

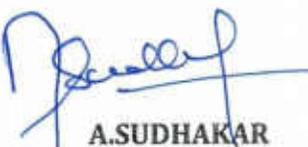
**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
OA. No.673 OF 2018**

IN THE MATTER OF:

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

INDEX

SI NO.	PARTICULAR	PAGE NO.
1.	CONSOLIDATED REPORT IN THE MATTER OF OA No. 673/2018, NEWS ITEM PUBLISHED IN 'THE HINDU' AUTHORED BY SHRI. JACOB KOSHY TITLED "MORE RIVER STRETCHES ARE NOW CRITICALLY POLLUTED: CPCB".	
2.	ANNEXURE- I HON'BLE TRIBUNAL ORDER DATED 20.09.2018	
3.	ANNEXURE- II HON'BLE TRIBUNAL ORDER DATED 19.12.2018	
4.	ANNEXURE- III LETTER TO MEMBER SECRETARY (SPCBs/PCCs) FROM DIVISIONAL HEAD, WQM-I CPCB DATED: 28.09.2018	
5.	ANNEXURE- IV LETTER TO MEMBER SECRETARY (SPCBs/PCCs) FROM DIVISIONAL HEAD, WQM-I CPCB DATED: 28.11.2018.	
6.	ANNEXURE- V LETTER TO MEMBER SECRETARY (SPCBs/PCCs) FROM DIVISIONAL HEAD, WQM-I CPCB DATED: 11.12.2018	
7.	ANNEXURE- VI CPCB CONSTITUTED A 'TASK TEAM' UNDER THE CHAIRMANSHIP OF MEMBER SECRETARY, CPCB, VIDE LETTER DATED 14.11.2018.	
8.	ANNEXURE- VII MINUTES OF 1 st MEETING OF THE 'TASK TEAM' HELD ON 14.12.2018.	
9.	ANNEXURE- VIII MINUTES OF 2 ND MEETING OF 'TASK TEAM' HELD ON 05.01.2019.	
10.	ANNEXURE- IX MINUTES OF 3 rd MEETING OF 'TASK TEAM' HELD ON 11.02.2019 to 12.02.2019.	
11.	ANNEXURE- X LETTER TO MEMBER SECRETARY (SPCBs/PCCs) FROM DIVISIONAL HEAD, WQM-I CPCB DATED: 22.02.2019.	
12.	ANNEXURE- XI CRITERIA FOR PRIORITISATION OF POLLUTED RIVER LOCATING. (DRAFT)	
13.	ANNEXURE- XII ANALYSIS REPORT OF WATER SAMPLES OF SOME OF THE LOCATIONS OF RANGPO RIVER & TISTA RIVER, SIKKIM BY PCB, ASSAM.	


A.SUDHAKAR
SCIENTIST 'E'

**CENTRAL POLLUTION CONTROL BOARD
EAST ARJUN NAGAR
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**PLACE: DELHI
DATED: 27.02.2019**

**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"

**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"**



**CENTRAL POLLUTION CONTROL BOARD
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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 nqt.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 Requested SPCBs and PCCs for preparation and submission of the action plans for rejuvenation of polluted river stretches including constitution of River Rejuvenation Committee (RRC): -

In pursuance to the Hon'ble National Green Tribunal, this answering respondent i.e., Central Pollution Control Board (CPCB) vide letters dated 28.09.2018 requested 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 respective jurisdiction of the State /Union Territory Administration and reminded the SPCBs and PCCs vide letters dated 28.09.2018, 28.11.2018 and 11.12.2018. Copies of the CPCB letters dated 28.09.2018, 28.11.2018 and 11.12.2018 are annexed (Annexure III to Annexure-V).

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

As per the information available with CPCB, 26 States Viz., Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, J & K, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Mizoram, 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, GOJ' is already in place and three meetings has already taken place. The formal notification of RRC is in process and it may be sent within two days. However, the status with regard to the constitution of the 'River Rejuvenation Committee' by the States of Manipur is not available with CPCB.

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) as on 25.02.2019

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	-	Informed that the file under submission
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	-	-
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

2.2 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 and a copy of which is enclosed as **Annexure-VI**.

So far, CPCB has organised three meetings of the Task Team and the details are as given below:-

- First meeting of the Task Team was held on 14.12.2018 in CPCB and Task Team has finalised the check list for scrutiny of the river rejuvenation action plans.
- Second meeting of the task team was held on 05.01.2019 and considered the few draft action plans prepared by the few SPCBs.
- Third meeting of the Task Team was held in CPCB during February 11-12, 2019.

The Minutes of the three meetings of the Task Teams are enclosed as **Annexures-VII to Annexure-IX**.

2.3 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: -

There are 351 total no. of identified polluted rivers (w.r.to BOD) in 28 States and 3 UTs. 45 out of 321 polluted rivers and 16 out of 351 polluted rivers fall under the category P-I and P-II respectively. Remaining 290 Polluted river stretches fall under the category P-III to P-V. 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 136 action plans received w.r.to P-III to P-V polluted river stretches.

Action plans w.r.to P-I and P-II polluted river stretches has not been received from the States of Assam, Manipur as well as Uttar Pradesh (in case of river Hindon).

State-wise Identified Polluted Rivers and the Status of Action Plans received (as on 25.02.2018) is given in **Table 2**.

In the third meeting of the Task Team which was held during February 11-12, 2019, 17 States and 03 UTs have made presentations before the task team on the action plans prepared in respect of the Priority-I and Priority-II identified polluted river stretches by the respective State/UT *except 03 States namely Assam, Manipur and Nagaland. 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 and P-II:1), Manipur (P-II: 2) and Uttar Pradesh (P-I: 1 i.e. river Hindon).*

Table 2. State-wise Identified Polluted Rivers and the Status of Action Plans received by CPCB (as on 25.02.2018)

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	1	1
Chhattisgarh	5	0	0	0	0	5	5	5
Daman, Diu And Dnh	1	1	1	0	0	0	0	1
Delhi	1	1	1	0	0	0	0	1
Goa	11	0	0	0	0	11	11	11
Gujarat	20	5	5	1	1	14	14	20
Haryana	2	2	2	0	0	0	0	2
Himachal Pradesh	7	1	1	1	1	5	0	2
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	0	15
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	136	191

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

STATE	Total Identified Polluted River Stretches (PRS) Priority-I & Priority II	Identified PRS Priority-I	Identified Priority - II	Action Plans Received	Action Plans Not Received	Action Plans Not Recommended	Recommended subject to conditions
ASSAM	4	3	1	0	4	0	0
DAMAN, DIU AND DADRA NAGAR HAVELI	1	1	0	1	0	1	0
DELHI	1	1	0	1	0	1	0
GUJARAT	6	5	1	6	0	0	6
HARYANA	2	2	0	2	0	0	2
HIMACHAL PRADESH	2	1	1	2	0	0	2
JAMMU & KASHMIR	1	0	1	1	0	1	0
KERALA	1	1	0	1	0	0	1
MADHYA PRADESH	4	3	1	4	0	2	2
MAHARASHTRA	15	9	6	15	0	15	0
MANIPUR	1	0	1	0	1	0	0
MEGHALAYA	2	2	0	2	0	2	0
NAGALAND	1	1	0	1	0	1	0
ODISHA	1	1	0	1	0	1	0
PUNJAB	2	2	0	2	0	0	2
TAMIL NADU	4	4	0	4	0	4	0
TELANGANA	3	1	2	3	0	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	0	2
TOTAL	61	45	16	55	6	35	20

Out of 55 out of 61 total action plans received so far, 20 action plans pertaining to the States of Gujarat [P-I (5), P-II (01)], Haryana [P-I (01), P-II (01)], Himachal Pradesh [P-I (01), P-II (1)], Kerala [P-I (01)], Madhya Pradesh [P-I (02)], Punjab [P-I (02)], Telangana [P-I (01), P-II (02)] and West Bengal [P-I (01) and P-II (01)] have been recommended by the Task Team for approval subject to the conditions.

35 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.to 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.to industrial water consumption, wastewater generation, existing infrastructure for treatment of industrial effluent (both captive CTPs/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 the 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 of biodiversity parks on flood plains by removing encroachment., proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP), upgradation of existing sewage treatment plants if not in a position to comply with the effluent discharge norms, emphasis on utilization of treated sewage so as to minimize extraction of ground or surface water also 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 the action plans

State-wise and River-wise recommendations of the Rask 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 NAME	PRIORITY	RECOMMENDATIONS OF THE CPCB TASK TEAM
ASSAM	Bharalu	I	Not Received
	Borsola	I	Not Received
	Silsako	I	Not Received
	Sorusola	II	Not Received
DAMAN, DIU AND DADRA NAGAR HAVELI	Damanganga	I	Not Recommended
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

NAME OF THE STATE/UT	POLLUTED RIVER NAME	PRIORITY	RECOMMENDATIONS OF THE CPCB TASK TEAM
HARYANA	Sabarmati	I	Recommended Subject To Conditions
	Vishwamitri	II	Recommended Subject To Conditions
	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	Not Recommended
KERALA	Karamana	I	Recommended Subject To Conditions
MADHYA PRADESH	Chambal	I	Not Recommended
	Khan	I	Recommended Subject To Conditions
	Kshipra	I	Recommended Subject To Conditions
	Betwa	II	Not Recommended
MAHARASHTRA	Godavari	I	Not Recommended
	Kalu	I	Not Recommended
	Kundalika	I	Not Recommended
	Mithi	I	Not Recommended
	Morna	I	Not Recommended
	Mula	I	Not Recommended
	Mutha	I	Not Recommended
	Nira	I	Not Recommended
	Vel	I	Not Recommended
	Bhima	II	Not Recommended
	Indrayani	II	Not Recommended
	Mula-Mutha	II	Not Recommended
	Pawana	II	Not Recommended
	Wainganga	II	Not Recommended
	Wardha	II	Not Recommended
MANIPUR	Nambul	II	Not Received
MEGHALAYA	Umkhrah	I	Not Recommended
	Umshyrpi	I	Not Recommended
NAGALAND	Dhansiri	I	Not Recommended
ODISHA	Gangua	I	Not Recommended
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

2.4 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 the water quality of identified polluted river stretches. CPCB requested all the concerned States and UTs vide letter dated 31.12.2018 to display the water quality of identified polluted rivers and to provide the web link address to CPCB. Based on the information received CPCB updated the web link address in

CPCB web site. Reminders were also sent by email requesting the States for providing the web Link address.

