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#### STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII,
Bhubaneswar – 751 012

No. 6731

Ind-VI-BW/2824 (Pt. IV) /19-20

Dt. 28.07.2020

Speed Post/ Email

To

Dr. D. P. Mathuria
Executive Director, National Mission for Clean Ganga
Department for Water Resources, River Development & Ganga Rejuvenation,
Ministry of Jal Shakti
1st Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi-110 002

Sub: Submission of Monthly Progress Reports related to Control of River Pollution - Reg.

Ref: Email of Dt. 29.02.2020

Sir,

In Inviting a reference to above subject, the Monthly Progress Report for the month of June-2020 in compliance to the Proceedings of the 2<sup>nd</sup> Central Monitoring Committee is enclosed herewith for your kind information and necessary action.

Yours faithfully.

Encl : As above

**Member Secretary** 

Memo No. 6732

Date: 28.07.2020

Copy forwarded to Dr. J.C. Babu, Addl. Director, WQM-I Division, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi -110032 for kind information and necessary action.

Encl : As above

**Member Secretary** 

Memo No. 6733

Date: 28.07.2026

Copy forwarded to the Director, Env.-cum-Spl. Secy. To Government, Forest and Environment Department, for kind information and necessary action.

Encl : As above

Member Secretary

#### National Mission for Clean Ganga

# Format for Submission of Monthly Progress Report by States/ UTs (Hon'ble NGT in the matter of OA No. 673/2018 dated 06.12.2019)

State: Odisha Month: June, 2020

| SI No.  | Information sought for  | Replies  |
|---------|---|--|
| 6.1 (i) | identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment                           | List of Polluting stretches and their priority category are given in Annexure-1. Information on identification of drains contributing pollution to these river stretches are given in Annexure-2.  |
| (ii)    | Status of STPs. I & D and sewerage networks, Details of Existing infrastructure, Gap Analysis, Proposed along with completion timeline                          | Information given in Annexure-3  |
| (iii)   | Status of CETPs, Details of Existing CETP and ETP Infrastructure, Gap Analysis, Proposed along with completion timeline, No. of industries and complying status | There is no CETP in the State. Industries have installed captive ETPs for treatment of Industrial Effluent. Detail status of management of Industrial Effluent is given in Anexure-4.  |
| (iv)    | Status of Solid Waste Management and Details of of Processing facilities and Existing infrastructure, Gap analysis, Proposed alongwith completion timeline      | Information given in Annexure-5.   |
| (v)     | Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;                  | Latest water quality status during June, 2020 is given in Annexure-6 (a). Comparison of Status of polluted river stretches during the period 2017 -2020 as on June, 2020 is given in Annexure-6 (b). Summary of number of polluted river stretches under different category during the period 2017-2020 (June, 2020) is given in Annexure-6 (c). |

| (vi)   | Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams, etc. | Bio-medical wastes generating from the health care establishments are being managed either through common biomedical waste treatment and Disposal (CBWTDF) facilities or by deepburial practice.  |
|--------|--|---|
|        |  | Bar-code System has been implemented in the following four Common Facilities (CBWTDF):  1) M/s. Sani Clean Pvt. Ltd., Khurda, 2) M/s Mediaid Marketing Services, Bhubaneswar at SCB Medical College and Hospital, Cuttack 3) M/s Mediaid Marketing Services, Bhubaneswar at Rourkela Govt. Hospital, Rourkela 4) M/s. Bio-Tech Solutions, at VSS Medical College and Hospital Burla, Sambalpur.  Biomedical Waste generation and management in the Municipalities along the |
|        |  | polluted river stretches is given in Annexure-7   |
| (vii)  | Ground Water Regulation  | Information given in  |
| (viii) | Adopting Good Irrigation practices   | Annexure-8 (a) and 8(b).  |
| (ix)   | Protection and Management of Flood Protection Zones (FPZ)  |   |
| (x)    | Rain water harvesting  |   |
| (xi)   | Maintaining minimum environmental flow in river  |   |
| (xii)  | Plantation on both sides of the river  |   |
| (xiii) | Setting up of biodiversity parks on flood plains by removing encroachment  |   |

#### Annexure-I

## List of Polluted River Stretches as identified by CPCB and their priority Category (during 2017)

| Pollut | ed River Stretches identified by CPCB | Priority Category of<br>Polluted River stretch |
|--------|---------------------------------------|--|
| 1.     | Gangua River (Along Bhubaneswar)      | Priority-I                                     |
| 2.     | Guradih nallah (Rourkela)             | Priority-III                                   |
| 3      | Kathajodi (Cuttack to Urali)          | Priority-III                                   |
| 4      | Nandira Jhor (D/s of Talcher)         | Priority-III                                   |
| 5      | Daya (Bhubaneswar to Bargarh)         | Priority-IV                                    |
| 6      | Kuakhai (Along Bhubaneswar)           | Priority-IV                                    |
| 7      | Banguru nallah                        | Priority-V                                     |
|        | (along Talcher, Rengali)              |  |
|        | (Corrected as Along Talcher)          |  |
| 8      | Bheden                                | Priority-V                                     |
|        | (along Bheden)                        |  |
| 9      | Brahmani (Rourkela to Biritol)        | Priority-V                                     |
| 10     | Budhabalanga (Mahulia to Baripada )   | Priority-V                                     |
| 11     | Kusumi                                | Priority-V                                     |
|        | ( along Talcher)                      |  |
|        | (Corrected as Along Tangi)            |  |
| 12     | Mahanadi (Sambalpur to Paradeep)      | Priority-V                                     |
| 13     | Mangala (Along Puri)                  | Priority-V                                     |
| 14     | Nagavali (Jaykaypur to Rayagada)      | Priority-V                                     |
| 15     | Luna                                  | Priority-V                                     |
|        | (along Bijipur)                       |  |
| 16     | Ratnachira (Along Bhubaneswar,        | Priority-V                                     |
|        | Puri)                                 |  |
| 17     | Rushikulya (Pratappur to Ganjam)      | Priority-V                                     |
| 18     | Sabulia (Jagannathpatna, Rambha)      | Priority-V                                     |
| 19     | Serua                                 | Priority-V                                     |
|        | (Khandaeta to Sankhatrasa)            |  |

