0 | III |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------|-------------------------------------|-------------------------|----------------|
| 53. | WAINGANGA | TUMSAR TO AMBHORA | 14.0 | III |
| 54. | WARDHA | PULGAON TO RAJURA | 11.4 | III |
| 55. | WENA | ALONG HINGANGHAT | 7.6 | IV |

3.18 WATER QUALITY OF RIVERS IN MANIPUR

Water Quality of 14 rivers (Refer **Annexure I**) in Manipur was monitored at 39 locations during the year 2019 and 2021, out of which, 37 locations on 13 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 13 polluted rivers are Barak, Chakpi, Imphal, Iril, Khuga, Khujaïrok, Lokchao, Maha, Manipur, Nambul, Sekmai, Thoubal, Wangjing. Details of polluted river stretches identified are given in table below.

Table - 19: Number of Polluted River Stretches in Manipur

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------|-------------------------------------|-------------------------|----------------|
| 1. | BARAK | TAMENGLONG TO SENAPATI | 4.6 | V |
| 2. | CHAKPI | ALONG CHAKPIKARONG | 3.3 | V |
| 3. | IMPHAL | SEKMAI TO SAMUROU | 6.9 | IV |
| 4. | IRIL | KANGLA SIPHAI TO LILONG | 5.3 | V |
| 5. | KHUGA | KHUGA LAKE TO CHURACHANDPUR | 4.4 | V |
| 6. | KHUJAIROK | ALONG MOREH | 4.2 | V |
| 7. | LOKCHAO | ALONG BISHNUPUR | 4.4 | V |
| 8. | MAHA | ALONG CHANDEL | 4.7 | V |
| 9. | MANIPUR | WANGJING TO HEIROK | 4.1 | V |
| 10. | NAMBUL | SINGDA DAM TO BISHNUPUR | 7.0 | IV |
| 11. | SEKMAI | ALONG KAKCHING | 3.8 | V |
| 12. | THOUBAL | LILTAN TO PHADOM | 4.9 | V |
| 13. | WANGJING | WANGJING TO HEIROK | 4.4 | V |

3.19 WATER QUALITY OF RIVERS IN MEGHALAYA

Water Quality of 35 rivers (Refer **Annexure I**) in Meghalaya was monitored at 64 locations during the year 2019 and 2021, out of which, 12 locations on 7 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 7 polluted rivers are Kyrhukhla, Lukha, Myntdu, Nonbah, Umkhrah, Umshyrpi and Umtrew. Details of polluted river stretches identified are given in table below.

Table - 20: Number of Polluted River Stretches in Meghalaya

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------|----------------------------------|-------------------------|----------------|
| 1. | KYRHUKHLA | ALONG KHLIERIAT | 5.5 | V |
| 2. | LUKHA | ALONG MYNDIHATI | 5.5 | V |
| 3. | MYNTDU | ALONG JOWAI | 6.5 | IV |
| 4. | NONBAH | ALONG NONGSTOIN | 5.6 | V |
| 5. | UMKHRAH | ALONG SHILLONG | 56.0 | I |
| 6. | UMSHYRPI | DHANKETI TO HARISAVA | 44.0 | I |
| 7. | UMTREW | UMRAN TO BYRNIHAT | 5.8 | V |

3.20 WATER QUALITY OF RIVERS IN MIZORAM

Water Quality of 28 rivers (Refer **Annexure I**) in Mizoram was monitored at 46 locations during the year 2019 and 2021, out of which, 3 locations on 3 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 3 polluted rivers are Chithe, Lawbual, Tuikual. Details of polluted river stretches identified are given in table below.

Table - 21: Number of Polluted River Stretches in Mizoram

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|---------|----------------------------------|-------------------------|----------------|
| 1. | CHITHE | ALONG ARMED VENG | 5.9 | V |
| 2. | LAWBUAL | ALONG LAWIBUAL | 6.2 | IV |
| 3. | TUIKUAL | ALONG DINTHAR | 6.4 | IV |

3.21 WATER QUALITY OF RIVERS IN NAGALAND

Water Quality of 4 rivers (Refer **Annexure I**) in Nagaland is monitored at 8 locations during the year 2019 and 2021, out of which, were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 4 polluted rivers are Dhansiri, Dzu, Dzuna, Sano. Details of polluted river stretches identified are given in table below.

Table - 22: Number of Polluted River Stretches in Nagaland

| S NO. | RIVER NAME | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------|----------------------------------|-------------------------|----------------|
| 1. | DHANSIRI | ALONG DHANSIRI AND ALONG DIMAPUR | 18.0 | III |
| 2. | DZU | ALONG KOHIMA | 3.5 | V |
| 3. | DZUNA | ALONG KOHIMA | 3.5 | V |
| 4. | SANO | ALONG KOHIMA | 3.8 | V |

3.22 WATER QUALITY OF RIVERS IN ODISHA

Water Quality of 50 rivers (Refer **Annexure I**) in Odisha was monitored at 133 locations during the year 2019 and 2021, out of which, 14 locations on 7 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 7 polluted rivers are Brahmani, Daya, Gangua, Kathajodi, Kuakhai, Mangala, Serua. Details of polluted river stretches identified are given in table below.

Table - 23: Number of Polluted River Stretches in Odisha

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------|----------------------------------|-------------------------|----------------|
| 1. | BRAHMANI | ALONG ROURKELA | 5.6 | V |
| 2. | DAYA | NARANKHETA TO KANAS | 7.1 | IV |
| 3. | GANGUA | ALONG BHUBHNESHWAR | 39.2 | I |
| 4. | KATHAJODI | ALONG CUTTACK | 4.1 | V |
| 5. | KUAKHAI | ALONG BHUBANESWAR | 7.3 | IV |
| 6. | MANGALA | ALONG GOLASAHI | 7.4 | IV |
| 7. | SERUA | ALONG SANKHATRASA | 3.5 | V |

3.23 WATER QUALITY OF RIVERS IN PUDUCHERRY

Water Quality of 5 rivers (Refer **Annexure I**) in Puducherry was monitored at 6 locations during the year 2019 and 2021, out of which, 3 locations on 3 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 3 polluted rivers are Chunnambar, Coringa, Gautami-Godavari. Details of polluted river stretches identified are given in table below.

Table - 24: Number of Polluted River Stretches in Puducherry

| S NO. | RIVER NAME | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------------|----------------------------------|-------------------------|----------------|
| 1. | CHUNNAMBAR | ALONG NONANKUPPAM | 7.5 | IV |
| 2. | CORINGA | ALONG GEORGE PETA | 20.0 | III |
| 3. | GAUTAMI-GODAVARI | ALONG ADAVIPOLAM | 25.0 | II |

3.24 WATER QUALITY OF RIVERS IN PUNJAB

Water Quality of 5 rivers (Refer **Annexure I**) in Punjab was monitored 32 locations during the year 2019 and 2021, out of which, were found non-complying to the prescribed Water Quality Criteria

with respect to BOD. The names of 5 polluted rivers are Ghaggar, Kali Bein, Sirsa, Sutlej, Swan. Details of polluted river stretches identified are given in table below.

Table - 25: Number of Polluted River Stretches in Punjab

| S NO. | RIVER NAME | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------|----------------------------------|-------------------------|----------------|
| 1. | GHAGGAR | MUBARAKPUR TO SARDULGARH | 210.0 | I |
| 2. | KALI BEIN | AT MAND FATEHPUR | 5.8 | V |
| 3. | SIRSA | ALONG BADDI | 32.0 | I |
| 4. | SUTLEJ | LUDHIANA TO HARIKE | 120.0 | I |
| 5. | SWAN | ALONG SANTOSHGARH | 4.0 | V |

3.25 WATER QUALITY OF RIVERS IN RAJASTHAN

Water Quality of 20 rivers (Refer **Annexure I**) in Rajasthan was monitored at 35 locations. During the year 2019 and 2021, 33 locations on 18 rivers were monitored, out of which, 21 locations on 14 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 14 polluted rivers are Banas, Bandi, Berech, Bhanwar Semila, Chambal, Gambhiri, Guwardi, Jawai, Kanota, Khari, Kothari, Luni, Mahi, Piplaad. Details of polluted river stretches identified are given in table below.

Table - 26: Number of Polluted River Stretches in Rajasthan

| S NO. | RIVER NAME | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|----------------|--|-------------------------|----------------|
| 1. | BANAS | BASSI TO BISALPUR | 35.7 | I |
| 2. | BANDI | ALONG PALI | 94.0 | I |
| 3. | BERECH | ALONG NAGARI | 3.9 | V |
| 4. | BHANWAR SEMILA | ALONG BHANWAR SEMLA | 3.8 | V |
| 5. | CHAMBAL | ALONG KESHORAIPATTAN AND ALONG PALI (SAWAI MADHOPUR) | 5.7 | V |
| 6. | GAMBHIRI | ALONG CHITTORGARH | 4.9 | V |
| 7. | GUWARDI | ALONG GUWARDI | 9.5 | IV |
| 8. | JAWAI | AT JAWAI DAM | 11.7 | III |
| 9. | KANOTA | ALONG SUMEL | 9.5 | IV |
| 10. | KHARI | ALONG KELWARA | 7.6 | IV |
| 11. | KOTHARI | ALONG BHILWARA | 6.2 | IV |
| 12. | LUNI | ALONG RANAKPUR | 3.8 | V |
| 13. | MAHI | ALONG BANSWARA | 5.0 | V |
| 14. | PIPLAAD | AT PIPLAAD DAM | 3.2 | V |

3.26 WATER QUALITY OF RIVERS IN SIKKIM

Water Quality of 5 rivers (Refer **Annexure I**) in Sikkim was monitored at 14 locations during the year 2019 and 2021. All the monitored locations were found complying to the prescribed Water Quality Criteria with respect to BOD.

3.27 WATER QUALITY OF RIVERS IN TAMIL NADU

Water Quality of 12 rivers (Refer **Annexure I**) in Tamil Nadu was monitored at 73 locations during the year 2019 and 2021, out of which, 53 locations on 10 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 10 polluted rivers are Adyar, Amravati, Bhavani, Cauvery, Cooum, Palar, Sarabanga, Tambiraparani, Thirumanimuthar, Vasishta. Details of polluted river stretches identified are given in table below.

Table - 27: Number of Polluted River Stretches in Tamil Nadu

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|-----------------|--|-------------------------|----------------|
| 1. | ADYAR | TAMBARAM TO NANDANAM | 40.0 | I |
| 2. | AMRAVATI | ALONG MADHUTHUKKULAM AND ALONG KARUR | 4.0 | V |
| 3. | BHAVANI | ALONG BHAVANI | 4.6 | V |
| 4. | CAUVERY | ALONG METTUR, ALONG ERODE, KATTIPALAYAM TO TRICHY, KUMBAKONAM TO PITCHAVARAM | 17.0 | III |
| 5. | COOUM | AVADI TO SATHYA NAGAR | 345.0 | I |
| 6. | PALAR | ALONG VANIAMBADI | 4.0 | V |
| 7. | SARABANGA | ALONG SALEM | 24.0 | II |
| 8. | TAMBIRAPARANI | PAPPANKULAM TO ARUMUGANERI | 7.5 | IV |
| 9. | THIRUMANIMUTHAR | ALONG SALEM | 56.0 | I |
| 10. | VASISHTA | ALONG SALEM | 230.0 | I |

3.28 WATER QUALITY OF RIVERS IN TELANGANA

Water Quality of 12 rivers (Refer **Annexure I**) in Telangana was monitored at 49 locations during the year 2019 and 2021, out of which, 37 locations on 9 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 9 polluted rivers are Godavari, Karakavagu, Kinnersani, Krishna, Manair, Manjeera, Munneru, Musi, Nakkavagu. Details of polluted river stretches identified are given in table below.

Table - 28: Number of Polluted River Stretches in Telangana

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------|--|-------------------------|----------------|
| 1. | GODAVARI | ALONG BASARA, MANCHERIAL TO RAMAGUNDAM, ALONG KALESHWARAM, ALONG KAMALAPUR, ALONG BHADRACHALAM | 24.0 | II |
| 2. | KARAKAVAGU | ALONG PALONCHA | 4.0 | V |
| 3. | KINNERSANI | ALONG KHAMMAM | 6.0 | V |
| 4. | KRISHNA | ALONG WADAPALLY | 3.2 | V |
| 5. | MANAIR | KARIMNAGAR TO SOMNAPALLI | 16.0 | III |
| 6. | MANJEERA | SANGAREDDY TO GOWDICHARLA | 6.0 | V |
| 7. | MUNNERU | ALONG KHAMMAM | 6.0 | V |
| 8. | MUSI | BAPUGHAT TO RUDRAVELLY, KASANIGUDA TO VALIGONDA | 66.0 | I |
| 9. | NAKKAVAGU | ALONG BACHUGUDEM | 11.0 | III |

3.29 WATER QUALITY OF RIVERS IN TRIPURA

Water Quality of 11 rivers (Refer **Annexure I**) in Tripura was monitored at 38 locations during the year 2019 and 2021, out of which, only one location on river Haora was found non-complying to the prescribed Water Quality Criteria with respect to BOD. Details of polluted river stretch identified are given in table below.

Table - 29: Number of Polluted River Stretches in Tripura

| S NO. | RIVER NAME | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|------------|----------------------------------|-------------------------|----------------|
| 1. | HAORA | ALONG AGARTALA | 3.8 | V |

3.30 WATER QUALITY OF RIVERS IN UTTAR PRADESH

Water Quality of 18 rivers (Refer **Annexure I**) in Uttar Pradesh was monitored at 108 locations during the year 2019 and 2021, out of which, 96 locations on 17 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 17 polluted rivers are Bahela, Banganga, Betwa, Ganga, Ghaghara, Gomti, Hindon, Kali (W), Kalinadi (E), Pilkhar, Ramganga, Rapti, Rihand, Sai, Sone, Varuna and Yamuna. Details of polluted river stretches identified are given in table below.

Table - 30: Number of Polluted River Stretches in Uttar Pradesh

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------------|--|-------------------------|----------------|
| 1. | BAHELA | ALONG TANDA | 287.0 | I |
| 2. | BANGANGA | ALONG SHUKRATAL | 4.1 | V |
| 3. | BETWA | GOVIND SAGAR TO HAMIRPUR | 6.1 | IV |
| 4. | GANGA | FARRUKABAD TO ALLAHABAD, MIRZAPUR TO GHAZIPUR | 6.0 | V |
| 5. | GHAGHARA | ALONG AYODHYA AND BARHALGANJ TO DEORIA | 5.8 | V |
| 6. | GOMTI | MOHMEAK TO VARANASI | 15.2 | III |
| 7. | HINDON | SAHARANPUR TO GHAZIABAD | 126.0 | I |
| 8. | KALI (W) | ALONG MUZAFFAR NAGAR | 81.0 | I |
| 9. | KALINADI (E) | MEERUT TO KANNAUJ | 144.0 | I |
| 10. | PILKHAR | ALONG RAMPUR | 3.5 | V |
| 11. | RAMGANGA | ALONG SHERKOT AND KANNAUJ | 7.2 | IV |
| 12. | RAPTI | ALONG GORAKHPUR | 6.0 | V |
| 13. | RIHAND | ALONG RENUKUT | 3.4 | V |
| 14. | SAI | ALONG UNNAO AND JALALPUR | 4.2 | V |
| 15. | SONE | ALONG CHOPAN | 4.0 | V |
| 16. | VARUNA | RAMESHWAR TO TILL COFL WITH R. GANGA | 32.4 | I |
| 17. | YAMUNA | ALONG ASGARPUR, NOIDA, VRINDAVAN TO HAMIRPUR | 127.0 | I |

3.31 WATER QUALITY OF RIVERS IN UTTARAKHAND

Water Quality of 17 rivers (Refer **Annexure I**) in Uttarakhand was monitored at 40 locations during the year 2019 and 2021, out of which, 16 locations on 9 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 9 polluted rivers are Bahela, Banganga, Dhella, Kalyani, Kichha (Kitcha), Koshi, Nandour, Pilkhar and Suswa. Details of polluted river stretches identified are given in table below.

Table - 31: Number of Polluted River Stretches in Uttarakhand

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------------------|-------------------------------------|-------------------------|----------------|
| 1. | BAHELA | ALONG KASHIPUR | 56.0 | I |
| 2. | BANGANGA | ALONG IDRISHPUR | 4.0 | V |
| 3. | DHELLA | THAKURDWARA TO ADAMPUR | 60.0 | I |
| 4. | KALYANI | ALONG PANTNAGAR | 30.0 | II |
| 5. | KICHHA (KITCHA) | KICHHA TO PUL BHATTA | 12.0 | III |

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|---------|-------------------------------------|-------------------------|----------------|
| 6. | KOSHI | ALONG KASHIPUR | 12.0 | III |
| 7. | NANDOUR | ALONG SITARGANJ | 15.0 | III |
| 8. | PILKHAR | ALONG BILASPUR | 14.5 | III |
| 9. | SUSWA | ALONG MATHURAWALA | 30.0 | II |

3.32 WATER QUALITY OF RIVERS IN WEST BENGAL

Water Quality of 26 rivers (Refer **Annexure I**) in West Bengal was monitored at 59 locations during the year 2019 and 2021, out of which, 40 locations on 13 rivers were found non-complying to the prescribed Water Quality Criteria with respect to BOD. The names of 13 polluted rivers are Barakar, Churni, Damodar, Dwarakeshwar, Dwarka, Ganga, Jalangi, Kansi, Mahananda, Matha Bhanga, Rupnarayan, Teesta and Vindiyadhari. Details of polluted river stretches identified are given in table below.

Table - 32: Number of Polluted River Stretches in West Bengal

| S NO. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | MAX BOD OBSERVED (mg/L) | PRIORITY CLASS |
|-------|--------------|-------------------------------------|-------------------------|----------------|
| 1. | BARAKAR | ALONG ASANSOL | 3.1 | V |
| 2. | CHURNI | BIJOYPUR TO RANAGHAT | 20.8 | II |
| 3. | DAMODAR | DISHERGARH TO BURDWAN | 5.2 | V |
| 4. | DWARAKESHWAR | ALONG BANKURA TOWN | 3.8 | V |
| 5. | DWARKA | ALONG TARAPITH | 5.7 | V |
| 6. | GANGA | BEHRAMPUR TO HALDIA | 8.0 | IV |
| 7. | JALANGI | ALONG KRISHNA NAGAR | 6.2 | IV |
| 8. | KANSI | ALONG MIDNAPORE | 6.3 | IV |
| 9. | MAHANANDA | ALONG SILIGURI | 31.0 | I |
| 10. | MATHA BHANGA | ALONG GOBINDAPUR | 15.3 | III |
| 11. | RUPNARAYAN | KOLAGHAT TO GEONKHALI | 3.7 | V |
| 12. | TEESTA | ALONG SEVOKE | 3.8 | V |
| 13. | VINDYADHARI | HAROA TO MALANCHA | 29.6 | II |

4. COMPARATIVE ASSESSMENT (2018 Vs 2022)

Comparative assessment of PRS identified during assessment year 2018 vs 2022 has been carried out to assess the number of PRS identified, number of polluted rivers identified, number of datasets available and statistically analyzed, number of States & UTs having PRS. Detailed comparison of state wise number of stretches identified in each priority class is given in **Annexure IX**. Based on the comparative assessment, following observations are made.

- During the Year 2018, 351 polluted river stretches were identified on 323 rivers in the country based on analysis of water quality data of 521 rivers for the years 2016 and 2017. In present assessment, 311 polluted stretches are identified on 279 Rivers based on analysis of water quality data of 603 rivers for the years 2019 and 2021.
- Maharashtra still has the highest number of polluted river stretches in the country i.e. 55 identified in the year 2022. In Year 2018, 53 polluted river stretches were identified.
- Significant decrease in number of identified polluted river stretches has been observed in the State of Assam from 44 in year 2018 to 10 in 2022. It is pertinent to mentioned that many of the rivers identified during the year 2018 were declared as wetlands and stagnant water bodies by Assam Government, which are not considered in this exercise.
- In 13 States viz. Andhra Pradesh, Assam, Goa, Gujarat, Jammu & Kashmir, Kerala, Madhya Pradesh, Mizoram, Nagaland, Odisha, Sikkim, Tripura and West Bengal, number of identified polluted river stretches have reduced.
- Number of polluted river stretches have increased in 13 States/UTs viz. Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jharkhand, Maharashtra, Manipur, Puducherry, Punjab, Rajasthan, Tamil Nadu, Telangana and Uttar Pradesh.
- No change has been observed in number of identified polluted river stretches in 5 States/UTs viz. Daman and Diu, Dadra and Nagar Haveli (1), Delhi (1), Karnataka (17), Meghalaya 7) and Uttarakhand (9).

Comparative assessment of water quality network and other statistics for identification of PRS during Year 2018 and 2022 is given in **Table 33**. State wise number of PRS identified during Year 2018 and 2022 is given in **Table 34**. **Figure 7** depicts graphical representation of Priority wise PRS identified during Year 2018 and 2022

Table – 33: Comparative assessment of PRS identified during Year 2018 and 2022

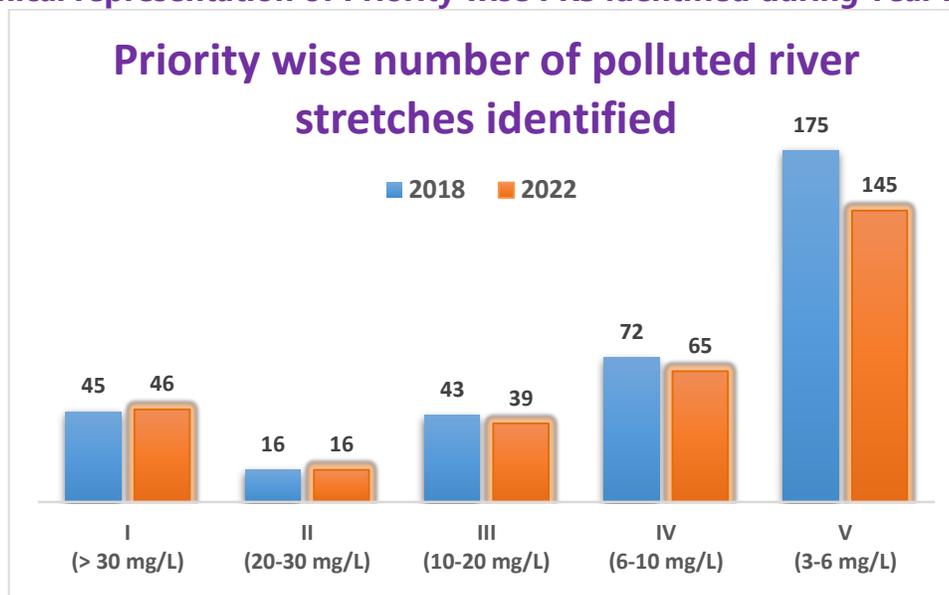
| Year of Study | 2018 | 2022 |
|--|--|--|
| Year of Water Quality Data for Study | 2016 & 17 | 2019 & 21 |
| Number of River monitoring locations sanctioned under NWMP during the study | 1533 (NWMP network of 3000) | 2026 (NWMP network of 4294) |
| Data sets available for BOD parameter | 521 rivers - 1488 locations (793 > 3mg/L) | 603 rivers - 1920 locations (817 > 3mg/L) |
| Priority Class | Number of polluted river stretches | |
| I (> 30 mg/L) | 45 | 46 |
| II (20-30 mg/L) | 16 | 16 |
| III (10-20 mg/L) | 43 | 39 |
| IV (6-10 mg/L) | 72 | 65 |
| V (3-6 mg/L) | 175 | 145 |
| Number of Polluted River Stretches identified | 351 | 311 |
| Number of Rivers identified as polluted | 323 | 279 |
| Number of States/UTs in which polluted rivers identified | 31 | 30* |

* No polluted rivers identified in Sikkim

Table – 34: State wise number of PRS identified during Year 2018 and 2022

| S No | State/UT | Number of PRS during 2022 | Number of PRS during 2018 |
|--------------------|---------------------------------------|---------------------------|---------------------------|
| 1. | ANDHRA PRADESH | 3 | 5 |
| 2. | ASSAM | 10 | 44 |
| 3. | BIHAR | 18 | 6 |
| 4. | CHHATTISGARH | 6 | 5 |
| 5. | DAMAN AND DIU, DADRA AND NAGAR HAVELI | 1 | 1 |
| 6. | DELHI | 1 | 1 |
| 7. | GOA | 6 | 11 |
| 8. | GUJARAT | 13 | 20 |
| 9. | HARYANA | 3 | 2 |
| 10. | HIMACHAL PRADESH | 9 | 7 |
| 11. | JAMMU & KASHMIR | 8 | 9 |
| 12. | JHARKHAND | 9 | 7 |
| 13. | KARNATAKA | 17 | 17 |
| 14. | KERALA | 18 | 21 |
| 15. | MADHYA PRADESH | 19 | 22 |
| 16. | MAHARASHTRA | 55 | 53 |
| 17. | MANIPUR | 13 | 9 |
| 18. | MEGHALAYA | 7 | 7 |
| 19. | MIZORAM | 3 | 9 |
| 20. | NAGALAND | 4 | 6 |
| 21. | ODISHA | 7 | 19 |
| 22. | PUDUCHERRY | 3 | 2 |
| 23. | PUNJAB | 5 | 4 |
| 24. | RAJASTHAN | 14 | 2 |
| 25. | SIKKIM | - | 4 |
| 26. | TAMIL NADU | 10 | 6 |
| 27. | TELANGANA | 9 | 8 |
| 28. | TRIPURA | 1 | 6 |
| 29. | UTTAR PRADESH | 17 | 12 |
| 30. | UTTARAKHAND | 9 | 9 |
| 31. | WEST BENGAL | 13 | 17 |
| GRAND TOTAL | | 311 | 351 |

Fig – 7: Graphical representation of Priority wise PRS identified during Year 2018 and 2022



4.1 POLLUTED RIVER STRETCHES DELISTED DUE TO SIGNIFICANT IMPROVEMENT IN WATER QUALITY

Improvement in water quality has been observed in 180 polluted river stretches identified during year 2018 w.r.t BOD parameter.

- I. 106 number of river stretches have been delisted from the previous list of polluted stretches identified in years 2019 & 21. State-wise distribution of delisted PRS is given in **Table 35**. Detailed list of Polluted River Stretches removed from the earlier list is given in **Annexure X**.

Table – 35: Number of Polluted River Stretches removed from the present list of PRS

| S NO. | State/ UT | Number of River Stretches |
|-------|------------------|---------------------------|
| 1. | ANDHRA PRADESH | 5 |
| 2. | ASSAM | 22 |
| 3. | GOA | 7 |
| 4. | GUJARAT | 8 |
| 5. | HIMACHAL PRADESH | 1 |
| 6. | JAMMU & KASHMIR | 2 |
| 7. | JHARKHAND | 3 |

| S NO. | State/ UT | Number of River Stretches |
|--------------|----------------|---------------------------|
| 8. | KARNATAKA | 4 |
| 9. | KERALA | 11 |
| 10. | MADHYA PRADESH | 7 |
| 11. | MAHARASHTRA | 1 |
| 12. | MIZORAM | 7 |
| 13. | NAGALAND | 2 |
| 14. | ODISHA | 10 |
| 15. | PUDUCHERRY | 1 |
| 16. | PUNJAB | 1 |
| 17. | SIKKIM | 4 |
| 18. | TRIPURA | 5 |
| 19. | UTTARAKHAND | 1 |
| 20. | WEST BENGAL | 4 |
| Total | | 106 |

- II.** Improvement in water quality of 74 previously identified polluted river stretches has been observed which is reflected by shift to lower Priority Class (Refer **Table 36**). Detailed description of Polluted River Stretches is given in **Annexure – XI**.

Table – 36: Priority wise number of Polluted River Stretches where improvement is observed

| Priority class identified during year 2018 | Priority class identified during year 2022 | | | | Grand Total |
|--|--|------------|-----------|-----------|-------------|
| | II | III | IV | V | |
| I | 5 | 8 | 2 | 1 | 16 |
| II | | 5 | 3 | 2 | 10 |
| III | | | 11 | 8 | 19 |
| IV | | | | 29 | 29 |
| Grand Total | 5 | 13 | 16 | 40 | 74 |

4.2 POLLUTED RIVER STRETCHES WHERE NO SIGNIFICANT CHANGES OBSERVED IN WATER QUALITY

No change has been observed in Priority Class of 108 polluted river stretches in both the assessment years 2018 & 2022. Out of 108, 27 are identified in P – I, 02 are identified in P – II, 08 are identified in P – III, 04 are identified in P – IV and 58 are identified in P – V class. State wise list of river stretches where no significant change in water quality observed during the year 2018 & 2022 is given in **Annexure XII**.

