

BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

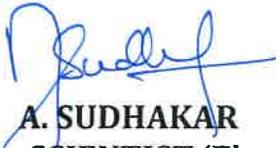
OA. No.673 OF 2018

IN THE MATTER OF:

**NEWS ITEM PUBLISHED IN 'THE HINDU' AUTHORED BY SHRI.
JACOB KOSHY TITLED
"MORE RIVER STRETCHES ARE NOW CRITICALLY POLLUTED: CPCB".**

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PLACE: DELHI

DATED: 05.04.2019

**BEFORE THE HON'BLE 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"

**Updated Consolidated Report on Compliance to
Hon'ble NGT Orders dated 20.09.2018 and 19.12.2018 in
OA 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"**



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05.04.2019

Updated Consolidated Report on Compliance to Hon'ble NGT Orders dated 20.09.2018 and 19.12.2018 in OA 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"

1. **Background:** - Hon'ble National Green Tribunal (NGT) in the matter of O.A. 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" passed orders on 20.09.2018 and 19.12.2018. Main directions passed by the Hon'ble NGT on 20.09.2018 which are reproduced as follows:

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 finalization 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 characterization 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.to 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.

- (xi) *The RRCs will send progress reports by e-mail at filing.ngt@gmail.com on or before 15.12.2018.*

*A copy of the Hon'ble NGT order dated 20.09.2018 is enclosed as **Annexure-I***

Further, Hon'ble National Green Tribunal (NGT) considered the matter and passed order on 19.12.2018. Relevant portion of the directions passed by the Hon'ble NGT on 19.12.2018 which are reproduced as follows:

11. *..... The said States/ UTs may now give revised reports on or before 31.01.2019 to CPCB after complying with the deficiencies. The CPCB shall examine the action plans and only if they meet the scientific and technical yardstick shall approve the same and convey it to the respective States/UTs. The States/ UTs after its approval shall place/host these action plans on the respective website giving clear timelines for its execution, agencies responsible for its execution along with the matching budgetary provisions.*
12. *By way of last opportunity, we extend the time for preparation of action plans till 31.01.2019 with the stipulation that for every delay thereafter, compensation for damage to the environment will be payable by each of the States/ UTs at the rate of Rs. One Crore per month for each of the Priority- I and Priority- II stretches, Rs. 50 lacs per month for stretches in Priority- III and Rs. 25 lacs per month each for Priority- IV and Priority- V stretches. The payment will be the responsibility of the Chief Secretaries of the States/Administrators of the UTs and the amount may be recovered from the erring officers. The CPCB may prominently place the names of the defaulting States and UTs and a notice to this effect on its website.*
13. *The SPCBs and Pollution Control Committees of UTs may display the quality of the water of polluted river stretches on their respective websites within one month from today, along with action taken, if any, which may be revised every three months. The CPCB may also display the water quality of the river stretches and action/inaction by such States on its websites. It is made clear that BOD will not be the sole criteria to determine whether a particular river stretch is a polluted river stretch. Other parameters including*

Faecal Coliform (FC) bacteria will also be the criteria for classifying a stretch as polluted or otherwise. CPCB may devise within two weeks a mechanism for classification wherein two criteria pollutants that is BOD and FC shall henceforth be basis of classification in Priority Classes.

14. *The CPCB may also examine whether river Rangpo in Sikkim falls in the category of polluted river stretches and if it is so, CPCB may give appropriate directions with regard to the said river also.*
15. *Any incomplete action plan will be treated as non-compliance. Performance guarantees are to be furnished for implementation of action plans within the above stipulated time to the satisfaction of Central Pollution Control Board in the sum of:*
 - (i) *Rs. 15 Crore for each of Priority I & II stretches*
 - (ii) *Rs. 10 Crore for each of Priority III stretches*
 - (iii) *Rs. 5 Crore for each of Priority IV & V stretches.*
16. *The CPCB will be at liberty to take further coercive measures against the States/UTs concerned and furnish a consolidated report to this Tribunal by 28.02.2019 by e-mail at ngt.filing@gmail.com.*

List for further consideration on 08.04.2019.

*A copy of the Hon'ble NGT order dated 19.12.2019 is enclosed as **Annexure-II***

Hon'ble NGT in its order dated 19.12.2018 clearly directed that the action plan should be prepared covering the components like identification of polluting sources including functioning/ status of Sewage Treatment Plants (STPs)/Effluent Treatment Plants (ETPs)/Common Effluent Treatment Plants (CETPs) 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 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.

2. Actions initiated by CPCB for ensuring compliance to the Hon'ble Directions dated 20.09.2018 and 19.12.2018: -

Initiatives taken by CPCB for ensuring compliance to the Hon'ble NGT orders are given in subsequent paras: -

2.1 In pursuance to the Hon'ble National Green Tribunal, Central Pollution Control Board (CPCB) vide letters dated 28.09.2018, 28.11.2018 and 11.12.2018 requested/reminded the concerned State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) to pursue with the concerned State Government/ Union Territory (UT) Administration regarding preparation of action plans with time lines in respect of the identified polluted river stretches falling within the jurisdiction of the respective State /Union Territory Administration.

2.2 Status on constitution of the River Rejuvenation Committees by the State Governments /UT Administration: -

As per the information available with CPCB, all 28 States Viz., Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, J & K, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Mizoram, Manipur, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura Uttar Pradesh, Uttarakhand and West Bengal as well as 03 UTs viz., DD & DNH, Delhi and Puducherry have constituted 'River Rejuvenation Committees (RRCs) 'and conducted meetings.

Jharkhand State Pollution Control Board informed that the 'River Rejuvenation Committee (RRC) under the Chairmanship of 'Additional Chief Secretary, MoFE & CC, Government of Jharkhand' is already in place and three meetings have already taken place. The formal notification of RRC is received from Jharkhand State on April 04, 2019. The State-wise details with regard to the constitution of RRCs are given in the Table 1 below:

Table 1. State-wise status regarding Constitution of 'River Rejuvenation Committee (RRC) in compliance to Hon'ble NGT Orders dated 20.09.2018 and 19.12.2018 in the matter of OA No. 673 of 2018 (as on 04.04.2019)

S. No.	STATE/UNION TERRITORY	Total No. of Identified Polluted River Stretches (P-I) to P-V)	Status of RRC Constitution	Date of Constitution
1	ANDHRA PRADESH	5	Yes	05.12.2018
2	ASSAM	44	Yes	24.12.2018
3	BIHAR	6	Yes	31.12.2018
4	CHHATTISGARH	5	Yes	22.11.2018
5	DAMAN, DIU AND DADRA NAGAR HAVELI	1	Yes	08.01.2019
6	DELHI	1	Yes	22.10.2018
7	GOA	11	Yes	21.11.2018
8	GUJARAT	20	Yes	29.11.2018
9	HARYANA	2	Yes	8.11.2018
10	HIMACHAL PRADESH	7	Yes	17.11.2018
11	JAMMU & KASHMIR	9	Yes	15.10.2018
12	JHARKHAND	7	Yes	03.04.2019
13	KARNATAKA	17	YES	24.11.2018
14	KERALA	21	Yes	12.12.2018
15	MADHYA PRADESH	22	Yes	01.11.2018
16	MAHARASHTRA	53	Yes	13.12.2018
17	MANIPUR	9	Yes	05.03.2019
18	MEGHALAYA	7	YES	24.01.2019
19	MIZORAM	9	YES	05.12.2018
20	NAGALAND	6	Yes	06.12.2018
21	ODISHA	19	Yes	12.11.2018
22	PUDUCHERRY	2	Yes	13.11.2018
23	PUNJAB	4	Yes	20.11.2018
24	RAJASTHAN	2	Yes	06.11.2018
25	SIKKIM	4	YES	23.01.2019
26	TAMIL NADU	6	Yes	26.12.2018
27	TELANGANA	8	Yes	29.11.2018
28	TRIPURA	6	Yes	01.11.2018
29	UTTAR PRADESH	12	Yes	14.12.2018
30	UTTARAKHAND	9	Yes	05.12.2018
31	WEST BENGAL	17	Yes	07.01.2019
	Grand Total	351		

