

## **Brief note prepared on Polluted River Stretches (NGT O.A. 673/2018)**

### Introduction:

Proceedings were initiated based on a news item dated 17.09.2018 in ‘The Hindu’ authored by Shri Jacob Koshy titled as “More river stretches are now critically polluted: CPCB”. According to the news item, 351 Polluted River stretches have been identified by the Central Pollution Control Board (CPCB) in all the states. **Polluted River Stretches (PRS) in Gujarat was 20 Nos. as per order dated 20/09/2018.**

| Priority as per CPCB criteria<br>Based on BOD (in mg/L) | Nos. of PRS as per Hon’ble NGT order dated 20/09/2018 |
|---|---|
| I (BOD>30)  | 05 (Sabarmati, Bhadhar, Amlakhadi, Bhogavo, Khari)    |
| II(BOD 20 to 30)  | 01 (Vishwamitri)                                      |
| III(BOD 11 to20)  | 02 (Dhadhar, Triveni)                                 |
| IV(BOD 6 to10 )   | 06 (Damanganga, Kolak, Shedhi, Mahi, Tapi, Amravati)  |
| V(BOD 3 to 6)   | 06 (Tapi, Baleshwar, Kim, Narmada, Meshwo, Anas)      |
| Total   | 20  |

### Action Taken:

Action plans were prepared by the State for all the 20 Polluted River Stretches (PRS). The State has submitted Action Plans for PRS of priority I & IV to CPCB within time limit and the same were approved by CPCB. Action Plans of 6 PRS of priority V have been submitted to CPCB and does not need approval by CPCB.

With respect to the PRS; 99 nos. of Sewage Treatment Plants (STPs) and 12 Common Effluent Treatment Plants (CETPs) including expansion of existing CETPs were proposed for management of domestic waste water and industrial waste water respectively. Provision of estimated cost of Rs. 1930 crores for the proposed Sewage Treatment Plants has been made by various Departments of Government of Gujarat whereas provision of estimated cost of Rs. 442 crores for the proposed Common Effluent Treatment Plants (CETPs) including expansion has been made by respective industrial unit.

- The progress related to action points proposed under action plan is reviewed at central level by Central Monitoring Committee in Ministry of Jal Shakti and at state level by RRC and Hon’ble Chief Secretary, Gujarat State.
- River Rejuvenation Committee (RRC) was constituted on 29/11/2018 and total 11 meetings are conducted so far for taking stock of progress related to action points.

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- Gujarat State has submitted Performance Bank Guarantee BG of Rs.15 Crore.
- Monthly progress report (MPR) of all PRS are regularly being submitted to the Ministry of Jalshakti in the format prescribed.
- State has ring fenced the amount of Rs. 2,100 Cr./- in compliance of the directions of Hon'ble NGT in the O.A. 606/2018 for management of solid waste and liquid waste.
- In compliance of the directions of Hon'ble NGT in the O.A. 606/2018; State Level Monitoring Committee (SLMC) constituted under the chairmanship of the Chief Secretary, Gujarat to monitor the management of Solid waste and liquid waste in the state.
- GPCB has started new initiatives of drone survey for priority – I PRS for identification of outlets in the river. Drone survey of river Sabarmati and Amlakhadi completed and for rest of the PRS of priority I & II are under progress.

## **List of Polluted River Stretches as per CPCB report 2022**

| Priority as per CPCB criteria Based on BOD (in mg/L) | List of Polluted River Stretches as per CPCB report 2022 (Based on BOD results for the year 2019 and 2021) |
|--|--|
| I (BOD>30)   | 06 (Sabarmati, Bhadhar, Amlakhadi, Khari, Dhadhar, Vishwamitri)  |
| II(BOD 20 to 30)                                     | 01 (Mindhola)  |
| III(BOD 11 to20)                                     | 01 (Mahi)  |
| IV(BOD 6 to10 )                                      | 01 (Shedhi)  |
| V(BOD 3 to 6)  | 04 (Bhogavo, Bhukhi Khadi, Damanganga, Tapi)   |
| Total  | 13   |

## **List of Polluted River Stretches (PRS) removed from the list of PRS as per CPCB report 2022**

| Sr No. | River Name      |
|--------|-----------------|
| 1      | Baleshwar khadi |
| 2      | Kim             |
| 3      | Kolak           |
| 4      | Triveni         |
| 5      | Amravati        |
| 6      | Anas            |
| 7      | Meshwo          |
| 8      | Narmada         |

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Considering the improvement in water quality of PRS, 8 nos. of PRS delisted from the list of PRS and 01 PRS was newly added as per CPCB report – 2022. As per the CPCB report – 2018 the number of PRS of the state was 20 Nos. which was decreased to 13 as per the CPCB report – 2022.

As per the results of BOD in the year 2023, water samples of only 07 PRS (Sabarmati, Khari, Bhadar, Amlakhadi, Vishwamitri, Dhadhar, Bhogavo) are showing BOD value > 03 mg/l, which is a basic criterion for indentifying the stretch of the river as PRS.