5. CONCLUDING REMARKS AND RECOMMENDATIONS

- Over the years, monitoring network on rivers under NWMP has been enhanced from 1533 river monitoring locations in year 2017 to 2026 river monitoring locations in year 2021.
- Decline in number of polluted river stretches are observed mainly due to collective actions taken by various stakeholders for rejuvenation of the polluted river stretches identified during the year 2018.
- Number of polluted river stretches are substantially reduced from 175 to 145 under Priority V category.
- Gradual decreasing trend is observed in number of identified PRS under Priority II (72 to 65) and Priority III (43 to 39).
- No change/ slight change in Priority I & II category of polluted river stretches indicates that further stringent actions are required for control of organic pollution from various point sources of pollution including development of infrastructure and its proper operation for treatment of wastewater before discharge into recipient water bodies.

- Concerted efforts of Central and State Government organizations with effective public participation is required for effective Water Quality Management in India.
- Various urban centers draw water from the river to meet their requirement and almost the entire wastewater generated by these centers is disposed of into the river. It leads to deterioration of water quality and there is need to ensure treatment of entire wastewater generated. Entire urban areas need to be covered with sewerage system.
- Ecological flow shall be made mandatory in all stretches and to be ensured by respective State Authorities.
- State Government shall finalize the list of prohibited activities and restricted activities including intensive surveillance for effective enforcement for needed compliance by various point and non-point sources.

Apart from above, strong determination & strict enforcement, needed behavioral change and citizen participation will bring the restoration and availability of water resources and would ease the water stress problem.

State-wise & Location wise maximum BOD value observed during year 2019 & 21

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) | |
|------|----------------|--------------|---|--|---|-----|
| 1 | ANDHRA PRADESH | GOSTANI | 4372 | RIVER GOSTANI SAMPLE BEFORE CONFLUENCE WITH M/S DELTA PAPER MILL EFFLUENTS, VENDRA, PALAKODERU | 8.6 | |
| 2 | | UPPUTERU | 4379 | RIVER UPPUTERU BEFORE CONFLUENCE WITH SEA, AT CHINAGOLLAPALEM VILLAGE, KRUTHIVENNU (M) | 3.4 | |
| 3 | | VASISHTA | 4365 | RIVER VASISHTA (GODAVARI) UPSTREAM OF NARASAPURAM TOWN BEFORE CONFLUENCE OF TOWN SEWAGE | 5.9 | |
| 4 | | | 4366 | RIVER VASISHTA (GODAVARI) DOWNSTREAM OF NARASAPURAM TOWN AFTER CONFLUENCE OF TOWN SEWAGE | 58.0 | |
| 5 | ASSAM | BEGA | 3765 | RIVER BEGA MG ROAD, MANGALDOI | 3.9 | |
| 6 | | BHARALU | 1528 | RIVER BHARALU AT GUWAHATI, ASSAM | 76.0 | |
| 7 | | BURHIDIHING | 1422 | RIVER BURHIDIHING AT MARGHERITA, ASSAM | 3.6 | |
| 8 | | DHANSIRI | 30073 | RIVER DHANSIRI AT BOKAJAN | 3.5 | |
| 9 | | | 30074 | RIVER DHANSIRI AT NUMALIGARH | 3.3 | |
| 10 | | | DIGBOI | 1530 | RIVER DIGBOI AT LAKHIPATHE, RESERVE FOREST, DIGBOI, ASSAM | 5.2 |
| 11 | | KHARSANG | 2061 | RIVER KHARSANG B/C WITH BURIDIHING NEAR KHARSANG (ASSAM-ARUNANCHAL BORDER), ASSAM | 3.3 | |
| 12 | | KULSI | 3810 | RIVER KULSI AT CHAYGAON NEAR NH37 CROSSING | 3.2 | |
| 13 | | MORA BHARALI | 1531 | RIVER MORA BHARALI AT TEZPUR, ASSAM | 3.6 | |
| 14 | | PAGLDIA | 2065 | RIVER PAGLDIA NEAR NALBARI TOWN, DIST. NALBARI, ASSAM | 3.4 | |
| 15 | | TOCKLAI | 4011 | RIVER TOCKLAI NEAR BRIDGE AT JORHAT | 4.8 | |
| 16 | | BIHAR | BAGMATI | 3135 | RIVER BAGMATI AT DARBANGA, SAMASTIPUR ROAD BRIDGE, DARBHANGA | 3.6 |
| 17 | | | BURHI GANDAK/ SIKRAHNA | 4295 | RIVER BURHI GANDAK AT KHAGARIA ROAD BRIDGE, KHAGARIA | 3.7 |
| 18 | | | | 4300 | RIVER BURHI GANDAK AT LAL BAGLA GHAT, MOTIHARI DHAKA ROAD, EAST CHAMPARAN | 9.9 |
| 19 | | | | 1820 | RIVER SIKRAHNA AT CHANPATIYA, EAST CHAMPARAN | 7.0 |
| 20 | 2575 | | | RIVER SIKRAHNA AT LAL PARSE, BITTIAH, EAST CHAMPARAN | 4.0 | |
| 21 | 4291 | | | RIVER SIKRAHNA LAURIA-NARKATIAGANJ ROAD BRIDGE, WEST CHAMPARAN | 10.0 | |
| 22 | DAHA | | 1821 | RIVER DAHA AT SIWAN | 6.0 | |
| 23 | | | 2560 | RIVER DAHA D/S AT SASAMUSA, GOPALGANJ | 3.7 | |
| 24 | | | 2561 | RIVER DAHA AT ITWA BRIDGE, GOPALGANJ | 3.9 | |
| 25 | | | 3129 | RIVER DAHA AT MEERGANJ | 3.5 | |
| 26 | | | 4292 | RIVER DAHA U/S SASAMUSA, GOPALGANJ | 3.3 | |
| 27 | | | 4397 | RIVER DAHA D/S RAJENDRA ROAD BRIDE SIWAN | 10.0 | |
| 28 | DHOUS | | 1823 | RIVER DHOUS AT MADHUVAPUR, MADHUBANI | 5.6 | |
| 29 | | | 4405 | RIVER DHOUS AT MADHWAPUR, MADHUBANI | 5.6 | |
| 30 | GANDAK | | 2568 | RIVER GANDAK AT REWAGHAT, MUJAFFARPUR | 3.8 | |
| 31 | GANGA | | 1077 | RIVER GANGA AT KURJI, PATNA U/S | 4.0 | |
| 32 | | | 1815 | RIVER GANGA AT MOKAMA (D/S) | 7.9 | |
| 33 | | | 1818 | RIVER GANGA AT MUNGER | 3.2 | |
| 34 | | | 2551 | RIVER GANGA AT BUXAR, RAMREKHAGHAT | 3.3 | |
| 35 | | 2553 | RIVER GANGA AT KEWALA GHAT, FATUHA, PATNA | 4.1 | | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) | |
|------|---------------------|-----------------------------|-------------------|--|--|------|
| 36 | | | 3113 | RIVER GANGA AT D/S BUXAR NEAR ROAD BRIDGE | 6.4 | |
| 37 | | | 3114 | RIVER GANGA NEAR DANAPUR (NEAR PIPA PUL) ,PATNA | 4.0 | |
| 38 | | | 3118 | RIVER GANGA AT U/S BHAGALPUR NEAR BARARIGHAT | 6.6 | |
| 39 | | | 4398 | RIVER GANGA AT WATER INTAKE POINT, BHAGALPUR | 3.2 | |
| 40 | | | 10115 | RIVER GANGA AT GULABI GHAT, PATNA | 3.2 | |
| 41 | | | 10138 | RIVER GANGA AT CHAMPANAGAR, BHAGALPUR | 4.2 | |
| 42 | | | 30076 | RIVER GANGA AT MANJHIGHAT(BIHAR) | 4.8 | |
| 43 | | GANGI | 4404 | RIVER GANGI AT ARA, D/S | 8.0 | |
| 44 | | GHAGHARA | 1076 | RIVER GHAGHARA NEAR CHAPRA, RIBILGANJ, SARAN | 3.6 | |
| 45 | | HARBORA | 2558 | RIVER HARBORA AT NARKATIAGANJ, WEST CHAMPARAN | 8.0 | |
| 46 | | KAMALA | 2569 | RIVER KAMALA AT DARBHANGA | 5.0 | |
| 47 | | KOHRA | 4293 | RIVER KOHRA (GANGA) U/S RAJ GHAT, MANJHAULIA, WEST CHAMPARAN | 4.0 | |
| 48 | | | 4294 | RIVER KOHRA (GANGA) D/S RAJ GHAT, MANJHAULIA, WEST CHAMPARAN | 8.0 | |
| 49 | | LAKHANDEI | 4400 | RIVER LAKHANDEI SITAMARHI U/S | 3.1 | |
| 50 | | | 4401 | RIVER LAKHANDEI SITAMARHI D/S | 11.0 | |
| 51 | | MANUSMAR | 2563 | RIVER MANUSMAR AT RIGA, SITAMARHI | 6.0 | |
| 52 | | | 4402 | RIVER MANUSMAR AT PARSHURAMPUR, RIGA - BELSUND ROAD, SITAMARHI | 5.2 | |
| 53 | | PARMAR | 1824 | RIVER PARMAR AT JOGBANI, ARARIA | 3.4 | |
| 54 | | PUNPUN | 2555 | RIVER PUNPUN AT PUNPUN, PATNA | 10.0 | |
| 55 | | | 3119 | RIVER POONPUN NEAR POONPUN RAIL BRIDGE, PATNA | 3.8 | |
| 56 | | RAMREKHA | 2559 | RIVER RAMREKHA AT HARINAGAR, WEST CHAMPARAN | 12.0 | |
| 57 | | | 3130 | RIVER RAMREKHA AT U/S HARINAGAR, WEST CHAMPARAN | 8.4 | |
| 58 | | SIRSIYA | 1822 | RIVER SIRSIYA AT RAXAUL, EAST CHAMPARAN | 30.0 | |
| 59 | | | 3136 | RIVER SIRSIYA D/S RAXAUL (KOERIA TOLA), EAST CHAMPARAN | 30.0 | |
| 60 | | SONE | 1075 | RIVER SONE AT KOELWAR, BHOJPUR | 4.0 | |
| 61 | CHHATTISGARH | ARPA | 1848 | RIVER ARPA D/S OF BILASPUR, CHHATISGARH. | 9.6 | |
| 62 | | HASDEO | 1106 | RIVER HASDEO AT U/S OF CHAMPA, CHHATISGARH. | 3.4 | |
| 63 | | KELO | 1849 | RIVER KELO U/S OF RAIGARH, CHHATISGARH. | 3.3 | |
| 64 | | | 1850 | RIVER KELO D/S OF RAIGARH, CHHATISGARH. | 3.9 | |
| 65 | | KHAROON | 1846 | RIVER KHAROON A/C KHAPRI DRAIN, CHHATISGARH. | 6.2 | |
| 66 | | | 1847 | RIVER KHAROON B/C KHAPRI DRAIN, DURG, RAIPUR ROAD BRIDGE, CHHATISGARH. | 28.5 | |
| 67 | | MAHANADI | 1100 | RIVER MAHANADI AT KHARAD, CHHATISGARH. | 3.2 | |
| 68 | | | 1101 | RIVER MAHANADI AT INTERSTATE BOUNDRY, CHHATISGARH. | 3.4 | |
| 69 | | | 1282 | RIVER MAHANADI AT SHEORINARAYAN VILLAGE, CHHATISGARH. | 3.6 | |
| 70 | | | 1467 | RIVER MAHANADI AFTER CONFL. WITH RIVER MAND, CHHATISGARH. | 3.8 | |
| 71 | | SEONATH | 3166 | RIVER SEONATH AT JHINGHRI VILLAGE, A/C OF SAMODA NALLA, CHHATISGARH. | 6.4 | |
| 72 | | | 3167 | RIVER SEONATH AT RAJNANDGAON, D/S AT MOHAD, RAJNANDGAON, CHHATISGARH. | 3.2 | |
| 73 | | DAMAN AND DIU, DADRA | DAMANGANGA | 2459 | RIVER DAMANGANGA AT ZARI CAUSE WAY BRIDGE, DAMAN | 12.2 |
| 74 | | | | 2460 | RIVER DAMANGANGA AT DISCHARGE POINT OF DISTILLERY, DAMAN | 6.1 |
| 75 | 2461 | | | RIVER DAMANGANGA AT DAMAN JETTY, MOTI DAMAN | 7.1 | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|---------------------|--------------|--|--|-------------------------|
| 76 | AND NAGAR HAVELI | | 2462 | RIVER DAMANGANGA AT VAPI WEIR, VAPI, DAMAN | 14.3 |
| 77 | | | 2466 | RIVER DAMANGANGA AT VILLAGE NAMDHA, VAPI | 14.8 |
| 78 | | | 30040 | RIVER DAMANGANGA AT ZERI CAUSEWAY, (UT OF DAMAN) | 9.1 |
| 79 | DELHI | YAMUNA | 1120 | RIVER YAMUNA AT PALLA, DELHI | 11.0 |
| 80 | | | 1121 | RIVER YAMUNA AT NIZAMUDDIN, DELHI | 48.0 |
| 81 | | | 1375 | RIVER YAMUNA AT OKHLA BRIDGE (INLET OF AGRA CANAL), DELHI | 56.0 |
| 82 | | | 1812 | RIVER YAMUNA AT OKHLA AFTER MEETING OF SHAHDARA DRAIN, DELHI | 83.0 |
| 83 | | | 5098 | RIVER YAMUNA AT WAZIRABAD | 10.0 |
| 84 | | | 5099 | RIVER YAMUNA AT ISBT BRIDGE | 38.0 |
| 85 | | | 5100 | RIVER YAMUNA AT ITO BRIDGE | 62.0 |
| 86 | | | 30026 | RIVER YAMUNA AT PALLA (DELHI) | 14.0 |
| 87 | | | GOA | KALNA | 1543 |
| 88 | KHANDEPAR | 1546 | | RIVER KHANDEPAR AT OPA - PONDA, GOA | 4.2 |
| 89 | MANDOVI | 3185 | | RIVER MANDOVI AT AMONA BRIDGE | 3.7 |
| 90 | MAPUSA | 2274 | | RIVER MAPUSA ON CULVERT ON HIGHWAY MAPUSA-PANAJI | 5.0 |
| 91 | SAL | 2271 | | RIVER SAL PAZORKHONI, CUNCOLIM(NEAR CULVERT MARGAO- CANACONA NATIONAL HIGHWAY) | 3.5 |
| 92 | | 3183 | | RIVER SAL AT KHAREBAND, MARGAO | 6.0 |
| 93 | | 3184 | | RIVER SAL AT ORLIM BRIDGE, ORLIM | 3.9 |
| 94 | ZUARI | 1475 | | RIVER ZUARI AT PANCHAWADI | 3.8 |
| 95 | | 3181 | | RIVER ZUARI AT BORIM BRIDGE | 6.4 |
| 96 | | 3182 | | RIVER ZUARI AT MARCAIM JETTY | 5.0 |
| 97 | GUJARAT | AMLAKHADI | 1434 | RIVER AMLAKHADI AFTER CONFL. OF W. WATER FROM ANKLESH | 49.0 |
| 98 | | | 1980 | RIVER AMLAKHADI AT PUNGAM ANKLESHWAR DISTT BHARUCH | 43.0 |
| 99 | | BHADAR | 1436 | RIVER BHADAR D/S JETPUR VILL. AFTER CONF. OF W. WATER FROM JETPUR CITY, | 258.6 |
| 100 | | BHOGAVO | 2072 | RIVER BHOGAVO D/S OF SURENDRANAGAR. | 6.0 |
| 101 | | BHUKHI KHADI | 4417 | RIVER BHUKHI KHADI, U/S OF GIDC VILAYAT, TA; VAGRA, DIST BHARUCH. | 3.1 |
| 102 | | | 4418 | RIVER BHUKHI KHADI, D/S OF GIDC VILAYAT, TA; VAGRA, DIST BHARUCH | 3.8 |
| 103 | | | 4419 | RIVER BHUKHI KHADI D/S OF GIDC SAYKHA, VILL: KOTHIYA TA: VAGRA, DIST BHARUCH | 3.9 |
| 104 | | DAMANGANGA | 1246 | RIVER DAMANGANGA AT KACHIGAON D\S (DAMAN), | 5.3 |
| 105 | | | 30039 | RIVER DAMANGANGA AT D/S OF GIDC WEIR, VAPI | 4.5 |
| 106 | | DHADAR | 1865 | RIVER DHADAR AT KOTHADA | 33.0 |
| 107 | | KHARI | 1437 | RIVER KHARI AT LALI VILLAGE NEAR AHMEDABAD, | 195.0 |
| 108 | | MAHI | 1863 | RIVER MAHI AT UMETA BRIDGE | 12.0 |
| 109 | | | 1864 | RIVER MAHI AT MUJPUR | 4.2 |
| 110 | | | 3206 | RIVER MAHI AT SHERKHI BRIDGE | 4.3 |
| 111 | | MINDHOLA | 1438 | RIVER MINDHOLA AT STATE HIGHWAY BRIDGE SACHIN, | 28.0 |
| 112 | SABARMATI | 2 | RIVER SABARMATI AT AHMEDABAD AT V.N. BRIDGE | 292.0 | |
| 113 | | 1223 | RIVER SABARMATI AFTER CONF. WITH MESHWA AT VAUTHA (NEAR DHOKLA), | 50.0 | |
| 114 | | 1408 | RIVER SABARMATI AT VILL. MIROLI TALUKA DASCROI, AHMEDABAD, | 55.0 | |
| 115 | | 1409 | RIVER SABARMATI AT RAILWAY BRIDGE AHMEDABAD, | 14.0 | |