As on 27.02.2019, States (23 Nos) have provided the web link addresses to CPCB. 08 States viz., Chhattisgarh, Delhi, Manipur, Meghalaya, Mizoram, Sikkim, Tamil Nadu and Uttar Pradesh are yet to provide web link address to CPCB. CPCB vide letter dated 22.02.2019 also requested all the 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 the trend in water quality to achieve the desired water quality criteria with timelines. A copy of the CPCB letter dated 22.02.2019 is enclosed as **Annexure-X**. State-wise details of the web link addresses as informed by the States/UTs are given in the **Table 5**.

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

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

2.5. 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 the polluted river locations and the prepared draft has been circulated to all the stakeholders seeking comments from the State Pollution Control Boards (SPCBs) and the Pollution Control Committees (PCCs) vide CPCB letter dated 09.01.2019, for providing comments or views by January 2019. The draft version of the criteria is also placed in 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. However, actual self-purification distance need to be estimated based on the requisite input parameters. 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 the comments on the circulated draft criteria for prioritisation of the polluted river location from few States viz., Karnataka Meghalaya, Mizoram, Punjab, Telangana, West Bengal and UT namely Puducherry. SPCBs viz., Telangana, Punjab and Mizoram as well as Puducherry Pollution Control Committee (PPCC) *have agreed with the proposed draft criteria* and few SPCBs have given comments or views as summarised below: -

- Criteria to be separated from 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 use it for water bodies /surface waters prioritisation also 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 and EC and similarly for BOD values
- Criteria may not be applicable for some water bodies especially those locations located in the coal mining areas where pH is the most critical parameter. Therefore, suggested to include pH.

A copy of the draft criteria for prioritisation of the polluted river location is enclosed as **Annexure-XI**.

CPCB proposes to discuss and finalise the afore-said draft criteria in the ensuing Chairpersons and Member Secretaries of Pollution Control Boards and Pollution Control Committees conference scheduled on 18 March 2019.

2.5 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 of River Rangpo and the CPCB letter dated 01.01.2019 are annexed (Annexure-XII).

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. *A copy of the report is being forwarded to the Sikkim State Pollution Control Board for further action at their end.*

3 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: -

3.1 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.

3.2 Rivers which are perineal 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.

3.3 Achieving goals of bathing criteria after implementation of the 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.

3.4 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'. Categorisation of the identified polluted river stretches may be taken up by the States based on the revised criteria proposed to be finalised in consultation with the States/UTs in the ensuing 63rd Chairpersons and Member Secretaries of Pollution Control Boards and Pollution Control Committees scheduled to be held in March 2019.

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 atleast for one hour in a week lessons relating to protection and improvement of environment. Awareness should be created by organizing suitable awareness programs. In the same matter, the issue of Calcutta tanneries was considered in *M.C Mehta Vs. Union of India And Ors.*⁵, (*Calcutta Tanneries' Matter*). The tanneries were directed to be shifted by adopting the 'Precautionary Principle' so as to prevent discharge of effluents in the River Ganga.

10. Dealing with the control of pollution in river Pallar in Tamil Nadu, the Hon'ble Supreme Court in *Vellore Citizen' Welfare Forum Vs. Union of India*, (1996) 5 SSC 647 observed:

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

³ (1987) 4 SCC 463 ¶14

⁴ (1988) 1 SCC 471

⁵ (1997) 2 SSC 411

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

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

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

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

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

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

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

11. The Central Government was directed to constitute an Authority under section 3 (3) of the Environment Act which can take measures to reverse the damage and recover the cost from the individuals responsible.
12. In *S. Jagannath Vs. Union of India &Ors.*⁶, effluents discharged by commercial shrimp culture farms were directed to be controlled. An authority was directed to be constituted headed by former Judge of the High Court to protect fragile coastal areas.
13. In the news item published in Hindustan Times titled "And Quiet Flows The Maily Yamuna"⁷, steps were directed to be taken to check pollution in river Yamuna.
14. In *Tirupur Dyeing Factory Owners Association Vs. Noyyal River Ayacutdars Protection Association &Ors.*⁸, directions were issued to check pollution in river Noyyal in the State of Tamil Nadu. A Committee headed by a former Judge of the High Court was appointed to assess the extent of damage and to identify the victims and based on the said report direction to cover damages and to stop pollution were issued by the High Court. Upholding the said directions, it was observed that if the pollution is not checked, the industrial activity has to be closed; cost for restoration has to be covered from those responsible for the pollution.
15. In spite of directions in several judgments, discharge of untreated sewage and industrial effluents in rivers and water bodies is continuing at a large scale. Sewage treatment capacity is disproportionate to the sewage generated. Reports have

⁶ (1997) 2 SCC 87

⁷ (2009) 17 SSC 720

⁸ (2009) 9 SSC 737

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

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

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

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

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

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

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

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

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

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

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

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

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

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

¹¹O.A. No. 58/2017

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

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

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

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

¹²O.A.No. 101/2014

¹³O.A. No. 456/2018

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

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

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

¹⁴O.A. No. 138/2016 (T_{NHRC})

¹⁵ O.A. No. 231/2014

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

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

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

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

¹⁷ O.A. No. 125/2018,

¹⁸ O.A. No. 116/2014,

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

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

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

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

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

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

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

²⁰O.A.No. 173 of 2018

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

*Bhandari &Ors.*²¹ as follows:

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

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

²¹ (2018) 11 SCC 734

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

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

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

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

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

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

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

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

²²O.A No. 56 (TIC) 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	6	20
HARYANA	2					2
HIMACHAL PRADESH	1	1	1		4	7
JAMMU & KASHMIR		1	2	2	4	9
JHARKHAND				3	4	7
KARNATAKA			4	7	6	17
KERALA	1			5	15	21
MADHYA PRADESH	3	1	1	3	14	22
MAHARASHTRA	9	6	14	10	14	53
MANIPUR		1			8	9
MEGHALAYA	2			3	2	7
MIZORAM			1	3	5	9
NAGALAND	1		1	2	2	6
ODISHA	1		3	2	13	19
PUDUCHERRY				1	1	2

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

Polluted River Stretches- Priority I & Priority II				
STATE	RIVER NAME	RIVER STRETCH	BOD RANGE/ MAX VALUE (mg/L)	PRIORITY
ASSAM	BHARALU	GUWAHATI TO CHILARAI NAGAR	52.0	I
	BORSOLA	ALONG SARABBHATTI, GUWAHATI	34.0	I
	SILSAKO	ALONG CHACHAL, GUWAHATI	34.0	I
	SORUSOLA	ALONG PALTAN BAZAR, GUWAHATI	30.0	II
DAMAN, DIU AND DADRA NAGAR HAVELI	DAMANGANGA	SILVASSA TO DAMAN JETTY, MOTI DAMAN	10 - 80	I
DELHI	YAMUNA	WAZIRABAD TO ASCARPUR	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
YAMUNA		PANIPAT TO SONEPAT	4 - 55	I
HIMACHAL PRADESH	SUKHANA	SUKHNA TO PARWANOO	54.0	I
	MARKANDA	KALA AMB TO NARAYANPUR	3.2 - 24	II
JAMMU & KASHMIR	DEVIKA	GURU RAVIDAS TEMPLE TO NAINSU	3.4-22	II
KERALA	KARAMANA	MALEKKDU TO THIRUVALLAM	56.0	I
MADHYA PRADESH	CHAMBAL	NAGDA TO RAMPURA	12 - 80	I
	KHAN	KABIT KHEDI TO KHAJRANA	30.8 - 80	I
	KSHIPRA	SIDDHAWAT TO TRIVENISANGAM	4 - 38	I
	BETWA	MANDIDEEP TO VIDISHA	3.3 - 20.2	II
MAHARASHTRA	GODAVARI	SOMESHWAR TEMPLE TO RAHED	5.0-88	I
	KALU	ALONG ATALE VILLAGE	75.0	I
	KUNDALIKA	SALAV TO ROHA	3.8-65	I
	MITHI	POWAI TO	250.0	I

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

Polluted River Stretches- Priority III, IV & V				
STATE	RIVER NAME	RIVER STRETCH	BOD RANGE/ MAX VALUE (mg/L)	PRIORITY
ANDHRA PRADESH	KUNDU	NANDYAL TO MADDURU	7.7	IV
	TUNGABHADRA	MANTHRALAYAM TO BAVAPURAM	3.2 - 6.7	IV
	GODAVARI	RAYANPETA TO RAJAHMUNDRI	3.1 - 3.4	V
	KRISHNA	AMRAVATHI TO HAMSALA DEEVI	3.2	V
	NAGAVALI	ALONG THOTAPALLI	3.2	V
ASSAM	DEEPAR BILL	DEEPAR BILL TO GUWAHATI	10.6	III
	DIGBOI	LAKHIPATHE, RESERVE FOREST	14.0	III
	KAMALPUR	ALONG KAMALPUR	18.6	III
	PANCHNAI	ORANG TO BORSALA	11.4	III
	BRAHAMPUTRA	KHERGHAT TO DHUBRI	3.2 - 6.4	IV
	KHARSANG	ASSAM-ARUNANCHAL BORDER TO LONGTOM-1	7.2	IV
	PAGLDIA	NALBARI TO KHUDRA SANKARA	8.2	IV
	BARAK	PANCHGRAM TO SILCHAR	3.5 - 4.2	V
	BAROI	DOWNSTREAM OF BRIDGE AT NH-52	3.6	V
	BEGA	ALONG MANGALDOI	4.5	V
	BEKI	BARPETA ROAD TO JYOTI GAON	3.5	V
	BHOGDOI	JORHAT TO DULIAGAON	4.5	V
	BOGINADI	LAKHIMPUR TO DIBRUGARH	4.2	V
	BORBEEL	ALONG RAMNAGAR, DIGBOI	3.8	V
	BORDOIBAM BEELMUKH	ALONG BEELMUKH BIRD SANCTUARY, DHEMAJI	5.2	V
	BURHIDIHING	MARGHERITA TO TINSUKIA	4 - 4.6	V
	DHANSIRI	GOLAGHAT TO KATHKETIA	4.3 - 5.6	V
	DIKHOW	NAGINI MORA TO DIKHOMUKH	3.2	V
	DIKRONG	ALONG BANDARDEWA	3.2	V
	DIPLAI	ALONG SILGARA, KOKRAJHAR	3.2	V
	DISANG	DILLIGHAT TO GUNDAMGHAT	4.2	V
	GABHARU	ALONG TUMIUKI, SONITPUR	5.4	V
	HOLUDUNGA	ALONG SOMARAJAN, 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	SIRSI	RUXOL TO KOIREA TOLA (RAXAUL)	20.0	III
	FARMAR	ALONG JOGBANI	3.6	V
	GANGA	BUXAR TO BHAGALPUR	3.2 - 4.2	V
	POONPUN	GAURICHAK TO FATUHA	3.3	V
	RAM REKHA	HARINAGAR TO RAMNAGAR	5.0	V
	SIKRAHNA	ALONG NARKATIAGANJ	4.5	V
CHHATTISGARH	HASDEO	KORBA TO URG	3.6 - 7	IV
	KHAROON	BUNDRI TO RAIPUR	3.3 - 7.2	IV
	MAHANADI	ARRANG TO SIHAWA	3.3 - 8	IV
	SEONATH	SHIMGA TO BEMTA	3.4 - 8.4	IV
	KELO	RAIGARH TO KANAKTORA	3.8	V
GOA	SAL	KHAREBAND TO MOBOR	4.2 - 16.8	III
	MANDOVI	MARCELA TO VOLVOI	3.3 - 6.2	IV
	TALPONA	ALONG CANACONA	6.8	IV
	ASSONORA	ASSONORA TO SIRSAIM	3.3	V
	BICHOLIM	BICHOLIM TO CURCHIREM	4.8	V
	CHAPORA	PERNEM TO MORJIM	3.5 - 5.2	V
	KHANDEPAR	PONDA TO OPA	3.4	V
	SINQUERIM	ALONG CANDOLIM	3.6	V
	TIRACOL	ALONG TIRACOL	3.9	V
	VALVANT	SANKLI - BICHOLIM TO PORIEM	4.3	V
	ZUARI	CURCHOREM TO MADKAI	3.2 - 5.1	V
GUJARAT	DHADAR	KHOTDA TO CHANDPURA	16.0	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
	MESHW	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