#### Details of drains contributing to polluted river stretches (River stretch-wise) (July, 2020)

| SI.<br>No. | Name of the<br>Polluted River<br>Stretch | Drain             | Type Domestic/ Industrial/ Mixed                        | Quantity<br>(MLD) | BOD (mg/L) | FC (MPN/<br>100 mL) |
|------------|--|-------------------|---|-------------------|------------|---------------------|
| 1.         | Gangua River                             | 10 Nos.           | Domestic  |                   |            |                     |
|            | (Along                                   |                   | Drain Name  | -                 | -          | -                   |
|            | Bhubaneswar)                             |                   | Patia   | -                 | -          | -                   |
|            |  |                   | Sainik School   | -                 | -          | -                   |
|            |  |                   | OAP area  | -                 | -          | -                   |
|            |  |                   | Vani Vihar  | -                 | -          | -                   |
|            |  |                   | Laxmisagar  | -                 | -          | -                   |
|            |  |                   | area  |                   |            |                     |
|            |  |                   | Baragada  | -                 | -          | -                   |
|            |  |                   | Area  |                   |            |                     |
|            |  |                   | Kedargouri  | -                 | -          | -                   |
|            |  |                   | Airport area  | -                 | -          | -                   |
|            |  |                   | Ghatikia  | -                 | -          | -                   |
|            |  |                   | Nicco Park  | -                 | -          | -                   |
| 2.         | Guradih nallah<br>(Rourkela)             | 1 No.             | Industrial  | -                 | -          | -                   |
| 3          | Kathajodi                                | 3 Nos.            | Domestic  |                   |            |                     |
|            | (Cuttack to Urali)                       | Cuttack to Urali) | Outlet of STP   | -                 |            |                     |
|            |  |                   | at CDA-   |                   | 3.8        | <1.8                |
|            |  |                   | Bidanasi area   |                   |            |                     |
|            |  |                   | Wastewater  | -                 |            |                     |
|            |  |                   | discharge to  |                   |            |                     |
|            |  |                   | Kathajodi   |                   | 24.8       | 160000              |
|            |  |                   | river through   |                   | 25         | 100000              |
|            |  |                   | sluice gate at  |                   |            |                     |
|            |  |                   | Khannagar   |                   |            |                     |
|            |  |                   | Outlet of STP   | -                 |            |                     |
|            |  |                   | at<br>Mattagajpur<br>discharge to<br>Kathajodi<br>river |                   | 2.3        | 1700                |
| 4          | Nandira Jhor                             | 1 No.             | Kisinda jhor,   | -                 | 1.4        | 45                  |
|            | (D/s of Talcher)                         |                   | a natural   |                   |            |                     |
|            | ,  |                   | storm water   |                   |            |                     |
|            |  |                   | drain carrying  |                   |            |                     |
|            |  |                   | treated   |                   |            |                     |
|            |  |                   | industrial  |                   |            |                     |
|            |  |                   | discharge   |                   |            |                     |

| SI.<br>No. | Name of the<br>Polluted River | Drain | Type                     | Quantity<br>(MLD) | BOD (mg/L) | FC (MPN/<br>100 mL) |
|------------|-------------------------------|-------|--------------------------|-------------------|------------|---------------------|
| NO.        | Stretch                       |       | Domestic/<br>Industrial/ | (IVILD)           |            | 100 mL)             |
|            |                               |       | Mixed                    |                   |            |                     |

| 5        | Daya            | 1 No.  | Gangua         | - | 7.4* | 116500* |
|----------|-----------------|--------|----------------|---|------|---------|
|          | (Bhubaneswar to |        | nallah , a     |   |      |         |
|          | Bargarh)        |        | natural storm  |   |      |         |
|          | ,               |        | water drain,   |   |      |         |
|          |                 |        | carrying       |   |      |         |
|          |                 |        | domestic       |   |      |         |
|          |                 |        | wastewater     |   |      |         |
| 6        | Kuakhai (Along  | -      | No drain       | - | -    | -       |
|          | Bhubaneswar)    |        |                |   |      |         |
| 7        | Banguru nallah  | -      | No drain       | - | -    | -       |
|          | (along Talcher, |        |                |   |      |         |
|          | Rengali)        |        |                |   |      |         |
| 8        | Bheden          |        | Kharkhari      | - | -    | -       |
|          | (along Bheden)  |        | nallah, a      |   |      |         |
|          | (3.28 2         |        | natural storm  |   |      |         |
|          |                 |        | water drain,   |   |      |         |
|          |                 |        | carrying       |   |      |         |
|          |                 |        | treated        |   |      |         |
|          |                 |        | industrial and |   |      |         |
|          |                 |        | domestic       |   |      |         |
|          |                 |        | wastewater     |   |      |         |
| 9        | Brahmani        | -      | Guradih        | _ | 7.6  | 24000   |
|          | (Rourkela to    |        | nallah, a      |   |      |         |
|          | Biritol)        |        | natural storm  |   |      |         |
|          | ,               |        | water drain,   |   |      |         |
|          |                 |        | carrying       |   |      |         |
|          |                 |        | treated        |   |      |         |
|          |                 |        | industrial and |   |      |         |
|          |                 |        | domestic       |   |      |         |
|          |                 |        | wastewater     |   |      |         |
| 10       | Budhabalanga    | 2 Nos. | Sarali Nallah  | _ | _    | -       |
|          | (Mahulia to     |        | and Jarli      |   |      |         |
|          | Baripada )      |        | nallah, two    |   |      |         |
|          | , ,             |        | natural storm  |   |      |         |
|          |                 |        | water drains   |   |      |         |
|          |                 |        | carrying       |   |      |         |
|          |                 |        | domestic       |   |      |         |
|          |                 |        | wastewater     |   |      |         |
| 11       | Kusumi          | -      | No drain       | - | -    | -       |
|          | ( along Tangi)  |        |                |   |      |         |
| <u> </u> |                 |        |                |   |      |         |

<sup>\*</sup> Average of four sampling stations on Gangua nallah

| 12 | Mahanadi         | Sambalpur   | : Domestic was   | tewater of Sam  | balpur Municip  | al Corporation  |
|----|------------------|-------------|--|-----------------|-----------------|-----------------|
|    | (Sambalpur to    | flows thro  | ugh four natural   | streams such as | s Tangana nalla | h, Dhobijhore,  |
|    | Paradeep)        | Haradajhoi  | r and Malatijhor   | which ultimate  | ely discharge i | nto Mahanadi    |
|    |                  | river       |  |                 |                 |                 |
|    |                  | Sonepur : 0 | One major drain  | carrying domest | ic wastewater o | of the town     |
|    |                  | Cuttack:    | One major drain  | n carrying dome | estic wastewate | er of a part of |
|    |                  | Cuttack cit | У  |                 |                 |                 |
|    |                  | Paradeep :  | : One major drai   | n carrying dome | estic wastewate | er of the town  |
|    |                  | through At  | harabanki creek  |                 |                 |                 |
| 13 | Mangala          |             | Outlet of 15   | -               | 12.5            | 1300            |
|    | (Along Puri)     |             | MLD STP at   |                 |                 |                 |
|    |                  |             | Mangalaghat,   |                 |                 |                 |
|    |                  |             | Puri   |                 |                 |                 |
| 14 | Nagavali         | -           | Treated wastewater of STP and ETP at Jaykaypur, Rayagada |                 |                 | our, Rayagada   |
|    | (Jaykaypur to    |             |  |                 |                 |                 |
|    | Rayagada)        |             |  |                 |                 |                 |
| 15 | Luna             | -           | No drain   | -               | -               | -               |
|    | (along Bijipur)  |             |  |                 |                 |                 |
| 16 | Ratnachira       | -           | No drain   | -               | -               | -               |
|    | (Along           |             |  |                 |                 |                 |
|    | Bhubaneswar,     |             |  |                 |                 |                 |
|    | Puri)            |             |  |                 |                 |                 |
| 17 | Rushikulya       | -           | No drain   | -               | -               | -               |
|    | (Pratappur to    |             |  |                 |                 |                 |
|    | Ganjam)          |             |  |                 |                 |                 |
| 18 | Sabulia          | -           | No drain   | -               | -               | -               |
|    | (Jagannathpatna, |             |  |                 |                 |                 |
|    | Rambha)          |             |  |                 |                 |                 |
| 19 | Serua            |             |  | As in Sl. No. 3 |                 |                 |
|    | (Khandaeta to    |             |  |                 |                 |                 |
|    | Sankhatrasa)     |             |  |                 |                 |                 |



#### Orissa water supply & sewerage board

(A Govt. of Odisha Undertaking)

Satyanagar, Bhubaneswar-751007 Phone: (0674)2571341 /2571185 Fax:2571348, Mail- msowssb@gmail.com & msowssb@outlook.com

No. 1991 (NR) 1.5. 2020 W-1815(2).