2.3 Constitution of the Task Team for scrutiny of the action plans submitted by the States/UTs: -

For the purpose of scrutiny of the action plans especially with regard to the Priority -I and Priority-II polluted river stretches to be submitted by the respective State/UT Administration and in compliance to the Hon'ble NGT order dated

20.09.2018, CPCB has constituted a 'Task Team' under the Chairmanship of Member Secretary, CPCB, vide CPCB letter dated 14.11.2018. CPCB has organised four meetings of the Task Team i.e., First meeting of the Task Team on 14.12.2018 in CPCB, second meeting of the Task Team on 05.01.2019 in CPCB, Third Meeting of the Task Team during February 11-12, 2019 in CPCB and Fourth meeting of the Task Team held on 28.03.2019 in CPCB. Action plans received from the States/UTs were considered for approval especially in respect of P-I to P-II identified polluted river stretches. Minutes of fourth meeting of the Task Team held on 28.03.2019 is enclosed as **Annexure-III**.

2.4 Status of action plans received and the status of approval of the action plans submitted by the States/UTs in respect of Priority-I and Priority-II Identified Polluted River Stretches: -

Out of 351 identified polluted rivers stretches (w.r.to BOD) in 28 States and 3 UTs, 45 (P-I category), 16 (P-II category) and remaining 290 Polluted river stretches fall under the category P-III to P-V.

So far, CPCB has received 41 out of 45 action plans w.r.to P-I and 14 out of 16 action plans w.r.to P-II and total 182 action plans received w.r.to P-III to P-V polluted river stretches.

6 out of 61 action plans in respect of P-I and P-II have not been received from the States of Assam (P-I: 3 viz., Bharalu, Borsola, Silsako) and P-II:1 (Sorusola), Manipur (P-II: 1 viz., Nambu) and Uttar Pradesh (P-I: viz., river Hindon).

It is also submitted that the action plan in respect of River Hindon is required to be implemented by the Government of Uttar Pradesh in compliance to the Hon'ble NGT Orders passed in Original Application No. 231/2014 & Original Application No.66/2015.

State-wise Identified Polluted River stretches and the Status of Action Plans received (as on 03.04.2019) is given in **Table 2**.

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

Name of the State / UT	Total No. of Identified Polluted River Stretches (PRS)	Priority I Identified Polluted River Stretches		Priority II Identified Polluted River Stretches		Priority – III to V Identified Polluted River Stretches		Total Action Plans Received
		No. of P-I PRS	Action Plans received w.r.to P-I	No. of P-II PRS	Action Plans received w.r.to P-II	No. of P-III to P-V	Action Plans received w.r.to P-III to P-V	
Andhra Pradesh	5	0	0	0	0	5	5	5
Assam	44	3	0	1	0	40	1	1
Bihar	6	0	0	0	0	6	6	6
Chhattisgarh	5	0	0	0	0	5	5	5
DD & DNH	1	1	1	0	0	0	0	1
Delhi	1	1	1	0	0	0	0	1
Goa	11	0	0	0	0	11	9	9
Gujarat	20	5	5	1	1	14	14	20
Haryana	2	2	2	0	0	0	0	2
Himachal Pradesh	7	1	1	1	1	5	5	7
Jammu & Kashmir	9	0	0	1	1	8	8	9
Jharkhand	7	0	0	0	0	7	7	7
Karnataka	17	0	0	0	0	17	17	17
Kerala	21	1	1	0	0	20	0	1
Madhya Pradesh	22	3	3	1	1	18	0	4
Maharashtra	53	9	9	6	6	38	38	53
Manipur	9	0	0	1	0	8	0	0
Meghalaya	7	2	2	0	0	5	5	7
Mizoram	9	0	0	0	0	9	0	0
Nagaland	6	1	1	0	0	5	5	6
Odisha	19	1	1	0	0	18	8	9
Puducherry	2	0	0	0	0	2	2	2
Punjab	4	2	2	0	0	2	2	4
Rajasthan	2	0	0	0	0	2	2	2
Sikkim	4	0	0	0	0	4	4	4
Tamil Nadu	6	4	4	0	0	2	2	6
Telangana	8	1	1	2	2	5	5	8
Tripura	6	0	0	0	0	6	6	6
Uttar Pradesh	12	4	3	0	0	8	6	9
Uttarakhand	9	3	3	1	1	5	5	9
West Bengal	17	1	1	1	1	15	15	17
Grand Total	351	45	41	16	14	290	182	237

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

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

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

55 out of 61 total action plans received so far, 40 action plans pertaining to the States /UT of Daman [P-I (01)], Gujarat [P-I (5), P-II (01)], Haryana [P-I (01), P-II (01)], Himachal Pradesh [P-I (01), P-II (1)], J & K [P-II (01)], Kerala [P-I (01)], Madhya Pradesh [P-I (03), P-II (1)], Maharashtra [P-I (09), P-II (06)], Odisha [P-I (1), Punjab [P-I (02)], Telangana [P-I (01), P-II (02)] and West Bengal [P-I (01) and P-II (01)] have been approved along with the conditions. 15 action plans received requires further improvement w.r.to either of the following: -

- (i) Identification of polluting sources including drains contributing to river pollution, functioning status of STPs/ETPs/CETP and solid waste management and processing facilities;
- (ii) Map showing Polluted River, its tributaries, drains, major towns, industrial estates, location of STPs/CETPs

- (iii) Detailed gap analysis w.r.t town-wise water consumption (including ground water consumption), sewage generation, existing infrastructure in the catchment area of the and the gap analysis;
- (iv) Detailed gap analysis w.r.t industrial water consumption, wastewater generation, existing infrastructure for treatment of industrial effluent (both captive ETPs/CETPs and their performance assessment), gap analysis w.r.to the industrial effluent management in the catchment area;
- (v) Quantification and characterisation of waste (such as solid waste, industrial hazardous waste, bio-medical waste, E-Waste), STP sludge management, existing infrastructure and detailed gap analysis;
- (vi) Latest Water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;
- (vii) Aspects such as ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river (by having watershed management provisions), plantation on both sides of the river, setting up biodiversity parks on flood plains by removing encroachment., proper interception and diversion of sewage carrying drains to Sewage Treatment Plant (STP), upgradation of existing sewage treatment plants if not in a position to comply with effluent discharge norms, emphasis on utilization of treated sewage so as to minimize extraction of ground or surface water be included,
- (viii) Speedy, definite or specific timelines for execution of action plans and the estimated budget including the monitoring agency
- (ix) Achievable goals with specific timelines for restoration of water quality of polluted rivers
- (x) Organisation-wise action plans with timelines and the estimated budget for implementation of action plans

State-wise and River-wise recommendations of the Task Team are given in **Table 4.**