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|------|------------------|---------------------|---|---|--|
| 116 | | | 1866 | RIVER SABARMATI AT HANSAOL BRIDGE, | 4.0 |
| 117 | | | 10014 | RIVER SABARMATI AT AHMEDABAD U/S | 4.0 |
| 118 | | | 10015 | RIVER SABARMATI AT AHMEDABAD D/S | 55.0 |
| 119 | | SHEDHI | 1222 | RIVER SHEDHI AT KHEDA, | 6.2 |
| 120 | | TAPI | 30045 | RIVER TAPI AT NIZHAR (MAHARASHTRA GUJARAT) | 3.4 |
| 121 | | VISHWAMITRI | 3204 | RIVER VISHWAMITRI DOWNSTREAM OF AT KHALIPUR VILLAGE, BEFORE MEETING JAMBUVA RIVER | 38.0 |
| 122 | HARYANA | GHAGGAR | 1025 | RIVER GHAGGAR GH-1 AT ROAD BRDG. SIRSA, DEBWALI ROAD | 56.0 |
| 123 | | | 1026 | RIVER GHAGGAR GH-2 AT CHANDARPUR SYPHEN | 60.0 |
| 124 | | | 1884 | RIVER GHAGGAR AT KALA AMB D/S MARKANDA | 60.0 |
| 125 | | | 1885 | RIVER GHAGGAR AT D/S OF SURAJPUR | 7.5 |
| 126 | | | 1887 | RIVER GHAGGAR BEFORE OTTU WEIR (BEFORE MIXING OF SATLUJ CANAL WATER) | 70.0 |
| 127 | | | 30014 | RIVER GHAGGAR AT PARWANOO D/S,AMRAVATI, HARYANA | 13.0 |
| 128 | | | 30017 | RIVER GHAGGAR AT SIRSA DABWALI ROAD (HARYANA) | 19.0 |
| 129 | | | 30018 | RIVER GHAGGAR AT CHANDRAPUR SIPHON (HARYANA) | 206.0 |
| 130 | | | 30020 | RIVER GHAGGAR AT OTTU WEIR (HARYANA) | 94.0 |
| 131 | | | MARKANDA | 30007 | RIVER MARKANDA AT NARAINGARH (HARYANA) |
| 132 | | YAMUNA | 1117 | RIVER YAMUNA AT HATHNIKUND, YAMUNANAGAR | 5.8 |
| 133 | | | 1119 | RIVER YAMUNA AT SONEPAT | 11.0 |
| 134 | | | 1496 | RIVER YAMUNA AT KALANAUR, YAMUNA NAGAR | 4.2 |
| 135 | | | 4914 | RIVER YAMUNA AT MANGLAURA, KARNAL | 7.9 |
| 136 | 10004 | | RIVER YAMUNA AT KHOJKIPUR PANIPAT | 21.0 | |
| 137 | 10005 | | RIVER YAMUNA AT PALLA, SONEPAT | 4.8 | |
| 138 | 30024 | | RIVER YAMUNA AT MOHENA PALWAL ROAD, HARYANA | 30.0 | |
| 139 | 30029 | | RIVER YAMUNA AT SONIPAT, BAGHPAT ROAD (HARYANA) | 20.0 | |
| 140 | 30031 | | RIVER YAMUNA AT HASANPUR | 43.0 | |
| 141 | 30032 | | RIVER YAMUNA AT SONAULI ROAD, SHAMLI BORDER , PANIPAT (HARYANA) | 10.0 | |
| 142 | HIMACHAL PRADESH | ASHWANI KHAD | 4428 | ASHWANI KHAD U/S OF WEIR SITE OF WTP NEAR ASHWANI BRIDGE | 80.0 |
| 143 | | | 4429 | D/S OF ASHWANI KHAD (AFTER CONFLUENCE OF LIFT NALLAH) | 14.0 |
| 144 | | BALD | 4486 | RIVER BALD D/S LANDFILLSITE AT BADDI | 40.0 |
| 145 | | GIRI | 2621 | RIVER GIRI AT D/S YASHWANT NAGAR | 3.3 |
| 146 | | | 3876 | RIVER GIRI AFTER CONFLUENCE OF ASHWANI RIVER AT GIRIPUL, YASHWANT NAGAR | 3.8 |
| 147 | | | 4442 | RIVER GIRI D/S PROPOSED SITE OF SRI RENUKAJI DAM SITE NEAR BRIDGE AT DADAHU- RENUKAJI | 4.8 |
| 148 | | MARKANDA | 3862 | RIVER MARKANDA D/S OF SALANI KHAD | 3.2 |
| 149 | | | 3864 | RIVER MARKANDA D/S OF MOGINAND NALA | 4.0 |
| 150 | | | 30008 | RIVER MARKANDA AT KALA AMB U/S (H.P) | 3.8 |
| 151 | | | PABBAR | 2619 | RIVER PABBAR AT D/S SWARAKUDDU |
| 152 | | RATTA | 4488 | RIVER RATTA BEFORE CONF. TO RIVER SIRSA | 8.0 |
| 153 | | SHIKARI KHAD | 4431 | SHIKARI KHAD BEFORE CONFLUENCE TO RIVER PABBAR NEAR HRTC ROHRU BUS STAND | 4.6 |
| 154 | | SIRSA | 1551 | RIVER SIRSA U/S SITOMAJRI NALLAHGARH | 4.0 |
| 155 | | | 1552 | RIVER SIRSA D/S NALAGARH BRIDGE | 14.0 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-----------------|--------------|----------------|---|-------------------------|
| 156 | | | 1868 | RIVER SIRSA AT D/S NALAGARH DISTT. SOLAN | 7.2 |
| 157 | | | 4485 | RIVER SIRSA U/S SANDHOLI NALLAH | 9.2 |
| 158 | | | 4487 | RIVER SIRSA D/S HOUSING BOARD NALLAH | 40.0 |
| 159 | | | 4489 | RIVER SIRSA D/S RIVER RATTA | 18.5 |
| 160 | | SUKHANA | 1870 | RIVER SUKHANA AT PARWANOO, DISTT. SOLAN | 72.0 |
| 161 | | BANGANGA | 2755 | RIVER BANGANGA (BATHING GHAT), KATRA, | 5.2 |
| 162 | | | 2756 | RIVER BANGANGA (IN FRONT OF PONY SHED NEAR REASI BRIDGE)KATRA | 6.2 |
| 163 | | BASANTER | 2752 | RIVER BASANTER U/S (R.H.S) SAMBA (BELOW NH-1A BRIDGE), | 4.2 |
| 164 | | | 2753 | RIVER BASANTER D/S(R.H.S.) SAMBA (AT CHAK MANGA GUJJAR | 3.3 |
| 165 | | CHUNTKOL | 1307 | RIVER CHUNT KOL (MAULANA AZAD BRIDGE) | 11.2 |
| 166 | | DEVAK | 2754 | RIVER DEVAK UDHAMPUR(NEAR SHIV MANDIR D/S)L.H.S. | 10.0 |
| 167 | | GAWKADAL | 1306 | RIVER GAWKADAL, SRG (SHERGHARI, SRG) | 3.2 |
| 168 | | | 1411 | RIVER JHELAM AT CHATTABAL WEIR (OUTLET | 3.5 |
| 169 | | | 3274 | RIVER JHELUM AT AWANTIPORA | 3.5 |
| 170 | JAMMU & KASHMIR | JHELUM | 3276 | RIVER JHELUM AT SOPORE, CONFLUENCE POINT OF WULAR LAKE | 3.2 |
| 171 | | | 3277 | RIVER JHELUM AT BARAMULLA D/S | 3.5 |
| 172 | | | 4054 | RIVER JHELUM AT PANTHACHOWK | 7.8 |
| 173 | | LIDDER | 4052 | RIVER LIDDER NEAR LAVENDER PARK | 7.0 |
| 174 | | | 1412 | RIVER TAWI AT JAMMU U/S, (TAWI BRIDGE) | 12.0 |
| 175 | | | 2744 | RIVER TAWI BELOW TAWI BRIDGE | 3.9 |
| 176 | | TAWI | 2745 | RIVER TAWI BAGHWATI NAGAR (2KM D/S TAWI BRIDGE | 8.0 |
| 177 | | | 2746 | RIVER TAWI AT BELICHARANA(4KM D/S TAWI BRIDGE) | 3.2 |
| 178 | | | 4055 | RIVER TAWI AT 1 KM D/S BELOW STP DISCHARGE POINT AT BHAGWATI NAGAR | 6.8 |
| 179 | | | 4056 | RIVER TAWI AT BALOL NALLAH, NEAR NIT COLLEGE, MIRAN SAHIB, BEFORE MIXING | 14.0 |
| 180 | | BOKARO | 2381 | RIVER BOKARO AT ZARANGDIH BRIDGE | 3.9 |
| 181 | | | 2380 | RIVER DAMODAR AT RAMGARH ROAD BRIDGE | 3.5 |
| 182 | | DAMODAR | 3553 | RIVER DAMODAR NEAR TELMUCHO BRIDGE | 3.5 |
| 183 | | | 3556 | RIVER DAMODAR AT CONFLUENCE OF BOKARO & DAMODAR NEAR ZARANGDIH BRIDGE, BOKARO | 3.4 |
| 184 | | GARGA | 4000 | RIVER GARGA NEAR TELMUCHO BRIDGE | 4.9 |
| 185 | | HARMU | 4753 | RIVER HARMU NEAR HARMU BRIDGE, HARMU, RANCHI | 10.1 |
| 186 | | | 4754 | RIVER HARMU BEFORE METTING TO SWARNREKHA RIVER | 10.1 |
| 187 | JHARKHAND | JUMAR | 2396 | RIVER JUMAR AT KANKE DAM | 3.8 |
| 188 | | | 4085 | RIVER JUMAR AT BIT MESRA, RANCHI | 5.3 |
| 189 | | KATRI | 4739 | RIVER KATRI RIVER, NEAR BHATINDA FALL, AT- TETENGABAD, MOONIDIH, DHANBAD | 3.6 |
| 190 | | KHARKHAI | 4745 | RIVER KHARKHAI BEFORE MEETING SWARNREKHA RIVER | 8.0 |
| 191 | | KOINA | 4747 | RIVER KOINA RIVER, MANOHARPUR, W.S | 3.1 |
| 192 | | | 23 | RIVER SUBARNAREKHA AT RANCHI, (TATISILWAI) | 5.8 |
| 193 | | SUBARNAREKHA | 24 | RIVER SUBARNAREKHA AT JAMSHEDPUR | 4.8 |
| 194 | | | 49 | RIVER SUBARNAREKHA AT D/S JAMSHEDPUR, (TATA NAGAR) | 10.0 |
| 195 | | | 2385 | RIVER SUBARNAREKHA AT NAMKUM ROAD BRIDGE | 6.8 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-------------|--------------------|--|--|---|
| 196 | | | 2386 | RIVER SUBARNAREKHA AT MURI ROAD BRIDGE | 3.4 |
| 197 | | | 4084 | RIVER SUBARNAREKHA AT HATIA ROAD BRIDGE, RANCHI | 3.5 |
| 198 | | | 4746 | RIVER SWARNAREKHA AFTER CONFLUENCE OF KHARKAI RIVER | 9.5 |
| 199 | KARNATAKA | AGHANASHINI | 4088 | RIVER AGHANASHINI RIVER, NR BRIDGE, KUMATA | 3.3 |
| 200 | | ARKAVATHI | 1165 | RIVER ARKAVATHI AT D/S OF KANAKAPURA TOWN, | 39.0 |
| 201 | | | 2778 | RIVER ARKAVATHI AT T.G. HALLI RESERVOIR, , | 22.0 |
| 202 | | | 2779 | RIVER ARKAVATHI AT HESARAGHATTA RESERVOIR, | 21.0 |
| 203 | | | 4108 | RIVER AKRAVATHI BEFORE CONFLUENCE AT SANGAM | 8.0 |
| 204 | | BHADRA | 1169 | RIVER BHADRA AT D/S OF KIOCL ROAD BRIDGE, NEAR HOLEHUNNUR, | 3.5 |
| 205 | | | 1387 | RIVER BHADRA AT D/S OF BHADRAVATHI, | 7.0 |
| 206 | | BHIMA | 1167 | RIVER BHIMA AT D/S OF BDG. NEAR YADGIR, | 4.0 |
| 207 | | | 1183 | RIVER BHIMA AT D/S OF ROAD BRIDGE AT GANGAPUR VILLAGE, | 4.0 |
| 208 | | | 1184 | RIVER BHIMA AT FEROZABAD VILLAGE (D/S), | 4.0 |
| 209 | | | 1888 | RIVER BHIMA AT CONFLUENCE OF JEWARGI TOWN SEWAGE DISPOSAL POINT | 4.0 |
| 210 | | CAUVERY | 1171 | RIVER CAUVERY AT SRI RANGAPATTANNA, D/S OF ROAD BDG., | 3.5 |
| 211 | | | 4109 | RIVER CAUVERY BEFORE CONFLUENCE AT SANGAM | 6.0 |
| 212 | | DAKSHINAK PINAKINI | 4107 | RIVER DAKSHINA PINAKINI NEAR MUGALUR BRIDGE MUGALUR, BENGALURU | 111.0 |
| 213 | | GANGAVALI | 4087 | RIVER GANGAVALI AT NR BRIDGE, ANKOLA | 3.4 |
| 214 | | KABINI | 2775 | RIVER KABINI AT BATHING GHAT, NANJANAGUD, | 3.8 |
| 215 | | KAGINA | 1895 | RIVER KAGINA D/S OF SEWAGE DISPOSAL POINT | 3.1 |
| 216 | | KRISHNA | 1028 | RIVER KRISHNA AT TINTINI BRIDGE, | 3.6 |
| 217 | | | 1170 | RIVER KRISHNA AT D/S OF DEVASAGAR BDG., | 3.2 |
| 218 | | | 1181 | RIVER KRISHNA AT D/S OF NARAYANPURA DAM, | 4.4 |
| 219 | | | 1182 | RIVER KRISHNA AT U/S OF UGARKHURD BARRAGE, | 3.6 |
| 220 | | | 2781 | RIVER KRISHNA AT D/S OF ALAMATTI DAM, | 4.7 |
| 221 | | | LAKSHMANTIRTH A | 1196 | RIVER LAKSHMANTIRTHA AT D/S OF HUNSUR TOWN, |
| 222 | | 2772 | | RIVER LAKSHMANTIRTHA AT D/S OF KATTEMALAVADI, | 5.6 |
| 223 | | 3572 | | RIVER LAKSHMANTIRTHA AT WATER SUPPLY INTAKE POINT TO HUNSUR TOWN | 4.2 |
| 224 | | NETRAVATHI | 1892 | RIVER NETRAVATHI U/S OF DHARMASTALA AT WATER SUPPLY INTAKE POINT | 6.0 |
| 225 | | SHARAVATHI | 4090 | RIVER SHARAVATHI NR BRIDGE AT HONNAVARA | 3.3 |
| 226 | | SHIMSHA | 1166 | RIVER SHIMSHA AT D/S OF BRIDGE, HALAGUR, | 3.8 |
| 227 | 1200 | | RIVER SHIMSHA AT D/S OF HIGHWAY BRIDGE, YEDIYAR, | 9.5 | |
| 228 | 3567 | | RIVER SHIMSHA D/S NEAR MADDUAR TOWN | 3.5 | |
| 229 | THENPENNAI | 30053 | RIVER THENPENNAIYAR AT CHOKKARASANAHALI BRIDGE (BANGALORE) | 72.0 | |
| 230 | TUNGA | 1168 | RIVER TUNGA AT D/S OF SHIMOOGA TOWN, | 6.0 | |
| 231 | | 4106 | RIVER TUNGA U/S SHIVAMOGGA CITY | 4.2 | |
| 232 | TUNGABHADRA | 29 | RIVER TUNGABHADRA AT ULLANUR | 4.0 | |
| 233 | | 38 | RIVER TUNGABHADRA AT HONNALI BRIDGE | 4.8 | |
| 234 | | 1896 | RIVER TUNGABHADRA AT CONFLUENCE POINT OF TUNGA AND BHADRA AT KUDLI | 4.0 | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-----------------------|-----------------------|----------------|---|-------------------------|
| 235 | | | 2768 | RIVER TUNGABHADRA AT D/S OF HPF, | 6.2 |
| 236 | | | 2769 | RIVER TUNGABHADRA AT JACKWELL POINT, | 3.8 |
| 237 | | | 2770 | RIVER TUNGABHADRA AT HARIHAR WATER SUPPLY INTAKE, | 5.6 |
| 238 | | | 4494 | RIVER TUNGABHADRA AT MYLARA | 3.5 |
| 239 | | | 30054 | RIVER TUNGABHADRA AT HOCHENCHALLI (BANGALORE) | 4.0 |
| 240 | | AYROOR | 2286 | RIVER AYROOR AT AYROOR BRIDGE | 5.5 |
| 241 | | CHALAKUDY | 1154 | RIVER CHALAKUDY AT PULICKALKA-DAVU, KERALA | 3.3 |
| 242 | | CHITTHRAPUZHA | 1573 | RIVER CHITTHRAPUZHA AT IRUMPANAM, KERALA | 3.2 |
| 243 | | KADALUNDY | 1566 | RIVER THIRURANGADY, KERALA | 3.4 |
| 244 | | | 2293 | RIVER KADALUNDI AT HAJIRAPPALLY | 3.3 |
| 245 | | KADAMBAYAR | 2337 | RIVER KADAMBAYAR AT BRAHMAPURAM | 4.0 |
| 246 | | | 2338 | RIVER KADAMBAYAR AT MANCKAKADAVU | 4.4 |
| 247 | | KALLAI | 2294 | RIVER KALLAYI AT KALLAI BRIDGE | 4.6 |
| 248 | | KALPATHI PUZHA | 3460 | RIVER KALPATHI PUZHA AT KALPATHI, PALAKKAD | 3.3 |
| 249 | | KARAMANA | 1155 | RIVER KARAMANA AT MOONNATTUMUKKU, KERALA | 10.2 |
| 250 | | | 3471 | RIVER KARAMANA AT ARUVIKARA, THIRUVANANTHAPURAM | 4.3 |
| 251 | | KORAYAR | 2326 | RIVER KORAYAR AT KANJIKODE | 3.5 |
| 252 | KERALA | MAMOM | 2285 | RIVER MAMOM AT MAMOM BRIDGE | 4.6 |
| 253 | | MANIMALA | 1384 | RIVER MANIMALA AT THONDRA, KERALA | 3.1 |
| 254 | | NEYYPAR | 1563 | RIVER NEYYAR AT AMARAVILA, KERALA | 3.9 |
| 255 | | | 2284 | RIVER NEYYAR AT ARUVIPURAM | 6.5 |
| 256 | | PAMBA | 1565 | RIVER PAMBA DOWN, KERALA | 3.9 |
| 257 | | | 10017 | RIVER PAMBA D/S | 3.9 |
| 258 | | | 17 | RIVER PERIYAR NEAR ALWAYS-ELOOR | 3.3 |
| 259 | | PERIYAR | 2335 | RIVER PERIYAR AT KALAMASSERY | 3.6 |
| 260 | | | 2336 | RIVER PERIYAR AT PURAPPALLIKAVU | 3.9 |
| 261 | | PULLUR | 2303 | RIVER PULLUR AT PULLUR BR. | 3.8 |
| 262 | | THIRUR | 2292 | RIVER THIRUR AT THALAKKADATHUR BRIDGE | 3.2 |
| 263 | | UPPALA | 2306 | RIVER UPPALA AT UPPALA BR. | 3.3 |
| 264 | | VAMANAPURAM | 1442 | RIVER VAMANAPURAM, KERALA | 6.3 |
| 265 | | | 2119 | RIVER BETWA AT NAYAPUR D/S MANDIDEEP INDL. AREA NO.1, DIST.RAISEN | 7.3 |
| 266 | | BETWA | 2121 | RIVER BETWA NEAR ROAD BRIDGE, BHOJPUR | 3.4 |
| 267 | | | 2124 | RIVER BETWA AT CHARANTIRGHAT, VIDISHA | 6.7 |
| 268 | | | 2125 | RIVER BETWA D/S AFTER MIXING OF BAIS AT VIDISHA | 6.7 |
| 269 | | | 30080 | RIVER BETWA AT KANJIA ROAD BRIDGE, ASHOK NAGAR (M.P.) | 5.3 |
| 270 | MADHYA PRADESH | BICHIA | 2117 | RIVER BICHIA, BRIDGE GOVINDGARH ROAD | 4.0 |
| 271 | | | 1366 | RIVER CHAMBAL AT NAGDA D/S, M.P. | 72.0 |
| 272 | | CHAMBAL | 3309 | RIVER CHAMBAL AT TAL VILLAGE NEAR BRIDGE, UJJAIN | 5.8 |
| 273 | | | 30060 | RIVER CHAMBAL AT FISH FARM, GANDHISAGAR | 6.0 |
| 274 | | CHAMLA | 3310 | RIVER CHAMLA AT W/S INTAKE POINT BADNAGAR, UJJAIN | 3.4 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-------------|-----------------|---|---|-------------------------|
| 275 | MAHARASHTRA | HIRAN | 3829 | RIVER HIRAN, NH -12 ROAD BRIDGE VIL VIKRAMPUR ,DIST NARSINGPUR | 7.8 |
| 276 | | | 4613 | RIVER HIRAN AFTER MIXING PARIYAT NEAR ROAD BRIDGE AT VILL GANIYARI, JABALPUR | 6.0 |
| 277 | | JOHILA | 1611 | RIVER JOHILA NEAR NAROJABAD NEAR UMARIA ROAD BRIDGE, M.P | 7.7 |
| 278 | | KALIASOT | 2120 | RIVER KALIASOT NEAR ROAD BRIDGE, MANDIDEEP | 3.9 |
| 279 | | KANHAN | 3312 | RIVER KANHAN AT CHINDWARA BEFORE MIXING BOREGAON GROWTH CENTRE NALLA, JABALPUR | 7.8 |
| 280 | | KHAN | 1367 | RIVER KHAN AT KABIT KHEDI (NEAR INDORE) M.P. | 40.0 |
| 281 | | | 2110 | RIVER KHAN AT SAKKAR KHADI, INDORE | 46.0 |
| 282 | | | 2111 | RIVER KHAN AT SANWER | 36.0 |
| 283 | | KSHIPRA | 1369 | RIVER KSHIPRA AT RAMGHAT AT UJJAIN, M.P. | 12.8 |
| 284 | | | 1370 | RIVER KSHIPRA AT TRIVENISANGAM (1 KM. D/S OF SANGAM), M.P. | 7.0 |
| 285 | | | 1468 | RIVER KSHIPRA AT SIDDHAWAT (D/S) OF UJJAIN., M.P. | 18.0 |
| 286 | | | 3315 | RIVER KSHIPRA AT GAUGHAT, UJJAIN | 9.0 |
| 287 | | | 3316 | RIVER KSHIPRA AT U/S OF MAHIDPUR CITY, UJJAIN | 4.0 |
| 288 | | KUNDA | 2114 | RIVER KUNDA AT KHARGONE | 4.2 |
| 289 | | MAHI | 30058 | RIVER MAHI AT VILLAGE BAJNA (M.P.) | 5.0 |
| 290 | | MALEI | 2104 | RIVER MALEI AT JAORA | 4.0 |
| 291 | | MANDAKINI | 1372 | RIVER MANDAKINI AT CHITRAKUT, M.P. | 3.2 |
| 292 | | NEWAJ | 3319 | RIVER NEWAJ AT W/S INTAKE POINT, SHUJALPUR, UJJAIN | 3.5 |
| 293 | | | 3320 | RIVER NEWAJ AT U/S NEAR W/S INTAKE POINT, RAJGARH, GUNA | 3.3 |
| 294 | | PARVATI | 1432 | RIVER PARVATI NEAR VILLAGE BATAODAPAR, M.P. | 3.7 |
| 295 | | SONE | 30082 | RIVER SONE DEORA U/S RIHAND (M. P.) | 6.1 |
| 296 | | TAPI | 10 | RIVER TAPI AT BURHANPUR | 6.0 |
| 297 | | WARDHA | 30059 | RIVER WARDHA AT BANGON VILLAGE NEAR PANDHURNA (M.P.) | 4.0 |
| 298 | | AMBA | 2651 | RIVER AMBA AT D/S OF WAKEN BRIDGE-U/S OF JS PETROCHEMICALS, WAKENPHATA, ROHA, RAIGAD | 4.9 |
| 299 | | AMRAVATI (TAPI) | 2652 | RIVER AMRAVATI D/S OF DONDAICHA, DHULE, DHULE | 3.4 |
| 300 | | BHATSA | 1461 | RIVER BHATSA AT D/S OF PISE DAM NEAR PISE VILLAGE (ULHAS), BHIWANDI, THANE | 10.0 |
| 301 | | | 2653 | RIVER BHATSA AT D/S OF LIBERTY OIL MILLS, SATNE, SHAHAPUR, THANE | 4.0 |
| 302 | | | 2654 | RIVER BHATSA AT U/S OF LIBERTY OIL MILLS, SATNE, SHAHAPUR, THANE | 4.0 |
| 303 | | BHIMA | 28 | RIVER BHIMA AT TAKLI, SOUTH SOLAPUR, SOLAPUR | 8.5 |
| 304 | | | 1188 | RIVER BHIMA AT NARSINGPUR, (D/S AF.CONFL.WITH R.NIRA), NARSINGPUR, MALSHIROS, SOLAPUR | 11.0 |
| 305 | 1189 | | RIVER BHIMA AT PUNE U/S VITHALWADI, HAWELI, PUNE | 38.0 | |
| 306 | 1190 | | RIVER BHIMA AT PUNE, D/S OF BUNDGARDEN, YERWADA, HAWELI, PUNE | 19.0 | |
| 307 | 1191 | | RIVER BHIMA AT PARGAON (AFTER CONFL.WITH MULA MUTHA),PARGAON, DAUND, PUNE | 8.0 | |
| 308 | 1192 | | RIVER BHIMA AFTER CONF. WITH DAUND, DAUND, PUNE | 7.5 | |
| 309 | 2655 | | RIVER BHIMA AT KOREGAON NEAR KOREGAON BRIDGE, SHIRUR, PUNE | 15.0 | |
| 310 | 2656 | | RIVER BHIMA RIVER-BACKWATER OF UJANI DAM NEAR RAW WATER PUMP HOUSE, KUMBARGAON, INDAPUR, PUNE | 8.4 | |
| 311 | BINDUSARA | 2657 | RIVER BINDUSARA AT BEED NEAR INTAKE WATER PUMP HOUSE AT DAM, PALIGAON, BEED, BEED | 4.8 | |
| 312 | BORI | 2658 | RIVER BORI D/S OF AMALNER, JALGAON, JALGAON | 3.4 | |
| 313 | BURAI | 2659 | RIVER BURAI BEFORE CONFLUECE TO TAPI RIVER, MUKUDAS, DHULE | 9.2 | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) | |
|------|-------|--------------|--|--|----------------------------|------|
| 314 | | CHANDRABHAGA | 1911 | RIVER CHANDRABHAGA U/S OF PANDHARPUR TOWN, GURSALE, PANDHARPUR, SOLAPUR | 10.5 | |
| 315 | | | 1912 | RIVER CHANDRABHAGA D/S OF PANDHARPUR TOWN, GURSALE, PANDHARPUR, SOLAPUR | 13.5 | |
| 316 | | DARNA | 2660 | RIVER DARNA AT CHEHEDI PUMPING STATION, CHEHEDI, NASHIK, NASHIK | 4.8 | |
| 317 | | | 2661 | RIVER DARNA AT ASWALI (DARNA DAM), LGATPURI, NASHIK | 4.2 | |
| 318 | | | 2662 | RIVER DARNA AT MES SITE PUMPING STATION, BHAGUR, NASHIK | 4.8 | |
| 319 | | | 2663 | RIVER DARNA AT BHAGUR PUMPING STATION NEAR PANDHURLI BRIDGE, BHAGUR, NASHIK | 4.6 | |
| 320 | | | 2664 | RIVER DARNA AT SANSARI , NASHIK, NASHIK | 16.5 | |
| 321 | | | GHOD | 2665 | RIVER GHOD AT SHIRUR, PUNE | 11.5 |
| 322 | | | GIRNA | 1252 | RIVER GIRNA AT JALGAON | 7.5 |
| 323 | | 1253 | | RIVER GIRNA AT MALEGAON (MANMAD), NASHIK | 18.0 | |
| 324 | | GODAVARI | 12 | RIVER GODAVARI AT DHALEGAON, PATHARI, PARBHANI | 5.8 | |
| 325 | | | 1095 | RIVER GODAVARI AT U/S OF GANGAPUR DAM, NASHIK | 4.4 | |
| 326 | | | 1096 | RIVER GODAVARI AT PANCHAVATI AT RAMKUND,NASHIK | 14.0 | |
| 327 | | | 1209 | RIVER GODAVARI AT RAHER, NAYAGAON, NANDED | 6.5 | |
| 328 | | | 1210 | RIVER GODAVARI AT VISHNUPURI,NANDED, NANDED | 5.0 | |
| 329 | | | 1211 | RIVER GODAVARI AT NASIK D/S, GADGEBABA MAHARAJ NAGAR, NASHIK | 9.8 | |
| 330 | | | 1312 | RIVER GODAVARI AT JAYAKWADI DAM, PAITHAN,AURANGABAD | 4.6 | |
| 331 | | | 2157 | RIVER GODAVARI AT LATUR WATER INTAKE NEAR PUMP HOUSE AT DHAMEGAON, KALUMB, OSMANABAD | 6.5 | |
| 332 | | | 2158 | RIVER GODAVARI AT U/S OF PAITHAN AT PAITHAN INTAKE PUMP HOUSE AT JAYAKWADI, PAITHAN, AURANGABAD | 5.6 | |
| 333 | | | 2159 | RIVER GODAVARI AT D/S OF PAITHAN AT PATHEGAON BRIDGE, PATHEGAON, PAITHAN, AURANGABAD | 4.8 | |
| 334 | | | 2160 | RIVER GODAVARI AT U/S OF AURANGABAD RESERVOIR, KAIGAON TOKKA NEAR KAIGAON BRIDGE,KAIGAON, GANGAPUR, AURANGABAD | 6.6 | |
| 335 | | | 2161 | RIVER GODAVARI AT JALNA INTAKE WATER PUMP HOUSE, SHAHABAD, AMBAD, JALNA | 6.5 | |
| 336 | | | 2177 | RIVER GODAVARI NEAR SOMESHWAR TEMPLE, SOMESHWAR, NASHIK | 5.6 | |
| 337 | | | 2179 | RIVER GODAVARI AT HANUMAN GHAT, NASHIK CITY, NASHIK | 9.2 | |
| 338 | | | 2180 | RIVER GODAVARI AT TAPOVAN, TAPOVAN, NASHIK | 27.0 | |
| 339 | | | 2181 | RIVER GODAVARI AT KAPILA- GODAVARI CONFLUENCE POINT, TAPOVAN, NASHIK | 28.0 | |
| 340 | | | 2182 | RIVER GODAVARI AT SAIKHEDA, NIPHAD, NASHIK | 6.0 | |
| 341 | | 2183 | RIVER GODAVARI AT NANDUR- MADMESHWAR DAM, NANDUR, NASHIK | 4.6 | | |
| 342 | | GOMAI | 2666 | RIVER GOMAI D/S OF SHAHADA, DHULE | 3.6 | |
| 343 | | HIWARA | 2667 | RIVER HIWARA D/S OF PACHORA, JALGAON | 3.8 | |
| 344 | | INDRAYANI | 2197 | RIVER INDRAYANI AT D/S OF ALANDIGAON, HAWELI,PUNE | 15.5 | |
| 345 | | | 2668 | RIVER INDRAYANI AT D/S OF MOSHIGAON, HAWELI, PUNE | 15.5 | |
| 346 | | | 2669 | RIVER INDRAYANI AT U/S OF MOSHIGAON, HAWELI, PUNE | 9.5 | |
| 347 | | KALU | 1092 | RIVER KALU AT ATALE VILLAGE, KALYAN, THANE | 8.0 | |
| 348 | | KAN | 2670 | RIVER KAN NEAR SAKRI WATER WORKS, SAKRI, DHULE | 6.5 | |
| 349 | | KANHAN | 1909 | RIVER KANHAN D/S OF NAGPUR, AGARGAON, KUHI, NAGPUR | 22.0 | |
| 350 | | | 2170 | RIVER KANHAN U/S OF M/S VIDHARBHA PAPER MILL, SINORA, PARSEONI, NAGPUR | 7.0 | |
| 351 | | | 2171 | RIVER KANHAN D/S OF M/S VIDHARBHA PAPER MILL, SINORA, PARSEONI, NAGPUR | 6.4 | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) | |
|------|-------|-----------------------|------------------|--|--|-----|
| 352 | | KOLAR | 1908 | RIVER KOLAR BEFORE CONFLUENCE TO KANHAN AT WAREGAON, KAMPTEE, NAGPUR | 4.8 | |
| 353 | | KOYNA | 2189 | RIVER KOYNA AT KARAD, SATARA | 7.5 | |
| 354 | | KRISHNA | 36 | RIVER KRISHNA AT KRISHNA BRIDGE, KARAD, KARAD, SATARA | 7.0 | |
| 355 | | | 1194 | RIVER KRISHNA AT MAHABALESHWAR DHOM DAM NEAR KOINA DAM, MAHABALESHWAR, SATARA | 11.0 | |
| 356 | | | 1310 | RIVER KRISHNA AT KURUNDWAD, SHIROL, KOLHAPUR | 3.2 | |
| 357 | | | 2187 | RIVER KRISHNA AT KSHETRA MAHULI, MAHULI, SATARA | 8.0 | |
| 358 | | | 2188 | RIVER KRISHNA AT KRISHNA-VENNA SANGAM AT MAHULI, SATARA | 7.5 | |
| 359 | | | 2190 | RIVER KRISHNA AT WAI, SATARA | 7.6 | |
| 360 | | | KUNDALIKA | 1152 | RIVER KUNDALIKA AT ROHA BRIDGE, ROHA CITY, RAIGAD | 4.0 |
| 361 | | | | 2198 | RIVER KUNDALIKA AT ARE KHURD (SALINE ZONE), AREKHURD, ROHA, RAIGAD | 9.0 |
| 362 | | 2671 | | RIVER KUNDALIKA NEAR SALAV BRIDGE (SALINA ZONE), SALAV, ROHA, RAIGAD | 17.0 | |
| 363 | | 2672 | | RIVER KUNDALIKA AT DHATAV AT JACKWELL, DHATAV, ROHA, RAIGAD | 12.0 | |
| 364 | | MANJEERA | 2673 | RIVER MANJEERA AT D/S OF LATUR NEAR LATUR-NANDED BRIDGE, BHATKHEDA, LATUR, LATUR | 7.5 | |
| 365 | | MITHI | 2168 | RIVER MITHI RIVER, MAHIM, BANDRA, MUMBAI | 50.0 | |
| 366 | | MOR | 2674 | RIVER MOR NEAR PADALSHE, JALGAON | 9.8 | |
| 367 | | MORNA | 2675 | RIVER MORNA AT D/S RAILWAY BRIDGE, AKOLA | 10.4 | |
| 368 | | MUCHKUNDI | 2676 | RIVER MUCHKUNDI AT WAKED NEAR M/S ASAHI INDIA GLASS LTD, WAKED, LANJA, RATNAGIRI | 12.0 | |
| 369 | | MULA | 2193 | RIVER MULA AT AUNDH BRIDGE, AUNDHGAON, HAWELI, PUNE | 15.0 | |
| 370 | | | 2194 | RIVER MULA AT HARRISON BRIDGE NEAR MULA- PAWANA SANGAM, BOPODI, HAWELI, PUNE | 28.0 | |
| 371 | | MULA-MUTHA | 2192 | RIVER MULA-MUTHA AT MUNDHAWA BRIDGE, MUNTHAWA, HAWELI, PUNE | 22.0 | |
| 372 | | | 2677 | RIVER MULA-MUTHA AT D/S OF THEUR, HAWELI, PUNE | 16.5 | |
| 373 | | MUTHA | 2191 | RIVER MUTHA AT SANGAM BRIDGE NEAR GANAPATHY GHAT, SHIVAJINAGAR, PUNE | 50.0 | |
| 374 | | | 2678 | RIVER MUTHA NEAR VEER SAVARKAR BHAVAN, PUNE | 24.0 | |
| 375 | | | 2679 | RIVER MUTHA AT DECCAN BRIDGE, DECCAN, PUNE | 36.0 | |
| 376 | | | 2680 | RIVER MUTHA AT KHADAKVASLA DAM, KHADAKVASLA, HAWELI, PUNE. | 7.4 | |
| 377 | | NIRA (KRISHNA) | 1463 | RIVER NIRA AT SAROLA BDG.ON PUNE-BANGLORE HIGHWAY, SAROLA, BHOR, PUNE | 15.0 | |
| 378 | | | 2195 | RIVER NIRA AT D/S OF JUBILANT ORGANOSIS, NIMBUT, BARAMATI,PUNE. | 11.5 | |
| 379 | | | 2681 | RIVER NIRA AT SANGAVI, PHALTAN, SATARA | 12.5 | |
| 380 | | | 2682 | RIVER NIRA AT U/S OF JUBILANT ORGANOSIS, NIRA(DATTAGHAT), BARAMATI, PUNE | 7.8 | |
| 381 | | | 2683 | RIVER NIRA AT SHINDEWADI. SHIRVAL, KHANDALA, SATARA | 7.5 | |
| 382 | | PANZARA | 2684 | RIVER PANZARA NEAR PANZARAKAN SSK LTD, PANZARA, DHULE | 8.5 | |
| 383 | | PATALGANGA | 1151 | RIVER PATALGANGA AT SHILPHATA, KHOPOLI, KHALAPUR, RAIGAD | 4.0 | |
| 384 | | | 1462 | RIVER PATALGANGA NEAR INTAKE OF MIDC W/W, TURADE, KHALAPUR, RAIGAD | 5.8 | |
| 385 | | | 2685 | RIVER PATALGANGA AT D/S OF KHARPADA BRIDGE, KHARPADA, KHALAPUR, RAIGAD | 11.0 | |
| 386 | | | 2686 | RIVER PATALGANGA AT VYAL PUMP HOUSE, VYAL, KHALAPUR, RAIGAD | 7.4 | |
| 387 | | | 2687 | RIVER PATALGANGA AT KHALAPUR PUMPING STATION, KHALAPUR, RAIGAD | 7.4 | |
| 388 | | | 2688 | RIVER PATALGANGA AT SAVROLI BRIDGE, KHALAPUR. RAIGAD | 7.4 | |
| 389 | | | 2689 | RIVER PATALGANGA AT GAGANGIRI MAHARAJ TEMPLE, KHOPOLI, KHALAPUR, RAIGAD | 6.6 | |
| 390 | | PAWANA | 2196 | RIVER PAWANA AT SANGAVIGAON, HAWELI PUNE. | 20.0 | |
| 391 | | | 2690 | RIVER PAWANA AT KASARWADI, HAWELI, PUNE | 21.0 | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-------|------------------|----------------|---|-------------------------|
| 392 | | | 2691 | RIVER PAWANA AT DAPODI BRIDGE AT PAWANA-MULLA SANGAM, DAPODI, HAWELI, PUNE | 26.0 |
| 393 | | | 2692 | RIVER PAWANA AT RAVET WEIR, RAVET, HAWELI, PUNE | 10.0 |
| 394 | | | 2693 | RIVER PAWANA AT CHINCHWADGAON, HAWELI, PUNE | 13.5 |
| 395 | | | 2694 | RIVER PAWANA AT PIMPRIGAON, HAWELI, PUNE | 18.5 |
| 396 | | PEDHI | 2695 | RIVER PEDHI NEAR ROAD BRIDGE AT DADHI-PEDHI VILLAGE, BHATKULI, AMRAVATI | 10.0 |
| 397 | | PEHLAR | 2696 | RIVER PEHLAR ON PEHLAR DAM-INLET OF WATER WORKS, PEHLAR, VASAI, THANE | 7.0 |
| 398 | | | 2697 | RIVER PENGANGA NEAR WATER SUPPLY SCHEME OF UMARKHED MC BELKHED, UMARKHED, YAVATMAL | 4.0 |
| 399 | | PENGANGA | 2698 | RIVER PENGANGA D/S OF ISAPUR DAM, ISAPUR, PUSAD, YAVATMAL | 7.2 |
| 400 | | | 2699 | RIVER PENGANGA AT MEHKAR-BULDANA ROAD BRIDGE, MEHKAR, BULDANA | 5.0 |
| 401 | | | 2700 | RIVER PURNA NEAR ACHALPUR-AMRAVATI ROAD BRIDGE, ASEGAON, CHANDUR BAZAR, AMRAVATI | 6.0 |
| 402 | | PURNA | 1913 | RIVER PURNA AT DHUPESHWAR, MALKAPUR, AKOLA | 6.8 |
| 403 | | | 2155 | RIVER PURNA A/C OF MORNA, ANDURA VILLAGE, BALAPUR, AKOLA | 6.8 |
| 404 | | RANGAVALI | 1907 | RIVER RANGAVALI D/S OF NAVAPUR, NANDURBAR | 11.5 |
| 405 | | | 2199 | RIVER SAVITRI AT OVALE VILLAGE, OVALE, MAHAD, RAIGAD | 3.8 |
| 406 | | | 2701 | RIVER SAVITRI JACKWELL AT UPSA KENDRE, NANGALWADI, MAHAD, RAIGAD | 11.0 |
| 407 | | SAVITRI | 2702 | RIVER SAVITRI AT SHEDAV DOV, MAHAD, RAIGAD | 12.0 |
| 408 | | | 2703 | RIVER SAVITRI AT DADLI BRIDGE, DADLI, MAHAD, RAIGADH | 50.0 |
| 409 | | | 2704 | RIVER SAVITRI AT MUTHAVALI VILLAGE, MAHAD, RAIGADH | 12.0 |
| 410 | | SINA | 2705 | RIVER SINA NEAR LABOTI TOLL NAKA, LABOTI, MOHAL, SOLAPUR | 8.4 |
| 411 | | | 2706 | RIVER SURYA RIVER, U/S OF SURYA DAM, DHAMMI, VIKRAMGAD, THANE | 8.0 |
| 412 | | SURYA | 2707 | RIVER SURYA AT MIDC PUMPING STATION, GARVASHET, PALGHAR, THANE | 4.0 |
| 413 | | | 2708 | RIVER SURYA AT INTAKE OF VASAI-VIRAR W/S SCHEME, MASVAN, PALGHAR, THANE | 11.0 |
| 414 | | TANSA | 2709 | RIVER TANSA NEAR ROAD BRIDGE, VILLAGE DAKEWALI, WADA, THANE | 4.0 |
| 415 | | | 1251 | RIVER TAPI AT BHUSAWAL U/S, BHUSAWAL RAILWAY COLONY, BHUSAWAL, JALGAON | 12.5 |
| 416 | | TAPI | 1313 | RIVER TAPI AT AJAND VILLAGE, RAVER, JALGAON | 13.5 |
| 417 | | | 1314 | RIVER TAPI AT UBAD VILLAGE, SHAHADA, NANDURBAR | 18.5 |
| 418 | | TITUR | 2710 | RIVER TITUR D/S OF CHALISGAON, JALGAON | 11.5 |
| 419 | | | 1093 | RIVER ULHAS AT U/S OF NRC BUND AT MOHANE, KALYAN, THANE | 4.0 |
| 420 | | ULHAS | 1094 | RIVER ULHAS AT U/S OF BADLAPUR, KULGAON, AMBERNATH, THANE | 4.0 |
| 421 | | | 2162 | RIVER ULHAS AT JAMBHUL WATER WORKS, JAMBHUL, AMBERNATH, THANE | 4.0 |
| 422 | | URMODI | 2711 | RIVER URMODI RIVER, NAGTHANE, SATARA | 6.8 |
| 423 | | VAITARNA | 2712 | RIVER VAITARNA NEAR ROAD BRIDGE, GANDHARE VILLAGE, WADA, THANE | 4.0 |
| 424 | | VASHISTI | 2713 | RIVER VASHISTI AT D/S OF THREE M PAPER MILLS NEAR CHIPLUN WATER INTAKE JACKWELL, KHERDI, CHIPLUN, RATNAGIRI | 4.0 |
| 425 | | VEL | 2715 | RIVER VEL AT SHIKRAPUR, SHIRUR, PUNE | 9.0 |
| 426 | | | 2186 | RIVER VENNA AT VARYE, SATARA. | 6.2 |
| 427 | | VENNA | 2716 | RIVER VENNA AT MAHABALESHWAR, SATARA | 5.4 |
| 428 | | | 2717 | RIVER VENNA AT MAHULI, SATARA | 7.2 |
| 429 | | WAGHUR | 2718 | RIVER WAGHUR AT SAKEGAON BEFORE CONFLUENCE WITH TAPI RIVER, JALGAON | 11.0 |
| 430 | | WAINGANGA | 11 | RIVER WAINGANGA AT ASHTI, GONDPIPRI, CHANDRAPUR | 14.0 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-----------|------------|--------------------------------------|--|--|
| 431 | | | 1910 | RIVER WAINGANGA AFTER CONLUENCE WITH KANHAN, AMBHORA, KUHI, NAGPUR | 5.6 |
| 432 | | | 2172 | RIVER WAINGANGA D/S OF ELLORA PAPER MILL, TUMSAR, TUMSAR, BHANDARA | 5.2 |
| 433 | | | 2173 | RIVER WAINGANGA U/S OF ELLORA PAPER MILL, TUMSAR, TUMSAR, BHANDARA | 4.0 |
| 434 | | | 2175 | RIVER WAINGANGA U/S OF GAURAV PAPER MILLS, NEAR JACKWELL, BRAMHPURI, CHANDRAPUR | 5.6 |
| 435 | | | 2176 | RIVER WAINGANGA D/S OF GAURAV PAPER MILLS, NEAR JACKWELL, BRAMHPURI, CHANDRAPUR | 5.8 |
| 436 | | | 1212 | RIVER WARDHA AT RAJURA BRIDGE, RAJURA, CHANDRAPUR, CHANDRAPUR | 8.2 |
| 437 | | WARDHA | 1315 | RIVER WARDHA AT PULGAON RAILWAY BRIDGE, PULGAON, WARDHA, WARDHA | 5.2 |
| 438 | | | 2156 | RIVER WARDHA AT CONFLUENCE POINT OF PENGANGA & WARDHA AT JUGAD, WANI, YAVATMAL | 7.8 |
| 439 | | | 2174 | RIVER WARDHA D/S OF ACC GHUGGUS, CHANDRAPUR, CHANDRAPUR | 9.2 |
| 440 | | | 2719 | RIVER WARDHA AT D/S OF ERAI RIVER, HADASTI, CHANDRAPUR, CHANDRAPUR | 11.4 |
| 441 | | | 2720 | RIVER WARDHA AT U/S OF ERAI HADASTI, CHANDRAPUR, CHANDRAPUR | 9.4 |
| 442 | | | 2721 | RIVER WARDHA AT U/S OF ACC GHUGGUS. , CHANDRAPUR, CHANDRAPUR | 8.0 |
| 443 | | | WENA | 2722 | RIVER WENA AT U/S OF MOHATA MILLS, NEAR RAILWAY BRIDGE, HINGANGHAT, WARDHA |
| 444 | | 2723 | | RIVER WENA AT D/S OF MOHATA MILLS, NR RD BRG ON HINGANGHAT-WADNER ROAD, HINGANGHAT, WARDHA | 7.6 |
| 445 | MANIPUR | BARAK | 2838 | RIVER BARAK NEAR NONEY VILLAGE (N.H. 53), TAMENGLONG | 4.6 |
| 446 | | | 2869 | RIVER BARAK AT SENAPATI | 3.4 |
| 447 | | | 2875 | RIVER BARAK AT N.H. 53, TAMENGLONG . | 3.1 |
| 448 | | CHAKPI | 2868 | RIVER CHAKPI AT CHAKPIKARONG | 3.3 |
| 449 | | IMPHAL | 1424 | RIVER IMPHAL AT MAHABALI | 6.9 |
| 450 | | | 1457 | RIVER IMPHAL AT KOIRENGEI | 4.3 |
| 451 | | | 1627 | RIVER IMPHAL AT KIYAMGI | 4.3 |
| 452 | | | 1628 | RIVER IMPHAL AT MINUTHONG | 4.0 |
| 453 | | | 2861 | RIVER KANGLA MOAT, IMPHAL WEST | 4.5 |
| 454 | | | 2862 | RIVER IMPHAL AT SAMUROU | 4.9 |
| 455 | | | 2864 | RIVER IMPHAL AT SEKMAI | 3.4 |
| 456 | | IRIL | 1458 | RIVER IRIL AT PORAMPET | 3.9 |
| 457 | | | 1624 | RIVER IRIL AT LILONG | 5.3 |
| 458 | | | 2863 | RIVER IRIL AT KANGLA SIPHAI | 3.8 |
| 459 | 2873 | | RIVER IRIL AT LILONG | 3.8 | |
| 460 | KHUGA | 1925 | RIVER KHUGA (LOCATION PL) | 4.4 | |
| 461 | | 2877 | RIVER KHUGA ON KHUGA DAM | 3.8 | |
| 462 | KHUJAIROK | 1926 | RIVER KHUJAIROK RIVER, MOREH | 4.2 | |
| 463 | LOKCHAO | 2878 | RIVER LOKCHAO AT BISHNUPUR | 4.4 | |
| 464 | MAHA | 2867 | RIVER MAHA AT CHANDEL | 4.7 | |
| 465 | MANIPUR | 2852 | RIVER MANIPUR AT SEKMAIJAN | 3.9 | |
| 466 | | 2857 | RIVER MANIPUR AT THOUBAL | 4.1 | |
| 467 | | 2879 | RIVER ETHAI BARRAGE ON MANIPUR RIVER | 4.0 | |
| 468 | NAMBUL | 1625 | RIVER NAMBUL AT HUMP BRIDGE | 6.0 | |
| 469 | | 1626 | RIVER NAMBUL AT HEIRANGOITHONG | 7.0 | |
| 470 | | 2858 | RIVER NAMBUL AT SAMUSANG (U.K. ROAD) | 5.6 | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) | |
|------|-----------|------------|----------------|--|--|-----|
| 471 | MEGHALAYA | | 2859 | RIVER SINGDA DAM AT NAMBUL RIVER | 4.0 | |
| 472 | | | 2860 | RIVER NAMBUL AT NAOREMTHONG | 4.8 | |
| 473 | | | 2880 | RIVER NAMBUL AT BISHNUPUR | 4.5 | |
| 474 | | SEKMAI | 1927 | RIVER SEKMAI RIVER, KAKCHING | 3.8 | |
| 475 | | THOUBAL | 2854 | RIVER THOUBAL AT PHADOM | 3.1 | |
| 476 | | | 2856 | RIVER THOUBAL AT YAIRIPOK | 4.4 | |
| 477 | | | 2870 | RIVER THOUBAL AT SHONG KONG | 3.7 | |
| 478 | | | 2871 | RIVER THOUBAL AT YONGUL KONG | 4.1 | |
| 479 | | | 2872 | RIVER THOUBAL AT LITAN | 4.9 | |
| 480 | | WANGJING | 2855 | RIVER WANGJING AT HEIROK | 3.8 | |
| 481 | | | 2876 | RIVER WANGJING AT WANGJING, | 4.4 | |
| 482 | | MEGHALAYA | KYRHUKHLA | 1428 | RIVER KYRHUKHLA NEAR SUTNGA KHLIERIAT, JAINTIA HILLS | 5.5 |
| 483 | | | LUKHA | 3375 | RIVER LUKHA AT MYNDIHATI (TRIBUTARY OF LUNAR) | 5.5 |
| 484 | | | MYNTDU | 1631 | RIVER MYNTDU JOWAI | 6.5 |
| 485 | NONBAH | | 3367 | RIVER NONBAH AT NANGSTOIN MARKE | 5.6 | |
| 486 | UMKHRAH | | 3359 | RIVER UMKHRAH AT DEMTHRING, SHILLONG | 50.0 | |
| 487 | | | 3360 | RIVER UMKHRAH ATUMKALIAR, SHILLONG | 40.0 | |
| 488 | | | 3361 | RIVER UMKHRAH AT MAWLAI, NEAR SLAUGHTER HOUSE | 56.0 | |
| 489 | | | 3362 | RIVER UMKHRAH AT MAWPDANG, MAWLAI | 40.0 | |
| 490 | UMSHYRPI | | 3364 | RIVER UMSHYRPI AT LAW COLLEGE, DHANKETI, | 44.0 | |
| 491 | | | 3365 | RIVER UMSHYRPI AT UMSHYRPI BRIDGE | 31.0 | |
| 492 | | UMTREW | 1427 | RIVER UMTREW AT BYRNIHAT EAST | 5.8 | |
| 493 | | | 3366 | RIVER UMTREW AT UMRAN, | 5.4 | |
| 494 | MIZORAM | CHITHE | 3718 | RIVER CHITHE AT ARMED VENG NR MINI SPORTS COMPLEX | 5.9 | |
| 495 | | LAWBUAL | 3721 | RIVER LAWIBUAL STREAM, LAWIBUAL VILLAGE | 6.2 | |
| 496 | | TUIKUAL | 4115 | RIVER TUIKUAL STREAM, U/S NR NEW SECRETARIAT COMPLEX, DINTHAR | 6.4 | |
| 497 | NAGALAND | DHANSIRI | 1797 | RIVER DHANSIRI AT BRIDGE NEAR PURANA BAZAAR, NAGALAND | 3.4 | |
| 498 | | | 1798 | RIVER DHANSIRI AT NEAR CHECK GATE (DIMAPUR KHUTKHUTI ROAD) | 3.5 | |
| 499 | | | 1800 | RIVER DHANSIRI AT NUTON BASTI | 18.0 | |
| 500 | | | 1928 | RIVER DHANSIRI AT NAGALAND-ASSAM BORDER, DIMAPUR | 4.4 | |
| 501 | | | 30072 | RIVER DHANSIRI AT KHATKATI GATE | 4.3 | |
| 502 | | DZU | 1930 | RIVER DZU D/S KOHIMA TOWN | 3.5 | |
| 503 | | DZUNA | 2892 | RIVER DZUNA RU IN KOHIMA, ADJOINING THE NEW KOHIMA MUNICIPAL COUNCIL SOLID WASTE MANAGEMENT SITE, NAGALAND | 3.5 | |
| 504 | | SANO | 2890 | RIVER SANO RU IN KOHIMA | 3.8 | |
| 505 | ODISHA | BRAHMANI | 1038 | RIVER BRAHMANI AT D/S PANPOSH AT DEOGAN | 5.6 | |
| 506 | | | 1302 | RIVER BRAHMANI AT ROURKELA D/S AT JALDA | 5.3 | |
| 507 | | | 3916 | RIVER BRAHMANI AT FD/S AT ATTAGHAT | 4.6 | |
| 508 | | DAYA | 2411 | RIVER DAYA AT BHUBANESWAR FD/S (2 KM AFTER CONFLUENCE OF GANGUA NALLAH WITH DAYA) | 7.1 | |
| 509 | | | 3895 | RIVER DAYA AT KANAS | 5.1 | |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) | |
|------|---------|------------------|----------------|--|---|-------|
| 510 | | GANGUA | 3896 | RIVER GANGUA NEAR RAJDHANI ENGINEERING COLLEGE | 20.6 | |
| 511 | | | 3897 | RIVER GANGUA AT PALASUNI | 25.5 | |
| 512 | | | 3898 | RIVER GANGUA AT SAMANTARAPUR | 39.2 | |
| 513 | | | 3899 | RIVER GANGUA AT VADIMULA | 12.6 | |
| 514 | | KATHAJODI | 1301 | RIVER KATHAJODI AT CUTTACK D/S | 4.1 | |
| 515 | | | 3892 | RIVER KATHAJODI AT CUTTACK FD/S AT MATTAGAJPUR | 3.5 | |
| 516 | | | KUAKHAI | 1280 | RIVER KUAKHAI AT BHUBANESWAR D/S | 7.3 |
| 517 | | | MANGALA | 3907 | RIVER MANGALA AT PURI D/S GOLASAHI | 7.4 |
| 518 | | PUDUCHERRY | SERUA | 2409 | RIVER SERUA AT CUTTACK FD/S (SERUA) AT SANKHATRASA | 3.5 |
| 519 | | | CHUNNAMBAR | 1689 | RIVER CHUNNAMBAR | 7.5 |
| 520 | CORINGA | | 2444 | RIVER CORINGA (TIDAL LOCK) | 20.0 | |
| 521 | | GAUTAMI-GODAVARI | 2443 | RIVER GAUTAMI-GODAVARI NEAR ADAVIPOLAM | 25.0 | |
| 522 | PUNJAB | GHAGGAR | 1023 | RIVER GHAGGAR AT MUBARAKPUR REST HOUSE (PATIALA), PUNJAB | 24.0 | |
| 523 | | | 1024 | RIVER GHAGGAR AT 100M D/S CONF. WITH R. SARASWATI (PATIALA), PUNJAB | 46.0 | |
| 524 | | | 1295 | RIVER GHAGGAR NEAR BANKARPUR, DERA BASSI, PUNJAB | 50.0 | |
| 525 | | | 1473 | RIVER GHAGGAR AT RATANHERI, D/S OF PATIALA NADI (AFTER CONFL.), PUNJAB | 42.0 | |
| 526 | | | 1698 | RIVER GHAGGAR AT D/S CHHATBIR, PUNJAB | 43.0 | |
| 527 | | | 1699 | RIVER GHAGGAR AT U/S DHAKANSU NALLAH, PUNJAB | 22.0 | |
| 528 | | | 1700 | RIVER GHAGGAR AT D/S DHAKANSU NALLAH, PUNJAB | 27.0 | |
| 529 | | | 1701 | RIVER GHAGGAR AT D/S JHARMAL NADI, PUNJAB | 38.0 | |
| 530 | | | 1702 | RIVER GHAGGAR AT U/S JHARMAL NADI, PUNJAB | 33.0 | |
| 531 | | | 1703 | RIVER GHAGGAR AT MOONAK, PUNJAB | 41.0 | |
| 532 | | | 1704 | RIVER GHAGGAR AT D/S SARDULGARH, PUNJAB | 64.0 | |
| 533 | | | 1705 | RIVER GHAGGAR AT U/S SARDULGARH, PUNJAB | 60.0 | |
| 534 | | | 4159 | RIVER GHAGGAR U/S BEFORE MIXING WITH SAGARPARA DRAIN AT VILL RASOULI, DIST PATIALA | 59.0 | |
| 535 | | | 4160 | RIVER GHAGGAR AT D/S AFTER MIXING WITH SAGARPARA DRAIN AT VILL RASOULI, PATIALA | 66.0 | |
| 536 | | | 4162 | CONFLUENCE POINT OF SUKHANA CHOE WITH GHAGGAR, VILL MUBARKPUR | 210.0 | |
| 537 | | | 30015 | RIVER GHAGGAR AT MUBARAKPUR (PUNJAB) | 25.0 | |
| 538 | | | 30016 | RIVER GHAGGAR AT TIWANA VILLAGE ,(PUNJAB) | 25.0 | |
| 539 | | | 30019 | RIVER GHAGGAR AT SIRDULGARH(PUNJAB) | 21.0 | |
| 540 | | | KALI BEIN | 2913 | RIVER KALI BEIN FALLING INTO BEAS, PUNJAB | 5.8 |
| 541 | | | SIRSA | 30012 | RIVER SARSA AT BADDI , (GHANOLI VILLAGE) PUNJAB | 32.0 |
| 542 | | | SUTLEJ | 1020 | RIVER SATLUJ AT 100M D/S BUDHA NALA CONFL., LUDHIANA | 105.0 |
| 543 | | | | 1021 | RIVER SATLUJ AT BOAT BDG. DHARMKOTNAKODAR ROAD, JALANDHAR | 40.0 |
| 544 | | | | 1022 | RIVER SATLUJ AT BRIDGE HARIKE, AMRITSAR | 6.2 |
| 545 | | | | 1381 | RIVER SATLUJ AT D/S EAST BEIN, PUNJAB | 24.0 |
| 546 | | | | 1690 | RIVER SATLUJ AT U/S BUDHA NALLAH (UPPER), PUNJAB | 3.2 |
| 547 | | | | 10022 | RIVER SATLUJ AT PHILLAUR U/S | 9.0 |
| 548 | | | | 10023 | RIVER SATLUJ AT PHAGWARA U/S (CHAHERU BRIDGE) | 20.0 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-----------|--------------------|----------------|---|-------------------------|
| 549 | | | 10024 | RIVER SATLUJ AT PHAGWARA D/S (KANGANIWAL BRIDGE) | 45.0 |
| 550 | | | 10025 | RIVER SATLUJ AT JALANDHAR U/S (PEERU SHAH KA DARGAH) | 85.0 |
| 551 | | | 10026 | RIVER SATLUJ AT JALANDHAR D/S (MALSIA BRIDGE) | 120.0 |
| 552 | | | 10028 | RIVER SATLUJ AT LUDHIANA D/S | 59.0 |
| 553 | | SWAN | 30011 | RIVER SWAN AT DHANGLA VILLAGE, SANTOSHGARH (PUNJAB) | 4.0 |
| 554 | | BANAS | 2951 | RIVER BISULPUR DAM, TONK, RAJASTHAN | 3.5 |
| 555 | | | 2952 | RIVER NEAR NEWTA DAM, JAIPUR, RAJASTHAN | 35.7 |
| 556 | | BANDI | 2948 | RIVER HEMAWAS DAM, PALI, RAJASTHAN | 4.1 |
| 557 | | | 4171 | RIVER BANDI AT NEHDA DAM, PALI | 94.0 |
| 558 | | BERECH | 4804 | RIVER BERACH NEAR VILLAGE-NAGARI, CHITTORGARH | 3.9 |
| 559 | | BHANWAR SEMILA | 4805 | RIVER BHANWAR SEMLA NEAR VILLAGE- DHOPAL, | 3.8 |
| 560 | | | 1289 | RIVER CHAMBAL AT KOTA D/S (2 KM. FROM CITY), RAJASTHAN | 3.3 |
| 561 | | | 1413 | RIVER CHAMBAL AT RAMESHWARGHAT NR. SAWAIMADHOPUR, RAJASTHAN | 3.1 |
| 562 | | CHAMBAL | 10029 | RIVER CHAMBAL AT KESHORAIPATAN U/S, NEAR SHRI RAJESHWAR MAHADEV TEMPLE, BUNDI | 3.3 |
| 563 | | | 10030 | RIVER CHAMBAL AT KESHORAIPATTAN D/S NEAR AMBEDKAR NAGAR, BUNDI | 5.7 |
| 564 | RAJASTHAN | | 4172 | RIVER GAMBHIRI AT GHOSUNDA DAM, CHITTORGARH | 4.4 |
| 565 | | GAMBHIRI | 4173 | RIVER GAMBHIRI DAM, NIMBAHERA-TEHSIL, CHITTORGARH | 4.9 |
| 566 | | | 4174 | RIVER GAMBHIRI NEAR OLD BUS STAND, CHITTORGARH | 3.6 |
| 567 | | GUWARDI | 4771 | RIVER GUWARDI RESERVIOR UPSTREAM SIDE OF GUWARDI NALLA (A TRIBUTARY TO BANAS RIVER) | 9.5 |
| 568 | | JAWAI | 2947 | RIVER JAWAI AT JAWAI DAM, SIROHI, RAJASTHAN | 11.7 |
| 569 | | KANOTA | 4781 | RIVER KANOTA DAM VILLAGE SUMEL, TEHSIL-BASSI | 9.5 |
| 570 | | KHARI | 4772 | RIVER KHARI AT KELWARA RESERVIOR, N/V KELWARA, TEHSIL-KUMBHALGARH DIST- RAJSAMAND, (UPSTREAM OF KHARI RIVER) | 7.6 |
| 571 | | KOTHARI | 4770 | RIVER KOTHARI AT MEJA DAM BHILWARA (UPSTREAM OF KOTHARI RIVER) | 6.2 |
| 572 | | LUNI | 2949 | RIVER SUKRI AT RANAKPUR DAM, RANAKPUR, PALI, RAJASTHAN | 3.8 |
| 573 | | MAHI | 30061 | RIVER MAHI AT GAMMON BRIDGE, BANSWARA(RAJASTHAN) | 5.0 |
| 574 | | PIPLAAD | 4790 | RIVER PIPLAAD DAM, BHAWANI MANDI | 3.2 |
| 575 | | | 10033 | RIVER ADYAR AT NANDAMBAKKAM | 40.0 |
| 576 | | | 10034 | RIVER ADYAR AT EKKATTUTHANGAL | 28.0 |
| 577 | | ADYAR | 10035 | RIVER ADYAR AT JAFERKHANPET | 23.0 |
| 578 | | | 10036 | RIVER ADYAR AT MARAIMALAI BRIDGE | 24.0 |
| 579 | | | 10037 | RIVER ADYAR BEFORE GOLF COURSE | 25.0 |
| 580 | | | 10038 | RIVER ADYAR AT KOTTURPURAM BRIDGE | 27.0 |
| 581 | | | 10039 | RIVER ADYAR NEAR BOAT CLUB | 30.0 |
| 582 | | AMRAVATI (CAUVERY) | 1319 | RIVER AMRAVATI AT 1KM D/S FROM EFF.DIS. PT. AT MADHUTHUKKULAM | 3.4 |
| 583 | | | 4813 | RIVER AMRAVATI LOCATED ADJACENT TO KARU MSW DUMP SITE AND ON THE NORTHERN BANK OF AMARAVATHI AND DOWNSTREAM SIDE OF KARU DYEING CLUSTER | 4.0 |
| 584 | | BHAVANI | 1205 | RIVER BHAVANI AT BHAVANI, TAMILNADU | 3.6 |
| 585 | | | 1322 | RIVER CAUVERY AT 1KM. D/S OF BHAVANI CONFL., TAMILNADU | 4.6 |