To

The Member Secretary, SPCB, Bhubaneswar.

Sub: Submission of Monthly Progress Report (April 2020) for compliance of direction of the Honble' NGT passed in OA No.673/2018 vide order dated 6.12.2019.

Letter No. 2120 dated 24.02.2020 addressed to H&UD Department. Ref:

Sir,

With reference to the subject cited above, the monthly progress report (April 2020) relating to compliance of direction of Hon'ble NGT passed in OA No.673/ 2018 vide order dated 6.12.2019 relating to OWSSB is furnished herewith in the prescribed format for information and necessary action.

Encl: as above.

Memo No. 1992 OWSSB

No. 1992/OWSSB Date. / 5 2020
Copy with copy of enclosure forwarded to the Additional Secretary to Govt & Additional Mission Director, SBM (U), H&UD Department for information and necessary action with

reference to letter No. 7349 dated 16.3.2020.

EIC-cum Member Secretary

### FORMAT FOR SUBMISSION OF MONTHLY PROGRESS REPORT BY OWSSB (HONBLE NGT IN THE MATTER OF OA. 673/2018 DATED 6.12.2019) ENDING MARCH 2020

| SI. | Activity to be monitored   | Timeline   | Progress/ compliance/ status  |                        |  |
|-----|--|--|---|------------------------|--|
| 1.  | Ensure 100% treatment of sewage at least in situ remediation   | 31.03.2020   | It is targeted to ensure treatm sewage generated in 6 UL Dec'2020.  Quantity of sewage treated in 2020 i. Puri - 14 mld ii. Cuttack- 40 mld iii. Talcher - 2 mld Total - 56 mld | Bs of the State by     |  |
|     | Commencement of setting up of STPs connecting all the drains and other sources of generation of sewage to the STPs must be ensured | 31.03.2020   |   |                        |  |
| 2.  | Timeline for completing all  | 31.03.2020   | Bhubaneswar Sewer   |                        |  |
|     | steps of action plans  | g completion of  | Sewerage Treatment Plant  | 46% Completed.         |  |
|     | including completion of  |  | (STP) – 1 No (56 mld)   |                        |  |
|     | setting up STPs & their  |  | Bhubaneswar Sewer   | age District-II        |  |
|     | commissioning.   |  | Sewerage Treatment Plant (STP) – 1 No (28 mld)  | 23% Completed.         |  |
|     | N .  |  | Bhubaneswar Sewera  | age District-III       |  |
|     |  |  | Sewerage Treatment Plant (STP) – 1 No (43.5 mld)  | 58% Completed.         |  |
|     |  | 10.2   | Bhubaneswar Sewer   | age District-IV        |  |
|     |  |  | Sewerage Treatment Plant (STP) – 1 No (8.5 mld)   | 29% Completed.         |  |
|     |  |  | Rourkela  | City                   |  |
|     |  |  | Sewerage Treatment Plant<br>(STP) – 1 No (40 MLD)   | 92% Completed.         |  |
|     |  |  | Sambalpur   | City                   |  |
|     |  |  | Sewerage Treatment Plant (STP) – 1 No (40 mld)  | 91% Completed.         |  |
| 6.1 | Progress report may be   | Dec. 2021  | Polluting sources i.e. drains   | s contributing to rive |  |
| 0.1 | comprised of details along   | A STATE OF THE PARTY OF THE PAR |   | lentified and deta     |  |
|     | with completion timeline on  |  | information is being compile  |                        |  |

| i. | Identification of |
|----|-------------------|
|    | polluting sources |
|    | including drains  |
|    | contributing to   |
|    | river pollution   |
|    | and action as per |
|    | NGT order on in   |
|    | situ treatment.   |
|    |                   |

Dec.2021

ii. Status of STP (I&D) and Sewerage network.:

Details of existing infrastructure, gap analysis, proposed along with completion timeline. At present proven technology is not available for in situ treatment of waste water in drain.

| Sewage Project Under   | Progress as on April 2020.               |  |  |
|--|--|--|--|
| ULBs<br>Bhubaneswar Sewei  |  |  |  |
| The second secon | 11.9/25.52 km                            |  |  |
| Sewer network  | (47% completed)                          |  |  |
| Sewerage Treatment<br>Plant (STP) – 1 No (56<br>mld)   | 46% Completed.                           |  |  |
| Sewage Pumping   | 3/5 (21%) civil                          |  |  |
| Station  | work completed.                          |  |  |
| Bhubaneswar Sewer  | age District-II                          |  |  |
| Sewer network  | 9.62/27.18 km                            |  |  |
| Derrot Horrison  | (35% completed)                          |  |  |
| Sewerage Treatment<br>Plant (STP) – 1 No (28<br>mld)   | 23% Completed.                           |  |  |
| Sewage Pumping   | 11/14 Nos (26%                           |  |  |
| Station  | completed.                               |  |  |
| Bhubaneswar Sewer  | age District-III                         |  |  |
| Sewer network  | 18.40/97.11 km                           |  |  |
|  | (19% completed)                          |  |  |
| Sewerage Treatment<br>Plant (STP) – 1 No<br>(43.5 mld)   | 58% Completed.                           |  |  |
| Sewage Pumping   | 5/9 Nos (39%                             |  |  |
| Station  | completed.                               |  |  |
| Bhubaneswar Sewe   | rage District-IV                         |  |  |
| Sewer network  | 10.50/14.23 km<br>(71% completed)        |  |  |
| Sewerage Treatment<br>Plant (STP) – 1 No (8.5<br>mld)  |  |  |  |
| Sewage Pumping   | 3/4 Nos (37%                             |  |  |
| Station  | completed.                               |  |  |
| Bhubaneswar SD-VI  | 162.57/254 kms<br>(64.04%)<br>completed. |  |  |
| Sewer network for  | 299.18/ 382 km                           |  |  |
| Cuttack Sewerage   | (78.30%                                  |  |  |
| District-I, II& III  | completed)                               |  |  |
| Sewer network of 3 STP   |  |  |  |
| in Bhubaneswar &   | MANAGEMENT AND STREET OF THE STREET      |  |  |

| Dec.2021 | Cuttack Rourkela City                                |                           |
|----------|--|---------------------------|
| Dec.2021 | Sewer network  | 150.99 km (80% completed) |
|          | Sewerage Treatment<br>Plant (STP) – 1 No (40<br>MLD) | 92% Completed.            |
|          | Sewage Pumping<br>Station                            | 4/6 Nos (65% completed.   |
| 1        | Sambalpu   | r City                    |
|          | Sewer network  | 88.17 km (35% completed)  |
|          | Sewerage Treatment<br>Plant (STP) – 1 No (40<br>mld) |                           |
|          | Sewage Pumping<br>Station                            | 5/8 Nos (37% completed.   |
|          |  |                           |
|          |  |                           |
| 1        |  |                           |

### Status on implementation of Action Plans for Restoration of identified Polluted River Stretches for ensuring compliance to Hon'ble NGT orders dated 20.09.2018, 19.12.2018 and 08.04.2019.