Table 4. State-wise and River-wise recommendations of the Task Team

Name of The State/UT	Polluted River	Priority	Recommendations Of The CPCB Task Team
ASSAM	Bharalu	I	Not Received
	Borsola	I	Not Received
	Silsako	I	Not Received
	Sorusola	II	Not Received
DD & DNH	Damanganga	I	Recommended Subject To Conditions
DELHI	Yamuna	I	Not Recommended
GUJARAT	Amlakhadi	I	Recommended Subject To Conditions
	Bhadar	I	Recommended Subject To Conditions
	Bhogavo	I	Recommended Subject To Conditions
	Khari	I	Recommended Subject To Conditions
	Sabarmati	I	Recommended Subject To Conditions
	Vishwamitri	II	Recommended Subject To Conditions
HARYANA	Ghaggar	I	Recommended Subject To Conditions
	Yamuna	I	Recommended Subject To Conditions
HIMACHAL PRADESH	Sukhana	I	Recommended Subject To Conditions
	Markanda	II	Recommended Subject To Conditions
JAMMU & KASHMIR	Devika	II	Recommended Subject To Conditions
KERALA	Karamana	I	Recommended Subject To Conditions
MADHYA PRADESH	Chambal	I	Recommended Subject To Conditions
	Khan	I	Recommended Subject To Conditions
	Kshipra	I	Recommended Subject To Conditions
	Betwa	II	Recommended Subject To Conditions
MAHARASHTRA	Godavari	I	Recommended Subject To Conditions
	Kalu	I	Recommended Subject To Conditions
	Kundalika	I	Recommended Subject To Conditions
	Mithi	I	Recommended Subject To Conditions
	Morna	I	Recommended Subject To Conditions
	Mula	I	Recommended Subject To Conditions
	Mutha	I	Recommended Subject To Conditions
	Nira	I	Recommended Subject To Conditions
	Vel	I	Recommended Subject To Conditions
	Bhima	II	Recommended Subject To Conditions
	Indrayani	II	Recommended Subject To Conditions
	Mula-Mutha	II	Recommended Subject To Conditions
	Pawana	II	Recommended Subject To Conditions
	Wainganga	II	Recommended Subject To Conditions
Wardha	II	Recommended Subject To Conditions	
MANIPUR	Nambul	II	Not Received
MEGHALAYA	Umkhrah	I	Not Recommended
	Umshyrpi	I	Not Recommended
NAGALAND	Dhansiri	I	Not Recommended
ODISHA	Gangua	I	Recommended Subject To Conditions
PUNJAB	Ghaggar	I	Recommended Subject To Conditions
	Satluj	I	Recommended Subject To Conditions
TAMIL NADU	Cauvery	I	Not Recommended
	Sarabanga	I	Not Recommended
	Thirumanimuthar	I	Not Recommended
	Vasista	I	Not Recommended
TELANGANA	Musi	I	Recommended Subject To Conditions
	Manjeera	II	Recommended Subject To Conditions
	Nakkavagu	II	Recommended Subject To Conditions
UTTAR PRADESH	Hindon	I	Not Received
	Kalinadi	I	Not Recommended
	Varuna	I	Not Recommended
	Yamuna	I	Not Recommended
UTTARAKHAND	Bhela	I	Not Recommended
	Dhela	I	Not Recommended
	Suswa	I	Not Recommended
	Kichha	II	Not Recommended
WEST BENGAL	Vindhadhari	I	Recommended Subject To Conditions
	Mahananda	II	Recommended Subject To Conditions

2.5 Displaying the water quality of polluted river stretches by the SPCBs/PCCs on their websites

As per Hon'ble NGT Order dated 19.12.2018, the concerned States/UTs are required to display water quality of identified polluted river stretches. CPCB requested all the concerned States and UTs vide letter dated 31.12.2018 to display water quality of identified polluted rivers and to provide web link address to CPCB. Based on the information received, CPCB updated web link addresses in CPCB web site. Reminders were also sent by email requesting the States for providing web link addresses. *CPCB vide letter dated 22.02.2019 also requested all concerned States and UTs to provide water quality data relating to identified polluted river stretches on monthly basis and also to update the data periodically (every three months) including trends in water quality to achieve the desired water quality criteria with timelines. As on 04.04.2019, States (25 Nos) and 02 UTs have provided web link details.* State-wise details of web link addresses as informed by the States/UTs are given in the **Table 5** below.

Table 5. States Displaying Water Quality of Identified Polluted River Stretches

S No	State	Link
1	Andhra Pradesh	http://appcb.ap.nic.in/water-quality-status-of-polluted-river-stretches-of-andhra-pradesh/
2	Assam	https://pcbassam.org/wqi.php
3	Bihar	http://forestonline.bih.nic.in/rrc/Background.aspx
4	Chhattisgarh	http://enviscecb.org/Data/Revised%20Action%20Plan%20for%20Rejuvenation%20of%20River 28 01 19.pdf
5	DD & DNH	https://daman.nic.in/websites/Pollution-Control-Committee/2019/Water-Quality-Data-of-the-Damanganga-River-2015-2018.pdf
6	Goa	http://goaspcb.gov.in/Media/Default/NWMP/polluted_river_stretches_data2017-18.pdf
7	Gujarat	https://gpcb.gujarat.gov.in/webcontroller/viewpage/water-quality-of-polluted-river-stretches-in-gujarat
8	Haryana	http://hspcb.gov.in/watqual.html
9	Himachal Pradesh	http://hppcb.nic.in/NGT/WQPRS.pdf
10	Jammu & Kashmir	https://jkriverrejuvenation.com/2019/02/07/level-of-bod-evaluated-on-different-identified-polluted-river-stretches-in-jammu-region-during-the-year-2018q1-q4/
11	Jharkhand	http://ispcb.nic.in/quicklink/water-quality-status-of-polluted-river-stretches-of-jharkhand.php
12	Karnataka	https://www.kspcb.gov.in/1water%20data.pdf
13	Kerala	https://www.keralapcb.nic.in/cmsadmin/fileUploads/NWMP_August_2018_up_13-02-2019.pdf
14	Madhya Pradesh	http://210.212.156.39/File_upload/view_WQI%20River_report.aspx
15	Maharashtra	http://mpcb.gov.in/river_strechess/River_strechess.php
16	Meghalaya	http://megspcb.gov.in/Monthly%20Water%20Quality%20Data%20of%20Identified%20Polluted%20River%20Stretches%20in%20Meghalaya.html
17	Mizoram	https://mpcb.mizoram.gov.in/page/polluted-river-data-2019
18	Nagaland	http://npcb.nagaland.gov.in/analysis-report-of-national-water-quality-monitoring-programme-for-december-2018/#
19	Odisha	http://ospcbboard.org/environmental-monitoring-data
20	Puducherry	https://dste.py.gov.in/ppccmain.htm
21	Punjab	http://ppcb.gov.in/attachments/environmental%20data/stretchesdec2018.pdf
22	Rajasthan	http://rspcbmis.environment.rajasthan.gov.in/laboratory/lab_SampleMonitoring_NWMPReport.aspx
23	Telangana	https://tspcb.cgg.gov.in/pages/envdata.aspx
24	Tripura	https://tspcb.tripura.gov.in/ngt673.html
25	Uttar Pradesh	http://www.uppcb.com/water-quality-data-stretches.htm
26	Uttarakhand	http://ueppcb.uk.gov.in/pages/display/168-water-quality-of-polluted-river-stretch
27	West Bengal	http://emis.wbpcb.gov.in/waterquality/showwqprevdatachoosedist.do

Note:-

States/UTs viz., Manipur, Sikkim, Tamil Nadu and Delhi UT are yet to provide web link details w.r.to the water quality of identified polluted river stretches

2.6 Criteria for Identification of Polluted Rivers considering the BOD and Faecal Coliform

In pursuance to the Hon'ble NGT order dated 19.12.2018, CPCB has prepared draft criteria for identification of polluted river locations and the draft has been circulated to all stakeholders seeking comments from State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) vide CPCB letter dated 09.01.2019, for providing comments or views by January 2019. The draft version of the criteria is also placed on CPCB website i.e., <http://cpcb.nic.in/wqm/draft-criteria-polluted-river-03.01.2019.pdf>

As per the draft criteria, the water quality data is required to be analysed and primarily average values of Biochemical Oxygen Demand (BOD) and Faecal Coliform (FC) need to be estimated. Then, based on the total score estimated for the parameters BOD (weightage- 70 %) and FC (Weightage- 30 %), the monitoring location is identified as 'polluted' location. The polluted locations in a continuous sequence are defined as 'polluted river stretch', if the distance between two monitoring locations is less than 10 KMs. To estimate actual self-purification distance or assimilative capacity of the river, requisite input parameters to be considered which varies on case-to-case depending on the local conditions. The monitoring locations may be prioritized in five classes from Priority I to V i.e., critically polluted to non-polluted. Priority –I indicates 'critically polluted'; Priority-II indicates 'severely polluted'; Priority-III indicates 'moderately polluted', Priority-IV indicates 'less polluted' and Priority –V indicates 'non-polluted'.