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

	KADALUNDY	ALONG HAJIRAPPALLY/ HAJIYARPALLI	3.6	V	
	KALLAI	THEKEPURAM TO ARAKKINAR	4.5	V	
	KARUVANNUR	ALONG KARUVANNUR	3.5	V	
	KAVVAI	ALONG KAVVAI	3.9	V	
	KUPPAM	THALIPARAMBA TO VELICHANGOOL	3.1 - 3.8	V	
	KUTTIYADY	ALONG KUTTIYADY	5.0	V	
	MOGRAL	ALONG MOGRAL	3.1	V	
	PERIYAR	ALWAYE-ELOOR TO KALAMASSERY	3.2 - 5.1	V	
	PERUVAMBA	ALONG PERUVAMBA	3.9	V	
	PUZHACKAL	OLARIKKARA TO PUZHACKAL	3.8	V	
	RAMAPURAM	ALONG RAMAPURAM	3.3	V	
	THIRUR	NADUVILANGADI TO THALAKKADATHUR	3.6	V	
	UPPALA	POYYA TO MULINJA	3.2	V	
MADHYA PRADESH	SONE	ALONG AMLAI	12.4	III	
	GOHAD	GOHAD DAM TO GORMI	6.3	IV	
	KOLAR	SURAJNAGAR TO SHIRDIPURAM	7.5	IV	
	TAPI	NEPANAGAR TO BURHANPUR	4.6 - 8	IV	
	BICHIA	SILPARI TO GADHAWA	3.5	V	
	CHAMLA	ALONG BADNAGAR, UJJAIN	4.0	V	
	CHOUPAN	ALONG VIJAIPUR	3.4	V	
	KALISOT	MANDIDEEP TO SAMARDHA VILLAGE	4.1	V	
	KANHAN	KANHAN IN CHINDWARA DISTRICT 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 EHITRAKUT	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
	KHUIAIROK	MOREH TO MAOJANG	4.3	V
	LOKCHAO	BISHNUPUR TO LOKTAK LAKE	4.5	V
	MANIPUR	SEKMAIJAN TO THOUBAL	3.6-4.3	V
	THOUBAL	SHONG KONG TO PHADOM	3.5	V
	WANGJING	WANGJING TO HEIROK	4.1-4.3	V
MEGHALAYA	KYRHUKHLA	SUTNGA TO KHLIERIAT	10.0	IV
	NONBAH	NANGSTOIN TO WAHRIAT	6.0-7.5	IV
	UMTREW	BYRNIHAT TO MORANG DALA	6.2-8.0	IV
	LUKHA	MYNDIHATI TO SHYMPLONG	6.0	V
	MYNTDU	JOWAI TO PAMHADEM	5.2	V
MIZORAM	TIAU	ALONG CHAMPHAI	11.3	III
	TLAWNG	ALONG ZOBAWK, SAIRANG TO BAIRABI	3.1-6.7	IV
	TUIPUI	ALONG CHAMPHAI	8.2	IV
	TUIVAWL	ALONG KEIFANG	6.8	IV
	CHITE	ALONG ARMED VENG	3.7	V
	MAT	ALONG SERCHHIP	5.5	V
	SAIKAH	ALONG LAWNGTLAI	4.4	V
	TUIKUAL	ALONG SERCHHIP	6.0	V

	TUIRIAL	ALONG TUIRIAL, AIZWAL	3.4-4.6	V
NAGALAND	DZUNA	ALONG KOHIMA	6.0-13.0	III
	CHATHE	MEDZIPHEMA TO, DIMAPUR	7.0	IV
	DZU	KOHIMA TO DZUKO VALLEY	7.0	IV
	DZUCHA	ALONG KOHIMA	4.0	V
	SANO	ALONG KOHIMA	4.0	V
ODISHA	GURADIH NALLAH	ALONG ROURKELA	11.3	III
	KATHAJODI	CUTTACK TO URALI	5.8-11.2	III
	NANDIRAJHOR	D/S TALCHER	2.7 - 13	III
	DAYA	BHUBANESWAR TO BARAGARH	4.0-7.3	IV
	KUAKHAI	URALI TO BHUBANESWAR	6.7-7.7	IV
	BANGURU NALLAH	ALONG TALCHER RENGALI	3.2	V
	BHEDEN	ALONG BHEDEN	3.6	V
	BRAHAMANI	ROURKELA TO BIRITOL	5.8-6.0	V
	BUDHABALNAGA	MAHULIA TO BARIPADA	3.5	V
	KUSUMI	ALONG ANGUL TALCHER	3.2	V
	MAHANADI	SAMBALPUR TO PARADEEP	3.6	V
	MANGALA	ALONG PURI	5.7	V
	NAGAVALLI	JAYKAYPUR TO RAYAGADA	3.5	V
	NUNA	ALONG BIJIPUR, PURI	3.1	V
	RATNACHIRA	ALONG BHUBHNEISHWAR, PURI	3.3	V
	RUSHIKULYA	PRATAPPUR TO GANJAM	3.4	V
	SABULJA	ALONG JAGANNATHPATNA, RAMBHA	5.0	V
	SERUA	KHANDAETA TO SANKHATRASA	4.8	V
	PUDUCHERRY	ARASALAR	ALONG KARAIKAL	7.0
CHUNNAMBAR		ALONG ARIYANKUPPAM	6.0	V
PUNJAB	KALI BEIN	SULTANPUR LODHI TO CONF TO BEAS	9.0	IV
	BEAS	ALONG MUKERIAN	3.8	V
RAJASTHAN	BANAS	ALONG BISALPUR DAM, SWAROOPGANJ, NEWTA DAM	13.2	III
	CHAMBAL	SAWAIMADHOPUR TO KOTA	3.2-4.8	V
SIKKIM	MANEY KHOLA	ADAMPOOL TO BURTUKK	3.2-4.5	V
	RANGIT	DAM SITE (NHPC) TO TREVENI	3.2-3.8	V
	RANICHU	NAMLI TO SINGTAM	3.8-4.0	V
	TEESTA	MELLI TO CHUNGTHANG	4.0-4.3	V
TAMIL NADU	BHAVANI	SIRUMUGAI TO KALINGARAYAN	3.3-6.6	IV
	TAMBIRAPANI	PAPPANKULAM TO ARUMUGANERI	3.1-4.0	V
TELANGANA	KARAKAVAGU	ALONG PALWANCHA	18.0	III
	MANER	WARANGAL TO SOMNAPALLI	6-20.0	III
	GODAVARI	BASAR TO KHAMMAM	4.0-9.0	IV
	KINNERSANI	ALONG PALWANCHA	10.0	IV
	KRISHNA	THANGADIGI TO WADAPALLY	5.0-6.0	V
TRIPURA	BURIGAON	ALONG BISHALGARH	3.9	V
	GUMTI	TELKAJILA TO AMARPUR	3.9	V
	HAORA	AGARTALA TO BISHRAMGANJ	3.2-4.0	V
	JURI	ALONG	4.9	V

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

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

A) Source control

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

(a) Industrial pollution control

(i) Inventorisation of industries

(ii) Categories of industry and effluent quality

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

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

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

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

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

(C) Flood Plain Zone.

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

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

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

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

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

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

- 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_{NHRC}), "Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case)*.
- viii) The Task Force will also ensure that no illegal mining takes place in river beds of such polluted stretches.
- ix) The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievement and failure may also be published on such website. The Committee may consider suitably rewarding those contributing significantly to the success of the project.
- x) The RRCs will have the authority to recover the cost of rejuvenation in Polluter Pays Principle from those who may be responsible for the pollution, to the extent found necessary. In this regard, principle laid down by this Tribunal in order dated 13.07.2017 in *O.A No. 200 of 2014, M.C Mehta Vs. U.O.I* will apply. Voluntary donations, CSR contribution, voluntary services and private participation may be considered in consultation with the RRC.