| B. Industrial Effluent Management (under 17 Ca   | at. of Industries in Head Office, Consent Administration)   |
|--|---|
| Identification of non-complying as well as illegal units   | Nil   |
| Closure Direction for non-complying and illegal units  | Nil   |
| Upgradation of existing captive ETPs or construction of new ETPs by individual industries.   | <ol> <li>S Nos.</li> <li>Rourkela Steel Plant, Rourkela has installed new ETP of capacity 1100 m³ for recirculation of Lagoon effluent in Hot Strip mill.</li> <li>Neelachal Ispat Nigam Ltd, Jajpur – has modified it's BOD plant.</li> <li>Emami Paper Mills Ltd., Balasore has upgraded ETP.</li> <li>Grasim Industries Ltd., Ganjam has upgraded ETP.</li> <li>Vedanta Ltd., (Smelter and CPP) Jharsuguda installed new ETP of 50m³/hr in the smelter plant.</li> </ol> |
| Up-gradation of existing CETPs with state of Art technologies  | No CETP in the State of Odisha  |
| Commissioning of new CETPs with State of Art technologies  | NA  |
| Interception and diversion of industrial effluent from drains carrying industrial effluents. Installation of OCEMS by industries and | Nil Out of 22 nos. of industries 21 nos. of industries have   |
| connectivity of all OCEMS with SPCB/ PCC and CPCB server.  | installed CEQMS and connected to server of SPCB and CPCB. Only M/s. NSPCL, NTPC SAIL Power Corporation Ltd., Rourkela has not installed CEQMS as it has adopted recirculation of cooling tower blow down water of power plant in ash slurry making.   |
| Utilization of treated effluent and reduction of water consumption by the industries.  | <ol> <li>3 Nos.</li> <li>M/s. Jindal Stainless Ltd., Kalinganagar Jajpur - installed 50m3/hr RO plant at CPP to completely reuse the cooling blow down water.</li> <li>M/s. Rourkela Steel Plant, Rourkela – recycled it's effluent from lagoon by treating in ETP and reused in Hot Strip Mill (1100 m³/hr) out of 1975m3/hr.</li> <li>M/s. Neelachal Ispat Nigam Ltd., Jajpur – utilized 150 m³/hr blow down effluent in pig casting and slag granulation.</li> </ol>     |
| Adoption of zero liquid discharge by the industries as per Direction of CPCB.  | Out of 22 nos. of industries 12 nos. of industries have already adopted ZLD. 3 nos. of industries have been directed to adopt ZLD. Other 7 nos. of industries discharging to river and sea after meeting prescribed standard. Detailed list enclosed as per Annexure-a.   |
| Notification of PETP standards.  Awareness of training for the concerned authorities of O &M of ETPs/ CETPs                          | ting in the well-sted siver stretches of Odiche (list   |

NB :Total 22 nos. of industries identified existing in the polluted river stretches of Odisha (list enclosed).

#### Annexure -a

| SI.<br>No. | Name of the industry   | Treatment<br>facility<br>provided | Recipient<br>water bodies                   | Connectivity<br>of CEQMS to<br>SPCB/ CPCB<br>server | Remarks   |
|------------|--|-----------------------------------|---|---|---|
| 1)         | M/s. Bhusan Power & Steel Ltd., At- Thelkoloi, Po - Lapanga, Rengali, Dist - Sambalpur-768212  | ETP                               | Bheden River                                | 4 nos. of<br>CEQMS                                  | The unit has been directed to adopt ZLD by 31.03.2020   |
| 2)         | M/s. Neelachallspat<br>Nigam Ltd., Kalinga Nagar<br>Industrial Complex, Po -<br>Duburi, Dist - Jajpur-<br>755026                     | ETP for BOD<br>plant              | Ganda Nallah<br>/ lead to<br>Brahmani       | 2 nos. of<br>CEQMS                                  | The unit has been directed to adopt ZLD by 31.12.2019   |
| 3)         | M/s Tata Steel Limited,<br>Kalinga Nagar Industrial<br>Complex, Duburi - 755<br>026, Dist Jajpur                                     | ETP                               | Ganda<br>Nallah/ lead<br>to Brahmani        | 3 nos. of<br>CEQMS                                  | The unit has adopted ZLD.   |
| 4)         | M/s. Jindal Steel and<br>Power Ltd., Chhendipada<br>Road, (SH-63), At/Po -<br>Jindal Nagar, Dist - Angul -<br>759111                 | ETP                               | Kurudibahali<br>nallah                      | 3 nos. of<br>CEQMS                                  | The unit has adopted ZLD.   |
| 5)         | Jindal Stainless Limited (JSL), Kalinganagar Industrial Complex, Village Jakhpura  | ETP                               | Ganda<br>Nallah/ lead<br>to Brahmani        | 1 no. of<br>CEQMS                                   | The unit has adopted ZLD.   |
| 6)         | M/s.Rourkela Steel Plant,<br>At- Rourkela Steel Plant,<br>Dist - Sundargarh  | ETP                               | Guradhi<br>Nallah /<br>Brahmani<br>river    | 7 nos. of<br>CEQMS                                  | The unit recycled it's effluent from lagoon by treating in ETP and reused in Hot Strip Mill (1100m3/hr) out of 1975m3/hr and directed to adopt ZLD by Dec, 2020 |
| 7)         | M/s. Tata Steel BSL Ltd.,<br>At: Narendrapur PO:<br>Kusupanga Via:<br>Meramandali Dist.:<br>Dhenkanal Pin.759121,<br>Odisha          | ETP                               | Effluent<br>discharged to<br>Kisinda nallah | 6 nos. of<br>CEQMS                                  | The unit has adopted ZLD.   |
| 8)         | M/s. NTPC -SAIL Power<br>Company Pvt. Ltd., (CPP-<br>II), Administrative<br>Building, RSP Complex,<br>Rourkela, Dist -<br>Sundargarh | ETP                               | Guradhi<br>Nallah /<br>Brahmani<br>River    |   | The unit has adopted ZLD.   |

| SI.<br>No. | Name of the industry   | Treatment<br>facility<br>provided | Recipient water bodies                                | Connectivity<br>of CEQMS to<br>SPCB/ CPCB<br>server | Remarks  |
|------------|--|-----------------------------------|---|---|--|
| 9)         | M/s. OCL India Ltd.<br>(Dalmia Cement Bharat<br>Limited), At. Rajgangpur,<br>Dist. Sundergarh, Odisha                  | ЕТР                               | Liploi Nalla /<br>Sankha River<br>/ River<br>Brahmani | 1 no.   | Adopted ZLD  |
| 10)        | Suidihi Distillery Ltd.,<br>LathikathaSundargarh   | ETP                               | River<br>Brahmani                                     | 1 no.<br>(Web Cam)                                  | Adopted ZLD  |
| 11)        | M/s. Talcher Super<br>Thermal Power Station,<br>NTPC, At- Kaniha, Po -<br>Deepsikha, Dist - Angul                      | ETP                               | River<br>Brahmani                                     | 1 no.   | Adopted ZLD  |
| 12)        | M/s. J.K. Paper Ltd.,<br>Jaykaypur, Dist -<br>Rayagada   | ETP                               | River Nagavali  | 1 no.   | The unit has been permitted to discharge 34000KLD of treated Industrial effluent to River Nagavali                       |
| 13)        | M/s Grasim Industries<br>Ltd, (formerly known as<br>Jayshree Chemicals Ltd),<br>At/PO-Jayshree-761 025,<br>Dist-Ganjam | ЕТР                               | River<br>Rushikulya                                   | 1 no.   | Adopted ZLD  |
| 14)        | M/s. NALCO Ltd., (Smelter<br>Unit) Nalco Nagar, Dist -<br>Angul - 759145   | ETP                               | Kisinda Jhor  | 1 No.   | The unit has been permitted to discharge 2640KLD of treated Industrial effluent to Kisindajhor only during rainy session |
| 15)        | M/s Talcher Thermal<br>Power Stations (TTPS),<br>AT/PO- Talcher<br>Thermal,Dist:Angul-<br>759101.                      | ЕТР                               | Nandira River   | 1 No.   | Adopted ZLD  |
| 16)        | M/s. Vedanta Ltd.,<br>(Smelter & CPP) At/Po -<br>Bhurkhamunda, Dist -<br>Jharsuguda - 768202                           | ETP                               | River Bheden  | 3 Nos.  | The unit has been permitted to discharge 50m3/hr of treated Industrial effluent to Bheden River only during rainy season |