CPCB is in receipt of comments on the circulated draft criteria for prioritisation of the polluted river location from few States viz., Karnataka, Meghalaya, Mizoram, Odisha, Punjab, Telangana, West Bengal and UT namely Puducherry. SPCBs viz., Telangana, Punjab, Odisha and Mizoram as well as Puducherry Pollution Control Committee (PPCC) which have *agreed with the proposed draft criteria*. A few SPCBs have given comments or views as summarised below: -

- Criteria for perennial and seasonal rivers may be separated as seasonal rivers have no flowing water or very less flowing water during most of the time. In that case, even if the industries located in the recipient waterbodies meet with the specified discharge norms, then also it would be difficult to achieve mass bathing norms

- Draft criteria to be modified for prioritisation of water bodies instead of only for rivers.
- Additional parameters namely Dissolved Oxygen (DO) (indicator parameter of water quality) and Electrical Conductivity (EC) (it affects the water used for drinking and irrigation directly) should be taken into consideration to calculate total score
- Suggested revision for weightage as DO (30 %), BOD (30 %), EC (10 %) and FC (30 %) and also suggested score corresponding to the average values of DO, EC, FC and BOD values
- Criteria may not be applicable for some water bodies especially those locations in the coal mining areas where pH is the most critical parameter. Therefore, suggested to include pH.

CPCB proposes to finalise the draft criteria by April 30, 2019.

2.7 Assessment of river Rangpo in Sikkim falls in Polluted River Category

In pursuance to the Hon'ble NGT order dated 19.12.2018, CPCB requested RD, CPCB (East), Shillong to carryout assessment of the river Rangpo vide CPCB letter dated 01.01.2019. Regional Directorate (East), Central Pollution Control Board, Shillong officials carried out sampling of river Rangpo during January 05-06, 2019 and water samples were collected from Seven (7) locations i.e., Four (4) locations of river Rangpo i.e.,

- i. Water from Up-Stream of Rangpo river of Kumrek,
- ii. Water from Rangpo river at midstream after Cipla Alkem Unit-I,
- iii. Water from midstream of Rangpo river near bridge before confluence with Tista River at Rangpo Town and
- iv. Water from Down-Stream of Rangpo river below TBM after Rangpo Town before confluence with Tista River

Apart from the above locations, samples were also collected from three (3) locations of river Tista i.e., Water from Tista river before confluence with Rangpo Rive before Rangpo town; Water from Tista River after confluence with Rangpo river). River Rangpo is located in the East Sikkim District, Sikkim, India. It is a tributary of the River Tista. It is fed by the River Rangpo chu. The river forms the border between

two Indian states Sikkim and West Bengal at Rangpo town. The Rangpo town in Sikkim lies on its north bank and West Bengal Check Gate lies on south bank of the river.

Immediately after Rangpo Town, it confluences with River Tista. River Rangpo runs through most of East Sikkim and a few parts of the Darjeeling District of North Bengal. It flows mainly from east to west with a variable channel pattern including braided, meandering, straight, gorge and blocked lake. Landslides are common along the river bank as cliff-like bedrocks are significantly exposed along the river valley wall. Rangpo chu, Rishi Khola, Pool Khola, Kumrek Khola are tributaries of River Rangpo. There are 21 industries in the catchment of river Rangpo mainly comprising of Alcoholic Beverages and blending units as well as Pharmaceutical formulation units, However, there are no STPs and CETPs in the drainage basin of river Rangpo. But while collection of samples, the visited team observed human activities like outdoor bathing, washing, river rock mining, river sand mining, open defecation. Mostly bathing activities were observed at all Sampling Locations.

The analysis results of the collected samples reveal that BOD content in river Rangpo is in the order of 1 to 2.8 mg/l which is less than 3 mg/l and therefore conforming to the bathing water quality criteria w.r.to BOD only. However, Total Coliforms (MPN/100ml) and Faecal Coliform in the river Rangpo are found to be in the order of 7500 to 110000 MPN/100 ml and 1100 to 4400 MPN/100 ml respectively. ***CPCB vide letter dated 07.03.2019 (Annexure-IV) requested Sikkim State Pollution Control Board for further action at their end.***

2.8 Issues relating to the Polluted River Stretches

Some of the issues raised by the States/UTs while making presentation in the third meeting of the Task Team held during February 11-12, 2019 are listed and discussed below: -

A. Time lines for compliance to the Hon'ble NGT Directions: -

Hon'ble NGT vide order dated 20.09.2018 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 finalization of the action plans. Most of the States/UTs are proposing at least 2 to 3 years' time lines for ensuring compliance to the Hon'ble NGT orders dated

20.09.2018 and 19.12.2018 to make the polluted water 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 finalization of the action plans, because of the administrative procedures to be followed and also requirement of time towards construction and commissioning activities as a part of implementation of the action plans.

CPCB's view: -

Depending on the stretch-wise infrastructure required to be set-up based on the detailed gap analysis w.r.to municipal sewage management assuming that fund is made available, then time lines be prescribed suitably (but not more than 24 to 36 months in case of sewage management). Notwithstanding to the timelines, States and UTs also be advised immediately to take necessary measures on the lines of action taken by U.P during the recent Kumbh Mela at Prayagraj. This would ensure better water quality in river even while infrastructure for sewage treatment is being set up.

In addition, States/UTs also have to take necessary measures such as dilution of river with fresh water where there is no infrastructure, prevention of disposal of municipal solid waste by providing screens or adoption of bio-remediation /provision of green bridges/ proper O & M of existing STPs, ensuring proper disposal of STP sludges, ODF, etc.,

In case of industries, 100 % strict compliance to the discharge norms by the industries should be ensured and in case of non-compliance, penalty or environmental compensation as per guidelines of CPCB on such industries should be levied in addition to prosecution under various provisions of Rules, as necessary.

B. Rivers which are perennial only to be taken up for the rejuvenation

Some of the States are of the view that the rivers which are non-perennial and seasonal among the Priority-I and Priority-II identified polluted river stretches, primarily such rivers should not be taken up for rejuvenation as it does not give any fruitful results. The industries located in the catchment area of the non-perennial or seasonal river, even if the industry effluent meets the effluent discharge norms, in such a case the recipient waterbodies may not comply with the bathing norms as

there will not be adequate dilution. Also, samples collected during non-monsoon or lean period, such samples reflect only sewage and directly fall in the highly polluted category.

CPCB's view: -

In case of perennial rivers, all States/UTs have to maintain water quality as per the bathing criteria prescribed under Environment (Protection) Rules, 1986. In case of non-perennial rivers, States/UTs have to define the use of water from non-perennial rivers. States/UTs have to (i) make arrangements for safe drinking water arrangements; (ii) display sign boards at salient points in public domain; (iii) Adoption of ZLD by all the industries as well as Zero Sewage Discharge by the local and urban bodies located in river catchment area; (iv) Source control measures like metered water supply, control on abstraction of ground water etc.,

C. Achieving goals of bathing criteria after implementation of action plans

State especially West Bengal informed that it is not possible to achieve the bathing water quality criteria i.e., BOD < 3 mg/l and FC < 1000 MPN/100 ml due to local conditions especially high and low tidal effect on the identified polluted rivers. However, achievable goal with respect to water quality in West Bengal is proposed for 'fisheries and wild life development'. This aspect may be considered subject to ensuring compliance to parameters such as pH between 6.5 to 8.5, Dissolved Oxygen 4mg/l or more, Free Ammonia (as N) 1.2 mg/l or less.