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

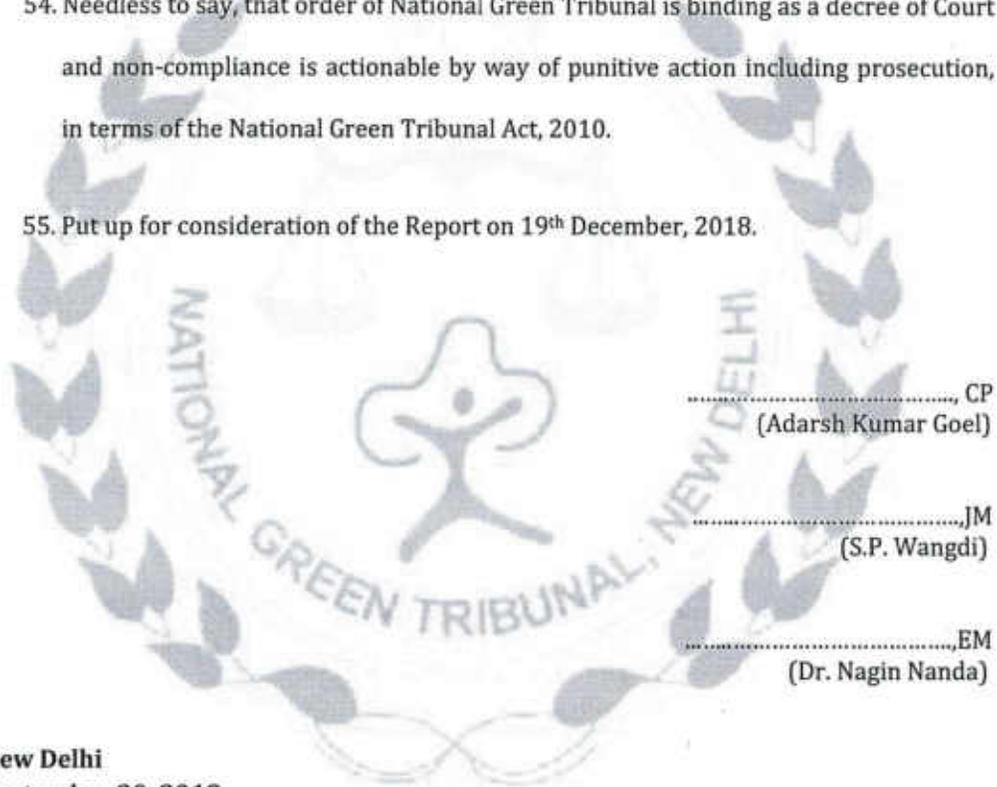
under Consent Mechanism. The said funds may be utilized for the purpose of expenditure for the Committees, including preparation and execution of action plans in accordance with the provisions contained in the Water Act, 1974.

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

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

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

55. Put up for consideration of the Report on 19th December, 2018.



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 SCC 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 (Trib.)

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 (Trib.) 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
R



F.No. A-14011/1/2018-WQM-I

SPEED POST

Dt: 28.09.2018

To

The Member Secretary (SPCBs/PCCs)

Sub: Hon'ble NGT (PB) New Delhi order dated 20th September, 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"

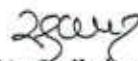
Sir,

with reference to the Hon'ble NGT (PB) New Delhi order dated 20.09.2018 in the matter of O.A No.673 /2018, all States and Union Territories are required to prepare action plans in two months and for making all the polluted river stretches fit for bathing purpose, within six months from the date of finalization of the action plans.

Based on the water quality monitoring carried-out during 2016-2017, CPCB has identified 351 polluted river stretches in 2018 (Priority I to Priority V) and available on CPCB website <http://www.cpcb.nic.in/> under Latest @ CPCB column.

In view of the above, it is requested to kindly pursue with the State Govt/UT Administration to prepare action plan with timelines in line with the river Hindon Action Plan, for each of the identified polluted river stretch (for all 351 identified) and same may be submitted to CPCB for ensuring compliance of the order of Hon'ble NGT dated 20.9.2018.

Yours faithfully,


(A. Sudhakar)
Divisional Head, WQM-I
etc

Encl: as above

Copy to:

- | | | |
|------|----------------------|---|
| i. | Regional Directorate | For information and necessary follow up, please |
| ii. | PS to CCB | For information, please |
| iii. | PS to MS | For information, please |
| iv. | LO (ANT), CPCB | For information, please |

(A Sudhakar)



28/9/18

etc

ANNEXURE - IV

HON'BLE NGT MATTER
Reminder -

By Speed Post

F.No. A-14011/1/2018-WQM-I

13243-13279

28.11.2018

To

(The Member Secretary
SPCBs/PCCs -As per List enclosed)

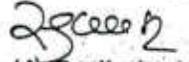
Sub: Compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 2018 in Original Application No. 673/2018 IN THE MATTER OF NEWS ITEM PUBLISHED IN 'THE HINDU' Titled "More river stretches are now critically polluted: CPCB"

Sir,

Please refer to CPCB letter No A-14011/1/2018-WQM-I dated 28.09.2018 on the captioned subject wherein all SPCBs and PCCs are requested to pursue with the respective State Govt. /UT Administration to prepare action plans in line with the river Hindon Action Plan, in two months for bringing out the polluted river stretches to be at-least fit for bathing purpose, in compliance to Hon'ble NGT (PB) New Delhi order dated 20.09.2018 in the matter of O.A No.673 /2018.

It is therefore requested to submit Action plans with timeline in compliance to Hon'ble NGT order at the early date to CPCB to enable to take further action. Also please arrange to provide copies of the orders constituting River Rejuvenation Committee (RRC) by your State Government/UT Administration and the subsequent meetings/ actions taken by RRC at an early date.

Yours faithfully,


(A. Sudhakar)

Head, WQM-I Division

Copy to

1. PS to MS

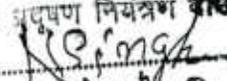
For information of 'MS' please

2. All RDs

For information & follow up with concerned SPCBs/PCCs and also to send action plans with timelines prepared in case of at least two identified Polluted River Stretches.

3. Law Section ,CPCB

For information, please

राज्य प्रदूषण नियंत्रण बोर्ड
निर्गत... 
दिनांक... 30/11/18

(A. Sudhakar)

Office copy

Hon'ble NGT Matter
Reminder II

F.No. A-14011/1/2018-WQM-I

11.12.2018

To

The Member Secretary

SPCBs/PCCs (Tamil Nadu, Telangana, Gujarat, Assam, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Maharashtra)

Sub: Compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 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: i) F.No. A-14011/1/2018-WQM-I / 11159-64 dated 28.09.2018

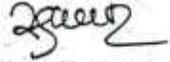
ii) F.No. A-14011/1/2018-WQM-I/13243-13279 dated 28.11.2018

Sir,

Kind attention is invited to the above cited letters on the captioned subject, wherein CPCB requested to prepare action plans with timelines in line with the river Hindon Action Plan, in two months, in compliance to Hon'ble NGT (PB) New Delhi order dated 20.09.2018 in the matter of O.A No.673 /2018. Also, as per Hon'ble NGT order dated 20.09.2018, all the concerned States /UTs are required to submit the status report to Hon'ble NGT by email on or before 15.12.2018. Further, the respective State /UT is required to send a copy of the action plan to CPCB especially with respect to Priority I & Priority for approval of CPCB.

In view of the above, it is requested to send the prepared action plans in respect of Priority I & Priority II polluted stretches (soft copies) to CPCB in compliance to Hon'ble NGT order for examination by the 'Task Team'.

Yours faithfully,



(A.Sudhakar)

Divisional Head, WQM-I

o/c

Copy to

1. PS to 'CCB'
2. PS to 'MS'
3. All RDs

For information of 'CCB' please

For information of 'MS' please

For information & follow up with concerned SPCBs/PCCs and also to submit action plans with timelines prepared in case of at least two identified Polluted River Stretches fall in the jurisdiction of the RD.

For information, please

4. Law Section, CPCB

(A. Sudhakar)

o/c

केन्द्रीय प्रदूषण नियंत्रण बोर्ड

निर्गत.....

दिनांक.....

12/12/18



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

F. No. A-14011/1/2018 -WQM-I/108

14.11.2018

OFFICE ORDER

Constitution of 'Task Team' for ensuring compliance to Hon'ble National Green Tribunal (NGT) Order dated September 20, 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"

In pursuance to Hon'ble National Green Tribunal (NGT) Order dated 20/09/2018 in the matter of Original Application No. 673/2018, Central Pollution Control Board (CPCB) is hereby constituting a **Task Team** with the following members:-

- | | | |
|----|--|-----------------|
| 1) | MS, CPCB | Chairman |
| 2) | Representative of MoEF & CC* | Member |
| 3) | Representative of MoWR, RD& GR* | Member |
| 4) | Representative of Ministry of Urban Development* | Member |
| 5) | Dr. A. B. Akolkar, Former Member Secretary, CPCB | Member |
| 6) | Sh. A. Sudhakar, AD | Member |
| 7) | Sh. B. Vinod Babu, AD | Member |
| 8) | Sh. J. Chandra Babu, Scientist, WQM-I | Member Convener |

* Not below the rank of Director

The terms of reference (ToR) of the Task Team shall be as follows:-

- i) Random scrutiny of action plans for restoration of polluted river stretches to be submitted by the State Government/Union Territory (UT) Administration in compliance to the Hon'ble NGT order dated 20/09/2018;
- ii) Upload action plans on CPCB website for seeking suggestions or views/comments from Stakeholders, *within a week*;
- iii) Approve the action plans submitted by the State Governments or UT Administrations and communicate to the Principal Secretary of respective State Government/UT Administration for ensuring execution of the approved action plans;

Contd...2/

:: 02 ::

- iv) The Chairman of Task Team may invite an expert from any reputed organization/ individual official as special invitee for the meetings for providing or seeking views/suggestions/review of action plans, as and when required by the Task Team; and
- v) TA/DA and Honorarium as per rules shall be paid for attending the meeting of Task Team for non-official members only by CPCB.

This issue with the approval of the Competent Authority, Central Board.

[Signature]
(A. Sudhakar)
Division Head, WQM-I
e/c

To

All the Concerned

Copy to:

- | | | | |
|----|---------------------------------|---|-----------------------------|
| 1. | PS to Chairman, CPCB | : | for information of 'CCB' pl |
| 2. | PS to MS, CPCB | : | for information of 'MS' pl |
| 3. | LO (ANT), CPCB | : | for information pl |
| 4. | All Regional Directorates, CPCB | : | for information pl. |

[Signature]
(A. Sudhakar)
e/c

[Signature]
S'D



Central Pollution Control Board

(Ministry of Environment, Forest & Climate Change, Govt. of India)

Parivesh Bhawan, East Arjun Nagar,

Delhi – 110032

Minutes of First meeting of the 'Task Team' held on 14.12.2018 in CPCB for Ensuring Compliance to Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi order dated 20.09.2018 in O.A No 673 of 2018 in the matter of news item published in 'THE HINDU' Titled "More river stretches are now critically polluted: CPCB"

First meeting of the '**Task Team**' constituted in compliance to Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi order dated 20.09.2018 was held on 14.12.2018 in 'Committee Room, V Floor, CPCB' under the Chairmanship of Dr. Prashant Gargava, Member Secretary, CPCB. The meeting was attended by the officials of MOHUA, NMCG, MoEF & CC & CPCB. The list of officials who attended the meeting is annexed (**Annexure-I**).