| SI.<br>No. | Name of the industry  | Treatment<br>facility<br>provided | Recipient<br>water bodies                       | Connectivity<br>of CEQMS to<br>SPCB/ CPCB<br>server | Remarks   |
|------------|---|-----------------------------------|---|---|---|
| 17)        | M/s. Vedanta Ltd., (IPP,<br>Smelter and CPP), At -<br>Bhurkamunda, Po-<br>Sirpura, Dist - Jharsuguda-<br>768202               | ETP                               | River Bheden                                    | 1 No.   | Adopted ZLD   |
| 18)        | M/s. COSBOARD Industries Ltd., Jagatpur Industrial Estate, Phase-II, Jagatpur, Dist - Cuttack - 754021                        | ETP                               | River<br>Mahanadi                               | 1 no. of<br>CEQMS                                   | The unit has been permitted to discharge 1000 KLD of treated Industrial effluent to River Mahanadi.                       |
| 19)        | M/s. Paradeep Phosphate<br>Ltd, PO- PPL, Township,<br>Paradeep, Dist –<br>Jagatsinghpur-754145                                | ЕТР                               | To Atharbanki<br>Creek                          | 3 nos. of<br>CEQMS                                  | The unit has been permitted to discharge 887 KLD of treated Industrial effluent to Atharbanki Creek only during monsoon.  |
| 20)        | M/s. Indian Farmers and<br>Fertilizer Co. Operative<br>Ltd., (IFFCO), At-<br>Musadhia, Po - Paradeep,<br>Dist - Jagatsinghpur | ETP                               | River<br>Mahanadi                               | 1 no. of<br>CEQMS                                   | The unit has been permitted to discharge 7200KLD of treated Industrial effluent to Mahanadi River                         |
| 21)        | M/s. Paradeep Refinery<br>Project, IOCL, At-<br>Paradeep, Po- Jhimani,<br>Via – Kujang, Dist –<br>Jagatsinghpur – 754141      | ETP                               | Deep Sea<br>(bay of<br>Bengal near<br>Paradeep) | 1 no.   | The unit has been permitted to discharge 8400 KLD of treated Industrial effluent to Deep Sea at distance of 3 km from LTL |
| 22)        | M/s. Essar Power (Orissa)<br>Limited, At-Udayabata,<br>PO-Paradeep, Dist-<br>Jagatsinghpur, Odisha                            | ЕТР                               | River<br>Mahanadi                               | 1 no.   | Adopted ZLD   |

Management of Municipal Solid Waste in Urban Local Bodies situated along the Polluted River Stretches

Annexure-5

| P  | Polluted River Stretches identified by CPCB | Name of Urban Local<br>Body | MSW<br>generation<br>(TPD) | Disposal<br>Practice | Waste<br>Management<br>Process |
|----|---|-----------------------------|----------------------------|----------------------|--------------------------------|
| 1  | Gangua River (Along                         | Bhubaneswar                 | 520.34                     | Open                 | Biomanure                      |
|    | Bhubaneswar)                                | Municipal                   |                            | Dumping              | (MCC)                          |
| 2  | Daya (Bhubaneswar to                        | Corporation                 |                            |                      |                                |
|    | Bargarh)                                    |                             |                            |                      |                                |
| 3  | Kuakhai (Along                              |                             |                            |                      |                                |
|    | Bhubaneswar)                                |                             |                            |                      |                                |
| 4  | Guradih nallah (Rourkela)                   | Rourkela Municipal          | 120.0                      | Open                 | Partial                        |
| 5  | Brahmani (Rourkela to                       | Corporation                 |                            | Dumping              | Processing                     |
|    | Biritol)                                    |                             |                            |                      | (MCC)                          |
| 6  | Kathajodi (Cuttack to Urali)                | Cuttack Municipal           | 366.0                      | Open                 | Biomanure                      |
| 7  | Serua                                       | Corporation                 |                            | Dumping              | (MCC)                          |
|    | (Khandaeta to                               |                             |                            |                      |                                |
|    | Sankhatrasa)                                |                             |                            |                      |                                |
| 8  | Nandira Jhor (D/s of                        | Talcher Municipality        | 18.0                       | Open                 | Partial                        |
|    | Talcher)                                    |                             |                            | Dumping              | Processing                     |
| 9  | Banguru nallah (along                       |                             |                            |                      | (MCC)                          |
|    | Talcher, Rengali)                           |                             |                            |                      |                                |
| 10 | Bheden                                      | Jharsuguda                  | 29.0                       | Open                 | No Processing                  |
|    | (along Bheden)                              | Municipality                |                            | Dumping              |                                |
| 11 | Budhabalanga (Mahulia to                    | Baripada                    | 50.0                       | Open                 | No Processing                  |
|    | Baripada )                                  | Municipality                |                            | Dumping              |                                |
| 12 | Kusumi<br>( along Tangi)                    | No large ULB                | -                          | -                    | -                              |
| 13 | Mahanadi (Sambalpur to                      | Sambalpur Municipal         | 100.0                      | Open                 | Partial                        |
|    | Paradeep)                                   | Corporation                 |                            | Dumping              | Processing                     |
|    |   |                             |                            |                      | (MCC)                          |
|    |   | Sonepur Municipality        | 3.5                        | Open                 | No Processing                  |
|    |   |                             |                            | Dumping              |                                |
|    |   | Paradeep                    | 57.45                      | Open                 | Biomanure                      |
|    |   | Municipality                |                            | Dumping              | (MCC)                          |
| 14 | Mangala (Along Puri)                        | Puri Municipality           | 120.0                      | Open                 | Partial                        |
|    |   |                             |                            | Dumping              | Processing                     |
|    |   |                             |                            |                      | (Vermicompost)                 |
| 15 | Nagavali (Jaykaypur to                      | Rayagada                    | 27.0                       | Open                 | No Processing                  |
|    | Rayagada)                                   | Municipality                |                            | Dumping              |                                |
| 16 | Luna  | No large ULB                | -                          | -                    | -                              |
|    | (along Bijipur)                             |                             |                            |                      |                                |
| 17 | Ratnachira                                  | No large ULB                | -                          | -                    | -                              |

| F  | Polluted River Stretches | Name of Urban Local | MSW        | Disposal | Waste      |
|----|--------------------------|---------------------|------------|----------|------------|
|    | identified by CPCB       | Body                | generation | Practice | Management |
|    |                          |                     | (TPD)      |          | Process    |
| 18 | Rushikulya (Pratappur to | Berhampur           | 143.0      | Open     | Partial    |
|    | Ganjam)                  | Municipal           |            | Dumping  | Composting |
|    |                          | Corporation         |            |          | (MCC)      |
|    |                          | Aska NAC            | 9.0        | Open     | Biomanure  |
|    |                          |                     |            | Dumping  | (MCC)      |
|    |                          | Chhatrapur          | 8.6        | Open     | Biomanure  |
|    |                          | Municipality        |            | Dumping  | (MCC)      |
| 19 | Sabulia (Jagannathpatna, | No large ULB        | -          | -        | -          |
|    | Rambha)                  |                     |            |          |            |