CPCB view:-

All the States/UTs have to clearly define the designated best use of river (as per Class A to Class E prescribed by CPCB) in each identified polluted river stretch so as to arrive at the requisite criteria for implementation of action plans for rejuvenation of the identified polluted river stretch. Such river stretch should meet designated best use standard prescribed by CPCB.

D) Identification of polluted river stretches

Present method followed for identification of polluted river stretches is based on the 'BOD' and needs revisit as the river is declared as 'polluted' merely based on one-time exceedance of the measured values w.r.to the 'BOD'.

CPCB view: -

Categorisation of the identified polluted river stretches may be taken up by the States/UTs henceforth based on revised criteria which is being finalised by CPCB.

E) Performance Guarantee

NGT Directions: - *As per Hon'ble NGT order dated 19.12.2018, performance guarantees are to be furnished for implementation of action plans within the 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, and (iii) Rs. 5 Crore for each of Priority IV & V stretches.*

States View: - States are of the view that submission of performance guarantee is a financial burden and instead such funds shall be utilised for the purpose of implementation of action plans as a part of ensuring compliance to the Hon'ble NGT Directions.

CPCB view: - Performance guarantee assures effective implementation of action plans within the timelines and therefore, following are the suggestions:

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

Above issues may please be considered and appropriate orders may be passed by Hon'ble NGT for taking further actions.

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 at least for one hour in a week lessons relating to protection and improvement of environment. Awareness should be created by organizing suitable awareness programs. In the same matter, the issue of Calcutta tanneries was considered in *M.C. Mehta Vs. Union of India And Ors.*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 laedas'; 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})

¹⁵O.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 (THC) of 2013

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

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

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

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

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

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

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

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

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

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

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

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

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

46. River Hindon has been taken up as a model for preparation of action plan for restoration of water quality.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	20
HARYANA		2				2
HIMACHAL PRADESH	1	1	1		4	7
JAMMU & KASHMIR			1	2	2	4
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 ATAILE VILLAGE	75.0	I
	KUNDALIKA	SALAV TO ROHA	3.8-65	I
	MITHI	POWAI TO	250.0	I

		DHARAVI		
	MORNA	AKOLA TO TAKALIJALAM	52.8	I
	MULA	BOPODI TO AUNDH GAON	33-35	I
	MUTHA	SHIVAJI NAGAR TO KHADAKWASLA DAM	5.0-42.5	I
	NIRA	SANGAVI TO SHINDEWADI	12.5-35	I
	VEL	NHAVARE TO SHIKARPUR	30.2	I
	BHIMA	VITHALWADI TO TAKLI	8.0-22.0	II
	INDRAYANI	MOSHIGAON TO ALANDIGAON	12.5-22	II
	MULA-MUTHA	THEUR TO MUNDHWA BRIDGE	14-22	II
	PAWANA	DAPODI TO RAVET	15.5-24	II
	WAINGANGA	TUMSA TO ASHTI	10.4-22.4	II
	WARDHA	GHUGHUS TO RAJURA	7.0-22.0	II
MANIPUR	NAMBUL	SINGDA DAM TO BISHNUPUR	3.6-23.7	II
MEGHALAYA	UMKHRAH	MAWLAI TO SHILLONG	30-90.2	I
	UMSHYRPI	UMSHYRPI BRIDGE TO DHANKETI	38.5-95.0	I
NAGALAND	DHANSIRI	CHECK GATE TO DIPHU BDG	7.0-50.0	I
ODISHA	GANGUA	D/S BHUWANESHWAR	14-39	I
PUNJAB	GHAGGAR	SARDULGARH TO MUBARAKPUR	9.0-380	I
	SATLUJ	RUPNAGAR TO HARIKA BRIDGE	3.8-108	I
TAMIL NADU	CAUVERY	METTUR TO MAYILADUTHURAI	3.3-32	I
	SARABANGA	THATHAYAMPATTI TO T.KONAGAPADI	78.0	I
	THIRUMANIMUTHAR	SALEM TO PAPPARAPATTI	190.0	I
	VASISTA	MANIVILUNDHAN TO THIYAGANUR	675.0	I
TELANGANA	MUSI	HYDRABAD TO NALGONDA	4.0-60.0	I
	MANJEBERA	GOWDICHARLA TO NAKKAVAGU	5.0-26	II
	NAKKAVAGU	GANDILACHAPET TO SEVALAL THANDA	26.0	II
UTTAR PRADESH	HINDON	SAHARANPUR TO GHAZIABAD	48-120	I
	KALINADI	MUZAFFAR NAGARTO GULAOTHI TOWN	8 - 78	I
	VARUNA	RAMESHWAR TO CONF WITH GANGA, VARANASI	4.5-45.2	I
	YAMUNA	ASGARPUR TO ETAWAH SHAHPUR TO ALLAHABAD (BALUA GHAT)	12.0-55	I
UTTARAKHAND	BHELA	KASHIPUR TO RAJPURA ATNDA	6.0-76.0	I
	DHELA	KASHIPUR TO GARHUWALA, THAKURDWARA	12 - 80	I
	SUSWA	MOTHRWALA TO RAIWALA	37.0	I
	KICHHA	ALONG KICHHA	28.0	II
WEST BENGAL	VINDHADHARI	HAROA BRIDGE TO 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, DHEMAJI	4.8	V
	Jai Bharali	ALONG SONITPUR	3.1	V
	JHANJI	JORHAT TO CHAWDANG	3.8	V
	KALONG	NAGAON TO MORI KALONG	3.7 - 4.3	V
	KAPILI	NAGAON TO KAMPUR TOWN	5.5	V
	KILLING	ALONG MOREGAON	5.8	V
	KOHORA	KOHORA TO MOHPARA	4.4	V
	KULSI	ALONG CHAYGAON	3.6	V
MALINI	ALONG RAMNAGAR, SILCHAR	5.3	V	
MORA BHARALI	ALONG TEZPUR	5.2	V	

	PARASHALI	ALONG DEMORIA	4.0	V
	PUTHIMARI	ALONG PUTHIMARI	4.8	V
	RANGA	ALONG GERAMUKH	3.8	V
	SAMAGURI	ALONG SAMAGURI, NAGAON	4.0	V
	SANKOSH	ALONG GOLAKGANJ	3.3	V
	SON	ALONG DEODHAR, KARIMGANJ	4.3	V
	SONAI	SONAI TO DAKSHIN MOHANPUR	4.4	V
	TENGA PUKHURI	ALONG KUKURACHOWA GAON	4.0	V
BIHAR	SIRSIA	RUXOL TO KOIREA TOLA (RAXAUL)	20.0	III
	FARMAR	ALONG JOGBANI	3.6	V
	GANGA	BUXAR TO BHAGALPUR	3.2 - 4.2	V
	POONPUN	GAURICHAK TO FATUHA	3.3	V
	RAM REKHA	HARINAGAR TO RAMNAGAR	5.0	V
	SIKRAHNA	ALONG NARKATIAGANJ	4.5	V
CHHATTISGARH	HASDEO	KORBA TO URGU	3.6 - 7	IV
	KHARON	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	III
	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
	MESHWA	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

JAMMU & KASHMIR	GIRI	ALONG SAINJ	4.4 - 6	V
	PABBAR	ALONG ROHRU	3.6 - 4	V
	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
JHARKHAND	SINDH	ALONG DUDERHAMA	3.7	V
	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
	TUNGBHADRA	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