Comparison of maximum BOD (mg/L) value of water samples collected from PRS.

| Sr. No. | River Name      | As per CPCB Report - 2018 | As per CPCB Report -2022 | For the Year 2022 | For the Year 2023 (upto Oct -23) |
|---------|-----------------|---------------------------|--------------------------|-------------------|----------------------------------|
| 1       | Amlakhadi       | 40-45                     | 49                       | 5.8               | 19                               |
| 2       | Bhadhar         | 426                       | 258.6                    | 69                | 45                               |
| 3       | Bhogavo         | 67                        | 6                        | 6                 | 5                                |
| 4       | Khari           | 235                       | 195                      | 56                | 37                               |
| 5       | Sabarmati       | 4 - 147                   | 292                      | 96                | 104                              |
| 6       | Vishwamitri     | 6-21                      | 38                       | 30                | 11                               |
| 7       | Dhadhar         | 16                        | 33                       | 21                | 9                                |
| 8       | Triveni         | 11                        | No PRS                   | <3                | <3                               |
| 9       | Amravati        | 10                        | No PRS                   | 5                 | <3                               |
| 10      | Damanganga      | 8                         | 5.3                      | <3                | <3                               |
| 11      | Kolak           | 8                         | No PRS                   | <3                | <3                               |
| 12      | Mahi            | 4.5-7                     | 12                       | <3                | <3                               |
| 13      | Shedhi          | 9                         | 6.2                      | 3.8               | <3                               |
| 14      | Tapi            | 8                         | 3.4                      | <3                | <3                               |
| 15      | Anas            | 5                         | No PRS                   | <3                | <3                               |
| 16      | Baleshwar Khadi | 4                         | No PRS                   | <3                | <3                               |
| 17      | Kim             | 3.1                       | No PRS                   | <3                | <3                               |
| 18      | Mindhola        | 6                         | 28                       | 7                 | <3                               |
| 19      | Meshwo          | 4                         | No PRS                   | <3                | <3                               |
| 20      | Narmada         | 5                         | No PRS                   | <3                | <3                               |

## Sewage Management

| Sr. No. | Title                                    | As on September 2021 | As on September 2023 |
|---------|--|----------------------|----------------------|
| 1.      | Sewage Generation (in MLD)               | 4003                 | 4451                 |
| 2.      | Treatment Capacity (in MLD)              | 4230                 | 5255                 |
| 3.      | Gap w.r.to treatment capacity (in MLD)   | NIL                  | NIL                  |
| 4.      | Capacity Utilization (in MLD)            | 3010                 | 3713                 |
| 5.      | Gap w.r.to capacity utilization (in MLD) | 994                  | 738                  |

## Status of STPs in the state.

| Sr. No. | Title                   | As on September 2021 |                | As on September 2023 |                |
|---------|-------------------------|----------------------|----------------|----------------------|----------------|
|         |                         | Total Nos.           | Capacity (MLD) | Total Nos.           | Capacity (MLD) |
| 1       | Operational STPs        | 102                  | 4230           | 172                  | 5255           |
| 2       | Under Construction STPs | 108                  | 1175           | 54                   | 969            |
| 3       | Under Planning STPs     | 39                   | 858            | 38                   | 816            |
|         | <b>Total</b>            | <b>249</b>           | <b>6263</b>    | <b>264</b>           | <b>7040</b>    |

Latest status of Treated waste water reuse in the State is as under:

|                       | TWW reuse started (MLD) | Project in tender/execution stage (MLD) | Projects under planning (MLD) | Total         |
|-----------------------|-------------------------|---|-------------------------------|---------------|
| Municipal Corporation | 833                     | 42                                      | 790                           | 1665          |
| Municipality          | 23                      | 6.5                                     | -                             | 29.50         |
| <b>Total</b>          | <b>856</b>              | <b>48.5</b>                             | <b>790</b>                    | <b>1694.5</b> |

## Industrial Wastewater Management

i. ETP details (As on 30/09/2023) :

- In State of Gujarat, total 40299 nos. of industries registered with State Pollution Control Board and out of which 14071 industries require functional primary ETP.
- Total 13655 industries have provided functional primary ETP.
- In Gujarat 416 Nos of industries found working without primary functional ETP.
  - Closure direction to industries: 278
  - Notices issued to industries: 118
  - Action Under Process: 20

ii. Status of CETPs in Gujarat (As on 30/09/2023):

- In State of Gujarat, there are currently 41 operational CETPs having hydraulic capacity of 819.756 MLD serving @ 6681 individual industries.
- Action taken by the Board against CETP for not complying with discharge norms. Total No. of CETPs not meeting with discharge standards : 18
  - No of CETPs against issued SCN under section 33-A of Water Act- 1974: 11
  - No of CETPs against action under process : 07
  - Total 17 CETPs are under construction / proposed with total hydraulic capacity 362.85 MLD.

iii. Action taken by the Board during September 2023 against the individual industries not complying with discharge norms.

- No of industries against Closure Direction issued under section 33-A of Water Act: 71
- No of industries against Notice / SCN under section 33-A of Water Act- 1974: 102
- No of industries against action under process : 18