## 6.1 (v) Latest Water quality of polluted river, its tributaries, drains and ground water quality in the catchment of Polluted river stretches during June, 2020

#### **Rivers**

| River   | SI.<br>No. | Polluted River<br>stretch with<br>Priority<br>Category | Monitoring station                | BOD<br>(mg/L) | Fecal<br>coliform (FC)<br>(MPN/100<br>mL)   | Fecal<br>Streptococci<br>(FS) (MPN/<br>100 mL)        | Remark         |
|---------|------------|--|-----------------------------------|---------------|---|---|----------------|
| Gangua  | 1          | D/s<br>Bhubaneswar                                     | Near Rajdhani<br>Engg. College    | 9.6           | 92000                                       | 170   | Not conforming |
|         |            | (Priority-I)   | Palasuni                          | 8.9           | 92000                                       | 170   |                |
|         |            |  | Samantarapur                      | 11.4          | 35000                                       | 130   |                |
|         |            |  | Vadimula                          | 4.6           | 4900  | n.a.  |                |
| Daya    | 2          | Bhubaneswar<br>to Bargarh                              | Bhubaneswar D/s<br>at Kanti       | 3.9           | 54000                                       | 130   | Not conforming |
|         |            | (Priority-IV)  | Bhubaneswar FD/s<br>at Manitri    | 3.2           | 13000                                       | 49  |                |
|         |            |  | Kanas                             | n.a.          | 3500  | n.a.  |                |
| Kuakhai | 3          | Urali to<br>Bhubaneswar                                | Bhubaneswar FU/s ( at Mancheswar) | 1.7           | 1700  | n.a.  | Conforming     |
|         |            | (Priority-IV)  | Bhubaneswar U/s<br>(at Hansapal)  | 1.8           | 2200  | n.a.  |                |
| V       |            | quality criteria for<br>R 742 (A) Dated 2              | •                                 | 3.0           | 500<br>(Desirable)<br>2500<br>(permissible) | 100<br>(Desirable)<br>500<br>(Maximum<br>Permissible) | -              |

n.a.: Not analysed

#### Ground Water quality of Bhubaneswar city along Kuakhai River, Daya River and Gangua nallah

| Station Name  | Month       | рН  | BOD,<br>mg/L | Nitrate-<br>mg/L | TC, MPN/<br>100 mL | FC, MPN/<br>100 mL |  |
|---|-------------|---|--------------|------------------|--------------------|--------------------|--|
| Khandagiri Area   | April, 2020 | 6.1   | 0.3          | n.a.             | <1.8               | <1.8               |  |
| Old town-<br>Samantarapur Area                                | April, 2020 | 7.1   | 0.4          | n.a.             | 33                 | 4.5                |  |
| Kalpana-Laxmisagar<br>Area,                                   | April, 2020 | 6.1   | 0.3          | n.a.             | 79                 | 4.5                |  |
| Chandrasekharpur  | April, 2020 | 6.5   | 0.3          | n.a.             | <1.8               | <1.8               |  |
| Capital Hospital<br>Area,                                     | April, 2020 | 5.1   | 0.7          | n.a.             | <1.8               | <1.8               |  |
| Secretariate-<br>Govenor House-Old<br>bus stand Area          | April, 2020 | No sampling as the area declared as Containment Zone to contain COVID 19 Pandemic |              |                  |                    |                    |  |
| Drinking water Specification (IS: 10500:2012) Desirable limit |             | 6.5-8.5   | -            | 45               | Absent             | Absent             |  |

n.a.: Not analysed

#### June, 2020

| River     | SI.<br>No. | Polluted River<br>stretch with<br>Priority<br>Category | Monitoring station | BOD<br>(mg/L) | Fecal<br>coliform (FC)<br>(MPN/100<br>mL)   | Fecal<br>Streptococci<br>(FS) (MPN/<br>100 mL)        | Remark     |
|-----------|------------|--|--------------------|---------------|---|---|------------|
| Kathajodi | 4          | Cuttack to Urali<br>(Priority-III)                     | Cuttack D/s        | n.a.          | 4900  | 11  | Conforming |
|           |            |  | Mattagajpur        | n.a.          | 2600  | n.a.  |            |
| Serua     | 5          | Khandaeta to   | Sankhatrasa        |               | 940   |   | Conforming |
|           |            | Sankhatrasa<br>(Priority-V)                            |                    | n.a.          |   | n.a.  |            |
| W         |            | uality criteria for B<br>R 742 (A) Dated 25            | •                  | 3.0           | 500<br>(Desirable)<br>2500<br>(permissible) | 100<br>(Desirable)<br>500<br>(Maximum<br>Permissible) | -          |

n.a.: not analysed

#### Ground Water quality of Cuttack city along Mahanadi river, Kathajodi River and Serua river

| Station Name   | Month       | рН      | BOD,<br>mg/L | Nitrate-<br>mg/L | TC, MPN/<br>100 mL | FC, MPN/<br>100 mL |
|--|-------------|---------|--------------|------------------|--------------------|--------------------|
| Jagatpur   | April, 2020 | 6.8     | 0.2          | n.a.             | 2                  | <1.8               |
| Mangalabag   | April, 2020 | 7.3     | 0.2          | n.a.             | 2                  | <1.8               |
| Madhupatna-Kalyan<br>Nagar Area  | April, 2020 | 6.9     | 0.5          | n.a.             | 1.8                | 1.8                |
| Badambadi Area   | April, 2020 | 7.3     | 0.6          | n.a.             | <1.8               | <1.8               |
| Bidanasi-Tulsipur<br>Area,   | April, 2020 | 7.6     | 0.2          | n.a.             | <1.8               | <1.8               |
| Drinking water<br>Specification<br>(IS: 10500:2012)<br>Desirable limit |             | 6.5-8.5 | -            | 45               | Absent             | Absent             |

n.a.: Not analysed

#### Characteristic of Drains falling on Kathajodi river (June, 2020)

| SI. | Station Name   |     |                   | Pa   | arameter | s      |        |
|-----|--|-----|-------------------|------|----------|--------|--------|
| No. |  | рН  | pH BOD, COD, TSS, |      |          |        | FC     |
|     |  |     | mg/l              | mg/l | mg/l     | MPN/   | 100ml  |
| 1   | Outlet of STP, Cuttack at CDA-Bidanasi area (36 MLD)                           | 6.7 | n.a.              | 14.3 | 4.0      | <1.8   | <1.8   |
| 2   | Wastewater discharge to Kathajodi<br>river through sluice gate at<br>Khannagar | 7.1 | n.a.              | 57.2 | 25.0     | 160000 | 160000 |

| 3 | Wastewater discharge to Kathajodi | 7.0 | n 2   | 21.4 | 0.0 | 160000 | 160000 |
|---|-----------------------------------|-----|-------|------|-----|--------|--------|
|   | river at Mattagajpur              | 7.0 | II.a. | 21.4 | 9.0 | 100000 | 100000 |