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|------|-------|---------------|--|--|-----------------------------|-------|
| 586 | | CAUVERY | 31 | RIVER CAUVERY AT MUSIRI | 3.9 | |
| 587 | | | 50 | RIVER CAUVERY AT METTUR | 5.7 | |
| 588 | | | 51 | RIVER CAUVERY AT PALLIPPALAYAM | 6.0 | |
| 589 | | | 1203 | RIVER CAUVERY AT TRICHY, GRAND ANAICUT, TAMILNADU | 17.0 | |
| 590 | | | 1206 | RIVER CAUVERY AT THANJAVUR, TAMILNADU | 5.2 | |
| 591 | | | 1320 | RIVER CAUVERY AT ERODE NEAR CHIRAPALAYAM, TAMILNADU | 15.0 | |
| 592 | | | 1323 | RIVER CAUVERY AT VELORE NEAR KATTIPALAYAM, TAMILNADU | 3.4 | |
| 593 | | | 1324 | RIVER CAUVERY AT MOHANUR NEAR PATTAPALAYAM, TAMILNADU | 3.4 | |
| 594 | | | 1325 | RIVER CAUVERY AT TIRUCHIRAPPALLI D/S, TAMILNADU | 6.2 | |
| 595 | | | 1326 | RIVER CAUVERY AT COLEROON, TAMILNADU | 6.0 | |
| 596 | | | 1327 | RIVER CAUVERY AT PITCHAVARAM, TAMILNADU | 6.1 | |
| 597 | | | 1451 | RIVER CAUVERY AT THIRUMUKKUDAL-CONFL. PT.OF R. AMRAVATI, TAMILNADU | 4.0 | |
| 598 | | | 3012 | RIVER CAUVERY AT KOMARAPALAYAM, NAMAKAL, TAMILNADU | 4.4 | |
| 599 | | | 3014 | RIVER CAUVERY AT VAIRAPALAYAM, NAMAKAL, TAMILNADU | 3.4 | |
| 600 | | | 3015 | RIVER CAUVERY AT PUGALUR, KARUR, TAMILNADU | 4.2 | |
| 601 | | | 3017 | RIVER CAUVERY AT KUMBAKONAM, THANJAVUR, TAMILNADU | 7.5 | |
| 602 | | | 4827 | RIVER CAUVERY AT KUMARAPALAYAM | 3.4 | |
| 603 | | | 10073 | RIVER CAUVERY AT KARUR U/S | 5.0 | |
| 604 | | | 10078 | RIVER CAUVERY AT MAYILADUTHURAI D/S | 4.8 | |
| 605 | | | COOUM | 10040 | RIVER COOUM AT ANNA NAGAR | 192.0 |
| 606 | | | | 10041 | RIVER COOUM AT ARUMBAKKAM | 320.0 |
| 607 | | | | 10042 | RIVER COOUM AT AMANJIKARAI | 345.0 |
| 608 | | | | 10043 | RIVER COOUM AT POONAMALLE | 84.0 |
| 609 | | | | 10044 | RIVER COOUM AT COLLAGE ROAD | 112.0 |
| 610 | | 10045 | | RIVER COOUM NEAR CENTRAL JAIL | 128.0 | |
| 611 | | 10046 | RIVER COOUM AT NAPIER BRIDGE | 180.0 | | |
| 612 | | PALAR | 1450 | RIVER PALAR AT VANIYAMBADI WATER SUPPLY HEAD WORK, TAMILNADU | 4.0 | |
| 613 | | SARABANGA | 3024 | RIVER SARABANGA AT SALEM, D/S OF TEXTILE DYEING INDUSTRIES EFFLUENT, TAMILNADU | 24.0 | |
| 614 | | TAMBIRAPARANI | 1159 | RIVER TAMBIRAPARANI AT BDG.NR. MADURA COATS LTD.PAPAVINASAM, TAMILNADU | 3.3 | |
| 615 | | | 1160 | RIVER TAMBIRAPARANI AT CHERANMADEVI, CAUSE WAY, TAMILNADU | 5.2 | |
| 616 | | | 1161 | RIVER TAMBIRAPARANI AT TIRUNELVELI, COLLECTORATE, TAMILNADU. | 5.5 | |
| 617 | | | 1162 | RIVER TAMBIRAPARANI AT MURAPPANADU, TAMILNADU | 6.4 | |
| 618 | | | 1328 | RIVER TAMBIRAPARANI AT PAPPANKULAM, TAMILNADU | 4.2 | |
| 619 | | | 1329 | RIVER TAMBIRAPARANI AT RAIL BDG. NR. AMBASAMUDAM, TAMILNADU | 3.5 | |
| 620 | | | 1330 | RIVER TAMBIRAPARANI AT ARUMUGANERI, TAMILNADU | 7.0 | |
| 621 | | | 3025 | RIVER TAMBIRAPARANI AT ERAL, THOTHUKUDI, TAMILNADU | 7.5 | |
| 622 | | | 3026 | RIVER TAMBIRAPARANI AT KALLIDAI KURICHI, TIRUNELVELI, TAMILNADU | 4.0 | |
| 623 | | | 3027 | RIVER TAMBIRAPARANI AT SRIVAİKUNTAM, D/S OF SK ANAICUT, TIRUNELVELI, TAMILNADU | 6.4 | |
| 624 | | 3028 | RIVER TAMBIRAPARANI AT VELLAKOIL, TIRUNELVELI, TAMILNADU | 3.2 | | |