MADHYA PRADESH	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
	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

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

	TUIRIAL	ALONG TUIRIAL, AIZWAL	3.4-4.6	V	
NAGALAND	DZUNA	ALONG KOHIMA	6.0-13.0	III	
	CHATHE	MEDZIPHEMA TO, DIMAPUR	7.0	IV	
	DZU	KOHIMA TO DZUKO VALLEY	7.0	IV	
	DZUCHA	ALONG KOHIMA	4.0	V	
	SANO	ALONG KOHIMA	4.0	V	
ODISHA	GURADIH NALLAH	ALONG ROURKELA	11.3	III	
	KATHAJODI	CUTTACK TO URALI	5.8-11.2	III	
	NANDIRAJHOR	D/S TALCHER	2.7 - 13	III	
	DAYA	BHUBANESWAR TO BARAGARH	4.0-7.3	IV	
	KUAKHAI	URALI TO BHUBANESWAR	6.7-7.7	IV	
	BANGURU NALLAH	ALONG TALCHER RENGALI	3.2	V	
	BHEDEN	ALONG BHEDEN	3.6	V	
	BRAHAMANI	ROURKELA TO BIRITOL	5.8-6.0	V	
	BUDHABALNAGA	MAHULIA TO BARIPADA	3.5	V	
	KUSUMI	ALONG ANGUL TALCHER	3.2	V	
	MAHANADI	SAMBALPUR TO PARADEEP	3.6	V	
	MANGALA	ALONG PURI	5.7	V	
	NAGAVALLI	JAYKAYPUR TO RAYAGADA	3.5	V	
	NUNA	ALONG BIJIPUR, PURI	3.1	V	
	RATNACHIRA	ALONG BHUBHNEHWAR, 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 KARAIKAL	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 BURTUUK	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 TOARUMUGANERI	3.1-4.0	V	
TELANGANA	KARAKAVAGU	ALONG PALWANCHA	18.0	III	
	MANER	WARANGAL TO SOMNAPALLI	6-20.0	III	
	GODAVARI	BASAR TO KHAMMAM	4.0-9.0	IV	
	KINNERSANI	ALONG PALWANCHA	10.0	IV	
	KRISHNA	THANGADIGI TO WADAPALLY	5.0-6.0	V	
TRIPURA	BURIGAON	ALONG BISHALGARH	3.9	V	
	GUMTI	TELKAJILA TO AMARPUR	3.9	V	
	HAORA	AGARTALA TO BISHRAMGANJ	3.2-4.0	V	
	JURI	ALONG	4.9	V	

		DHARMANAGAR		
	KHOWAI	ALONG TELIAMURA	3.3	V
	MANU	ALONG KAILASHAHAR	3.5-3.6	V
UTTAR PRADESH	GOMTI	SITAPUR TO VARANASI	3.1-18.0	III
	GANGA	KANNAUJ TO VARANASI	3.5-8.8	IV
	RAMGANGA	MURADABAD TO KANNAUJ	6.6	IV
	BETWA	HAMIRPUR TO WAGPURA	3.5-4.2	V
	GHAGHARA	BARHALGANJ TO DEORIA	4.0-4.5	V
	RAPTI	DOMINGARH TO RAJGHAT	4.7-5.9	V
	SAI	UNNAO TO JAUNPUR	4.0-4.5	V
	SARYU	AYODHYA TO ELAFATGANJ	4.3	V
	UTTARAKHAND	KALYANI	D/S PANT NAGAR	16.0
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 (T.NURC), "Stench Grips Mansa's Sacred Ghuggar 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 Mehra 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. 04 & 05

Court No. 1

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

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

WITH

Original Application No. 727/2018

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

Titled

"More river stretches are now critically polluted: CPCB

WITH

Dr. Tudi Indrasena Reddy & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 19.12.2018

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

For Applicant(s): Mr. Sravan Kumar, Advocate in Original Application No. 727/2018

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

ORDER

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

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

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

¹ (1987) 4 SCC 463 ¶14 & (1988) 1 SCC 471

² (1997) 2 SSC 411

³ (1996) 5 SSC 647

⁴ (1997) 2 SCC 87

⁵ (2009) 17 SSC 720

⁶ (2009) 9 SSC 737

⁷ (2018) 11 SCC 734

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

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

¹⁰ O.A. No. 58/2017

¹¹ O.A.No. 101/2014

¹² O.A. No. 456/2018

¹³ O.A. No. 138/2016 (TnhrC)

¹⁴ O.A. No. 231/2014

¹⁵ O.A. No. 125/2018

¹⁶ O.A. No. 116/2014

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

¹⁸ O.A.No. 173 of 2018

¹⁹ O.A No. 56 (Tnrc) of 2013

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

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

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

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

- i. Execution of field surveys to assess pollution load generated by industries and sewage generated in a city or town discharging sewage and trade effluent into river Hindon and its tributaries.
- ii. Collating water quality monitoring data of river Hindon and its tributaries and assigning the class as per primary water quality criteria.
- iii. Water quality assessment of river in context of sewage/industrial drain outfalls with dilution and distance factors.
- iv. Laying time-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.

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

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

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

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

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

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

12. By way of last opportunity, we extend the time for preparation of action plans till 31.01.2019 with the stipulation that for every delay thereafter, compensation for damage to the environment will be payable by each of the States/ UTs at the rate of Rs. One Crore per month for each of the Priority- I and Priority- II stretches, Rs. 50 lacs per month for stretches in Priority- III and Rs. 25 lacs per month each for Priority- IV and Priority- V stretches. The payment will be the responsibility of the Chief Secretaries of the States/Administrators of the UTs and the amount may be recovered from the erring officers. The CPCB may prominently place the names of the defaulting States and UTs and a notice to this effect on its website.

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

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

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

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

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

List for further consideration on 08.04.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

December 19, 2018

Original Application Nos. 673/2018 & 727/2018

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Central Pollution Control Board
(Ministry of Environment, Forest & Climate Change, Govt. of India)
Parivesh Bhawan, East Arjun Nagar,
Delhi – 110032

Minutes of 4th meeting of the Task Team for ensuring compliance to Hon'ble NGT (PB), New Delhi order dated 20.09.2018 and 19.12.2018 in OA No 673/2018 in the Matter of News Item Published in 'THE HINDU' Titled "More river stretches are now critically polluted: CPCB" held on 28.03.2019 in Committee Room, 4th Floor, CPCB, Delhi

Fourth meeting of the Task Team was held on 28th March, 2019 in CPCB, under the Chairmanship of Sh. A. Sudhakar, AD, CPCB for reviewing the revised action plans received from SPCBs/PCCs viz. Daman, Diu and Dadra Nagar Haveli, Delhi, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Meghalaya, Odisha and Telangana for rejuvenation of identified polluted river stretches in compliance to Hon'ble NGT orders dated 20/09/2018 and 19/12/2018. List of participants is Annexed (Annexure-I).

Sh. A. Sudhakar, AD & DH, WQM-I, CPCB, informed that the Member Secretary has to leave for Ahmedabad, he may not attend today's meeting and thereafter welcomed the members of the Task Team. He reiterated that as per Hon'ble NGT vide its order dated 19.12.2018 directed all States/PCCs to display their water quality on their website and States/PCCs not displaying water quality in spite of several communications will be declared as defaulter in the final report to be submitted before Hon'ble NGT and requested Sh. J.C. Babu, AD, CPCB to brief about the updates w.r.to action plans received from all SPCBs/PCCs, web-link display pertaining to water quality of polluted river and constitution of River Rejuvenation Committee by all the States/UTs for ensuring compliance to the Hon'ble NGT orders dated 20/09/2018 and 19/12/2018.