#### June, 2020

| River             | SI.<br>No.  | Polluted River<br>stretch with<br>Priority<br>Category | Monitoring station                                     | BOD<br>(mg/L) | Fecal<br>coliform (FC)<br>(MPN/100<br>mL)   | Fecal<br>Streptococci<br>(FS) (MPN/<br>100 mL)        | Remark            |
|-------------------|---|--|--|---------------|---|---|-------------------|
| Guradih<br>nallah | 6   | Along Rourkela<br>(Priority-III)                       | Rourkela (before<br>confluence with<br>Brahmani river) | n.a.          | 17000                                       | 22  | Not<br>Conforming |
| Brahmani          | 7   | Rourkela to<br>Biritola                                | Panposh D/s at<br>Deogaon                              | n.a.          | 4600  | 27  | Not<br>Conforming |
|                   |   | (Priority-V)   | Rourkela D/s at<br>Jalda                               | n.a.          | 2300  | 22  |                   |
|                   |   |  | Rourkela FD/s at<br>Attaghat                           | n.a.          | 490   | 17  |                   |
|                   |   |  | Rourkela FD/s at<br>Biritola                           | n.a.          | 270   | 11  |                   |
| W                 | Water quality criteria for Bathing water<br>(GSR 742 (A) Dated 25.12.2000 |  |  |               | 500<br>(Desirable)<br>2500<br>(permissible) | 100<br>(Desirable)<br>500<br>(Maximum<br>Permissible) | -                 |

n.a.: Not analysed

No Ground water quality monitoring in Rourkela city by State Pollution Control Board, Odisha

June, 2020

| River                         | SI.<br>No.                    | Polluted River<br>stretch with<br>Priority | Monitoring station | BOD<br>(mg/L) | Fecal<br>coliform (FC)<br>(MPN/100 | (FS) (MPN/   | Remark     |
|-------------------------------|-------------------------------|--|--------------------|---------------|------------------------------------|--------------|------------|
|                               |                               | Category                                   |                    |               | mL)                                | 100 mL)      |            |
| Nandira                       | 8                             | D/s Talcher                                | Nandira D/s at     | n.a.          | 45                                 | <1.8         | Conforming |
| jhor                          |                               | (Priority-III)                             | Dasnali            |               |                                    |              |            |
| Banguru                       | 9                             | Along Talcher                              | Along Talcher      | n.a.          | 330                                | 7.8          | Conforming |
| nallah                        |                               | (Priority-V)                               | J                  |               |                                    |              |            |
| W                             | /ater c                       | quality criteria for                       | Bathing water      | 3.0           | 500                                | 100          | -          |
|                               | (GSR 742 (A) Dated 25.12.2000 |  |                    |               | (Desirable)                        | (Desirable)  |            |
| (GSN 742 (A) Dated 25.12.2000 |                               |  |                    | 2500          | 500                                |              |            |
|                               |                               |  |                    |               | (permissible)                      | (Maximum     |            |
|                               |                               |  |                    |               |                                    | Permissible) |            |

n.a.: Not analysed

#### Ground Water quality of Talcher city along in the catchment of Nandira jhor and Banguru nallah

| Station Name  | Month       | рН      | BOD,<br>mg/l | Nitrate-<br>mg/l | TC, MPN/<br>100 ml | FC, MPN/<br>100 ml |
|---|-------------|---------|--------------|------------------|--------------------|--------------------|
| Talcher Town  | April, 2020 | 7.6     | 0.4          | n.a.             | <1.8               | <1.8               |
| Meramundali area  | April, 2020 | 7.9     | 0.8          | n.a.             | <1.8               | <1.8               |
| Talcher Thermal area  | April, 2020 | 7.6     | 0.7          | n.a.             | <1.8               | <1.8               |
| Banarpal  | April, 2020 | 7.2     | 0.5          | n.a.             | <1.8               | <1.8               |
| Kulad   | April, 2020 | 7.5     | 1.1          | n.a.             | <1.8               | <1.8               |
| Drinking water Specification (IS: 10500:2012) Desirable limit |             | 6.5-8.5 | -            | 45               | Absent             | Absent             |

n.a.: Not analysed

#### June, 2020

| River  | SI.<br>No.  | Polluted River<br>stretch with<br>Priority | Monitoring station               | BOD<br>(mg/L) | Fecal<br>coliform (FC)<br>(MPN/100          | Fecal<br>Streptococci<br>(FS) (MPN/                   | Remark     |
|--------|---|--|----------------------------------|---------------|---|---|------------|
|        |   | Category                                   |                                  |               | mL)   | 100 mL)   |            |
| Mahan  | 10  | Sambalpur to                               | Sambalpur D/s                    | n.a.          | 490   | 2   | Conforming |
| adi    |   | Paradeep<br>( <b>Priority-V)</b>           | Sambalpur FD/s at<br>Shankarmath | n.a.          | 460   | 4.5   |            |
|        |   |  | Sambalpur FFD/s at<br>Huma       | n.a.          | 270   | 7.8   |            |
|        |   |  | Sonepur U/s                      | n.a.          | 78  | 2   |            |
|        |   |  | Sonepur D/s                      | n.a.          | 110   | 4   |            |
|        |   |  | Tikarpada                        | n.a.          | 78  | <1.8  |            |
|        |   |  | Narasinghpur                     | n.a.          | 130   | 13  |            |
|        |   |  | Munduli                          | n.a.          | 78  | <1.8  |            |
|        |   |  | Cuttack U/s                      | n.a.          | 110   | <1.8  |            |
|        |   |  | Cuttack D/s                      | n.a.          | 490   | 4.5   |            |
|        |   |  | Cuttack FD/s                     | n.a.          | 220   | 2   |            |
|        |   |  | Paradeep U/s                     | n.a.          | 20  | 4.5   |            |
|        |   |  | Paradeep D/s                     | n.a.          | 78  | n.a.  |            |
| Bheden | 11  | Along Bheden (Priority-V)                  | Bheden                           | 0.6           | 45  | n.a.  | Conforming |
| V      | Water quality criteria for Bathing water<br>(GSR 742 (A) Dated 25.12.2000 |  |                                  |               | 500<br>(Desirable)<br>2500<br>(permissible) | 100<br>(Desirable)<br>500<br>(Maximum<br>Permissible) | -          |

#### Water quality of Tributaries of Mahanadi River

| River                                    | Monitoring station | BOD<br>(mg/L) | Fecal coliform<br>(FC)<br>(MPN/100 mL)   | Fecal Streptococci<br>(FS) (MPN/<br>100 mL)     | Remark     |
|--|--------------------|---------------|--|---|------------|
| Ib River                                 | Sundargarh         | n.a.          | 140                                      | n.a.  | Conforming |
|  | Jharsuguda         | n.a.          | 78                                       | n.a.  |            |
|  | Brajarajnagar U/s  | n.a.          | 230                                      | n.a.  |            |
|  | Brajarajnagar D/s  | n.a.          | 330                                      | n.a.  |            |
| Ong<br>River                             | Dharuakhaman       | n.a.          | 45                                       | n.a.  | Conforming |
| Tel<br>River                             | Monmunda           | n.a.          | 20                                       | n.a.  | Conforming |
| Water quality criteria for Bathing water |                    | 3.0           | 500 (Desirable)<br>2500<br>(permissible) | 100 (Desirable)<br>500 (Maximum<br>Permissible) |            |