Shri A.Sudhakar, DH, WQM-I, CPCB, welcomed all the officials and members of the Task Team for attending the meeting. Thereafter, Shri J. Chandra Babu, Scientist 'D', WQM-I and Member Convener of the Task Team informed the salient points of Hon'ble NGT order dated 20.09.2018 that all the concerned States and Union Territories are directed to prepare action plans within two months for bringing all the identified 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. The action plans are required to be prepared for the identified polluted river stretches by the four-member Committee i.e., 'River Rejuvenation Committee' (RRC) to be constituted by the respective State Government or Union Territory Administration, which will function under overall supervision and coordination of 'Principal Secretary, Environment of the concerned State/Union Territory'. The RRC will also be the Monitoring Committee for execution of the action plan. Further, he also informed the Task Team that 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 and thereafter Action Plans may be subjected to a random scrutiny by a task team of the CPCB. He also informed the members of the Task Team that there are 61 out of 351 identified polluted river stretches falling in Priority-I and Priority-II categories located in 18 States and 02 UTs.

In response to a query of Dr. Prashant Gargava, Member Secretary, CPCB and Chairman of the Task Team with regard to the status of action plans received so far from States, Shri J.C.Babu informed that till 13.12.2015, CPCB is in receipt of action plans from the State of Assam (01 no. of polluted river stretch), Chhattisgarh (05 no. of polluted river stretches), Madhya Pradesh (04

no. of polluted river stretches), Kerala (01 no. of polluted river) and Karnataka (17 no. of polluted river stretches). However, the action plans submitted by M.P and Kerala, fall in Priority-I and Priority-II categories.

Chairman of the Task Team stated that it is important to formulate a criteria or check list to facilitate review of plans received from States and uniform process of approval since Hindon action plan is already available therefore action plans submitted by the concerned States/UTs can be randomly scrutinized keeping the Hindon model action plan as basis. Shri Sandeep, Director, NMCG pointed out that in the base model some value addition can be done to improvise and make the action plan feasible and can achieve the desired objectives. He also emphasized the role of Task Team for pragmatic approach in examining and approving the plan being submitted by respective States. He is also of the opinion that the plans submitted by the States which are reasonable and feasible such action plans should be considered for approval. Sh. Lalit Bokolia, Additional Director, MoEF & CC supplemented and informed that the efforts of Chhattisgarh State in preparing the comprehensive action plan are appreciated. However, the action plans are lacking with respect to the financial estimates and are required for action plans.

Upon deliberations, following decisions were taken by the Task Team: -

- (i) Check list or criteria for evaluation of plans to be finalized by WQM-I Division as per recommendations of the Task Team members and same is circulated to all the members of the Task Team for providing the views or suggestions within a week.
- (ii) It was noted that the RRC constituted by the State Governments/UT Administrations are required to file the status report by 15.12.2018 to Hon'ble National Green Tribunal (NGT). The Task Team suggested to prepare a note (status on the RRCs constituted by the States/UTs, actions plans prepared and submitted by the States till 15.12.2018 as well as initiatives taken by CPCB), and
- (iii) Comments on the action plans so far received also be prepared and placed in the next meeting of the Task Team for consideration and next meeting of the Task Team should be organized either in last week of December 2018 or First week of January 2019.

The meeting ended with the thanks to the Chair.

-- OO --

Annexure-I

List of Participants

Sl. No.	Name of Official Designation	Organization / Division	Contact Number	E-mail ID
1	Dr. Prashant Gargava	MS, CPCB and Chairman of the Committee	9990870057	mscb.cpcb@nic.in
2	Sh. A. Sudhakar	DH, WQM-I	8800326699	Asudhakar.cpcb@nic.in
3	Sh. Sundeep	Director, NMCG	9433080104	Sundeep.nmcg@gmail.com
4	Sh. Rohit Kakkar	MoHUA	8750622900	rohit.kakkar@nic.in
5	Sh. Lalit Bokolia	MoEF&CC	9811108267	lk.bokolia@nic.in
6	Sh. B. Vinod Babu	DH, WM-I & IT	9910061557	bvbabu.cpcb@nic.in
7	Sh. J. C. Babu	Scientist 'D'	9868278903	jcb.cpcb@nic.in
8	Sh. Kamal Bandhu	CPCB, ALO	8285815812	Kamalpcb81@gmail.com
9	Mrs. Suniti Parashar	Scientist 'B'	9868819711	nwmp.cpcb@gmail.com
10	Dr. Deepali Agarwal	RA, WQM-I	-	nwmp.cpcb@gmail.com



CENTRAL POLLUTION CONTROL BOARD
(Water Quality Management Division)
Parivesh Bhawan, East Arjun Nagar,
Delhi-110032

MINUTES OF THE 2ND MEETING OF TASK TEAM HELD ON 5/1/2019 IN COMMITTEE ROOM, 5TH FLOOR, CPCB FOR SCRUTINY OF ACTION PLANS RECEIVED FOR REJUVENATION OF IDENTIFIED POLLUTED RIVER STRETCHES

A meeting was convened on 5/1/2019 at 10.30 AM in Committee Room, 5th Floor, under the Chairmanship of Dr. Prashant Gargava, Member Secretary, CPCB with the task team members for scrutiny of action plan received from SPCBs/PCCs for rejuvenation of identified polluted river stretches. List of participants is attached at Annexure-I.

Sh. A Sudhakar, AD & DH, WQM-I, CPCB, welcomed all the officials and members of the Task team attending the meeting. To the query of Dr. Prashant Gargava, Member Secretary, CPCB regarding the status of action plan received from States having Priority I & Priority II river stretches and their review, Sh. J.C. Babu, Scientist D briefed about the NGT order dated 20.09.2018 and details related to the action plan on polluted river stretches being submitted by the states. He also informed that 29 action plans have been received out of 61 (Priority-I & Priority-II) from SPCBs/PCCs. He further stated that all the states have to submit their action plans by 31st January, 2019 and CPCB shall examine the reports and submit/file consolidate report to Hon'ble NGT by 28th February, 2019.

Dr. A. B. Akolkar, Member, Task team stated that action plans to be prepared by States as per model plan on River Hindon which was shared with the States/UTs. He also opined that comments and observations for the submitted action plans may be prepared and communicated to the respective State Govt/SPCB for carrying out improvements in the action plans and submission of revised reports to CPCB upon approval of RRC by 31/1/2019.

Sh. Sundeep, Director, NMCG suggested that septage management and interceptors for control of pollution from drains to be included in the action plans by the States/UTs.

Discussions were held and decisions were taken listed as under:

1. SPCBs/PCCs which have made review of the identified polluted river stretches by CPCB in Sep, 2018 w.r.to locations having high or low BOD may provide justification with supporting monthly data of two years 2016-17 under NWMP for changing the priority.
2. Flow details and load estimation of drains, confluence point of tributaries, if any must be incorporated in the action plans proposed by States/UTs
3. Pictorial representation of river stretch drains, monitoring locations and drain outfalls/discharge points may be shown on map with Latitude and Longitude
4. Septage management plan of the cities/ town of each polluted river stretch may also be mentioned
5. Interventions required for controlling pollution load from each drain also be included in the action plan
6. It was decided that action plans received in CPCB shall be scrutinized and the observation shall be communicated to the concerned for further improvements and submission of action plans in Compliance to the Hon'ble NGT orders dated 20/9/2018 & 19/12/2018.

Next meeting of task team to review the received action plans shall be held on 23rd Jan, 2019 tentatively.

Meeting ended with vote of thanks to the Chair.

- 00 -

Annexure-I

List of Participants

1. Dr. Prashant Gargava, Member Secretary, CPCB and Chairman, Task Team
2. Dr. A. B. Akolkar, Former MS, CPCB and Member, Task Team
3. Sh. A. Sudhakar, DH, WQM-I, CPCB and Member
4. Sh. Sundeep Director, NMCG and Member
5. Sh. B. Vinod Babu, DH, IT Division, CPCB and Member
6. Sh R. M. Bhardwaj, Consulting Scientist, CPCB
7. Smt. Urmila Thakur, Law Officer, CPCB, Special Invitee
8. Sh. J. Chandra Babu, Scientist D, WQM-I, CPCB and Member Convener
9. Smt Suniti Parashar, Scientist D, WQM-I, CPCB
10. Smt Alpana Narula, SSA, WQM-I, CPCB
11. Dr Pooja Tripathi, RA-I, WQM-I, CPCB



Central Pollution Control Board

(Ministry of Environment, Forest & Climate Change, Govt. of India)

Parivesh Bhawan, East Arjun Nagar,

Delhi - 110032

Sub: 3rd 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 during 11.2.2019 to 12.02.2019 in Conference Room, 2nd Floor, Conference Hall CPCB, Delhi.

Third meeting of the Task Team was held during 11th & 12th February, 2019 in CPCB, under the Chairmanship of Dr. Prashant Gargava, Member Secretary, CPCB and Chairman, Task Team with the officials of State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) and other concerned officials for scrutiny and reviewing the proposed action plans received from SPCBs/PCCs 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.

Sh. A Sudhakar, AD & DH, WQM-I, CPCB, welcomed all members of the Task Team and all the officials of the SPCBs/ PCCs as well as other officials attended the meeting. He informed to all the officials that the action plans MUST be submitted only after approval of River Rejuvenation Committee (RRC) constituted by the respective State Government and action plans must include the micro level plans with timelines & budgetary estimates. Final action plans received will be reviewed by the CPCB Task Team and report will be submitted to Hon'ble NGT by CPCB on or before 28th February, 2019. The action plans received after 31.01.2019 will be dealt separately and informed accordingly.

Subsequently, SPCBs/ PCCs were requested to make detailed presentation on the action plans covering major parts of action plan as directed by Hon'ble NGT in its orders dated 20/09/2018 and 19/12/2018. The recommendations of the task team on the proposed action plans made by SPCBs/ PCCs during 11-12th Feb, 2019 are detailed below:-

S No	State	River Name	Priority Class	Observations and Recommendations of the Task Team on the presentation made by the SPCB/ PCC
1	ASSAM	BHARALU	I	a) Action plans not received on the P-I & P-II category so far. b) No representative made presentation on 11.02.2019 before the Task Team. c) APCB wide letter dated 6.2.2019 communicated to CPCB that revised action plan will be submitted within two weeks after taking information from all the concerned department. d) Not recommended by Task Team.
		BORSOLA	I	
		SILSAKO	I	
		SORUSOLA	II	
2.	KERALA	KARAMANA	I	a) To check the flow details of river Karamana. b) To include the macro level action plans with time-lines and the budgetary details, as per comments of CPCB. c) Funds allocated for ongoing projects indicated.