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|------|-----------|-----------------|----------------|--|-------------------------|
| 625 | | | 3029 | RIVER TAMBIRAPARANI AT SIVALAPERI, CONFLUENCE POINT OF KUTTRALAM FALLS, D/S OF PALAYAMKOTTAI, TIRUNELVELI, TAMILNADU | 6.0 |
| 626 | | THIRUMANIMUTHAR | 3022 | RIVER THIRUMANIMUTHAR AT SALEM, D/S OF SAGO & TEXTILE DYING INDUSTRIES, TAMILNADU | 56.0 |
| 627 | | VASISHTA | 3023 | RIVER VASISTA AT SALEM, D/S OF SAGO INDUSTRIES EFFLUENT, TAMILNADU | 230.0 |
| 628 | | | 13 | RIVER GODAVARI AT MANCHERIAL | 8.0 |
| 629 | | | 2356 | RIVER GODAVARI, D/S OF RAMANUGUNDAM, MANTHANI | 24.0 |
| 630 | | | 2360 | RIVER GODAVARI AT BASARA, ADILABAD | 15.0 |
| 631 | | | 2361 | RIVER GODAVARI AT MANCHERIAL, NEAR RLY BDG B/C OF RALLAVAGU | 12.0 |
| 632 | | | 2362 | RIVER GODAVARI AT RAMAGUNDAM D/S, NEAR FCI INTAKE WELL, KARIMNAGAR | 18.0 |
| 633 | | | 2363 | RIVER GODAVARI AT GODAVARIKHANI, NEAR BATHING GHAT, KARIMNAGAR | 16.0 |
| 634 | | GODAVARI | 2364 | RIVER GODAVARI AT RAMAGUNDAM U/S, KARIMNAGAR | 12.0 |
| 635 | | | 2365 | RIVER GODAVARI AT KAMALPUR U/S M/S AP RAYONS LTD. INTAKE WELL, WARANGAL | 10.0 |
| 636 | | | 2366 | RIVER GODAVARI AT KAMALPUR D/S AT M/S. AP RAYONS LTD. DISCHARGE POINT, WARANGAL | 4.0 |
| 637 | | | 2367 | RIVER GODAVARI AT BHADRACHALAM U/S BATHING GHAT, KHAMMAM | 12.0 |
| 638 | | | 2368 | RIVER GODAVARI AT BHADRACHALAM D/S BATHING GHAT, KHAMMAM | 16.0 |
| 639 | | | 2369 | RIVER GODAVARI AT BURGAMPAHAD, KHAMMAM | 10.0 |
| 640 | | | 4662 | RIVER GODAVARI AT KALESHWARAM, 500 MTS.BEFORE BATHING GHAT | 13.0 |
| 641 | | KARAKAVAGU | 3080 | RIVER KARAKAVAGU U/S AT PALONCHA, KHAMMAM | 4.0 |
| 642 | | | 3081 | RIVER KARAKAVAGU D/S AT PALONCHA, KHAMMAM | 4.0 |
| 643 | | KINNERASANI | 2372 | RIVER KINNERASANI A/C OF KTPS ASH POND EFFLUENTS, KHAMMAM | 6.0 |
| 644 | | KRISHNA | 1465 | RIVER KRISHNA AT WADAPALLY AFTER CONFL. WITH R. MUSI(SHIFTED FROM 1220) | 3.2 |
| 645 | TELANGANA | | 1158 | RIVER MANER AT SOMNAPALLI | 16.0 |
| 646 | | MANAIR | 4256 | RIVER MANAIR AT LOWER MANAIR DAM, KARIMNAGAR | 8.0 |
| 647 | | | 4257 | RIVER MANERU D/S OF MUNICIPAL DUMP SITE KARIMNAGAR | 6.0 |
| 648 | | | 4664 | RIVER MANERU AT GHATTEPALLI (V) NEAR SUITHANABAD | 6.0 |
| 649 | | | 1157 | RIVER MANJEERA AT RAIPALLY | 6.0 |
| 650 | | MANJEERA | 1781 | RIVER MANJEERA - NEAR GANAPATHI SUGARS, MEDAK DIST. | 3.4 |
| 651 | | | 2375 | RIVER MANJEERA AT GOWDICHARLA A/C WITH NAKKAVAGU | 5.0 |
| 652 | | | 4666 | RIVER MANJEERA AT ISMAILKHANPET TANK, ISMAIKHAPET (V) | 4.0 |
| 653 | | MUNNERU | 4251 | RIVER MUNNERU AT D/S OF PRAKASH NAGAR, KHAMMAM | 6.0 |
| 654 | | | 1173 | RIVER MUSI D/S AT PRATAPSINGARAM, HYDERABAD | 33.0 |
| 655 | | | 2339 | RIVER MUSI AT NAGOLE, RANGAREDDY | 43.0 |
| 656 | | | 3082 | RIVER MUSI RESERVOIR AT KASANIGUDA, NALGONDA | 5.6 |
| 657 | | | 4253 | RIVER MUSI SAMPLE AT BAPUGHAT SANGAM U/S OF MUSI | 46.0 |
| 658 | | MUSI | 4254 | RIVER MUSI SAMPLE AT RUDRAVELLY BRIDGE | 7.0 |
| 659 | | | 4656 | RIVER MUSI AT MOOSARAMBAGH BRIDGE, HYDERABAD | 66.0 |
| 660 | | | 4657 | RIVER MUSI AT PILLAPALLI | 46.0 |
| 661 | | | 4658 | RIVER MUSI AT VALIGONDA BRIDGE, NALGONDA | 6.2 |
| 662 | | | 4659 | RIVER MUSI AT OUTLET OF NALLA CHERUVU, PEERAJADIGUDA | 32.0 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|----------------------|------------------|----------------|--|-------------------------|
| 663 | | | 4660 | RIVER MUSI AT PEERAJADIGUDA | 31.0 |
| 664 | | NAKKAVAGU | 2349 | RIVER NAKKAVAGU, BACHUGUEDEM, MEDAK | 11.0 |
| 665 | TRIPURA | HAORA | 3397 | RIVER HAORA AT DASHAMIGHAT, WEST TRIPURA | 3.8 |
| 666 | | BAHELA | 30001 | RIVER BAHELA AT BADLI VILLAGE LOHIYA BRIDGE , TANDA (U.P.) | 287.0 |
| 667 | | BANGANGA | 30038 | RIVER BANGANGA AT D/S SHUKRATAL (BEFORE CONFLUENCE OF LAKSAR DRAIN) | 4.1 |
| 668 | | | 1356 | RIVER BETWA BEFORE CONF. YAMUNA AT HAMIRPUR, U.P. | 6.1 |
| 669 | | BETWA | 1735 | RIVER BETWA AT GOVIND SAGAR, U.P | 3.9 |
| 670 | | | 30079 | RIVER BETWA AT SUKMA DUKMA DAM, JHANSI (U.P.) | 5.0 |
| 671 | | | 1046 | RIVER GANGA AT ALLAHABAD (RASOOLABAD), U.P. | 3.2 |
| 672 | | | 1049 | RIVER GANGA AT ALLAHABAD D/S (SANGAM), U.P. | 3.4 |
| 673 | | | 1063 | RIVER GANGA AT KANNAUJ U/S (RAJGHAT), U.P | 3.4 |
| 674 | | | 1066 | RIVER GANGA AT KANNAUJ D/S, U.P | 5.3 |
| 675 | | | 1067 | RIVER GANGA AT KANPUR U/S (RANIGHAT), U.P | 4.0 |
| 676 | | | 1068 | RIVER GANGA AT KANPUR D/S (JAJMAU PUMPING STATION), U.P | 5.8 |
| 677 | | | 1070 | RIVER GANGA AT VARANASI U/S (ASSIGHAT), U.P | 3.3 |
| 678 | | | 1071 | RIVER GANGA AT VARANASI D/S (MALVIYA BRIDGE), U.P | 4.2 |
| 679 | | | 1073 | RIVER GANGA AT TRIGHAT (GHAZIPUR), U.P | 4.4 |
| 680 | | | 1146 | RIVER GANGA AT BITHOOR (KANPUR), U.P. | 4.4 |
| 681 | | | 1147 | RIVER GANGA AT DALMAU (RAI BAREILLY), U.P. | 4.5 |
| 682 | | GANGA | 2485 | RIVER GANGA U/S, VINDHYACHAL, MIRZAPUR | 3.2 |
| 683 | | | 2486 | RIVER GANGA D/S, MIRZAPUR | 4.2 |
| 684 | UTTAR PRADESH | | 2487 | RIVER GANGA AT KADAGHAT, ALLAHABAD | 3.9 |
| 685 | | | 2498 | RIVER GANGA AT KALA KANKAR, RAEBARELI | 4.3 |
| 686 | | | 10151 | RIVER GANGA AT FARRUKABAD | 4.2 |
| 687 | | | 10152 | RIVER GANGA A/C GOMTI RIVER, BHUSAULA | 4.1 |
| 688 | | | 10153 | RIVER GANGA AT CHUNAR | 3.8 |
| 689 | | | 10154 | RIVER GANGA AT BATHING GHAT (BHARAOGHAT) | 3.8 |
| 690 | | | 10155 | RIVER GANGA AT D/S (SHUKLAGANJ) | 4.4 |
| 691 | | | 10156 | RIVER GANGA AT BATHING GHAT (GOLA GHAT) | 4.6 |
| 692 | | | 10157 | RIVER GANGA AT BATHING GHAT (JAJMAU BRIDGE) | 5.4 |
| 693 | | | 30075 | RIVER GANGA AT TARIGHAT GHAZIPUR (U.P.) | 6.0 |
| 694 | | | 1355 | RIVER GHAGHARA AT DEORIA D/S, U.P. | 5.8 |
| 695 | | GHAGHARA | 2492 | RIVER GHAGHARA AT BARHALGANJ, GORAKHPUR | 5.8 |
| 696 | | | 1354 | RIVER SARYU AT AYODHYA AT MAIN BATHING GHAT, U.P. | 3.4 |
| 697 | | | 1072 | RIVER GOMTI AT VARANASI, U.P | 3.9 |
| 698 | | | 1350 | RIVER GOMTI AT SITAPUR U/S AT WATER INTAKE, U.P. | 4.0 |
| 699 | | | 1351 | RIVER GOMTI AT LUCKNOW U/S AT WATER INTAKE POINT, U.P. | 5.2 |
| 700 | | GOMTI | 1352 | RIVER GOMTI AT LUCKNOW D/S, U.P. | 15.2 |
| 701 | | | 1353 | RIVER GOMTI AT JAUNPUR D/S, U.P. | 4.4 |
| 702 | | | 10083 | RIVER GOMTI AT NEEMSAR U/S | 4.2 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-------|------------|----------------|--|-------------------------|
| 703 | | | 10084 | RIVER GOMTI AT NEEMSAR D/S | 4.4 |
| 704 | | | 10085 | RIVER GOMTI AT BHATPUR U/S | 4.4 |
| 705 | | | 10086 | RIVER GOMTI AT BHATPUR D/S | 4.8 |
| 706 | | | 10087 | RIVER GOMTI AT GAUGHAT U/S | 5.4 |
| 707 | | | 10088 | RIVER GOMTI AT GAUGHAT D/S | 5.6 |
| 708 | | | 10089 | RIVER GOMTI AT MOHMEAK U/S | 10.0 |
| 709 | | | 10090 | RIVER GOMTI AT MOHMEAK D/S | 11.0 |
| 710 | | | 10091 | RIVER GOMTI AT PIPRAGHAT U/S | 14.5 |
| 711 | | | 10092 | RIVER GOMTI AT PIPRAGHAT D/S | 15.0 |
| 712 | | | 10093 | RIVER GOMTI AT GANGAGANJ U/S | 6.5 |
| 713 | | | 10094 | RIVER GOMTI AT GANGAGANJ D/S | 5.6 |
| 714 | | | 10095 | RIVER GOMTI AT SULTANPUR U/S | 4.9 |
| 715 | | | 10096 | RIVER GOMTI AT SULTANPUR D/S | 4.8 |
| 716 | | | 10097 | RIVER GOMTI AT JAUNPUR U/S | 3.5 |
| 717 | | | 1357 | RIVER HINDON AT SAHARANPUR D/S, U.P. | 54.0 |
| 718 | | | 1358 | RIVER HINDON AT GHAZIABAD D/S, U.P. | 82.6 |
| 719 | | | 1483 | RIVER HINDON AFTER CONFL. WITH R. KRISHNA & KALI NEAR BINAULI TOWN, PURA MAHADEV, MEERUT, U.P. | 126.0 |
| 720 | | | 2496 | RIVER HINDON AT SARDHANA BUDHANA ROAD, VILLAGE BAPARSI, MEERUT | 74.0 |
| 721 | | | 10098 | RIVER HINDON AT MAHESHPUR U/S | 58.0 |
| 722 | | | 10099 | RIVER HINDON AT MAHESHPUR D/S | 58.0 |
| 723 | | | 10100 | RIVER HINDON AT BARNAWA U/S | 72.0 |
| 724 | | | 10101 | RIVER HINDON AT BARNAWA D/S | 74.0 |
| 725 | | | 10102 | RIVER HINDON AT MOHAN NAGAR U/S | 67.0 |
| 726 | | | 10103 | RIVER HINDON AT MOHAN NAGAR D/S | 90.0 |
| 727 | | | 10106 | RIVER HINDON AT GHAZIABAD U/S | 67.0 |
| 728 | | | 1477 | RIVER KALINADI AT U/S OF MUZAFFAR NAGAR U.P. | 15.0 |
| 729 | | | 1478 | RIVER KALINADI AT D/S OF MUZAFFAR NAGAR, U.P. | 81.0 |
| 730 | | | 1065 | RIVER KALINADI AT KANNAUJ (BEFORE CONF.), U.P | 6.0 |
| 731 | | | 1480 | RIVER KALINADI AT U/S OF GULAOTHI TOWN IN BULANDSAHAR, U.P. | 144.0 |
| 732 | | | 2497 | RIVER KALI EAST AT KHARKHODA-PARIKSHIT GARH ROAD, VILL. KOL, MEERUT | 68.0 |
| 733 | | | 30000 | RIVER PILKHAR AT RAMPUR, BHOT(U.P) | 3.5 |
| 734 | | | 1064 | RIVER RAMGANGA AT KANNAUJ (BEFORE CONF.), U.P | 7.2 |
| 735 | | | 30077 | RIVER RAMGANGA AT D/S SHERKOT, KALAGARH (U.P.) | 4.0 |
| 736 | | | 1363 | RIVER RAPTI AFTER CONFL. OF R. HONIN NR. DOMINGARH RLY BRIDGE, GORAKHPUR, U.P. | 5.4 |
| 737 | | | 2491 | RIVER RAPTI AT RAJGHAT, GORAKHPUR | 6.0 |
| 738 | | | 1359 | RIVER RIHAND AT RENUKUT U/S, U.P. | 3.1 |
| 739 | | | 1360 | RIVER RIHAND AT RENUKUT D/S, U.P. | 3.4 |
| 740 | | | 1361 | RIVER SAI AT UNNAO AFTER DRAIN OUTFALL, U.P. | 3.4 |
| 741 | | | 2484 | RIVER SAI AT JALALPUR, JAUNPUR | 4.2 |
| 742 | | | 30081 | RIVER SONE U/S TO RIHAND, CHOPAN (U.P.) | 4.0 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-----------------|--|----------------|---|-------------------------|
| 743 | UTTARAKHAND | VARUNA | 2482 | RIVER VARUNA AT RAMESHWAR, VARANASI | 3.9 |
| 744 | | | 2483 | RIVER VARUNA B/C WITH GANGA AT VARANASI | 32.4 |
| 745 | | YAMUNA | 1123 | RIVER YAMUNA AT MATHURA U/S , U.P. | 18.0 |
| 746 | | | 1124 | RIVER YAMUNA AT MATHURA D/S , U.P. | 36.0 |
| 747 | | | 1125 | RIVER YAMUNA AT AGRA U/S, U.P. | 16.0 |
| 748 | | | 1126 | RIVER YAMUNA AT D/S OF AGRA, U.P. | 34.0 |
| 749 | | | 1127 | RIVER YAMUNA AT ETAWAH, U.P. | 23.2 |
| 750 | | | 1497 | RIVER YAMUNA AT RAHIMPUR KA NAGLA, NEAR FLYOVER BRIDGE (MAZAWALI) HARYANA | 47.0 |
| 751 | | | 1498 | RIVER YAMUNA AT BATESWAR, U.P | 21.0 |
| 752 | | | 1499 | RIVER YAMUNA AT JUHIKA B/C WITH CHANBAL, ETAWAH, U.P | 12.4 |
| 753 | | | 2283 | RIVER YAMUNA AT HAMIRPUR | 5.7 |
| 754 | | | 2493 | RIVER YAMUNA AT SHAHPUR | 18.0 |
| 755 | | | 2494 | RIVER YAMUNA AT VISHRAMGHAT, MATHURA | 14.0 |
| 756 | | | 2495 | RIVER YAMUNA AT KESIGHAT, VRINDAVAN | 11.6 |
| 757 | | | 10081 | RIVER YAMUNA AT ETAWAH D/S | 22.4 |
| 758 | | | 10082 | RIVER YAMUNA AT UDI | 20.0 |
| 759 | | | 30030 | RIVER YAMUNA AT ASGARPUR VILLAGE,U.P | 127.0 |
| 760 | | | 30033 | RIVER YAMUNA A/C OF CHAMBAL AT SHERGARH, JUHIKA (U.P) | 9.2 |
| 761 | | | 30034 | RIVER YAMUNA AT ETAWAH | 24.0 |
| 762 | | | UTTARAKHAND | BAHELA | 2734 |
| 763 | 2735 | RIVER BHELLA AT LOHIYA BRIDGE D/S KASHIPUR | | | 56.0 |
| 764 | BANGANGA | 30037 | | RIVER BANGANGA AT U/S IDRISHPUR (U.K.) | 4.0 |
| 765 | DHELLA | 2732 | | RIVER DHELLA U/S AT KASHIPUR MORADABAD ROAD BRIDGE | 29.0 |
| 766 | | 2733 | | RIVER DHELLA D/S AT THAKURDWARA ALIGANJ ROAD | 60.0 |
| 767 | | 30004 | | RIVER DHELLA AT ADAMPUR | 31.0 |
| 768 | KALYANI | 3438 | | RIVER KALYANI AT U/S PANTNAGAR INDL AREA, US NAGAR | 12.8 |
| 769 | | 3439 | | RIVER KALYANI AT D/S PANTNAGAR INDUSTRIAL AREA, US NAGAR | 30.0 |
| 770 | KICHHA (KITCHA) | 2729 | | RIVER KICHHA AT KICHHA U.S. NAGAR | 12.0 |
| 771 | | 30003 | | RIVER KICCHA AT PULL BHATTA | 6.4 |
| 772 | KOSHI | 2731 | | RIVER KOSHI AT KASHIPUR BAJPUR ROAD BRIDGE | 12.0 |
| 773 | | 30002 | | RIVER KOSI AT DADIYAL BRIDGE, UTTRAKHAND | 4.3 |
| 774 | NANDOUR | 2736 | | RIVER NANDOUR U/S SITARGANJ INDUSTRIAL AREA, US NAGAR | 12.0 |
| 775 | | 2737 | | RIVER NANDOUR D/S SITARGANJ INDUSTRIAL AREA, US NAGAR | 15.0 |
| 776 | PILKHAR | 2730 | | RIVER PILKHAR AFTER BILASPUR RAMPUR | 14.5 |
| 777 | SUSWA | 2724 | | RIVER SUSWA AT MATHURAWALA, DEHRADUN | 30.0 |
| 778 | WEST BENGAL | BARAKAR | 1336 | RIVER BARAKAR AT ASANSOL (WATER INTAKE POINT), BURDWAN, WEST BENGAL | 3.1 |
| 779 | | | 1764 | RIVER CHURNI D/S OF RANAGHAT TOWN, WEST BENGAL | 12.0 |
| 780 | | CHURNI | 2518 | RIVER CHURNI, MAJHADIA, NADIA | 20.8 |
| 781 | | | 30064 | RIVER CHURNI AT BIJOYPUR (WEST BENGAL) | 15.0 |
| 782 | | DAMODAR | 1331 | RIVER DAMODAR AT DISHERGARH VILL.(NR.BIHAR-WEST BENGAL BORDER) , BURDWAN, WEST BENGAL | 4.0 |

| S NO | STATE | RIVER NAME | NWM P STN CODE | LOCATION | MAX BOD OBSERVED (mg/L) |
|------|-------|--------------|----------------|---|-------------------------|
| 783 | | | 1332 | RIVER DAMODAR AT D/S OF IISCO AFTER 3RD OUTFALL AT DHENNA VILLAGE, BURDWAN, WEST BENGAL | 3.2 |
| 784 | | | 1333 | RIVER DAMODAR AT NARAINPUR AFTER CONFL. OF NUNIA NALLAH, BURDWAN, WEST BENGAL | 3.7 |
| 785 | | | 1334 | RIVER DAMODAR NEAR MUJHER MANA VILLAGE AFTER CONF. OF TAMPLA NALLAH, BURDWAN, WEST BENGAL | 5.2 |
| 786 | | | 2527 | RIVER DAMODAR AT WATER INTAKE POINT FOR BURDWAN TOWN, BURDWAN | 4.2 |
| 787 | | | 10107 | RIVER DAMODAR AT ANDAL U/S, BURDWAN | 3.7 |
| 788 | | | 10108 | RIVER DAMODAR AT ANDAL D/S, BURDWAN | 3.6 |
| 789 | | | 10110 | RIVER DAMODAR AT DURGAPUR U/S, BURDWAN | 3.8 |
| 790 | | | 10111 | RIVER DAMODAR AT RANIGANJ D/S, BURDWAN | 3.8 |
| 791 | | DWARAKESHWAR | 2541 | RIVER DWARAKESHWAR AT WATER INTAKE POINT FOR BANKURA TOWN ON , BANKURA | 3.8 |
| 792 | | DWARKA | 2531 | RIVER U/S OF TARAPITH ON DWARKA AT SADHAK BAMDEB GHAT, BIRBHUM | 4.8 |
| 793 | | | 2532 | RIVER D/S OF TARAPITH ON DWARKA, SATIGHAT | 5.7 |
| 794 | | | 1052 | RIVER GANGA AT ULUBERIA , HOWRAH, WEST BENGAL | 5.4 |
| 795 | | | 1053 | RIVER GANGA AT DAKSHMINESHWAR, KOLKATA, WEST BENGAL | 5.5 |
| 796 | | | 1054 | RIVER GANGA AT PALTA WEST BENGAL | 6.8 |
| 797 | | | 1080 | RIVER GANGA AT BAHARAMPORE, MURSHIDABAD, WEST BENGAL | 4.8 |
| 798 | | | 1335 | RIVER GANGA AT PATIKALI NEAR DURGA CHAK WEST BENGAL | 3.9 |
| 799 | | | 1469 | RIVER GANGA AT DIAMOND HARBOUR, 24 PARGANAS (S) WEST BENGAL | 4.1 |
| 800 | | | 1470 | RIVER GANGA AT GARDEN REACH, KOLKATA, WEST BENGAL | 5.3 |
| 801 | | GANGA | 1471 | RIVER GANGA AT HOWRAH-SHIVPUR WEST BENGAL | 6.4 |
| 802 | | | 1472 | RIVER GANGA AT SERAMPORE, HOOGHLY, WEST BENGAL | 6.1 |
| 803 | | | 2506 | RIVER TRIBENI ON GANGA, NEAR BURNING GHAT, HOOGHLY | 6.1 |
| 804 | | | 2511 | RIVER NABADIP ON GANGA, GHOSHPARA NEAR MONIPURGHAT, NADIA | 5.9 |
| 805 | | | 10159 | RIVER GANGA AT BEHRAMPORE (KHAGRA), MURSHIDABAD | 5.8 |
| 806 | | | 10160 | RIVER GANGA AT BEHRAMPORE, (GORA BAZAR), MURSHIDABAD | 8.0 |
| 807 | | | 10161 | RIVER GANGA AT PALTA, SHITALTALA, | 6.8 |
| 808 | | JALANGI | 2514 | RIVER JALANGI, D/S OF KRISHNA NAGAR, NADIA | 6.2 |
| 809 | | KANSI | 2507 | RIVER KANSABATI D/S OF KANSI AT MIDNAPORE, NEAR NEW HANUMAN MANDIR, GANDHIGHAT, MEDINIPORE(W) | 6.3 |
| 810 | | MAHANANDA | 1946 | RIVER MAHANANDA AT SILIGURI, DARJEELING | 3.1 |
| 811 | | | 2525 | RIVER MAHANANDA D/S, RAMGHAT, DARJEELING | 31.0 |
| 812 | | MATHA BHANGA | 2517 | RIVER MATHA BHANGA, GOBINDAPUR, NADIA | 15.3 |
| 813 | | RUPNARAYAN | 1337 | RIVER RUPNARAYAN BEFORE CONFL. TO GANGA NEAR GEONKHALI, MEDINIPORE, WEST BENGAL | 3.6 |
| 814 | | | 2509 | RIVER RUPNARAYAN AT D/S OF KOLAGHAT, NEAR KOLAGHAT RAIL BRIDGE NO.3, MEDINIPORE, WEST BENGAL | 3.7 |
| 815 | | TEESTA | 1947 | RIVER TEESTA AT SEVOKE, SILIGURI, DARJEELING | 3.8 |
| 816 | | VINDYADHARI | 2549 | RIVER U/S OF BINDYADHARI AT HAROA BRIDGE, 24 PARGANAS(N) | 29.6 |
| 817 | | | 2550 | RIVER D/S OF VINDYADHARI AT MALANCHA BURNING GHAT | 19.2 |