Sh. J.C. Babu, AD, CPCB, informed that the Action plans have been received from most of the State Boards except Manipur, Assam and U.P. (river Hindon). Updated status on State-wise action plans received is given at **Annexure-II**. The web-link displaying water quality data of the identified polluted river stretches at the web-site of SPCB /PCC viz., Manipur, Sikkim, Tamil Nadu and Delhi is yet to be received and its details are given at **Annexure-III**. As regards to the constitution of River Rejuvenation Committee (RRC) by the State Governments or UT Administrations, Jharkhand State is the only State which is yet to communicate about the constitution of its RRC. State-wise status of constitution of RRC is given at **Annexure -IV**.

Thereafter, Sh. Rohit Kakkar, Advisor, CPHEEO/MoHUA raised issues regarding allocating funds from the concerned Ministry under Central Govt. for implementation of the action plans provided (i) All States must quote realistic budget estimates to obtain financial aid from the concerned Ministry, for commissioning of STPs/CETPs; and (ii) For rejuvenation of Polluted river stretches apart from STPs/CETPs & their performance, action plans be proposed for setting up of aerators, by respective Departments, for improvement of river water quality to maintain bathing water quality criteria.

Task Team decided that any State deleting any of the stretches from the present list of polluted stretches (as given in Hon'ble NGT order dated 20/09/2018) may file their reply before the Hon'ble NGT separately describing the rationale behind the same and may delete only if NGT directs

accordingly. The Revised Action Plans in respect of P-I & P-II which were not recommended earlier viz., Damanganga (Daman, Diu and Dadra Nagar Haveli), Yamuna (Delhi), Devika (Jammu & Kashmir), Betwa and Chambal (Madhya Pradesh), 9 P-I & 6 P-II Polluted river stretches (Maharashtra), Umkhrah & Umshympri (Meghalaya), Gangua (Odisha) were reviewed as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018 by the Task Team members.

Main Decision of the Task Team on the action plans for rejuvenation of polluted river stretches are as follows:

S.No	Name of the river	Observations/Suggestions of the CPCB Task Team	Recommendations of the CPCB Task Team
1	Damanganga (Daman, Diu and Dadra Nagar Haveli)	Strict enforcement w.r.to industrial effluent discharge is suggested. All industrial units should be asked to achieve ZLD status and no industrial wastewater partial/ fully treated be allowed to discharge in the River	Recommended subject to conditions.
2	Yamuna (Delhi)	DPCC submitted only the Executive summary with time line. Action plan wise budget is not given. NMCG representative suggested that since Delhi has huge no. of industries and action plan does not cover all the industries operating in Delhi. Therefore, all the licensed industries having registered GST No and Aadhar No. may be interlinked for estimating total no of industries and detailed gap analysis w.r.to industrial effluent as well as hazardous waste management.	Not Recommended. The action plans submitted by Delhi Govt. needs to be revised and resubmitted by the Delhi Govt.
3	Devika, Jammu & Kashmir:	Revised action plan was reviewed and it was observed that action plan for rejuvenation of River Devika is already being implemented under AMRUT Scheme.	Approved subject to achievable water quality and timelines and other aspects as per Hon'ble NGT order dated 20.09.2018 & 19.12.2018
4	Betwa and Chambal, Madhya Pradesh	In case of action plans for river Betwa, detailed gap analysis w. r. to Industrial pollution control need to be included wherever applicable. In case of action plan for river Chambal, ground water quality is exceeding the limit prescribed under IS 10500-2012 at few locations for parameters such as TDS, Chlorides, Total Hardness (including Calcium and Magnesium Hardness), Sulphates as well as Mercury content. Also, observed fluoride content is higher than the acceptable limit at few locations. Such contaminated ground water should not be	Action plans Recommended subject to conditions.

S.No	Name of the river	Observations/Suggestions of the CPCB Task Team	Recommendations of the CPCB Task Team
		allowed for drinking purpose and such ground water sources should be capped or closed and alternate arrangements need to be made by the local/urban bodies wherever applicable.	
5	9 polluted river stretches of P-I category & 6 polluted river stretches of P-II category- Maharashtra	Revised action plan reviewed and the action plan requires action plan wise budget estimates with break up and organization responsible for implementation of action plan.	Recommended subject to conditions.
6	Umkhrah & Umshympri Meghalaya:	Since only the executive summary was submitted highlighting responsible agency for the particular task, therefore action plan needs to be revised including all the aspects viz., detailed gap analysis w.r.to Industrial, sewage and municipal solid waste management along with budget estimate and timelines and other aspects as per the Hon'ble NGT orders dated 20.09.2018 and 19.12.2018 also be included.	Not recommended
7	Gangua (Odisha)	Revised action plans reviewed and it was observed that action plan covering aspects w.r.to Flood Plain Zone protection and its management, rain water harvesting, ground water recharge aspect, maintaining E-Flows and water shed management, good irrigation practices setting up of Bio-diversity parks including removal of encroachment and plantation on both sides of river to be included in the action plan.	Recommended for subject to conditions

Task Team also suggested CPCB to review the action plans submitted by the States/UTs in respect of P-III to P-IV category polluted river stretches and also to communicate the observations to the respective States/UT for incorporating necessary suggestions & for initiating further action for ensuring compliance to Hon'ble NGT orders dated 20.09.2018 and 19.12.2018.

Comments on the 'draft Criteria for identification of polluted river locations' provided by SPCBs/PCCs were also discussed and the Task Team suggested for its finalization based on the comments received from various stakeholders.

The Meeting ended with vote of thanks to the Chair.

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Annexure -ILIST OF PARTICIPANTS

4th Task Team meeting for Scrutiny of Action Plans for Restoration of Polluted River Stretches in compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 2018 & 19th December, 2018 in O.A.No.673/2018 in the matter of News Item published in 'The Hindu' titled "More River Stretches are Now Critically Polluted: CPCB"

Venue: Committee Room, 4th Floor, CPCB, Delhi

Date: 28th March, 2019

S.No.	NAME	DESIGNATION	ORGANISATION	EMAIL	Mobile No.
1	Sh. A.Sudhakar	DH, WQM-I	CPCB	asudhakar.cpcb@nic.in	8800326699
2	Sh. Rohit Kakkar	Dy. Advisor	CPHEEO/ MoHUA	rohit.kakkar@nic.in	8750622900
3	Sh. R. M. Bhardwaj	Consultant	NMCG, MoWR, RD &GR	rmbhardwaj@gmail.com	9868211284
4	Sh. J.C.Babu	Scientist E, WQM-I	CPCB	jcb.cpcb@nic.in	
5	Dr. Deepali Agarwal	RA	CPCB	cpcb.nwmp@gmail.com	
6	Ms. Deepty Goyal	JRF	CPCB	cpcb.nwmp@gmail.com	

Annexure-II

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 and 19.12.2018 in OA No. 673 of 2018 (as on 27.03.2019)

Name of the State / UT	Total No. of Identified Polluted River stretches (PRS)	Priority I Identified Polluted River stretches		Priority II Identified Polluted River stretches		Priority – III to V Identified Polluted River stretches		Total Action Plans Received
		No. of P-I PRS	Action Plans received w.r.to P-I	No. of P-II PRS	Action Plans received w.r.to P-II	No. of P-III to P-V	Action Plans received w.r.to P-III to P-V	
AP	5	0	0	0	0	5	5	5
Assam	44	3	0	1	0	40	1	1
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	4	4
Gujarat	20	5	5	1	1	14	14	20
Haryana	2	2	2	0	0	0	0	2
HP	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	0	1
MP	22	3	3	1	1	18	0	4
Maharashtra	53	9	9	6	6	38	38	53
Manipur	9	0	0	1	0	8	0	0
Meghalaya	7	2	2	0	0	5	5	7
Mizoram	9	0	0	0	0	9	0	0
Nagaland	6	1	1	0	0	5	5	6
Odisha	19	1	1	0	0	18	8	9
Puducherry	2	0	0	0	0	2	2	2
Punjab	4	2	2	0	0	2	2	4
Rajasthan	2	0	0	0	0	2	2	2
Sikkim	4	0	0	0	0	4	4	4
Tamil Nadu	6	4	4	0	0	2	2	6
Telangana	8	1	1	2	2	5	5	8
Tripura	6	0	0	0	0	6	6	6
UP	12	4	3	0	0	8	6	9
Uttarakhand	9	3	3	1	1	5	5	9
West Bengal	17	1	1	1	1	15	15	17
Grand Total	351	45	41	16	14	290	177	232