				<p>d) Revised action plan as per CPCB comments due for submission by 20.02.2019</p> <p>e) Recommended subject to conditions</p>
3	MANIPUR	NAMBUL	II	<p>a) Action plan yet to be submitted.</p> <p>b) No representative from the State made presentation in 3rd meeting of Task Team held on 11.02.2019.</p> <p>c) Not recommended</p>
4	MEGHALAYA	UMKHRAH	I	<p>a) Detailed gap analysis on sewage and industrial effluent yet to be made.</p> <p>b) Adequate Interventions needed in compliance to the Hon'ble NGT order in coordination with all the concerned departments and in consultation with RRC constituted by Meghalaya Government.</p> <p>c) Action plan yet to be prepared covering all aspects as per Hon'ble NGT orders dated 20.09.2018 and 19.12.2018.</p> <p>d) Not Recommended</p>
		UMSHYRPI	I	
5	NAGALAND	DHANSIRI	I	<p>a) Nagaland submitted action plans vide letter dated 24.01.2019.</p> <p>b) Action plan prepared only based on preliminary information but not prepared with detailed gap analysis</p> <p>c) No representative made presentation on 11.02.2019 before the Task Team.</p> <p>d) Not recommended.</p>
6	TAMILNADU	CAUVERY	I	<p>a) Tamil Nadu State presented the data on 4 polluted river stretches which are stated to be non-perennial in nature.</p> <p>b) Action plan prepared are based on preliminary information; detailed action plans not prepared in compliance to Hon'ble NGT orders dated 20.09.2018 and 19.12.2018</p> <p>c) Not Recommended</p>
		SARABANGA	I	
		THIRUMANIMUTHAR	I	
		VASISTA	I	
7	TELANGANA	MUSI	I	<p>a) Septic management is to be included in the action plan of river Musi.</p> <p>b) Polluted stretches with improved water quality are to be declared as non-polluted in the revised reports.</p> <p>c) The task team suggested to combine action plan related to river Manjeera and Nakkavagu</p> <p>d) Ground Water Board and Irrigation Departments are required to rework on their plans and budget estimation.</p> <p>e) Revised action plans with, timelines and estimated budget are required to be made for concurrence of RRC and for initiating further action.</p> <p>f) Recommended subject to conditions</p>
		MANJEERA	II	
		NAKKAVAGU	II	
8	DAMAN, DIU AND DADRA NAGAR HAVELI	DAMANGANGA	I	<p>a) Action Plan not submitted with the approval of RRC constituted by DD&DNH UT administration</p>

				<p>b) Action plans not prepared with detailed Gap analysis, and covering other aspects as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018.</p> <p>c) Not Recommended</p>
9	DELHI	YAMUNA	I	<p>a) Action plans based on detailed gap analysis with respect to industries, industrial water consumption and effluent generation, captive ETPs and their capacity as well as waste management including industrial hazardous wastes not covered.</p> <p>b) Task team suggested revision of action plan and its submission with detailed gap analysis and covering other aspects as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018.</p> <p>c) Not Recommended</p>
10	GUJARAT	AMLAKHADI	I	<p>a) Redefine the CETP standard and put up achievable targets.</p> <p>b) A table showing organization responsible, timelines and total budget estimation to be included for each river at the end of the report.</p> <p>c) The action plan to be re-submitted and for taking further action with the approval of RRC</p> <p>d) Recommended subject to condition.</p>
		BHADAR	I	
		BHOGAVO	I	
		KHARI	I	
		SABARMATI	I	
		VISHWAMITRI	II	
11	HARYANA	GHAGGAR	I	<p>a) Action plans do not cover aspects such as good irrigation practices, e-flow, rain water harvesting, re-use of treated sewage and development of bio-diversity parks etc. as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018.</p> <p>b) Recommendation subject to condition</p>
		YAMUNA	I	
12	HIMACHAL PRADESH	SUKHANA	I	<p>a) Action plans do not cover aspects such as good irrigation practices, e-flow, rain water harvesting, re-use of treated sewage and development of bio-diversity parks etc. as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018.</p> <p>b) Recommendation subject to condition.</p>
		MARKANDA	II	
13	JAMMU & KASHMIR	DEVIKA	II	<p>a) Some action plans are already implementation with the financial support from Central Government.</p> <p>b) J&K vide letter dated 5.2.2019 withdrawn earlier action plans and informed that the revised action plan will be submitted as per suggestions of CPCB</p> <p>c) Action plan prepared only based on preliminary information but not prepared with detailed gap analysis</p> <p>d) Not recommended.</p>
14	MAHARASHTRA	GODAVARI	I	<p>a) Submitted report covering gap analysis with respect to sewage, industrial effluent and waste</p>
		KALU	I	

		KUNDALIKA	I	management. However, detailed action plan not prepared covering all aspects in compliance to Hon'ble NGT orders dated 20.09.2018 and 19.12.2018. b) Not recommended.
		MITHI	I	
		MORNA	I	
		MULA	I	
		MUTHA	I	
		NIRA	I	
		VEL	I	
		BHIMA	II	
		INDRAYANI	II	
		MULA-MUTHA	II	
		PAWANA	II	
		WAINGANGA	II	
		WARDHA	II	
15	PUNJAB	GHAGGAR	I	a) Action plans do not cover aspects such as good irrigation practices, e-flow, rain water harvesting, re-use of treated sewage and development of bio-diversity parks etc. as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018. b) Recommendation subject to condition.
		SATLUJ	I	
16	UTTAR PRADESH	HINDON	I	a) Action plans prepared based on preliminary information but not based on the detailed gap analysis covering all aspects as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018. b) Not Recommended.
		KALINADI	I	
		VARUNA	I	
		YAMUNA	I	
17	UTTRAKHAND	BHELA	I	a) Action plans prepared based on preliminary information but not based on the detailed gap analysis covering all aspects as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018. b) Not Recommended.
		DHELA	I	
		SUSWA	I	
		KICHHA	II	
18	MADHYA-PRADESH	KHAN	I	a) Chambal & Betwa: Action plan is prepared for inventory of municipal and industrial waste estimation. Detailed action plan to be prepared in compliance to Hon'ble NGT orders dated 20.09.2018 and 19.12.2018. Betwa River is polluted from Mandideep to Bhojpur & Vidisha till D/s Vidisha. The river is mostly dry throughout the year and receives wastewater from Mandideep, Bhopal & Vidisha b) Chambal and Betwa: Not recommended. c) Kshipra, Khan,; Recommended subject to conditions
		CHAMBAL	I	
		KSHIPRA	I	
		BETWA	II	
19	ODISHA	GANGUA	I	a) Detailed action plan not prepared covering all aspects as per Hon'ble NGT orders dated 20 Sept & 19 Dec 2018. Proposes that constitution of Special Surveillance task team for estimating the total budget requirement and revision of action plan in consultation with sewerage board, water board and irrigation department with respect to timeline b) Not recommended

20	WEST BENGAL	VINDYADHARI	I	a) WBPCB proposes water quality goals achievable only for fisheries and wild life development and not possible to meet bathing criteria as no adequate E-Flows. b) River Vindiyadhari water is used for Fisheries which require minimum BOD of 120mg/l and is then reduced by natural means to around 15-20 mg/l. c) River Mahananda flows mostly on international boundary of India - Bangladesh. It is polluted due to industrial discharges from Bangladesh. Revised action plans submitted with approval of RRC d) Recommended subject to conditions
		MAHANANDA	II	

State-wise recommendations of the Task Team is enclosed as **Annexure -II**.

It was suggested all the SPCBs/ PCCs representatives to modify the action plans as per suggestions of the task team as well as covering all aspects as per Hon'ble NGT orders dated 20.09.2018 and 19.12.2018 and to seek approval of RRC constituted in the respective States or UTs for initiating further actions for ensuring compliance to Hon'ble NGT orders. All the states were also requested to upload the action plans in the website after seeking concurrence from RRC for dissemination of information to the public. Also the representatives are informed to resubmit the revised plans wherever recommended by 20.02.2019 after obtaining necessary approval from RRC.

Meeting ended with thanks to the Chair.

List of Participants

3rd 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: 2nd Floor, Conference Hall

Date: 11.02.2019

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20.	Ms. Deepty Goyal	JRF	CPCB	cpcb.nwmp@gmail.com	01143102423

3rd Task Team meeting for ensuring compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 2018 & 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"

Venue: 2nd Floor, Conference Hall

Date:12.02.2019

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Annexure-II

Summary of Observations/ Recommendations of Task Team on Action Plans for Restoration of Identified Polluted River Stretches submitted by the States/UTs as per Hon'ble NGT Orders dated 20.09.2018 & 19.12.2018

STATE	Identified Polluted River Name	Recommendations of the CPCB Task Team
ASSAM	BHARALU	Not Received
	BORSOLA	Not Received
	SILSAKO	Not Received
	SORUSOLA	Not Received
DAMAN, DIU AND DADRA NAGAR HAVELI	DAMANGANGA	Not Recommended
DELHI	YAMUNA	Not Recommended
GUJARAT	AMLAKHADI	Recommended subjected to conditions
	BHADAR	Recommended subjected to conditions
	BHOGAVO	Recommended subjected to conditions
	KHARI	Recommended subjected to conditions
	SABARMATI	Recommended subjected to conditions
	VISHWAMITRI	Recommended subjected to conditions
HARYANA	GHAGGAR	Recommended subjected to conditions
	YAMUNA	Recommended subjected to conditions
HIMACHAL PRADESH	SUKHANA	Recommended subjected to conditions
	MARKANDA	Recommended subjected to conditions
JAMMU & KASHMIR	DEVIKA	Not Recommended
KERALA	KARAMANA	Recommended subjected to conditions
MADHYA PRADESH	CHAMBAL	Not Recommended
	KHAN	Recommended subjected to conditions
	KSHIPRA	Recommended subjected to conditions
	BETWA	Not Recommended
MAHARASHTRA	GODAVARI	Not Recommended
	KALU	Not Recommended
	KUNDALIKA	Not Recommended
	MITHI	Not Recommended
	MORNA	Not Recommended
	MULA	Not Recommended
	MUTHA	Not Recommended
	NIRA	Not Recommended
	VEL	Not Recommended
	BHIMA	Not Recommended
	INDRAYANI	Not Recommended
	MULA-MUTHA	Not Recommended
	PAWANA	Not Recommended
	WAINGANGA	Not Recommended
WARDHA	Not Recommended	
MANIPUR	NAMBUL	Not Received
MEGHALAYA	UMKHRAH	Not Recommended
	UMSHYRPI	Not Recommended
NAGALAND	DHANSIRI	Not Recommended
ODISHA	GANGUA	Not Recommended
PUNJAB	GHAGGAR	Recommended subjected to conditions
	SUTLEJ	Recommended subjected to conditions
TAMIL NADU	CAUVERY	Not Recommended
	SARABANGA	Not Recommended
	THIRUMANIMUTHAR	Not Recommended
	VASISTA	Not Recommended
TELANGANA	MUSI	Recommended subjected to conditions
	MANJEERA	Recommended subjected to conditions

STATE	Identified Polluted River Name	Recommendations of the CPCB Task Team
	NAKKAVAGU	Recommended subjected to conditions
UTTAR PRADESH	HINDON	Not Received
	KALINADI	Not Recommended
	VARUNA	Not Recommended
	YAMUNA	Not Recommended
UTTARAKHAND	BHELA	Not Recommended
	DHELA	Not Recommended
	SUSWA	Not Recommended
	KICHHA	Not Recommended
WEST BENGAL	VINDHADHARI	Recommended subjected to conditions
	MAHANANDA	Recommended subjected to conditions

<i>Total PI & PII River Stretches</i>	<i>61</i>	<i>Not Recommended by Task Team</i>	<i>35</i>
<i>Action Plan Reports from UP, Manipur and Assam Not Received</i>	<i>6</i>	<i>Recommended subjected to conditions</i>	<i>20</i>

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

22.02.2019

To

The Member Secretary,
SPCBs/PCCs – (Andhra Pradesh, Assam, Daman, Diu And Dadra Nagar Haveli, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Puducherry, Punjab, Telangana, Uttarakhand) – seeking to provide additional data regarding trend analysis

Sub: Compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 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"

Sir,

You are aware that Hon'ble NGT order on 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", all State Governments and Union Territory Administration were directed to display the latest water quality of polluted river stretches on the website of your Board, within a month i.e. by 18.01.2019.