List of Polluted Rivers based on monitored data during year 2019 & 2021 (BOD > 3mg/L)

| S NO. | RIVER | S NO. | RIVER | S NO. | RIVER | S NO. | RIVER |
|-------|--------------------|-------|-----------------------|-------|------------------|-------|---------------------|
| 1 | ADYAR | 36 | BORI | 71 | GANDAK | 106 | KADAMBAYAR |
| 2 | AGHANASHINI | 37 | BRAHMANI | 72 | GANGA | 107 | KAGINA |
| 3 | AMBA | 38 | BURAI | 73 | GANGAVALI | 108 | KALI (W) |
| 4 | AMLAKHADI | 39 | BURHI GANDAK/ SIKRANA | 74 | GANGI | 109 | KALI BEIN |
| 5 | AMRAVATI (CAUVERY) | 40 | BURHIDIHING | 75 | GANGUA | 110 | KALIASOT |
| 6 | AMRAVATI (TAPI) | 41 | CAUVERY | 76 | GARGA | 111 | KALINADI (E) |
| 7 | ARKAVATHI | 42 | CHAKPI | 77 | GAUTAMI-GODAVARI | 112 | KALLAI |
| 8 | ARPA | 43 | CHALAKUDY | 78 | GAWKADAL | 113 | KALNA |
| 9 | ASHWINI KHAD | 44 | CHAMBAL | 79 | GHAGGAR | 114 | KALPATHI PUZHA |
| 10 | AYROOR | 45 | CHAMLA | 80 | GHAGHARA | 115 | KALU |
| 11 | BAGMATI | 46 | CHANDRABHAGA | 81 | GHOD | 116 | KALYANI |
| 12 | BAHELA | 47 | CHITHE | 82 | GIRI | 117 | KAMALA(BIHAR) GANGA |
| 13 | BALD | 48 | CHITTHRAPUZHA | 83 | GIRNA | 118 | KAN |
| 14 | BANAS | 49 | CHUNNAMBAR | 84 | GODAVARI | 119 | KANHAN |
| 15 | BANDI | 50 | CHUNTKOL | 85 | GOMAI | 120 | KANOTA |
| 16 | BANGANGA (GANGA) | 51 | CHURNI | 86 | GOMTI | 121 | KANSI |
| 17 | BANGANGA (J&K) | 52 | COOUM | 87 | GOSTANI | 122 | KARAKAVAGU |
| 18 | BARAK | 53 | CORINGA | 88 | GUWARDI | 123 | KARMANA |
| 19 | BARAKAR | 54 | DAHA | 89 | HAORA | 124 | KATHAJODI |
| 20 | BASANTER | 55 | DAKSHINAK PINAKINI | 90 | HARBORA | 125 | KATRI |
| 21 | BEGA | 56 | DAMANGANGA | 91 | HARMU | 126 | KELO |
| 22 | BERECH | 57 | DAMODAR | 92 | HASDEO | 127 | KHAN |
| 23 | BETWA | 58 | DARNA | 93 | HINDON | 128 | KHANDEPAR |
| 24 | BHADAR | 59 | DAYA | 94 | HIRAN | 129 | KHARI |
| 25 | BHADRA | 60 | DEVAK | 95 | HIWARA | 130 | KHARKHAI |
| 26 | BHANWAR SEMILA | 61 | DHADAR | 96 | IMPHAL | 131 | KHARON |
| 27 | BHARALU | 62 | DHANSIRI | 97 | INDRAYANI | 132 | KHARSANG |
| 28 | BHATSA | 63 | DHELLA | 98 | IRIL | 133 | KHUGA |
| 29 | BHAVANI | 64 | DHOUS | 99 | JALANGI | 134 | KHUJAIROK |
| 30 | BHIMA | 65 | DIGBOI | 100 | JAWAI | 135 | KICHHA (KITCHA) |
| 31 | BHOGAVO | 66 | DWARAKESHWAR | 101 | JHELUM | 136 | KINNERSANI |
| 32 | BHUKHI KHADI | 67 | DWARKA | 102 | JOHILA | 137 | KOHRA (GANGA) |
| 33 | BICHIA | 68 | DZU | 103 | JUMAR | 138 | KOINA |
| 34 | BINDUSARA | 69 | DZUNA | 104 | KABINI | 139 | KOLAR (MAH) |
| 35 | BOKARO | 70 | GAMBHIRI | 105 | KADALUNDY | 140 | KORAYAR |

| S No. | River | S No. | River | S No. | River | S No. | River |
|-------|----------------|-------|-----------------|-------|-----------------|-------|-----------------|
| 141 | KOSHI (UK) | 176 | MITHI | 211 | PUNPUN | 246 | TAWI |
| 142 | KOTHARI | 177 | MOR | 212 | PURNA | 247 | TEESTA |
| 143 | KOYNA | 178 | MORA BHARALI | 213 | RAMGANGA | 248 | THENPENNAI |
| 144 | KRISHNA | 179 | MORNA | 214 | RAMREKHA | 249 | THIRUMANIMUTHAR |
| 145 | KSHIPRA | 180 | MUCHKUNDI | 215 | RANGAVALI | 250 | THIRUR |
| 146 | KUAKHAI | 181 | MULA | 216 | RAPTI | 251 | THOUBAL |
| 147 | KULSI | 182 | MULA-MUTHA | 217 | RATTA | 252 | TITUR |
| 148 | KUNDA | 183 | MUNNERU | 218 | RIHAND | 253 | TOCKLAI |
| 149 | KUNDALIKA | 184 | MUSI | 219 | RUPNARAYAN | 254 | TUIKUAL |
| 150 | KYRHUKHLA | 185 | MUTHA | 220 | SABARMATI | 255 | TUNGA |
| 151 | LAKHANDEI | 186 | MYNTDU | 221 | SAI | 256 | TUNGABHADRA |
| 152 | LAKSHMANTIRTHA | 187 | NAKKAVAGU | 222 | SAL | 257 | ULHAS |
| 153 | LAWBUAL | 188 | NAMBUL | 223 | SANO | 258 | UMKHRAH |
| 154 | LIDDER | 189 | NANDOUR | 224 | SARABANGA | 259 | UMSHYRPI |
| 155 | LOKCHAO | 190 | NETRAVATHI | 225 | SAVITRI | 260 | UMTREW |
| 156 | LUKHA | 191 | NEWAJ | 226 | SEKMAI | 261 | UPPALA |
| 157 | LUNI | 192 | NEYYAR | 227 | SEONATH | 262 | UPPUTERU |
| 158 | MAHA | 193 | NIRA (KRISHNA) | 228 | SERUA | 263 | URMODI |
| 159 | MAHANADI | 194 | NONBAH | 229 | SHARAVATHI | 264 | VAITARNA |
| 160 | MAHANANDA | 195 | PABBAR | 230 | SHEDHI | 265 | VAMANAPURAM |
| 161 | MAHI | 196 | PAGLDIA | 231 | SHIKARI KHAD | 266 | VARUNA |
| 162 | MALEI | 197 | PALAR | 232 | SHIMSHA | 267 | VASHISTI |
| 163 | MAMOM | 198 | PAMBA | 233 | SINA | 268 | VASISHTA |
| 164 | MANAIR | 199 | PANZARA | 234 | SIRSA | 269 | VEL |
| 165 | MANDAKINI (MP) | 200 | PARMAR | 235 | SIRSIYA (GANGA) | 270 | VENNA |
| 166 | MANDOVI | 201 | PARVATI (GANGA) | 236 | SONE | 271 | VINDYADHARI |
| 167 | MANGALA | 202 | PATALGANGA | 237 | SUBARNAREKHA | 272 | VISHWAMITRI |
| 168 | MANIMALA | 203 | PAWANA | 238 | SUKHANA | 273 | WAGHUR |
| 169 | MANIPUR | 204 | PEDHI | 239 | SURYA | 274 | WAINGANGA |
| 170 | MANJEERA | 205 | PEHLAR | 240 | SUSWA | 275 | WANGJING |
| 171 | MANUSMAR | 206 | PENGANGA | 241 | SUTLEJ | 276 | WARDHA |
| 172 | MAPUSA | 207 | PERIYAR | 242 | SWAN | 277 | WENA |
| 173 | MARKANDA | 208 | PILKHAR | 243 | TAMBIRAPARANI | 278 | YAMUNA |
| 174 | MATHA BHANGA | 209 | PIPLAAD | 244 | TANSA | 279 | ZUARI |
| 175 | MINDHOLA | 210 | PULLUR | 245 | TAPI | | |

List of Clean Rivers based on monitored data during year 2019 & 2021 (BOD < 3mg/L)

| S No. | River | S No. | River | S No. | River | S No. | River | S No. | River |
|-------|---------------------|-------|--------------------|-------|-------------|-------|------------------|-------|-------------------|
| 1 | ACHANKOVIL | 34 | BHARATHAPUZHA | 67 | DEO | 100 | HEMAVATI | 133 | KAVVAYI |
| 2 | AJAB BOURALI | 35 | BHARGAVI | 68 | DEVI | 101 | HUKITOLA | 134 | KEECHERI |
| 3 | AJAY | 36 | BHEDEN | 69 | DHALAI | 102 | HUNDRI | 135 | KEN |
| 4 | ALAKNANDA | 37 | BHOGDOI | 70 | DHATESHWARI | 103 | IB | 136 | KENGRE HOLE |
| 5 | ALHI | 38 | BICHOLIM | 71 | DHAULI KHAD | 104 | INDRAVATI | 137 | KERANDI |
| 6 | AMBIKA | 39 | BINWA | 72 | DIGARU | 105 | IRANG | 138 | KHARASROTA |
| 7 | AMRAVATI (NARMADA) | 40 | BIRUPA | 73 | DIKCHU | 106 | ITHIKKARA | 139 | KHAWTHLANGTUIPUIP |
| 8 | ANAS | 41 | BOGINADI | 74 | DIKHOW | 107 | JAI BHARALI | 140 | KHOWAI |
| 9 | ANJARAKANDY | 42 | BORSILA | 75 | DIKRONG | 108 | JALDHAKA | 141 | KILLING |
| 10 | ANS | 43 | BRAHMAPUTRA | 76 | DISANG | 109 | JAMMER | 142 | KIM |
| 11 | ARASALAR | 44 | BUDHABALANGA | 77 | DORIKA | 110 | JAMUNI | 143 | KISINDAJHOR |
| 12 | ASHWANI | 45 | BUGI | 78 | DZUCHA | 111 | JAMUNIA | 144 | KMEUM |
| 13 | ASSONORA | 46 | BURIGAON | 79 | DZUDZA | 112 | JHANJI | 145 | KOHORA |
| 14 | BADA | 47 | CHALIYAR | 80 | FENI | 113 | JIADHAL | 146 | KOLAK |
| 15 | BADAJHOR | 48 | CHALLUI | 81 | GABHARU | 114 | JURI | 147 | KOLAR (MP) |
| 16 | BADASANKHA | 49 | CHANDRAGIRI | 82 | GAI NADI | 115 | KAKODONGA | 148 | KOLONG |
| 17 | BAHUDA | 50 | CHAPORA | 83 | GAJ | 116 | KALI (KARNATAKA) | 149 | KONAR |
| 18 | BAITARNI | 51 | CHARAN KHAD | 84 | GALUDIH | 117 | KALI SINDH | 150 | KOSHALYA |
| 19 | BALASON | 52 | CHATHE | 85 | GAMBIRA | 118 | KALIANI | 151 | KOSHI |
| 20 | BALESHWAR KHADI | 53 | CHENAB | 86 | GANGA (AP) | 119 | KALIPAI | 152 | KUJI |
| 21 | BANER KHAD | 54 | CHENGKAWL LUI | 87 | GANOL | 120 | KALJANI | 153 | KUMARDHARA |
| 22 | BANGURUSINGADA JHOR | 55 | CHHAPI | 88 | GHATPRABHA | 121 | KALLADA | 154 | KUNDLI |
| 23 | BANJAR | 56 | CHHIMTUIPUI | 89 | GOBARI | 122 | KANSARI | 155 | KUNDU |
| 24 | BARALIA | 57 | CHILLAR | 90 | GOLA | 123 | KAPILI | 156 | KUNNI PUL |
| 25 | BARNADI | 58 | CHOTA TAWA | 91 | GOPAD | 124 | KARAPUZHA | 157 | KUPLI |
| 26 | BAROI | 59 | CHOUPAN | 92 | GOUR | 125 | KARINGODE | 158 | KUPPAM |
| 27 | BASPA | 60 | CORAPUZHA | 93 | GOWTHAMI | 126 | KARIYARI | 159 | KURWA |
| 28 | BATHER | 61 | DAMDIAI | 94 | GUMTI | 127 | KARO | 160 | KUSEI |
| 29 | BATTA | 62 | DAMRING (KRISHNEI) | 95 | GUNDABAI | 128 | KAROLA | 161 | KUSHABHDARA |
| 30 | BEAS | 63 | DAMSALA | 96 | HALDI | 129 | KARUVANNUR | 162 | KUSHAWATI |
| 31 | BEEHAR | 64 | DEJLA DEWDA | 97 | HARABAGH | 130 | KATHAKAL | 163 | KUSHIARA |
| 32 | BEKI | 65 | DEMOW | 98 | HARHA | 131 | KATNI | 164 | KUSUMI |
| 33 | BHAGIRATHI | 66 | DENWA | 99 | HATHNI | 132 | KAVERI | 165 | KUTTIYADY |

| S No. | River | S No. | River | S No. | River | S No. | River | S No. | River |
|-------|-------------------|-------|-----------------|-------|-------------------|-------|--------------------|-------|-------------------|
| 166 | KWAI | 199 | MUVATTAPUZHA | 232 | RANGANADI | 265 | SINGRA | 298 | TUIRIAL |
| 167 | KYN Shi | 200 | MYNTANG | 233 | RANGIT | 266 | SINQUERIM | 299 | TUIRINI |
| 168 | LAHMUN | 201 | NAGAVALI | 234 | RANICHU | 267 | SITARAM JAJU SAGAR | 300 | TUIVAWL |
| 169 | LAITRYNGEW | 202 | NALKARI | 235 | RASULPUR | 268 | SIUEL | 301 | TUNIA |
| 170 | LAMU | 203 | NANDIRAJHOR | 236 | RATNACHIRA | 269 | SONAI | 302 | TUT |
| 171 | LARGI | 204 | NARMADA | 237 | RAVI | 270 | SONO | 303 | UDAYA SAMUDRAM |
| 172 | LARSING | 205 | NEELESWARAM | 238 | RILANG | 271 | SOUTH KOEL | 304 | UJAD |
| 173 | LINGIRA | 206 | NEUGAL | 239 | RUSHIKULYA | 272 | SPITI | 305 | UJH |
| 174 | LONGAI | 207 | NGENGPUI | 240 | RWIANG | 273 | SUBANSIRI | 306 | UMIAM MAWPHLANG |
| 175 | LYNRIANG RIANG | 208 | NIZ KODOMI | 241 | SABARI | 274 | SUFFRY | 307 | UMIUREM |
| 176 | MADAI | 209 | NONGAL | 242 | SABULIA | 275 | SUKETI KHAD | 308 | UMKHEN |
| 177 | MADHURA | 210 | NORTH KOEL | 243 | SAIKAH | 276 | SURAN | 309 | UMNGI |
| 178 | MAHE | 211 | NUNA | 244 | SAKHISIH | 277 | SUVARANVATHI | 310 | UMNGOT |
| 179 | MALPRABHA | 212 | NUWA NOI | 245 | SALANDI | 278 | TALPONA | 311 | VAIGAI |
| 180 | MANAS | 213 | ONG | 246 | SALMONA | 279 | TAWIZO | 312 | VAIPUANPHO |
| 181 | MANDA (DUDHAI) | 214 | PACHIN | 247 | SANKH (BRAHMANI) | 280 | TEIREI | 313 | VAISHALI |
| 182 | MANDAKINI (GANGA) | 215 | PALERU | 248 | SANKH (MP) | 281 | TEL | 314 | VALAPATTANAM |
| 183 | MANEY KHOLA | 216 | PALLICKAL | 249 | SANKHA (MAHANADI) | 282 | THALLASSERY | 315 | VALVANT |
| 184 | MANIYANKODE PUZHA | 217 | PANAM | 250 | SANKOSH | 283 | THLUMUWI | 316 | VAMSHADHARA |
| 185 | MANJESHWAR | 218 | PANCHAGANGA | 251 | SDERKARIAH | 284 | TIAU | 317 | VANVA (WATERFALL) |
| 186 | MANJHI KHAD | 219 | PANCHNAI | 252 | SERLUI | 285 | TIHU | 318 | VENKATPURE |
| 187 | MANU | 220 | PAPAVINASANAM | 253 | SESAH | 286 | TIKIRA | 319 | VENNAR |
| 188 | MANWAR TAWI | 221 | PARVATI (INDUS) | 254 | SESSA | 287 | TINGRAI | 320 | WAH BLEI |
| 189 | MARKANDEYA | 222 | PEDDAKANJARLA | 255 | SHANKNI | 288 | TIRACOL | 321 | WAHKHLEK KHLEK |
| 190 | MAT | 223 | PENNAR | 256 | SHIVNA | 289 | TIRTHAN | 322 | WAHREW |
| 191 | MAYURAKSHI | 224 | PERUVAMBA | 257 | SHRIYA | 290 | TLAWNG | 323 | WAIKHRWI |
| 192 | MECHI | 225 | POCHERA | 258 | SILABATI | 291 | TONS | 324 | YAGACHI |
| 193 | MEENACHIL | 226 | PURNA | 259 | SILTorsa | 292 | TONS (MP) | | |
| 194 | MESHWa | 227 | PUTHIMARI | 260 | SIMRAR | 293 | TORSA | | |
| 195 | MILAK | 228 | PUZHACKAL | 261 | SIMSANG | 294 | TOWKAK | | |
| 196 | MOGRAL | 229 | RAIDAK | 262 | SINDH (INDUS) | 295 | TUICHHUAHAN | | |
| 197 | MOL KHAD | 230 | RAMAPURAM | 263 | SINDH (MP) | 296 | TUIKUM | | |
| 198 | MUHARI | 231 | RAMIALA | 264 | SINGDA JHOR | 297 | TUIPUI | | |

List of Polluted River Stretches- Priority I (BOD more than 30.0 mg/L)

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|------------------|------|--------------------|--|-----------------------------|
| 1. | ANDHRA PRADESH | 1. | VASISHTA | ALONG NARASAPURAM | 58.0 |
| 2. | ASSAM | 2. | BHARALU | ALONG ULUBARI | 76.0 |
| 3. | DELHI | 3. | YAMUNA | PALLA TO OKHLA D/S | 83.0 |
| 4. | GUJARAT | 4. | AMLAKHADI | ALONG ANKLESHWAR | 49.0 |
| | | 5. | BHADAR | ALONG JETPUR | 258.6 |
| | | 6. | DHADAR | ALONG KOTHADA | 33.0 |
| | | 7. | KHARI | ALONG LALI VILLAGE | 195.0 |
| | | 8. | SABARMATI | RAYSAN TO VAUTHA | 292.0 |
| | | 9. | VISHWAMITRI | ALONG KHALIPUR VILLAGE | 38.0 |
| 5. | HARYANA | 10. | GHAGGAR | BHAGWANPUR TO SURAJPUR; ALONG KALA AMB, ALONG CHANDRAPURA, ALONG SIRSA | 206.0 |
| | | 11. | YAMUNA | HATHNIKUND TO PALLA AND PALWAL TO HASANPUR | 43.0 |
| 6. | HIMACHAL PRADESH | 12. | ASHWINI KHAD | MATHOLI TO BHOG | 80.0 |
| | | 13. | BALD | ALONG BADDI | 40.0 |
| | | 14. | SIRSA | ALONG NALAGARH | 40.0 |
| | | 15. | SUKHANA | ALONG PARWANOO | 72.0 |
| 7. | KARNATAKA | 16. | ARKAVATHI | HESARAGHATTA TO KANAKPURA | 39.0 |
| | | 17. | DAKSHINAK PINAKINI | ALONG MUGALUR | 111.0 |
| | | 18. | THENPENNAI | ALONG KODIYALAM | 72.0 |
| 8. | MADHYA PRADESH | 19. | CHAMBAL | NAGDA TO GANDHISAGAR | 72.0 |
| | | 20. | KHAN | INDORE TO SANWER | 46.0 |
| 9. | MAHARASHTRA | 21. | BHIMA | PUNE TO SOLAPUR | 38.0 |
| | | 22. | MITHI | ALONG MAHIM | 50.0 |
| | | 23. | MUTHA | ALONG PUNE CITY | 50.0 |
| | | 24. | SAVITRI | ALONG MAHAD | 50.0 |
| 10. | MEGHALAYA | 25. | UMKHRAH | ALONG SHILLONG | 56.0 |
| | | 26. | UMSHYRPI | DHANKETI TO HARISAVA | 44.0 |
| 11. | ODISHA | 27. | GANGUA | ALONG BHUBHNESHWAR | 39.2 |
| 12. | PUNJAB | 28. | GHAGGAR | MUBARAKPUR TO SARDULGARH | 210.0 |
| | | 29. | SIRSA | ALONG BADDI | 32.0 |

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|---------------|------|-----------------|---|-----------------------------|
| | | 30. | SUTLEJ | LUDHIANA TO HARIKE | 120.0 |
| 13. | RAJASTHAN | 31. | BANAS | BASSI TO BISALPUR | 35.7 |
| | | 32. | BANDI | ALONG PALI | 94.0 |
| 14. | TAMIL NADU | 33. | ADYAR | TAMBARAM TO NANDANAM | 40.0 |
| | | 34. | COOUM | AVADI TO SATHYA NAGAR | 345.0 |
| | | 35. | THIRUMANIMUTHAR | ALONG SALEM | 56.0 |
| | | 36. | VASISHTA | ALONG SALEM | 230.0 |
| 15. | TELANGANA | 37. | MUSI | BAPUGHAT TO RUDRAVELLY, KASANIGUDA TO VALIGONDA | 66.0 |
| 16. | UTTAR PRADESH | 38. | BAHELA | ALONG TANDA | 287.0 |
| | | 39. | HINDON | SAHARANPUR TO GHAZIABAD | 126.0 |
| | | 40. | KALI (W) | ALONG MUZAFFAR NAGAR | 81.0 |
| | | 41. | KALINADI (E) | MEERUT TO KANNAUJ | 144.0 |
| | | 42. | VARUNA | RAMESHWAR TO TILL CONF WITH R. GANGA | 32.4 |
| | | 43. | YAMUNA | ALONG ASGARPUR, NOIDA, VRINDAVAN TO HAMIRPUR | 127.0 |
| 17. | UTTARAKHAND | 44. | BAHELA | ALONG KASHIPUR | 56.0 |
| | | 45. | DHELLA | THAKURDWARA TO ADAMPUR | 60.0 |
| 18. | WEST BENGAL | 46. | MAHANANDA | ALONG SILIGURI | 31.0 |

Summary Table - Priority I:

- Number of Polluted river stretches identified: 46
- Number of States/ UTs: 18
- Number of polluted rivers in the category: 40

List of State wise Polluted River Stretches- Priority II (BOD between 20.1 and 30.0 mg/L)

| S No | STATE | S No. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|------|--------------|-------|------------------|--|-----------------------------|
| 1. | BIHAR | 1. | SIRSIYA | RAXAUL | 30.0 |
| 2. | CHHATTISGARH | 2. | KHAROON | ALONG RAIPUR | 28.5 |
| 3. | GUJARAT | 3. | MINDHOLA | ALONG SACHIN | 28.0 |
| 4. | HARYANA | 4. | MARKANDA | ALONG NARAINGARH | 29.0 |
| 5. | MAHARASHTRA | 5. | GODAVARI | GANGAPR DAM TO MADHESWAR DAM, ALONG NANDUR, KAIGAON TO DHALEGAON, NANDED TO INTERSTATE BORDER | 28.0 |
| | | 6. | KANHAN | PARSEONI TO KUHI | 22.0 |
| | | 7. | MULA | AUNDHGAON TO BOPODI | 28.0 |
| | | 8. | MULA-MUTHA | MUNDHAWA TO THEUR | 22.0 |
| | | 9. | PAWANA | SANGAVIGAON TO DAPODI | 26.0 |
| 6. | PUDUCHERRY | 10. | GAUTAMI-GODAVARI | ALONG ADAVIPOLAM | 25.0 |
| 7. | TAMIL NADU | 11. | SARABANGA | ALONG SALEM | 24.0 |
| 8. | TELANGANA | 12. | GODAVARI | ALONG BASARA, MANCHERIAL TO RAMAGUNDAM, ALONG KALESHWARAM, ALONG KAMALAPUR, ALONG BHADRACHALAM | 24.0 |
| 9. | UTTARAKHAND | 13. | KALYANI | ALONG PANTNAGAR | 30.0 |
| | | 14. | SUSWA | ALONG MATHURAWALA | 30.0 |
| 10. | WEST BENGAL | 15. | CHURNI | BIJOYPUR TO RANAGHAT | 20.8 |
| | | 16. | VINDYADHARI | HAROA TO MALANCHA | 29.6 |

Summary Table - Priority II:

- Number of Polluted river stretches identified: 16
- Number of States/ UTs: 10
- Number of polluted rivers in the category: 15

List of Polluted River Stretches- Priority III (BOD between 10.1 to 20.0 mg/L)

| S No | STATE | S No. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|------|---|-------------------|--------------|---|--------------------------------|
| 1. | BIHAR | 1. | LAKHANDEI | ALONG SITAMARHI | 11.0 |
| | | 2. | RAMREKHA | HARINAGAR | 12.0 |
| 2. | DAMAN AND DIU, DADRA AND NAGAR HAVELI | 3. | DAMANGANGA | ALONG DAMAN | 14.8 |
| 3. | GUJARAT | 4. | MAHI | KOTNA TO MUJPUR | 12.0 |
| 4. | JAMMU & KASHMIR | 5. | CHUNTKOL | AT MAULANA AZAD BRIDGE | 11.2 |
| | | 6. | TAWI | ALONG JAMMU | 14.0 |
| 5. | JHARKHAND | 7. | HARMU | ALONG RANCHI | 10.1 |
| 6. | KERALA | 8. | KARMANA | ALONG ARUVIKARA AND ALONG MOONNATTUMUKKU | 10.2 |
| 7. | MADHYA PRADESH | 9. | KSHIPRA | ALONG UJJAIN | 18.0 |
| 8. | MAHARASHTRA | 10. | CHANDRABHAGA | ALONG GURSALE | 13.5 |
| | | 11. | DARNA | BHAGUR TO CHEHEDI | 16.5 |
| | | 12. | GHOD | ALONG SHIRUR | 11.5 |
| | | 13. | GIRNA | MALEGAON TO JALGAON | 18.0 |
| | | 14. | INDRAYANI | MOSHIGAON TO ALANDIGAON | 15.5 |
| | | 15. | KRISHNA | ALONG MAHABALESHWAR AND ALONG SATARA | 11.0 |
| | | 16. | KUNDALIKA | ALONG ROHA | 17.0 |
| | | 17. | MORNA | ALONG AKOLA | 10.4 |
| | | 18. | MUCHKUNDI | ALONG LANJA | 12.0 |
| | | 19. | NIRA | SAROLA TO SANGAVI | 15.0 |
| | | 20. | PATALGANGA | KHOPOLI TO KHARPADA | 11.0 |
| | | 21. | RANGAVALI | ALONG NAVAPUR | 11.5 |
| | | 22. | SURYA | GARVASHET TO MASVAN | 11.0 |
| | | 23. | TAPI | RAVER TO SHAHADA | 18.5 |
| | | 24. | TITUR | ALONG CHALISGAON | 11.5 |
| | | 25. | WAGHUR | ALONG JALGAON | 11.0 |
| | | 26. | WAINGANGA | TUMSAR TO AMBHORA | 14.0 |
| 27. | WARDHA | PULGAON TO RAJURA | 11.4 | | |
| 9. | NAGALAND | 28. | DHANSIRI | ALONG DHANSIRI AND ALONG DIMAPUR | 18.0 |
| 10. | PUDUCHERRY | 29. | CORINGA | ALONG GEORGE PETA | 20.0 |
| 11. | RAJASTHAN | 30. | JAWAI | AT JAWAI DAM | 11.7 |
| 12. | TAMIL NADU | 31. | CAUVERY | ALONG METTUR, ALONG ERODE, KATTIPALAYAM TO TRICHY, | 17.0 |

| S No | STATE | S No. | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|------|---------------|-------|--------------|-------------------------------------|--------------------------------|
| | | | | KUMBAKONAM TO PITCHAVARAM | |
| 13. | TELANGANA | 32. | MANAIR | KARIMNAGAR TO SOMNAPALLI | 16.0 |
| | | 33. | NAKKAVAGU | ALONG BACHUGUDEM | 11.0 |
| 14. | UTTAR PRADESH | 34. | GOMTI | MOHMEAK TO VARANASI | 15.2 |
| 15. | UTTARAKHAND | 35. | KICHHA | KICHHA TO PUL BHATTA | 12.0 |
| | | 36. | KOSHI | ALONG KASHIPUR | 12.0 |
| | | 37. | NANDOUR | ALONG SITARGANJ | 15.0 |
| | | 38. | PILKHAR | ALONG BILASPUR | 14.5 |
| 16. | WEST BENGAL | 39. | MATHA BHANGA | ALONG GOBINDAPUR | 15.3 |

Summary Table - Priority III:

- Number of Polluted river stretches identified: 39
- Number of States/ UTs: 16
- Number of polluted rivers in the category: 39

List of Polluted River Stretches- Priority IV (BOD between 6.1 and 10.0 mg/L)