Annexure-III

States displaying Water Quality of Identified Polluted River Stretches (as on 27.03.2019)

S No	State	Link
1.	Andhra Pradesh	http://appcb.ap.nic.in/water-quality-status-of-polluted-river-stretches-of-andhra-pradesh/
2.	Goa	http://goaspcb.gov.in/Media/Default/NWMP/polluted_river_stretches_data2017-18.pdf
3.	Gujarat	https://gpcc.gujarat.gov.in/webcontroller/viewpage/water-quality-of-polluted-river-stretches-in-gujarat
4.	Madhya Pradesh	http://210.212.156.39/File_upload/view_WQI%20River_report.aspx
5.	Jammu & Kashmir	https://jkriverrejuvenation.com/2019/02/07/level-of-bod-evaluated-on-different-identified-polluted-river-stretches-in-jammu-region-during-the-year-2018q1-q4/
6.	Uttarakhand	http://ueppcb.uk.gov.in/pages/display/168-water-quality-of-polluted-river-stretch
7.	West Bengal	http://emis.wbpcb.gov.in/waterquality/showwqprevdatachoosedist.do
8.	Punjab	http://ppcb.gov.in/attachments/environmental%20data/stretchesdec2018.pdf
9.	Nagaland	http://npcb.nagaland.gov.in/analysis-report-of-national-water-quality-monitoring-programme-for-december-2018/#
10.	Haryana	http://hspcb.gov.in/watqual.html
11.	Kerala	https://www.keralapcb.nic.in/cmsadmin/fileUploads/NWMP_August_2018_up_13-02-2019.pdf
12.	Assam	https://pcbassam.org/wqi.php
13.	Karnataka	https://www.kspcb.gov.in/1water%20data.pdf
14.	Rajasthan	http://rspcbmis.environment.rajasthan.gov.in/laboratory/lab_SampleMonitoring_NWMPReport.aspx
15.	Telangana	https://tspcb.cgg.gov.in/pages/envdata.aspx
16.	Maharashtra	http://mpcb.gov.in/river_stretches/River_stretches.php
17.	Odisha	http://ospboard.org/environmental-monitoring-data
18.	Daman, Diu And Dadra Nagar Haveli	https://daman.nic.in/websites/Pollution-Control-Committee/2019/Water-Quality-Data-of-the-Damanganga-River-2015-2018.pdf
19.	Himachal Pradesh	http://hppcb.nic.in/NGT/WQPRS.pdf
20.	Puducherry	https://dste.py.gov.in/ppccmain.htm
21.	Tripura	https://tspcb.tripura.gov.in/ngt673.html
22.	Uttar Pradesh	http://www.uppcb.com/water-quality-data-stretches.htm
23.	Bihar	http://forestonline.bih.nic.in/rrc/Background.aspx
24.	Jharkhand	http://jspcb.nic.in/quicklink/water-quality-status-of-polluted-river-stretches-of-jharkhand.php
25.	Mizoram	https://mpcb.mizoram.gov.in/page/polluted-river-data-2019
26.	Meghalaya	http://megspcb.gov.in/Monthly%20Water%20Quality%20Data%20of%20Identified%20Polluted%20River%20Stretches%20in%20Meghalaya.html
27.	Chhattisgarh	http://enviscecb.org/Data/Revised%20Action%20Plan%20for%20Rejuvenation%20of%20River_28_01_19.pdf

- States not displaying Water Quality of Identified Polluted River Stretches

1. Delhi
2. Manipur
3. Sikkim
4. Tamil Nadu

Annexure-IV

State-wise status regarding Constitution of 'River Rejuvenation Committee (RRC) in compliance to Hon'ble NGT Orders dated 20.09.2018 and 19.12.2018 in the matter of OA No. 673 of 2018 (as on 27.03.2019)

S. No.	STATE/UNION TERRITORY	Total No. of Identified Polluted River Stretches (P-I) to P-V)	Status of RRC Constitution	Date of Constitution
1	ANDHRA PRADESH	5	Yes	05.12.2018
2	ASSAM	44	Yes	24.12.2018
3	BIHAR	6	Yes	31.12.2018
4	CHHATTISGARH	5	Yes	22.11.2018
5	DAMAN, DIU AND DADRA NAGAR HAVELI	1	Yes	08.01.2019
6	DELHI	1	Yes	22.10.2018
7	GOA	11	Yes	21.11.2018
8	GUJARAT	20	Yes	29.11.2018
9	HARYANA	2	Yes	8.11.2018
10	HIMACHAL PRADESH	7	Yes	17.11.2018
11	JAMMU & KASHMIR	9	Yes	15.10.2018
12	JHARKHAND*	7	-	*
13	KARNATAKA	17	YES	24.11.2018
14	KERALA	21	Yes	12.12.2018
15	MADHYA PRADESH	22	Yes	01.11.2018
16	MAHARASHTRA	53	Yes	13.12.2018
17	MANIPUR	9	Yes	05.03.2019
18	MEGHALAYA	7	YES	24.01.2019
19	MIZORAM	9	YES	05.12.2018
20	NAGALAND	6	Yes	06.12.2018
21	ODISHA	19	Yes	12.11.2018
22	PUDUCHERRY	2	Yes	13.11.2018
23	PUNJAB	4	Yes	20.11.2018
24	RAJASTHAN	2	Yes	06.11.2018
25	SIKKIM	4	YES	23.01.2019
26	TAMIL NADU	6	Yes	26.12.2018
27	TELANGANA	8	Yes	29.11.2018
28	TRIPURA	6	Yes	01.11.2018
29	UTTAR PRADESH	12	Yes	14.12.2018
30	UTTARAKHAND	9	Yes	05.12.2018
31	WEST BENGAL	17	Yes	07.01.2019
	Grand Total	351		

* Information is not available with CPCB



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT. OF INDIA

F.No.A-14011/1/2019-WQM-I

07.03.2019

To

The Member Secretary,
Sikkim State Pollution Control Board,
Department of Forest,
Environment & Wildlife Management Government of Sikkim,
Deorali, Gangtok. -737102

Sub: Compliance to Hon'ble NGT (PB) New Delhi order dated 19th December, 2018 in Original Application No. 673/2018 in the matter of news item published in 'The Hindu' titled "More river stretches are now critically polluted: CPCB"

Ref: RD North East letter no. RD/NE/735/NGT(PB)/2018-19/1348 dated 07.02.2019

Sir,

With reference to above, the analysis results of river Rangpo and River Tista are reviewed. Based on the water quality results, it has been observed that water quality of the two rivers is not complying with respect to Primary Water Quality Criteria for Bathing for Fecal Coliform parameter which may be due to discharge of untreated/ partially treated sewage into the River. Copy of the analysis results is enclosed for ready reference.

In view of above, it is requested to issue necessary Directions under Environment (Protection) Act, 1986 to the concerned Municipal Corporations and Urban Local Bodies for ensuring proper treatment and utilization of treated sewage.

The action taken report may kindly be send at an early date to CPCB.

Yours faithfully,

(A. Sudhakar)

DIL WQM-I Division

Encl: As above