CPCB vide letter dated 31.12.2018 requested your SPCB/PCC for providing Web-Link details with respect to Water Quality of Identified Polluted River Stretches so as to enable CPCB to upload at its website for dissemination of information to the Public.

Based on the information received, the State-wise web links have been updated on CPCB website. However, it is requested that the goal of dissemination of current water quality data of Identified Polluted River Stretches is to check the deterioration/ improvement in water quality trend in view of execution of action plans over a period of timelines fixed for achieving the desired water quality. Therefore, the current water quality with the deliverables in achieving the desirable water quality and timelines may also be uploaded in your website periodically.

Yours faithfully,



(A. Sudhakar)
Head, WQM-I Division

o/c

25/02/19

To

The Member Secretary,
SPCBs/PCCs – (Karnataka, Kerala, Nagaland, Rajasthan, West Bengal, Maharashtra, Odisha) – web
link provided but requires improvement

**Sub: Compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 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"**

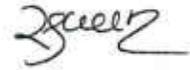
Sir,

You are aware that Hon'ble NGT order on 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", all State
Governments and Union Territory Administration were directed to display the latest water quality of
polluted river stretches on the website of your Board, within a month i.e. by 18.01.2019.

CPCB vide letter dated 31.12.2018 requested your SPCB/PCC for providing Web-Link details with
respect to Water Quality of Identified Polluted River Stretches so as to enable CPCB to upload at its
website for dissemination of information to the Public.

Based on the information received, the State-wise web links have been updated on CPCB website.
However, it is observed that the data is not provided appropriately to enable to be viewed by public
with/ without knowledge of NWMP programme i.e. the data should be related to current water quality
of identified polluted river stretches. It is requested that the goal of dissemination of current water
quality data of Identified Polluted River Stretches is to check the deterioration/ improvement in water
quality trend in view of execution of action plans over a period of timelines fixed for achieving the
desired water quality. Therefore, the current water quality with the deliverables in achieving the
desirable water quality and timelines may also be uploaded in your website periodically.

Yours faithfully,



(A. Sudhakar)
Head, WQM-I Division

of

25/04/19

To

The Member Secretary,
SPCBs/PCCs - (Bihar, Chhattisgarh, Delhi, Jharkhand, Manipur, Meghalaya, Mizoram, Sikkim,
Tamil Nadu, Tripura, Uttar Pradesh) - which have not taken action

Sub: Compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 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"

Sir,

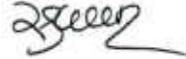
You are aware that Hon'ble NGT order on 19.12.2018 in OA No 673/2018 in the matter of News item published in 'THE HINDU' titled "More river stretches are now critically polluted: CPCB", all State Governments and Union Territory Administration were directed to display the latest water quality of polluted river stretches on the website of your Board, within a month i.e. by 18.01.2019.

CPCB vide letter dated 31.12.2018 requested your SPCB/PCC for providing Web-Link details with respect to Water Quality of Identified Polluted River Stretches so as to enable CPCB to upload at its website for dissemination of information to the Public.

Kindly arrange to provide current year water quality on your website and link to the same by e-mail at asudhakar.cpcb@nic.in and jcb.cpcb@nic.in urgently. It is requested that the goal of dissemination of current water quality data of Identified Polluted River Stretches is to check the deterioration/improvement in water quality trend in view of execution of action plans over a period of timelines fixed for achieving the desired water quality. Therefore, the current water quality with the deliverables in achieving the desirable water quality and timelines may also be uploaded in your website periodically.

If above act is not performed then CPCB is bound to put list of such non-complying states to CPCB site in compliance to Hon'ble NGT order dated 19.12.2018.

Yours faithfully,



(A. Sudhakar)
Head, WQM-I Division

ofc

केंद्रीय प्रदूषण नियंत्रण बोर्ड

निर्देश: _____

दिनांक: _____

25/02/19



CENTRAL POLLUTION CONTROL BOARD
(Ministry of Environment, Forest and Climate Change)
"Parivesh Bhawan", East Arjun Nagar,
Delhi-110032

CRITERIA FOR PRIORITISATION OF POLLUTED RIVER LOCATION (DRAFT)

1. Introduction

Water Quality monitoring is an essential component to maintain and restore the wholesomeness of resources by way of prevention and control of pollution as prescribed under the Water (Prevention and Control of Pollution) Act, 1974. However, the Act does not define the level of wholesomeness to be maintained or restored in different water bodies of the country. In view of the said reason, The Central Pollution Control Board (CPCB) has tried to define the wholesomeness in terms of protection of human uses, and thus, taken human uses of water as base for identification of water quality objectives for different water bodies in the country. It was considered ambitious to maintain or restore all natural water body at pristine level which is possible only by taking proper control measures. The level and degree of treatment required can be decided depending on the categorization of the polluted river stretch, as per the criteria given below:-

2. Identification of Polluted River Monitoring Location

The water quality data is required to be analyzed 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. However, actual self-purification distance need to be estimated based on the requisite input parameters.

3. Prioritization of Polluted River Monitoring Location

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'.

Following **Table 1 to Table 3** gives the average BOD/Faecal coliform values or range and the corresponding scores as well as categorization of the monitoring location

Table 1. Observed Average BOD Values in mg/l and the Corresponding BOD Score

S. No	Average BOD (Weightage-70 %)	
	Average BOD Value in mg/l	BOD Score (X)
1	> 30	100
2	21-30	70
3	11-20	50
4	3 -10	30
5	< 3	10

Table 2. Observed Ave. Faecal Coliform in MPN/100 ml and the Corresponding FC Score

S.No	Faecal Coliform (Weightage -30 %)	
	Average Faecal Coliform in MPN/100 ml	FC Score (Y)
(1)	≥ 5000	100
(2)	3001 -5000	50
(3)	1001 to 3000	30
(4)	501 to 1000	20
(5)	≤500	10

Table 3. Total Score and the Corresponding Category of River Monitoring Location

S. No	Total Score* (Z')	Priority Class of the Monitoring location	Category of Monitoring location
(1)	>90	Priority-I	Critically Polluted or Very Poor
(2)	71-90	Priority-II	Severely Polluted or Poor
(3)	51-70	Priority-III	Moderately Polluted or Fair
(4)	21-50	Priority-IV	Less Polluted or Good
(5)	10-20	Priority-V	Very Good

*Note:- (i) Above criteria must be considered only for the locations having monitored at least for 2 years and 8 observations in each year; and (ii) Please refer to the procedure for estimation of Total Score given in S.No. 4. For easy understanding flow chart given in **Figure 1** may also be referred*

4. Steps for Calculating the Total Score and Identification of Monitoring Location as the Polluted Monitoring Location:-

- (i) Depending on the average BOD measured value, assign the BOD score (X) as given in **Table 1**.
- (ii) Similarly depending on the average FC measured value, assign the FC Score (Y) as given in **Table 2**.
- (iii) Total score (Z) is estimated as : BOD Score (X) X (Weightage of BOD i.e., 70 %) + FC Score (Y) X (Weightage for FC i.e., 30 %).
- (iv) Now compare calculated Total Score (Z) with the Z' Value given in the Table 3 and the monitoring location is categorized suitably.

E.g.: At a particular monitoring location, the average values of BOD and the FC values are observed as 32 mg/l and 1600 MPN/100 ml respectively. Then, the total score is calculated as

- X is the BOD Score corresponding to the average BOD value of 32 mg/l as per **Table 1** = 100
- Y is the FC Score corresponding to the average FC value of 1600 MPN/100 ml as per **Table 2** = 30
- Calculated Total Score (Z) = X X Weightage of BOD + Y X Weightage of FC i.e., $100 \times 0.7 + 30 \times 0.3 = 70 + 9 = 79$.
- Compare 79 value with the Z' values given in the **Table 3** to decide on the Priority Category of the Monitoring Location. In this case, it is 'Severely polluted',

- 4.1 **Criteria for Priority I – Critically Polluted:** - If the Total score is > 90, then the monitoring location is categorized as '**Critically Polluted**' or **Very Poor**.
- 4.2 **Criteria for Priority II – Severely Polluted:** - If the Total score is 71 to 90, then the monitoring location is categorized as '**Severely Polluted**' or **Poor**
- 4.3 **Criteria for Priority III-Moderately Polluted:** - If the Total score is 51 to 70, then the monitoring location is categorized as '**Moderately Polluted**' or **Fair**
- 4.4 **Criteria for Priority IV –Less Polluted:** - If the Total score is 21 to 50, then the monitoring location is categorized as '**Less Polluted**'. or **Good**
- 4.5 **Criteria for Priority V-Non-Polluted:**-If the Total score is 10 to 20, then the monitoring location is categorized as '**Non-Polluted**' or **Very Good**