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|------------------|------|---------------------------|---|-----------------------------|
| 1. | ANDHRA PRADESH | 1. | GOSTANI | ALONG VILLAGE VENDRA | 8.6 |
| 2. | BIHAR | 2. | BURHI GANDAK/ SIKRAHNA | NARKATIAGANJ TO PAKRIDAYAL | 10.0 |
| | | 3. | DAHA | GOPALGANJ TO SIWAN | 10.0 |
| | | 4. | GANGA | ALONG BUXAR, PATNA, FATWAH AND BHAGALPUR | 7.9 |
| | | 5. | GANGI | AT ARA | 8.0 |
| | | 6. | HARBORA | ALONG NARKATIAGANJ | 8.0 |
| | | 7. | KOHRA | ALONG MANJHAULIA | 8.0 |
| | | 8. | PUNPUN | ALONG PUNPUN | 10.0 |
| | | 3. | CHHATTISGARH | 9. | ARPA |
| 10. | SEONATH | | | RAJNANDGAON TO JHENGHARI | 6.4 |
| 4. | GOA | 11. | ZUARI | PANCHAWADI TO MARCAIM | 6.4 |
| 5. | GUJARAT | 12. | SHEDHI | ALONG KHEDA | 6.2 |
| 6. | HIMACHAL PRADESH | 13. | RATTA | ALONG NALAGARH | 8.0 |
| 7. | JAMMU & KASHMIR | 14. | BANGANGA | ALONG KATRA | 6.2 |
| | | 15. | DEVAK | ALONG UDHAMPUR | 10.0 |
| | | 16. | JHELUM | SRINAGAR TO BARAMULLA | 7.8 |
| | | 17. | LIDDER | ALONG PAHALGAM | 7.0 |
| 8. | JHARKHAND | 18. | KHARKHAI | ALONG SONARI | 8.0 |
| | | 19. | SUBARNAREKHA | ALONG RANCHI, ALONG MURI, ALONG JAMSHEDPUR | 10.0 |
| 9. | KARNATAKA | 20. | BHADRA | BHADRAVATHI TO HOLEHUNNUR | 7.0 |
| | | 21. | SHIMSHA | YEDIYAR TO MADDUAR | 9.5 |
| | | 22. | TUNGABHADRA | KUDLI TO MYLARA, ULLANUR TO HOCHCHALLI | 6.2 |
| 10. | KERALA | 23. | NEYYAR | ARUVIPURAM TO AMARAVILA | 6.5 |
| | | 24. | VAMANAPURAM | ALONG VAMANAPURAM | 6.3 |
| 11. | MADHYA PRADESH | 25. | BETWA | MANDIDEEP TO VIDISHA AND ALONG KANJIYA | 7.3 |
| | | 26. | HIRAN | ALONG JABALPUR | 7.8 |
| | | 27. | JOHILA | ALONG NAROJABAD | 7.7 |
| | | 28. | KANHAN | ALONG CHINDWARA | 7.8 |
| | | 29. | SONE | ALONG DEORA | 6.1 |
| 12. | MAHARASHTRA | 30. | BHATSA | SHAHAPUR TO BHIWANDI | 10.0 |
| | | 31. | BURAI | ALONG DHULE | 9.2 |
| | | 32. | KALU | ALONG KALYAN | 8.0 |
| | | 33. | KAN | ALONG SAKRI | 6.5 |

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|---------------|------|---------------|-------------------------------------|-----------------------------|
| | | 34. | KOYNA | ALONG KARAD | 7.5 |
| | | 35. | MANJEERA | ALONG LATUR | 7.5 |
| | | 36. | MOR | ALONG PADALSHE | 9.8 |
| | | 37. | PANZARA | ALONG PANZARA | 8.5 |
| | | 38. | PEDHI | ALONG BHATKULI | 10.0 |
| | | 39. | PEHLAR | AT PEHLAR | 7.0 |
| | | 40. | PENGANGA | MEHKAR TO UMARKHED | 7.2 |
| | | 41. | PURNA | ASEGAON TO AKOLA | 6.8 |
| | | 42. | SINA | ALONG MOHAL | 8.4 |
| | | 43. | URMODI | ALONG NAGTHANE | 6.8 |
| | | 44. | VEL | ALONG SHIKRAPUR | 9.0 |
| | | 45. | VENNA | MAHABALESHWAR TO MAHULI | 7.2 |
| | | 46. | WENA | ALONG HINGANGHAT | 7.6 |
| 13. | MANIPUR | 47. | IMPHAL | SEKMAI TO SAMUROU | 6.9 |
| | | 48. | NAMBUL | SINGDA DAM TO BISHNUPUR | 7.0 |
| 14. | MEGHALAYA | 49. | MYNTDU | ALONG JOWAI | 6.5 |
| 15. | MIZORAM | 50. | LAWBUAL | ALONG LAWIBUAL | 6.2 |
| | | 51. | TUIKUAL | ALONG DINTHAR | 6.4 |
| 16. | ODISHA | 52. | DAYA | NARANKHETA TO KANAS | 7.1 |
| | | 53. | KUAKHAI | ALONG BHUBANESWAR | 7.3 |
| | | 54. | MANGALA | ALONG GOLASAHAI | 7.4 |
| 17. | PUDUCHERRY | 55. | CHUNNAMBAR | ALONG NONANKUPPAM | 7.5 |
| 18. | RAJASTHAN | 56. | GUWARDI | ALONG GUWARDI | 9.5 |
| | | 57. | KANOTA | ALONG SUMEL | 9.5 |
| | | 58. | KHARI | ALONG KELWARA | 7.6 |
| | | 59. | KOTHARI | ALONG BHILWARA | 6.2 |
| 19. | TAMIL NADU | 60. | TAMBIRAPARANI | PAPPANKULAM TO ARUMUGANERI | 7.5 |
| 20. | UTTAR PRADESH | 61. | BETWA | GOVIND SAGAR TO HAMIRPUR | 6.1 |
| | | 62. | RAMGANGA | ALONG SHERKOT AND KANNAUJ | 7.2 |
| 21. | WEST BENGAL | 63. | GANGA | BEHRAMPUR TO HALDIA | 8.0 |
| | | 64. | JALANGI | ALONG KRISHNA NAGAR | 6.2 |
| | | 65. | KANSI | ALONG MIDNAPORE | 6.3 |

Summary Table - Priority IV:

- Number of Polluted river stretches identified: 65
- Number of States/ UTs: 21
- Number of polluted rivers in the category: 63

List of Polluted River Stretches- Priority V (BOD between 3.1 and 6.0 mg/L)

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|-------------------------|------|--------------|---|--------------------------|
| 1. | ANDHRA PRADESH | 1. | UPPUTERU | ALONG CHINAGOLLAPALEM VILLAGE | 3.4 |
| 2. | ASSAM | 2. | BEGA | ALONG MANGALDOI | 3.9 |
| | | 3. | BURHIDIHING | ALONG MARGHERITA | 3.6 |
| | | 4. | DHANSIRI | ALONG BOKAJAN AND NUMALIGARH | 3.5 |
| | | 5. | DIGBOI | IOCL OIL TOWN TO LAKHIPATHAR RESERVE FOREST | 5.2 |
| | | 6. | KHARSANG | ALONG KHARSANG | 3.3 |
| | | 7. | KULSI | ALONG CHAYGAON | 3.2 |
| | | 8. | MORA BHARALI | ALONG MORA BHARALI | 3.6 |
| | | 9. | PAGLDIA | ALONG NALBARI TOWN | 3.4 |
| | | 10. | TOCKLAI | ALONG KUMAR KAIBARTA GAON | 4.8 |
| | | 3. | BIHAR | 11. | BAGMATI |
| 12. | DHOUS | | | ALONG MADHUVAPUR | 5.6 |
| 13. | GANDAK | | | ALONG REWAGHAT | 3.8 |
| 14. | GHAGHARA | | | ALONG REVELGANJ | 3.6 |
| 15. | KAMALA | | | ALONG DARBHANGA | 5.0 |
| 16. | MANUSMAR | | | ALONG SITAMARHI | 6.0 |
| 17. | PARMAR | | | ALONG JOGBANI | 3.4 |
| 18. | SONE | | | KOELWAR | 4.0 |
| 4. | CHHATTISGARH | 19. | HASDEO | CHAMPA | 3.4 |
| | | 20. | KELO | RAIGARH | 3.9 |
| | | 21. | MAHANADI | SHIVRINARAYAN TO PORATH | 3.8 |
| 5. | GOA | 22. | KALNA | ALONG CHANDEL | 4.0 |
| | | 23. | KHANDEPAR | ALONG KHANDEPAR | 4.2 |
| | | 24. | MANDOVI | ALONG AMONA | 3.7 |
| | | 25. | MAPUSA | ALONG KARASWADA | 5.0 |
| | | 26. | SAL | KHAREBAND TO ASSOLNA | 6.0 |
| 6. | GUJARAT | 27. | BHOGAVO | ALONG SURENDRANAGAR | 6.0 |
| | | 28. | BHUKHI KHADI | ALONG VAGRA | 3.9 |
| | | 29. | DAMANGANGA | ALONG KACHIGAON AND ALONG CHANOD | 5.3 |
| | | 30. | TAPI | ALONG NIZHAR | 3.4 |
| 7. | HIMACHAL PRADESH | 31. | GIRI | ALONG YASHWANT NAGAR AND ALONG DADAHU | 4.8 |
| | | 32. | MARKANDA | SALANI TO RAMPUR JATTAN | 4.0 |
| | | 33. | PABBAR | ALONG SWARAKUDDU | 4.6 |

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|-----------------|------|----------------|---|--------------------------|
| 8. | JAMMU & KASHMIR | 34. | SHIKARI KHAD | ALONG ROHRU | 4.6 |
| | | 35. | BASANTER | ALONG SAMBA | 4.2 |
| | | 36. | GAWKADAL | ALONG SHERGARHI | 3.2 |
| 9. | JHARKHAND | 37. | BOKARO | ALONG JARANGDIH | 3.9 |
| | | 38. | DAMODAR | ALONG TELMUCHO, ALONG JARANGDIH, ALONG RAMGARH | 3.5 |
| | | 39. | GARGA | ALONG TELMUCHO | 4.9 |
| | | 40. | JUMAR | NAGRI TO BHUTI | 5.3 |
| | | 41. | KATRI | ALONG MOONIDIH | 3.6 |
| | | 42. | KOINA | ALONG MANOHARPUR | 3.1 |
| 10. | KARNATAKA | 43. | AGHANASHINI | ALONG KUMATA | 3.3 |
| | | 44. | BHIMA | GANGAPUR TO YADGIR | 4.0 |
| | | 45. | CAUVERY | ALONG SRI RANGAPATTANNA | 6.0 |
| | | 46. | GANGAVALI | ALONG ANKOLA | 3.4 |
| | | 47. | KABINI | ALONG NANJANAGUD | 3.8 |
| | | 48. | KAGINA | ALONG GOLA K | 3.1 |
| | | 49. | KRISHNA | ALONG UGARKHURD, ALAMATTI TO TINTANI, ALONG DEVASAGAR | 4.7 |
| | | 50. | LAKSHMANTIRTHA | ALONG HUNSUR | 5.6 |
| | | 51. | NETRAVATHI | ALONG DHARMASTALA | 6.0 |
| | | 52. | SHARAVATHI | ALONG HONNAVARA | 3.3 |
| | | 53. | TUNGA | ALONG SHIVAMOGGA | 6.0 |
| 11. | KERALA | 54. | AYROOR | ALONG ERNAKULAM | 5.5 |
| | | 55. | CHALAKUDY | ALONG PULICKALKA-DAVU | 3.3 |
| | | 56. | CHITTHRAPUZHA | ALONG IRUMPANAM | 3.2 |
| | | 57. | KADALUNDY | ALONG TIRURANGADI | 3.4 |
| | | 58. | KADAMBAYAR | MANCKAKADAVU TO BRAHMAPURAM | 4.4 |
| | | 59. | KALLAI | ALONG KALLAI | 4.6 |
| | | 60. | KALPATHI PUZHA | ALONG KALPATHI | 3.3 |
| | | 61. | KORAYAR | ALONG KANJIKODE | 3.5 |
| | | 62. | MAMOM | ALONG MAMAM | 4.6 |
| | | 63. | MANIMALA | ALONG THONDRA | 3.1 |
| | | 64. | PAMBA | ALONG PAMBA AND ALONG MANNAR | 3.9 |
| | | 65. | PERIYAR | ALONG ALWAYS-ELOOR, ALONG PURAPPALLIKAVU, ALONG KALAMASSERY | 3.9 |
| | | 66. | PULLUR | ALONG PULLUR | 3.8 |
| | | 67. | THIRUR | ALONG TITUR | 3.2 |
| | | 68. | UPPALA | ALONG MAJIBAIL | 3.3 |
| 12. | | 69. | BICHIA | ALONG REWA | 4.0 |

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|------------------------|-----------------------|------|-----------------|----------------------------------|--------------------------|
| | MADHYA PRADESH | 70. | CHAMLA | ALONG BADNAGAR | 3.4 |
| | | 71. | KALIASOT | ALONG MANDIDEEP | 3.9 |
| | | 72. | KUNDA | ALONG KHARGONE | 4.2 |
| | | 73. | MAHI | ALONG BAJNA | 5.0 |
| | | 74. | MALEI | ALONG JAORA | 4.0 |
| | | 75. | MANDAKINI | ALONG CHITRAKUT | 3.2 |
| | | 76. | NEWAJ | SHUJALPUR TO RAJGARH | 3.5 |
| | | 77. | PARVATI | ALONG BATAODAPAR | 3.7 |
| | | 78. | TAPI | ALONG BURHANPUR | 6.0 |
| | | 79. | WARDHA | ALONG BANGON | 4.0 |
| 13. MAHARASHTRA | | 80. | AMBA | ALONG ROHA | 4.9 |
| | | 81. | AMRAVATI (TAPI) | ALONG DHULE | 3.4 |
| | | 82. | BINDUSARA | ALONG BEED | 4.8 |
| | | 83. | BORI | ALONG JALGAON | 3.4 |
| | | 84. | GOMAI | ALONG SHAHADA | 3.6 |
| | | 85. | HIWARA | ALONG PACHORA | 3.8 |
| | | 86. | KOLAR | ALONG WAREGAON | 4.8 |
| | | 87. | TANSA | ALONG VILLAGE DAKEWALI | 4.0 |
| | | 88. | ULHAS | BADLAPUR TO MOHANE | 4.0 |
| | | | | 89. | VAITARNA |
| | | 90. | VASHISTI | ALONG CHIPLUN | 4.0 |
| 14. MANIPUR | | 91. | BARAK | TAMENGLONG TO SENAPATI | 4.6 |
| | | 92. | CHAKPI | ALONG CHAKPIKARONG | 3.3 |
| | | 93. | IRIL | KANGLA SIPHAI TO LILONG | 5.3 |
| | | 94. | KHUGA | KHUGA LAKE TO CHURACHANDPUR | 4.4 |
| | | 95. | KHUJAIROK | ALONG MOREH | 4.2 |
| | | 96. | LOKCHAO | ALONG BISHNUPUR | 4.4 |
| | | 97. | MAHA | ALONG CHANDEL | 4.7 |
| | | 98. | MANIPUR | WANGJING TO HEIROK | 4.1 |
| | | 99. | SEKMAI | ALONG KAKCHING | 3.8 |
| | | 100. | THOUBAL | LILTAN TO PHADOM | 4.9 |
| | | 101. | WANGJING | WANGJING TO HEIROK | 4.4 |
| 15. MEGHALAYA | | 102. | KYRHUKHLA | ALONG KHLIERIAT | 5.5 |
| | | 103. | LUKHA | ALONG MYNDIHATI | 5.5 |
| | | 104. | NONBAH | ALONG NONGSTOIN | 5.6 |
| | | 105. | UMTREW | UMRAN TO BYRNIHAT | 5.8 |
| 16. MIZORAM | | 106. | CHITHE | ALONG ARMED VENG | 5.9 |
| 17. NAGALAND | | 107. | DZU | ALONG KOHIMA | 3.5 |

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|---------------|------|--------------------|--|--------------------------|
| | | 108. | DZUNA | ALONG KOHIMA | 3.5 |
| | | 109. | SANO | ALONG KOHIMA | 3.8 |
| 18. | ODISHA | 110. | BRAHMANI | ALONG ROURKELA | 5.6 |
| | | 111. | KATHAJODI | ALONG CUTTACK | 4.1 |
| | | 112. | SERUA | ALONG SANKHATRASA | 3.5 |
| 19. | PUNJAB | 113. | KALI BEIN | AT MAND FATEHPUR | 5.8 |
| | | 114. | SWAN | ALONG SANTOSHGARH | 4.0 |
| 20. | RAJASTHAN | 115. | BERECH | ALONG NAGARI | 3.9 |
| | | 116. | BHANWAR SEMILA | ALONG BHANWAR SEMLA | 3.8 |
| | | 117. | CHAMBAL | ALONG KESHORAIPATTAN AND ALONG PALI (SAWAI MADHOPUR) | 5.7 |
| | | 118. | GAMBHIRI | ALONG CHITTORGARH | 4.9 |
| | | 119. | LUNI | ALONG RANAKPUR | 3.8 |
| | | 120. | MAHI | ALONG BANSWARA | 5.0 |
| | | 121. | PIPLAAD | AT PIPLAAD DAM | 3.2 |
| 21. | TAMIL NADU | 122. | AMRAVATI (CAUVERY) | ALONG MADHUTHUKKULAM AND ALONG KARUR | 4.0 |
| | | 123. | BHAVANI | ALONG BHAVANI | 4.6 |
| | | 124. | PALAR | ALONG VANIYAMBADI | 4.0 |
| 22. | TELANGANA | 125. | KARAKAVAGU | ALONG PALONCHA | 4.0 |
| | | 126. | KINNERSANI | ALONG KHAMMAM | 6.0 |
| | | 127. | KRISHNA | ALONG WADAPALLY | 3.2 |
| | | 128. | MANJEERA | SANGAREDDY TO GOWDICHARLA | 6.0 |
| | | 129. | MUNNERU | ALONG KHAMMAM | 6.0 |
| 23. | TRIPURA | 130. | HAORA | ALONG AGARTALA | 3.8 |
| 24. | UTTAR PRADESH | 131. | BANGANGA | ALONG SHUKRATAL | 4.1 |
| | | 132. | GANGA | FARRUKABAD TO ALLAHABAD , MIRZAPUR TO GHAZIPUR | 6.0 |
| | | 133. | GHAGHARA | ALONG AYODHYA AND BARHALGANJ TO DEORIA | 5.8 |
| | | 134. | PILKHAR | ALONG RAMPUR | 3.5 |
| | | 135. | RAPTI | ALONG GORAKHPUR | 6.0 |
| | | 136. | RIHAND | ALONG RENUKUT | 3.4 |
| | | 137. | SAI | ALONG UNNAO AND JALALPUR | 4.2 |
| | | 138. | SONE | ALONG CHOPAN | 4.0 |
| 25. | UTTARAKHAND | 139. | BANGANGA | ALONG IDRISHPUR | 4.0 |
| 26. | WEST BENGAL | 140. | BARAKAR | ALONG ASANSOL | 3.1 |
| | | 141. | DAMODAR | DISHERGARH TO BURDWAN | 5.2 |
| | | 142. | DWARAKESHWAR | ALONG BANKURA TOWN | 3.8 |

| S No. | STATE | S No | RIVER | POLLUTED RIVER STRETCH/ LOCATION | Max BOD Observed (mg/ L) |
|-------|-------|------|------------|----------------------------------|--------------------------|
| | | 143. | DWARKA | ALONG TARAPITH | 5.7 |
| | | 144. | RUPNARAYAN | KOLAGHAT TO GEONKHALI | 3.7 |
| | | 145. | TEESTA | ALONG SEVOKE | 3.8 |

Summary Table - Priority V:

- Number of Polluted river stretches identified: 145
- Number of States/ UTs: 26
- Number of polluted rivers in the category: 138

State-wise and Priority-wise of polluted river stretches identified during assessment Year 2018 and 2022

| State/ UT | Priority I | | | Priority II | | | Priority III | | | Priority IV | | | Priority V | | | Total | | |
|---------------------------------------|------------|------|-----------|-------------|------|-----------|--------------|------|-----------|-------------|------|-----------|------------|------|-----------|-------|------|-----------|
| | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation |
| ANDHRA PRADESH | 0 | 1 | ↑ | 0 | 0 | — | 0 | 0 | — | 2 | 1 | ↓ | 3 | 1 | ↓ | 5 | 3 | ↓ |
| ASSAM | 3 | 1 | ↓ | 1 | 0 | ↓ | 4 | 0 | ↓ | 3 | 0 | ↓ | 33 | 9 | ↓ | 44 | 10 | ↓ |
| BIHAR | 0 | 0 | — | 0 | 1 | ↑ | 1 | 2 | ↑ | 0 | 7 | ↑ | 5 | 8 | ↑ | 6 | 18 | ↑ |
| CHHATTISGARH | 0 | 0 | — | 0 | 1 | ↑ | 0 | 0 | — | 4 | 2 | ↓ | 1 | 3 | ↑ | 5 | 6 | ↑ |
| DAMAN AND DIU, DADRA AND NAGAR HAVELI | 1 | 0 | ↓ | 0 | 0 | — | 0 | 1 | ↑ | 0 | 0 | — | 0 | 0 | — | 1 | 1 | — |
| DELHI | 1 | 1 | — | 0 | 0 | — | 0 | 0 | — | 0 | 0 | — | 0 | 0 | — | 1 | 1 | — |
| GOA | 0 | 0 | — | 0 | 0 | — | 1 | 0 | ↓ | 2 | 1 | ↓ | 8 | 5 | ↓ | 11 | 6 | ↓ |
| GUJARAT | 5 | 6 | ↑ | 1 | 1 | — | 2 | 1 | ↓ | 6 | 1 | ↓ | 6 | 4 | ↓ | 20 | 13 | ↓ |
| HARYANA | 2 | 2 | — | 0 | 1 | ↑ | 0 | 0 | — | 0 | 0 | — | 0 | 0 | — | 2 | 3 | ↑ |
| HIMACHAL PRADESH | 1 | 4 | ↑ | 1 | 0 | ↓ | 1 | 0 | ↓ | 0 | 1 | ↑ | 4 | 4 | — | 7 | 9 | ↑ |
| JAMMU & KASHMIR | 0 | 0 | — | 1 | 0 | ↓ | 2 | 2 | — | 2 | 4 | ↑ | 4 | 2 | ↓ | 9 | 8 | ↓ |
| JHARKHAND | 0 | 0 | — | 0 | 0 | — | 0 | 1 | ↑ | 3 | 2 | ↓ | 4 | 6 | ↑ | 7 | 9 | ↑ |
| KARNATAKA | 0 | 3 | ↑ | 0 | 0 | — | 4 | 0 | ↓ | 7 | 3 | ↓ | 6 | 11 | ↑ | 17 | 17 | — |
| KERALA | 1 | 0 | ↓ | 0 | 0 | — | 0 | 1 | ↑ | 5 | 2 | ↓ | 15 | 15 | — | 21 | 18 | ↓ |
| MADHYA PRADESH | 3 | 2 | ↓ | 1 | 0 | ↓ | 1 | 1 | — | 3 | 5 | ↑ | 14 | 11 | ↓ | 22 | 19 | ↓ |
| MAHARASHTRA | 9 | 4 | ↓ | 6 | 5 | ↓ | 14 | 18 | ↑ | 10 | 17 | ↑ | 14 | 11 | ↓ | 53 | 55 | ↑ |
| MANIPUR | 0 | 0 | — | 1 | 0 | ↓ | 0 | 0 | — | 0 | 2 | ↑ | 8 | 11 | ↑ | 9 | 13 | ↑ |
| MEGHALAYA | 2 | 2 | — | 0 | 0 | — | 0 | 0 | — | 3 | 1 | ↓ | 2 | 4 | ↑ | 7 | 7 | — |
| MIZORAM | 0 | 0 | — | 0 | 0 | — | 1 | 0 | ↓ | 3 | 2 | ↓ | 5 | 1 | ↓ | 9 | 3 | ↓ |
| NAGALAND | 1 | 0 | ↓ | 0 | 0 | — | 1 | 1 | — | 2 | 0 | ↓ | 2 | 3 | ↑ | 6 | 4 | ↓ |
| ODISHA | 1 | 1 | — | 0 | 0 | — | 3 | 0 | ↓ | 2 | 3 | ↑ | 13 | 3 | ↓ | 19 | 7 | ↓ |
| PUDUCHERRY | 0 | 0 | — | 0 | 1 | ↑ | 0 | 1 | ↑ | 1 | 1 | — | 1 | 0 | ↓ | 2 | 3 | ↑ |

| State/ UT | Priority I | | | Priority II | | | Priority III | | | Priority IV | | | Priority V | | | Total | | |
|----------------------|------------|-----------|-----------|-------------|-----------|-----------|--------------|-----------|-----------|-------------|-----------|-----------|------------|------------|-----------|------------|------------|-----------|
| | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation | 2018 | 2022 | Variation |
| PUNJAB | 2 | 3 | ↑ | 0 | 0 | — | 0 | 0 | — | 1 | 0 | ↓ | 1 | 2 | ↑ | 4 | 5 | ↑ |
| RAJASTHAN | 0 | 2 | ↑ | 0 | 0 | — | 1 | 1 | — | 0 | 4 | ↑ | 1 | 7 | ↑ | 2 | 14 | ↑ |
| SIKKIM | 0 | 0 | — | 0 | 0 | — | 0 | 0 | — | 0 | 0 | — | 4 | 0 | ↓ | 4 | 0 | ↓ |
| TAMIL NADU | 4 | 4 | — | 0 | 1 | ↑ | 0 | 1 | ↑ | 1 | 1 | — | 1 | 3 | ↑ | 6 | 10 | ↑ |
| TELANGANA | 1 | 1 | — | 2 | 1 | ↓ | 2 | 2 | — | 2 | 0 | ↓ | 1 | 5 | ↑ | 8 | 9 | ↑ |
| TRIPURA | 0 | 0 | — | 0 | 0 | — | 0 | 0 | — | 0 | 0 | — | 6 | 1 | ↓ | 6 | 1 | ↓ |
| UTTAR PRADESH | 4 | 6 | ↑ | 0 | 0 | — | 1 | 1 | — | 2 | 2 | — | 5 | 8 | ↑ | 12 | 17 | ↑ |
| UTTARAKHAND | 3 | 2 | ↓ | 1 | 2 | ↑ | 1 | 4 | ↑ | 4 | 0 | ↓ | 0 | 1 | ↑ | 9 | 9 | — |
| WEST BENGAL | 1 | 1 | — | 1 | 2 | ↑ | 3 | 1 | ↓ | 4 | 3 | ↓ | 8 | 6 | ↓ | 17 | 13 | ↓ |
| TOTAL | 45 | 46 | ↑ | 16 | 16 | — | 43 | 39 | ↓ | 72 | 65 | ↓ | 175 | 145 | ↓ | 351 | 311 | ↓ |