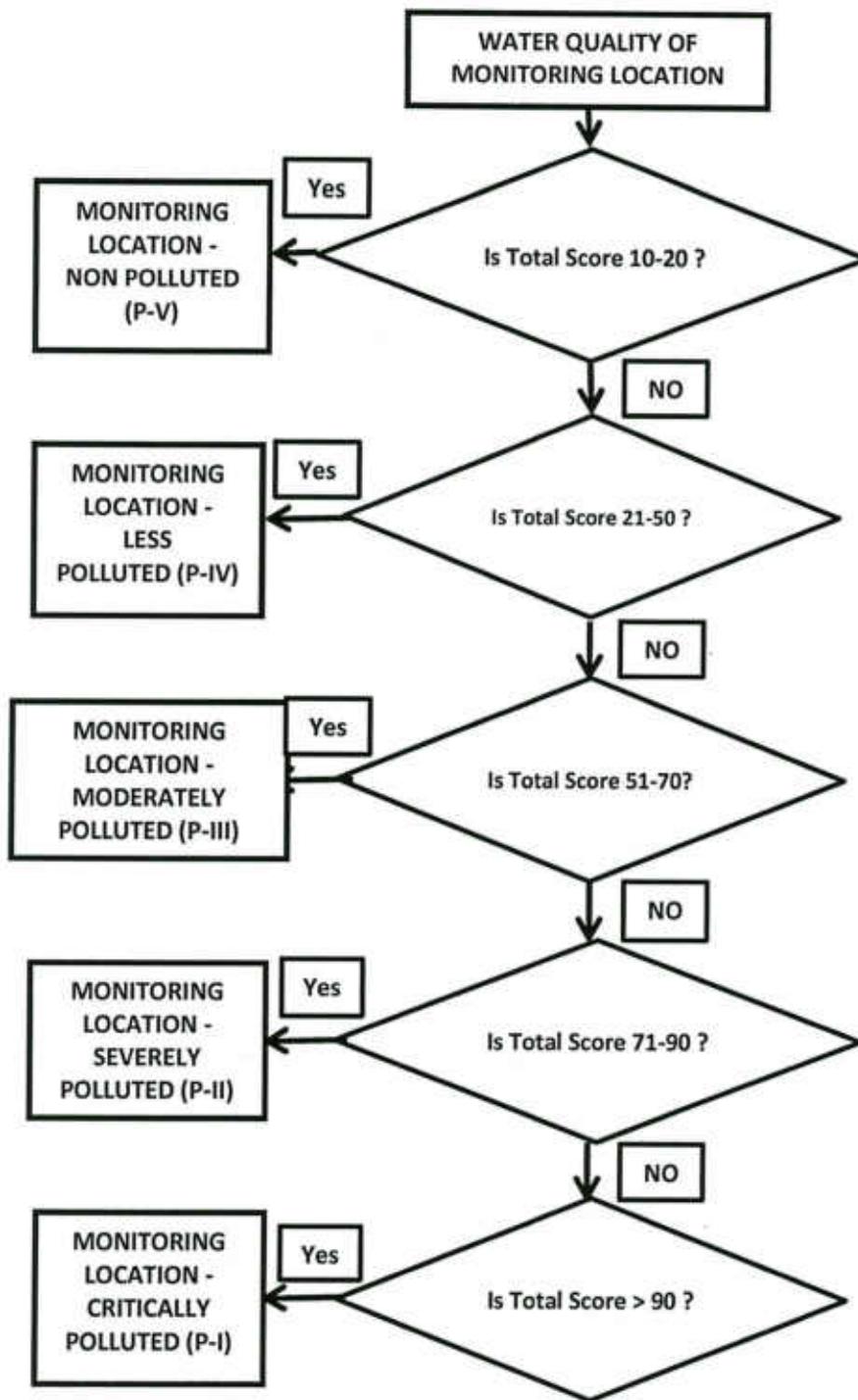


Figure 1. Flow Chart: Criteria for Prioritization of Polluted River Monitoring Location

Date: 09.01.2019

No- A-14011/1/2019-WQM-I 14824-14868

To

1. The Joint Secretary,
MoWR, RD & GR
2. The Joint Secretary,
CP Division, MoEF&CC
3. The Member Secretary,
All SPCBs/PCCs
4. Regional Director,
All RDs
5. All Divisional Heads/ Lab Incharges, CPCB

Sub: Draft Criteria for Prioritization of Polluted River locations -reg

Sir,

In compliance to Hon'ble NGT Directions dated 19.12.2018 in O. A. 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', with Dr. Tudi Indrasena Reddy & Ors. Versus UOI & Ors, CPCB has prepared "draft criteria for prioritization of polluted river location" and same is uploaded in CPCB website at <http://cpcb.nic.in/wqm/draft-criteria-polluted-river-03.01.2019.pdf>. A copy of afore-said draft criteria is enclosed.

It is requested to provide comments or suggestions on the aforesaid draft criteria by 19.01.2019 to CPCB by email at asudhakar.cpcb@nic.in and jcb.cpcb@nic.in to enable CPCB to take further action on the matter

Yours faithfully,



(A. Sudhakar)
DH-WQM-I



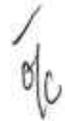
Encl: As above

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2. PS to MS
3. LO, CPCB

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: for information of 'MS', please
: for information, Please

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निर्दिष्ट... NS'imp
दिनांक... 10-1-19



(A. Sudhakar)

POLLUTION CONTROL BOARD, ASSAM
BAMUNIMADAM, GUWAHATI - 781021



Analysis Report of Water Samples of some of the locations of Rangpo river & Tista river, Sikkim

Lab. Ref. No.	Source	Date & Time of Collection	pH	Conductivity (µS/cm)	Turbidity (NTU)	C.O.D. (mg/L)	BOD (3 days at 27°) (mg/L)	P-Alkalinity (mg/L)	Total Alkalinity (mg/L)	Total Hardness (mg/L)	Calcium Hardness (mg/L)	Magnesium Hardness (mg/L)	Chloride as Cl ⁻ (mg/L)	Sulphate as SO ₄ ⁻² (mg/L)	Nitrate as N (mg/L)	Phosphate as PO ₄ (mg/L)	TDS (mg/L)	TFS (mg/L)	TSS (mg/L)	NH ₃ -N (mg/L)	TKN (mg/L)	Sodium as Na (mg/L)	Potassium as K (mg/L)	Fluoride as F ⁻ (mg/L)	Boron (mg/L)	Iron as Fe (mg/L)	Lead as Pb (mg/L)	Zinc as Zn (mg/L)	Copper as Cu (mg/L)	Chromium as Cr (T) (mg/L)	Nickel as Ni (mg/L)	Cadmium as Cd (mg/L)	Mercury as Hg (mg/L)	Oil and Grease	Arsenic as As (mg/L)	Total Coliform (MPN/100ml)	Faecal Coliform (MPN/100ml)
GW-01/19 MBW-01/19	Water from U/S of Rangpo river of Kurnek	05.01.19 2:15 PM	7	69	2	6.2	2.0	0	40	24	16	8	8	8.3	0.2	0.1	44	14	50	0.16	0.52	1.26	0.42	0.19	0.02	1.8	0.011	0.018	0.006	BDL	BDL	BDL	BDL	1.5	BDL	21000	9300
GW-02/19 MBW-02/19	Water from Rangpo river at midstream after Cipla Akkem Unit - 1	05.01.19 2:45 PM	7	51	2	7.7	2.0	0	34	16	10	6	8	6.9	0.1	0.1	34	10	22	0.16	0.58	0.92	0.21	0.18	0.01	0.6	0.007	0.006	BDL	BDL	BDL	BDL	2.8	BDL	46000	2800	
GW-03/19 MBW-03/19	Water from midstream of Rangpo river near bridge before confluence with Tista river at Rangpo Town.	05.01.19 3:30 PM	7	49	2	4.7	1.2	0	36	12	8	4	6	7.3	0.1	0.6	36	8	48	0.16	0.62	1.36	0.85	0.16	0.02	0.8	0.01	0.01	BDL	BDL	BDL	BDL	2.2	BDL	7500	1100	
GW-04/19 MBW-04/19	Water from D/S of Rangpo river below TBM after Rangpo Town before confluence with Tista river	05.01.19 4:00 PM	7	52	2	7.7	2.8	0	48	14	10	4	8	7.6	0.2	0.1	34	12	88	0.14	0.48	1.06	0.37	0.13	0.01	1.8	0.013	0.016	BDL	BDL	BDL	BDL	2.6	BDL	110000	4400	
GW-05/19 MBW-05/19	Water from Tista river before confluence with Rangpo river before Rangpo Town.	05.01.19 4:30 PM	7	84	2	6.2	2.6	0	48	26	18	8	10	11.5	0.1	0.1	52	16	42	0.13	0.44	1.28	0.63	0.65	0.01	1.1	0.012	0.03	BDL	BDL	BDL	BDL	1.1	BDL	21000	7500	
GW-06/19 MBW-06/19	Water from Tista river after confluence with Rangpo river.	08.01.19 8:40 AM	7	66	2	6.2	2.8	0	46	22	16	6	6	10.8	0.1	0.1	42	12	45	0.15	0.56	1.3	0.47	0.23	0.02	0.8	0.012	0.013	BDL	BDL	BDL	BDL	2.4	BDL	9300	2100	
GW-07/19 MBW-07/19	Water from Tista river at Malli near bridge.	05.01.19 11:15 AM	7	69	2	6.2	2.0	0	40	24	16	8	8	8.3	0.2	0.1	44	14	50	0.16	0.52	1.26	0.42	0.19	0.02	1.8	0.011	0.018	0.006	BDL	BDL	BDL	BDL	1.5	BDL	21000	9300

BDL - Below Dejectable Limit

R. Basumatary, JSA, CPCB, Shillong

Collected by

IIC Laboratory 02.02.19

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

14590

To

01/01/2019

The Regional Director,
Central Pollution Control Board,
Regional Directorate (North East),
Tumsir, Lumdingob, Lower,
Motinagar, Near Fire Bridge H.Q.,
Lumbynggad, Shillong-793014

Sub: Compliance to Hon'ble NGT (PB) New Delhi order dated 19.12. 2018 in Original Application No. 673/2018 in the matter of assessment of water quality on river Rangpo in Sikkim-reg

Sir,

Kindly refer to Hon'ble NGT order dated 19.12. 2018 in Original Application No. 673/2018 wherein Hon'ble NGT directed CPCB to examine whether river Rangpo falls in the category of polluted river stretches and to give appropriate directions if required.

In this connection, it is requested to arrange for assessment and monitoring of river Rangpo mainly at upstream and downstream of major towns located on the banks of river Rangpo. Detailed assessment report be submitted at an early date to CPCB (HQ) to take further action in the matter.

Yours Faithfully,

(A. Sudhakar)
Divisional Head, WQM-I

Copy to:

1. PS to 'CCB' : For information of 'CCB', please
2. ✓ PS to 'MS' : For information of 'MS,' please
3. Lo (UT), CPCB : For information of " please

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(A.Sudhakar)