Annexure X

State-wise list of 106 PRS removed from the earlier list of 351 PRS (identified during Year 2018) based on observed improvement in the monitored data during 2019 & 2021

| S No | State | River | Stretch | Priority class during the year 2018 | |
|------|----------------|-------------|-------------------------------|-------------------------------------|---|
| 1. | ANDHRA PRADESH | GODAVARI | RAYANPETA TO RAJAHMUNDRI | V | |
| 2. | | KRISHNA | AMRAVATHI TO HAMSALA DEEVI | V | |
| 3. | | KUNDU | NANDYAL TO MADDURU | IV | |
| 4. | | NAGAVALI | ALONG THOTAPALLI | V | |
| 5. | | TUNGABHADRA | MANTHRALAYAM TO BAVAPURAM | IV | |
| 6. | ASSAM | BARAK | PANCHGRAM TO SILCHAR | V | |
| 7. | | BAROI | DOWNSTREAM OF BRIDGE AT NH-52 | V | |
| 8. | | BEKI | BARPETA ROAD TO JYOTI GAON | V | |
| 9. | | BHOGDOI | JORHAT TO DULIAGAON | V | |
| 10. | | BOGINADI | LAKHIMPUR TO DIBRUGARH | V | |
| 11. | | BORSOLA | ALONG SARABBHATTI, GUWAHATI | I | |
| 12. | | BRAHAMPUTRA | KHERGHAT TO DHUBRI | IV | |
| 13. | | DIKHOW | NAGINI MORA TO DIKHOMUKH | V | |
| 14. | | DIKRONG | ALONG BANDARDEWA | V | |
| 15. | | DISANG | DILLIGHAT TO GUNDAMGHAT | V | |
| 16. | | GABHARU | ALONG TUMIUKI, SONITPUR | V | |
| 17. | | JHANJI | JORHAT TO CHAWDANG | V | |
| 18. | | JIA BHARALI | ALONG SONITPUR | V | |
| 19. | | KAPILI | NAGAON TO KAMPUR TOWN | V | |
| 20. | | KILLING | ALONG MOREGAON | V | |
| 21. | | KOHORA | KOHORA TO MOHPARA | V | |
| 22. | | KOLONG | NAGAON TO MORI KALONG | V | |
| 23. | | PANCHNAI | ORANG TO BORSALA | III | |
| 24. | | PUTHIMARI | ALONG PUTHIMARI | V | |
| 25. | | RANGA | ALONG GERAMUKH | V | |
| 26. | | SANKOSH | ALONG GOLAKGANJ | V | |
| 27. | | SONAI | SONAI TO DAKSHIN MOHANPUR | V | |
| 28. | | GOA | ASSONORA | ASSONORA TO SIRSAIM | V |
| 29. | | | BICHOLIM | BICHOLIM TO CURCHIREM | V |
| 30. | | | CHAPORA | PERNEM TO MORJIM | V |
| 31. | SINQUERIM | | ALONG CANDOLIM | V | |
| 32. | TALPONA | | ALONG CANACONA | IV | |
| 33. | TIRACOL | | ALONG TIRACOL | V | |
| 34. | VALVANT | | SANKLI – BICHOLIM TO PORIEM | V | |
| 35. | GUJARAT | AMRAVATI | ALONG DADHAL, ANKALESHWAR | IV | |

| S No | State | River | Stretch | Priority class during the year 2018 |
|------|----------------------------|-----------------|--|-------------------------------------|
| 36. | | ANAS | DAHOD TO FATEHPURA | V |
| 37. | | BALEHWAR KHADI | PANDESARA TO KAPLETHA | V |
| 38. | | KIM | SAHOL BRIDGE TO HANSOL | V |
| 39. | | KOLAK | KIKARLA TO SALVAV | IV |
| 40. | | MESHA | ALONG SHAMLAJI | V |
| 41. | | NARMADA | GARUDESHWAR TO BHARUCH | V |
| 42. | | TRIVENI/ HIRAN | TRIVENI SANGAM TO BADALPARA | III |
| 43. | HIMACHAL PRADESH | BEAS | KULLU TO DEHRAGOPIPUR | V |
| 44. | JAMMU & KASHMIR | CHENAB | JAL PATAN TO PARGAWAL | V |
| 45. | | SINDH | ALONG DUDERHAMA | V |
| 46. | | KONAR | ALONG TILAYA AND KONAR | V |
| 47. | JHARKHAND | NALKARI | ALONG PATRATU | V |
| 48. | | SANKH | KONGSERABASAR TO BOLBA | IV |
| 49. | | KALI | HASAN MAAD (WEST COAST PAPER MILL) TO BOMMANAHALLI RESERVOIR | IV |
| 50. | KARNATAKA | KUMARDHARA | ALONG UPPINANGADI | V |
| 51. | | MALPRABHA | KHANAPUR TO DHARWAD | III |
| 52. | | YAGACHI | ALONG YAGACHI, HASSAN | V |
| 53. | | BHARATHAPUZHA | ALONG PATAMBI | IV |
| 54. | | BHAVANI | ALONG ELACHIVAZHY | V |
| 55. | | KARUVANNUR | ALONG KARUVANNUR | V |
| 56. | | KAVVAI | ALONG KAVVAI | V |
| 57. | | KEECHERI | PULIYANNOR TO KECHERY | IV |
| 58. | KERALA | KUPPAM | THALIPARAMBA TO VELICHANGOOL | V |
| 59. | | KUTTIYADY | ALONG KUTTIYADY | V |
| 60. | | MOGRAL | ALONG MOGRAL | V |
| 61. | | PERUVAMBA | ALONG PERUVAMBA | V |
| 62. | | PUZHACKAL | OLARIKKARA TO PUZHACKAL | V |
| 63. | | RAMAPURAM | ALONG RAMAPURAM | V |
| 64. | | CHOUPAN | ALONG VIJAIPUR | V |
| 65. | | GOHAD/ VAISHALI | GOHAD DAM TO GORMI | IV |
| 66. | | KATNI | ALONG KATNI | V |
| 67. | MADHYA PRADESH | KOLAR | SURAJNAGAR TO SHIRDIPURAM | IV |
| 68. | | SIMRAR | ALONG KATNI | V |
| 69. | | TONS | CHAKGHAT TO CHAPPAR | V |
| 70. | | WAINGANGA | CHINDWARA TO BALAGHAT | V |
| 71. | MAHARASHTRA | PANCHAGANGA | SHIROL TO KOLHAPUR | V |
| 72. | | MAT | ALONG SERCHHIP | V |
| 73. | MIZORAM | SAIKAH | ALONG LAWNGTLAI | V |
| 74. | | TIAU | ALONG CHAMPHAI | III |
| 75. | | TLAWNG | ALONG ZOBAWK, SAIRANG TO BAIRABI | IV |

| S No | State | River | Stretch | Priority class during the year 2018 |
|------|--------------------|--------------|------------------------------|-------------------------------------|
| 76. | | TUIPUI | ALONG CHAMPHAI | IV |
| 77. | | TUIRIAL | ALONG TUIRIAL, AIZWAL | V |
| 78. | | TUIVAWL | ALONG KEIFANG | IV |
| 79. | NAGALAND | CHATHE | MEDZIPHEMA TO, DIMAPUR | IV |
| 80. | | DZUCHA | ALONG KOHIMA | V |
| 81. | ODISHA | BHEDEN | ALONG BHEDEN | V |
| 82. | | BUDHABALANGA | MAHULIA TO BARIPADA | V |
| 83. | | KUSUMI | ALONG ANGUL TALCHER | V |
| 84. | | MAHANADI | SAMBALPUR TO PARADEEP | V |
| 85. | | NAGAVALLI | JAYKAYPUR TO RAYAGADA | V |
| 86. | | NANDIRAJHOR | D/S TALCHER | III |
| 87. | | NUNA | ALONG BIJIPUR, PURI | V |
| 88. | | RATNACHIRA | ALONG BHUBHNEISHWAR, PURI | V |
| 89. | | RUSHIKULYA | PRATAPPUR TO GANJAM | V |
| 90. | | SABULIA | ALONG JAGANNATHPATNA, RAMBHA | V |
| 91. | PUDUCHERRY | ARASALAR | ALONG KARAICAL | IV |
| 92. | PUNJAB | BEAS | ALONG MUKERIAN | V |
| 93. | SIKKIM | MANEY KHOLA | ADAMPOOL TO BURTUKK | V |
| 94. | | RANGIT | DAM SITE (NHPC) TO TREVENI | V |
| 95. | | RANICHU | NAMLI TO SINGTAM | V |
| 96. | | TEESTA | MELLI TO CHUNGTHANG | V |
| 97. | TRIPURA | BURIGAON | ALONG BISHALGARH | V |
| 98. | | GUMTI | TELKAJILA TO AMARPUR | V |
| 99. | | JURI | ALONG DHARMANAGAR | V |
| 100. | | KHOWAI | ALONG TELIAMURA | V |
| 101. | | MANU | ALONG KAILASHAHAR | V |
| 102. | UTTARAKHAND | GANGA | HARIDWAR TO SULTANPUR | IV |
| 103. | WEST BENGAL | KALJANI | BITALA TO ALIPURDWAR | V |
| 104. | | KAROLA | JALPAIGURI TO THAKURER KAMAT | V |
| 105. | | MAYURAKSHI | SURI TO DURGAPUR | V |
| 106. | | SILABATI | GHATAL TO NISCHINDIPUR | V |

State wise list to 74 PRS shifted in lower priority class

| S NO | RIVER | STATE | PRIORITY CLASS DURING THE YEAR 2018 | STRETCH DURING YEAR 2018 | PRIORITY CLASS DURING THE YEAR 2022 | STRETCH DURING YEAR 2022 |
|------|-------------|-----------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|---|
| 1 | GODAVARI | MAHARASHTRA | I | SOMESHWAR TEMPLE TO RAHED | II | GANGAPR DAM TO MADHESWAR DAM, ALONG NANDUR, KAIGAON TO DHALEGAON, NANDED TO INTERSTATE BORDER |
| 2 | MULA | MAHARASHTRA | I | BOPODI TO AUNDH GAON | II | AUNDHGAON TO BOPODI |
| 3 | SARABANGA | TAMIL NADU | I | THATHAYAMPATTI TO T.KONAGAPADI | II | ALONG SALEM |
| 4 | SUSWA | UTTARAKHAND | I | MOTHRWALA TO RAIWALA | II | ALONG MATHURAWALA |
| 5 | VINDHADHARI | WEST BENGAL | I | HAROA BRIDGE TO MALANCHA BURNING GHAT | II | HAROA TO MALANCHA |
| 6 | DAMANGANGA | DAMAN, DIU AND DADRA NAGAR HAVELI | I | SILVASSA TO DAMAN JETTY, MOTI DAMAN | III | ALONG DAMAN |
| 7 | KARAMANA | KERALA | I | MALEKKDU TO THIRUVALLAM | III | ALONG ARUVIKARA AND ALONG MOONNATTUMUKKU |
| 8 | KSHIPRA | MADHYA PRADESH | I | SIDDHAWAT TO TRIVENISANGAM | III | ALONG UJJAIN |
| 9 | KUNDALIKA | MAHARASHTRA | I | SALAV TO ROHA | III | ALONG ROHA |
| 10 | MORNA | MAHARASHTRA | I | AKOLA TO TAKALIJALAM | III | ALONG AKOLA |
| 11 | NIRA | MAHARASHTRA | I | SANGAVI TO SHINDEWADI | III | SAROLA TO SANGAVI |
| 12 | DHANSIRI | NAGALAND | I | CHECK GATE TO DIPHU BDG | III | ALONG DHANSIRI AND ALONG DIMAPUR |
| 13 | CAUVERY | TAMIL NADU | I | METTUR TO MAYILADUTHURAI | III | ALONG METTUR, ALONG ERODE, KATTIPALAYAM TO TRICHY, KUMBAKONAM TO PITCHAVARAM |
| 14 | KALU | MAHARASHTRA | I | ALONG ATALE VILLAGE | IV | ALONG KALYAN |
| 15 | VEL | MAHARASHTRA | I | NHAVARE TO SHIKARPUR | IV | ALONG SHIKRAPUR |

| S NO | RIVER | STATE | PRIORITY CLASS DURING THE YEAR 2018 | STRETCH DURING YEAR 2018 | PRIORITY CLASS DURING THE YEAR 2022 | STRETCH DURING YEAR 2022 |
|------|-------------|------------------|-------------------------------------|---------------------------------|-------------------------------------|--|
| 16 | BHOGAVO | GUJARAT | I | SURENDRANAGAR TO NANA KERALA | V | ALONG SURENDRANAGAR |
| 17 | INDRAYANI | MAHARASHTRA | II | MOSHIGAON TO ALANDIGAON | III | MOSHIGAON TO ALANDIGAON |
| 18 | WAINGANGA | MAHARASHTRA | II | TUMSA TO ASHTI | III | TUMSAR TO AMBHORA |
| 19 | WARDHA | MAHARASHTRA | II | GHUGHUS TO RAJURA | III | PULGAON TO RAJURA |
| 20 | NAKKAVAGU | TELANGANA | II | GANDILACHAPET TO SEVALAL THANDA | III | ALONG BACHUGUDEM |
| 21 | KICHHA | UTTARAKHAND | II | ALONG KICHHA | III | KICHHA TO PUL BHATTA |
| 22 | DEVIKA | JAMMU & KASHMIR | II | GURU RAVIDAS TEMPLE TO NAINSU | IV | ALONG UDHAMPUR |
| 23 | BETWA | MADHYA PRADESH | II | MANDIDEEP TO VIDISHA | IV | MANDIDEEP TO VIDISHA AND ALONG KANJIYA |
| 24 | NAMBUL | MANIPUR | II | SINGDA DAM TO BISHNUPUR | IV | SINGDA DAM TO BISHNUPUR |
| 25 | MARKANDA | HIMACHAL PRADESH | II | KALA AMB TO NARAYANPUR | V | SALANI TO RAMPUR JATTAN |
| 26 | MANJEERA | TELANGANA | II | GOWDICHARLA TO NAKKAVAGU | V | SANGAREDDY TO GOWDICHARLA |
| 27 | BANGANGA | JAMMU & KASHMIR | III | PONY SHED TO BATHING GHAT | IV | ALONG KATRA |
| 28 | TUNGABHADRA | KARNATAKA | III | HARIHAR TO KORLAHALLI | IV | KUDLI TO MYLARA, ULLANUR TO HOCHCHALLI |
| 29 | SONE | MADHYA PRADESH | III | ALONG AMLAI | IV | ALONG DEORA |
| 30 | MOR | MAHARASHTRA | III | JALGAON TO AMODA | IV | ALONG PADALSHE |
| 31 | PEDHI | MAHARASHTRA | III | NARAYANPUR TO BHATKULI | IV | ALONG BHATKULI |
| 32 | PENGANGA | MAHARASHTRA | III | MEHKAR TO UMARKHED | IV | MEHKAR TO UMARKHED |
| 33 | PURNA | MAHARASHTRA | III | DHUPESHWAR TO ASEGAON | IV | ASEGAON TO AKOLA |
| 34 | URMODI | MAHARASHTRA | III | DHANGARWADI TO NAGTHANE | IV | ALONG NAGTHANE |
| 35 | VENNA | MAHARASHTRA | III | MAHABALESHWAR TO MAHULI | IV | MAHABALESHWAR TO MAHULI |
| 36 | WENA | MAHARASHTRA | III | KAWADGHAT TO HINDANGHAT | IV | ALONG HINGANGHAT |
| 37 | GANGA | WEST BENGAL | III | TRIBENI TO DIAMOND HARBOUR | IV | BEHRAMPUR TO HALDIA |

| S NO | RIVER | STATE | PRIORITY CLASS DURING THE YEAR 2018 | STRETCH DURING YEAR 2018 | PRIORITY CLASS DURING THE YEAR 2022 | STRETCH DURING YEAR 2022 |
|------|----------------|-----------------|-------------------------------------|--|-------------------------------------|---|
| 38 | DIGBOI | ASSAM | III | LAKHIPATHE, RESERVE FOREST | V | IOCL OIL TOWN TO LAKHIPATHAR RESERVE FOREST |
| 39 | SAL | GOA | III | KHAREBAND TO MOBOR | V | KHAREBAND TO ASSOLNA |
| 40 | LAKSHMANTIRTHA | KARNATAKA | III | KATTEMALAVADI TO HUNSUR | V | ALONG HUNSUR |
| 41 | KOLAR | MAHARASHTRA | III | ALONG KORADI | V | ALONG WAREGAON |
| 42 | DZUNA | NAGALAND | III | ALONG KOHIMA | V | ALONG KOHIMA |
| 43 | KATHAJODI | ODISHA | III | CUTTACK TO URALI | V | ALONG CUTTACK |
| 44 | KARAKAVAGU | TELANGANA | III | ALONG PALWANCHA | V | ALONG PALONCHA |
| 45 | DWARKA | WEST BENGAL | III | TARAPITH TO SADHAK BAMDEB GHAT | V | ALONG TARAPITH |
| 46 | KHARSANG | ASSAM | IV | ASSAM-ARUNANCHAL BORDER TO LONGTOM-1 | V | ALONG KHARSANG |
| 47 | PAGLDIA | ASSAM | IV | NALBARI TO KHUDRA SANKARA | V | ALONG NALBARI TOWN |
| 48 | HASDEO | CHHATTISGARH | IV | KORBA TO URGHA | V | CHAMPA |
| 49 | MAHANADI | CHHATTISGARH | IV | ARRANG TO SIHAWA | V | SHIVRINARAYAN TO PORATH |
| 50 | MANDOVI | GOA | IV | MARCELA TO VOLVOI | V | ALONG AMONA |
| 51 | DAMAN GANGA | GUJARAT | IV | KACHIGAON TO VAPI | V | ALONG KACHIGAON AND ALONG CHANOD |
| 52 | TAPI | GUJARAT | IV | KHADOD (BARDOLI) TO SURAT | V | ALONG NIZHAR |
| 53 | GAWKADAL | JAMMU & KASHMIR | IV | GAWKADAL BRIDGE TO NOHATA | V | ALONG SHERGARHI |
| 54 | GARGA | JHARKHAND | IV | ALONG TALMUCHU | V | ALONG TELMUCHO |
| 55 | CAUVERY | KARNATAKA | IV | RANGANATHITTU TO SATHYAMANGALAM BRIDGE | V | ALONG SRI RANGAPATTANNA |
| 56 | KABINI | KARNATAKA | IV | NANJANAGUD TO HEJJIGE | V | ALONG NANJANAGUD |
| 57 | KAGINA | KARNATAKA | IV | SHAHABAD TO HONGUNTA | V | ALONG GOLA K |
| 58 | KRISHNA | KARNATAKA | IV | YADURWADI TO TINTINI BRIDGE | V | ALONG UGARKHURD, ALAMATTI TO TINTANI, ALONG DEVASAGAR |

| S NO | RIVER | STATE | PRIORITY CLASS DURING THE YEAR 2018 | STRETCH DURING YEAR 2018 | PRIORITY CLASS DURING THE YEAR 2022 | STRETCH DURING YEAR 2022 |
|------|-------------------------|----------------|-------------------------------------|---------------------------------|-------------------------------------|---|
| 59 | KADAMBAYAR | KERALA | IV | MANCKAKADAVU TO BRAHMAPURAM | V | MANCKAKADAVU TO BRAHMAPURAM |
| 60 | MANIMALA | KERALA | IV | KALLOOPARA TO THONDRA | V | ALONG THONDRA |
| 61 | PAMBA | KERALA | IV | MANNAR TO THAKAZHY | V | ALONG PAMBA AND ALONG MANNAR |
| 62 | TAPI | MADHYA PRADESH | IV | NEPANAGAR TO BURHANPUR | V | ALONG BURHANPUR |
| 63 | BINDUSAR | MAHARASHTRA | IV | SWARAJ NAGAR TO SNEHNAGAR | V | ALONG BEED |
| 64 | BORI | MAHARASHTRA | IV | ALONG AMALNER | V | ALONG JALGAON |
| 65 | HIWARA | MAHARASHTRA | IV | PACHORA TO NIMBORA | V | ALONG PACHORA |
| 66 | KHARKHALA/ KYRHUKHLA | MEGHALAYA | IV | SUTNGA TO KHLIERIAT | V | ALONG KHLIERIAT |
| 67 | NONBAH | MEGHALAYA | IV | NANGSTOIN TO WAHRIAT | V | ALONG NONGSTOIN |
| 68 | UMTREW | MEGHALAYA | IV | BYRNIHAT TO MORANG DALA | V | UMRAN TO BYRNIHAT |
| 69 | DZU | NAGALAND | IV | KOHIMA TO DZUKO VALLEY | V | ALONG KOHIMA |
| 70 | KALI BEIN | PUNJAB | IV | SULTANPUR LODHI TO CONF TO BEAS | V | AT MAND FATEHPUR |
| 71 | BHAVANI | TAMIL NADU | IV | SIRUMUGAI TO KALINGARAYAN | V | ALONG BHAVANI |
| 72 | KINNERSANI | TELANGANA | IV | ALONG PALWANCHA | V | ALONG KHAMMAM |
| 73 | GANGA | UTTAR PRADESH | IV | KANNAUJ TO VARANASI | V | FARRUKABAD TO ALLAHABAD , MIRZAPUR TO GHAZIPUR |
| 74 | DAMODAR | WEST BENGAL | IV | DURGACHAKM TO DISHERGARH | V | DISHERGARH TO BURDWAN |

**State wise list of river stretches with no change in water quality observed during the year
2018 & 2022**

| SNO | STATE | RIVER | STRETCH | PRIORITY CLASS |
|-----|------------------|--------------|----------------------------------|----------------|
| 1. | ASSAM | BEGA | ALONG MANGALDOI | V |
| 2. | | BHARALU | GUWAHATI TO CHILARAI NAGAR | I |
| 3. | | BURHIDIHING | MARGHERITA TO TINSUKIA | V |
| 4. | | DHANSIRI | GOLAGHAT TO KATHKETIA | V |
| 5. | | KULSI | ALONG CHAYGAON | V |
| 6. | | MORA BHARALI | ALONG TEZPUR | V |
| 7. | BIHAR | PARMAR | ALONG JOGBANI | V |
| 8. | CHHATTISGARH | KELO | RAIGARH TO KANAKTORA | V |
| 9. | | SEONATH | SHIMGA TO BEMTA | IV |
| 10. | DELHI | YAMUNA | WAZIRABAD TO ASGARPUR | I |
| 11. | GOA | KHANDEPAR | PONDA TO OPA | V |
| 12. | GUJARAT | AMLAKHADI | PUNGUM TO BHARUCH | I |
| 13. | | BHADAR | JETPUR VILLAGE TO SARAN VILLAGE | I |
| 14. | | KHARI | LALI VILLAGE TO KASHIPURA | I |
| 15. | | SABARMATI | KHEROJ TO VAUTHA | I |
| 16. | | SHEDHI | DHAMOD TO KHEDA | IV |
| 17. | | HARYANA | GHAGGAR | RORKI TO SIRSA |
| 18. | YAMUNA | | PANIPAT TO SONEPAT | I |
| 19. | HIMACHAL PRADESH | GIRI | ALONG SAINJ | V |
| 20. | | PABBAR | ALONG ROHRU | V |
| 21. | | SUKHANA | SUKHNA TO PARWANOO | I |
| 22. | JAMMU & KASHMIR | BASANTER | SAMBA TO CHAKMANGARAKWAL | V |
| 23. | | CHUNT KOL | MAULANA AZAD BRIDGE TO KANIKADAL | III |
| 24. | JHARKHAND | DAMODAR | PHUSRO ROAD BDG TO TURIO | V |
| 25. | | JUMAR | KANKE DAM TO KADAL | V |
| 26. | | SUBARNAREKHA | HATIA DAM TO JAMSHEDPUR | IV |
| 27. | KARNATAKA | BHADRA | HOLEHUNNUR TO BHADRAVATHI | IV |
| 28. | | BHIMA | GHANAPUR TO YADGIR | V |
| 29. | | NETRAVATHI | UPPINANGADI TO MANGALURU | V |
| 30. | | SHIMSHA | YEDIYAR TO HALAGUR | IV |
| 31. | | TUNGA | SHIVAMOGA TO KUDLI | V |
| 32. | KERALA | CHITRAPUZHA | IRUMPANAM TO KARINGACHIRA | V |
| 33. | | KADALUNDY | ALONG HAJIRAPPALLY/ HAJIYARPALLI | V |
| 34. | | KALLAI | THEKEPURAM TO ARAKKINAR | V |
| 35. | | PERIYAR | ALWAYE-ELOOR TO KALAMASSERY | V |
| 36. | | THIRUR | NADUVILANGADI TO THALAKKADATHUR | V |
| 37. | | UPPALA | POYYA TO MULINJA | V |
| 38. | MADHYA PRADESH | BICHIA | SILPARI TO GADHAWA | V |
| 39. | | CHAMBAL | NAGDA TO RAMPURA | I |
| 40. | | CHAMLA | ALONG BADNAGAR, UJJAIN | V |
| 41. | | KALISOT | MANDIDEEP TO SAMARDHA VILLAGE | V |
| 42. | | KHAN | KABIT KHEDI TO KHAJRANA | I |

| SNO | STATE | RIVER | STRETCH | PRIORITY CLASS |
|-----|-------------|-----------------------|----------------------------------|----------------|
| 43. | MAHARASHTRA | KUNDA | KHARGONE TO KHEDI KHURD | V |
| 44. | | MALEI | JAORA TO BARAUDA | V |
| 45. | | MANDAKINI | ALONG CHITRAKUT | V |
| 46. | | NEWAJ | ALONG SHUJALPUR | V |
| 47. | | PARVATI | BATAWADA TO PILUKHEDI | V |
| 48. | | AMBA | BENSE TO ROHA | V |
| 49. | | GHOD | ANNAPUR TO SHISHUR | III |
| 50. | | GOMAI | LONKHEDA TO SHAHDA | V |
| 51. | | KOYNA | KARAD TO PAPDARDE | IV |
| 52. | | KRISHNA | SHINDI TO KURUNDWAD | III |
| 53. | | MITHI | POWAI TO DHARAVI | I |
| 54. | | MULA & MUTHA | THEUR TO MUNDHWA BRIDGE | II |
| 55. | | MUTHA | SHIVAJI NAGAR TO KHADAKWASLA DAM | I |
| 56. | | PATALGANGA | KHADEPADA TO KOPOLI | III |
| 57. | | PAWANA | DAPODI TO RAVET | II |
| 58. | | PEHLAR | PELHAR DAM TO GOLANI NAKA | IV |
| 59. | | SINA | SOLAPUR TO BANKALAGI | IV |
| 60. | TANSA | ALONG THANE | V | |
| 61. | TAPI | RAVER TO SHAHADA | III | |
| 62. | ULHAS | KALYAN TO BADLAPUR | V | |
| 63. | VAITARNA | GANDHRE TO SARASHI | V | |
| 64. | VASHISTI | KHERDI TO DALVATNE | V | |
| 65. | WAGHUR | SUNASGAON TO SAKEGAON | III | |
| 66. | MANIPUR | IRIL | KANGLA SIPHAI TO UKHRUL | V |
| 67. | | KHUGA | KHUGA LAKE TO CHURACHANDPUR | V |
| 68. | | KHUJAIROK | MOREH TO MAOJANG | V |
| 69. | | LOKCHAO | BISHNUPUR TO LOKTAK LAKE | V |
| 70. | | MANIPUR | SEKMAIJAN TO THOUBAL | V |
| 71. | | THOUBAL | SHONG KONG TO PHADOM | V |
| 72. | | WANGJING | WANGJING TO HEIROK | V |
| 73. | MEGHALAYA | LUKHA | MYNDIHATI TO SHYMPLONG | V |
| 74. | | UMKHRAH | MAWLAI TO SHILLONG | I |
| 75. | | UMSHYRPI | UMSHYRPI BRIDGE TO DHANKETI | I |
| 76. | MIZORAM | CHITE | ALONG ARMED VENG | V |
| 77. | NAGALAND | SANO | ALONG KOHIMA | V |
| 78. | ODISHA | BRAHMANI | ROURKELA TO BIRITOL | V |
| 79. | | DAYA | BHUBANESWAR TO BARAGARH | IV |
| 80. | | GANGUA | D/S BHUWANESHWAR | I |
| 81. | | KUAKHAI | URALI TO BHUBANESWAR | IV |
| 82. | | SERUA | KHANDAETA TO SANKHATRASA | V |
| 83. | PUNJAB | GHAGGAR | SARDULGARH TO MUBARAKPUR | I |
| 84. | | SATLUJ | RUPNAGAR TO HARIKA BRIDGE | I |
| 85. | RAJASTHAN | CHAMBAL | SAWAIMADHOPUR TO KOTA | V |
| 86. | TAMIL NADU | THIRUMANIMUT HAR | SALEM TO PAPPARAPATTI | I |
| 87. | | VASISTA | MANIVILUNDHAN TO THIYAGANUR | I |
| 88. | TELANGANA | KRISHNA | THANGADIGI TO WADAPALLY | V |

| SNO | STATE | RIVER | STRETCH | PRIORITY CLASS |
|------|---------------|--------------|---|----------------|
| 89. | | MANAIR | WARANGAL TO SOMNAPALLI | III |
| 90. | | MUSI | HYDERABAD TO NALGONDA | I |
| 91. | TRIPURA | HAORA | AGARTALA TO BISHRAMGANJ | V |
| 92. | | GHAGHARA | BARHALGANJ TO DEORIA | V |
| 93. | | GOMTI | SITAPUR TO VARANASI | III |
| 94. | | HINDON | SAHARANPUR TO GHAZIABAD | I |
| 95. | | KALINADI (E) | MUZAFFAR NAGARTO GULAOTHI TOWN | I |
| 96. | UTTAR PRADESH | RAMGANGA | MURADABAD TO KANNAUJ | IV |
| 97. | | RAPTI | DOMINGARH TO RAJGHAT | V |
| 98. | | SAI | UNNAO TO JAUNPUR | V |
| 99. | | VARUNA | RAMESHWAR TO CONF WITH GANGA, VARANASI | I |
| 100. | | YAMUNA | ASGARPUR TO ETAWAH & SHAHPUR TO ALLAHABAD (BALUA GHAT) | I |
| 101. | UTTARAKHAND | BHELA | KASHIPUR TO RAJPURA ATNDA | I |
| 102. | | DHELA | KASHIPUR TO GARHUWALA, THAKURDWARA | I |
| 103. | | BARAKAR | KULTI TO ASANSOL | V |
| 104. | | DWARAKESHWAR | ALONG BANKURA | V |
| 105. | WEST BENGAL | JALANGI | LAAL DIGHI TO KRISHNA NAGAR | IV |
| 106. | | KANSI | MIDNAPORE TO RAMNAGAR | IV |
| 107. | | RUPNARAYAN | KOLAGHAT TO BENAPUR | V |
| 108. | | TEESTA | SILIGURI TO PAHARPUR | V |