| (GSR 742 (A) Dated 25.12.2000 |  |  |
|-------------------------------|--|--|

n.a.: Not analysed

#### **Ground Water quality**

| Station Name  | Month                              | рН      | BOD,<br>mg/l | Nitrate-<br>mg/I | TC, MPN/<br>100 ml | FC, MPN/<br>100 ml |  |  |  |
|---|------------------------------------|---------|--------------|------------------|--------------------|--------------------|--|--|--|
|   | Sambalpur                          |         | Mahanadi Ri  | ver              | T                  |                    |  |  |  |
| Near Panthanivas  | April, 2020                        | 7.9     | 0.7          | n.a.             | <1.8               | <1.8               |  |  |  |
| Near Railway station  | April, 2020                        | 7.4     | 0.4          | n.a.             | 23                 | 2                  |  |  |  |
| Near VSS Medical<br>College, Burla                            | April, 2020                        | 7.9     | 0.8          | n.a.             | <1.8               | <1.8               |  |  |  |
|   | Paradeep town Along Mahanadi River |         |              |                  |                    |                    |  |  |  |
| Badapadia market<br>complex                                   | April, 2020                        | 8.3     | 0.7          | n.a.             | <1.8               | <1.8               |  |  |  |
| Musadiha  | April, 2020                        | 8.1     | 0.3          | n.a.             | 7.8                | 2                  |  |  |  |
| Jharsuguda town in the catchment of Bheden river and Ib river |                                    |         |              |                  |                    |                    |  |  |  |
| Burkhamunda   | April, 2020                        | 6.9     | 0.4          | n.a.             | <1.8               | <1.8               |  |  |  |
| Badamal Industrial<br>Estate                                  | April, 2020                        | 6.5     | 0.8          | n.a.             | <1.8               | <1.8               |  |  |  |
| Budhipadar  | April, 2020                        | 6.4     | 0.3          | n.a.             | <1.8               | <1.8               |  |  |  |
| Brajarajnagar Mining<br>belt                                  | April, 2020                        | 7.1     | 0.7          | n.a.             | <1.8               | <1.8               |  |  |  |
| Rampur area (Water<br>tank)                                   | April, 2020                        | 7.1     | 0.4          | n.a.             | <1.8               | <1.8               |  |  |  |
| Ib thermal power station                                      | April, 2020                        | 7.2     | 0.3          | n.a.             | <1.8               | <1.8               |  |  |  |
| Belpahar area   | April, 2020                        | 7.1     | 0.2          | n.a.             | <1.8               | <1.8               |  |  |  |
| Drinking water Specification (IS: 10500:2012) Desirable limit |                                    | 6.5-8.5 | -            | 45               | Absent             | Absent             |  |  |  |

n.a.: Not analysed

#### June, 2020

| River   | SI.                           | Polluted River       | Monitoring station | BOD                 | Fecal              | Fecal        | Remark     |
|---------|-------------------------------|----------------------|--------------------|---------------------|--------------------|--------------|------------|
|         | No.                           | stretch with         |                    | (mg/L)              | coliform (FC)      | Streptococci |            |
|         |                               | Priority             |                    |                     | (MPN/100           | (FS) (MPN/   |            |
|         |                               | Category             |                    |                     | mL)                | 100 mL)      |            |
| Mangala | 12                            | Along Puri           | Mangala D/s at     | n.a.                | 170                | n.a.         | Not        |
|         |                               | (Priority-V)         | Golasahi           |                     |                    |              | Conforming |
| Nuna    | 13                            | Along Bijipur,       | Bijipur            | n.a.                | 1700               | n.a.         | Conforming |
|         |                               | Puri                 |                    |                     |                    |              |            |
|         |                               | (Priority-V)         |                    |                     |                    |              |            |
| Ratnac  | 14                            | Along                | Kumardihi          | n.a.                | 1300               | n.a.         | Conforming |
| hira    |                               | Sakhigopal,          |                    |                     |                    |              |            |
|         |                               | Puri                 |                    |                     |                    |              |            |
|         |                               | (Priority-V)         |                    |                     |                    |              |            |
| V       | Vater o                       | quality criteria for | Bathing water      | 3.0                 | 500                | 100          | -          |
|         | (GSR 742 (A) Dated 25.12.2000 |                      |                    | (Desirable)<br>2500 | (Desirable)<br>500 |              |            |
|         |                               |                      |                    |                     | (permissible)      |              |            |
|         |                               |                      |                    |                     | (1                 | Permissible) |            |

#### Ground Water quality of Puri town along Mangala river

| Station Name   | Month       | рН      | BOD,<br>mg/l | Nitrate-<br>mg/l | TC, MPN/<br>100 ml | FC, MPN/<br>100 ml |
|--|-------------|---------|--------------|------------------|--------------------|--------------------|
| Hospital-Bus stand-<br>Mausima temple area                   | April, 2020 | 7.9     | 0.2          | n.a.             | <1.8               | <1.8               |
| Near Jagannath<br>Temple,                                    | April, 2020 | 7.9     | 0.4          | n.a.             | <1.8               | <1.8               |
| Near Sea Beach   | April, 2020 | 8.2     | 0.3          | n.a.             | 13                 | <1.8               |
| Baliapanda   | April, 2020 | 7.8     | 0.4          | n.a.             | 4.5                | <1.8               |
| Drinking water Specification (IS: 10500:2012)Desirable limit |             | 6.5-8.5 | -            | 45               | Absent             | Absent             |

n.a.: Not analysed

#### Characteristic of Drain falling on Mangala river (June, 2020)

| SI. | Station Name                                  | Parameters |      |      |      |           |      |  |
|-----|---|------------|------|------|------|-----------|------|--|
| No. | No.   |            | BOD, | COD, | TSS, | TC        | FC   |  |
|     |   |            | mg/l | mg/l | mg/l | MPN/100ml |      |  |
| 1   | Outlet of STP, Puri at Mangalaghat<br>15 MLD) | 7.4        | n.a. | 24.4 | 7.0  | <1.8      | <1.8 |  |

#### June, 2020

| River   | SI.<br>No. | Polluted River<br>stretch with<br>Priority<br>Category | Monitoring station | BOD<br>(mg/L)                               | Fecal<br>coliform (FC)<br>(MPN/100<br>mL)             | Fecal<br>Streptococci<br>(FS) (MPN/<br>100 mL) | Remark     |
|---|------------|--|--------------------|---|---|--|------------|
| Nagavali  | 15         | Jaykaypur to   | Jayakaypur D/s     | n.a.  | 490   | 7.8  | Conforming |
|   |            | Rayagada<br>(Priority-V)                               | Rayagada D/s       | n.a.  | 790   | 4.5  |            |
| Water quality criteria for Bathing water<br>(GSR 742 (A) Dated 25.12.2000 |            |  | 3.0                | 500<br>(Desirable)<br>2500<br>(permissible) | 100<br>(Desirable)<br>500<br>(Maximum<br>Permissible) | -  |            |

n.a.: Not analysed

No Ground water quality monitoring in Rayagada town by State Pollution Control Board, Odisha

#### **Rivers**

#### <u>June, 2020</u>

| River  | SI.                           | Polluted River       | Monitoring station | BOD         | Fecal         | Fecal        | Remark     |
|--------|-------------------------------|----------------------|--------------------|-------------|---------------|--------------|------------|
|        | No.                           | stretch with         |                    | (mg/L)      | coliform (FC) | Streptococci |            |
|        |                               | Priority             |                    |             | (MPN/100      | (FS) (MPN/   |            |
|        |                               | Category             |                    |             | mL)           | 100 mL)      |            |
| Budhab | 16                            | Mahulia to           | Baripada D/s       | n.a.        | 1300          | 14           | Conforming |
| alanga |                               | Baripada             |                    |             |               |              |            |
|        |                               | (Priority-V)         |                    |             |               |              |            |
| V      | /ater d                       | quality criteria for | Bathing water      | 3.0         | 500           | 100          | -          |
|        | (GSR 742 (A) Dated 25.12.2000 |                      |                    | (Desirable) | (Desirable)   |              |            |
|        | ,                             |                      |                    |             | 2500          | 500          |            |
|        |                               |                      | (permissible)      | `           |               |              |            |
|        |                               |                      |                    |             |               | Permissible) |            |

n.a.: Not analysed

No Ground water quality monitoring in Baripada town by State Pollution Control Board, Odisha

#### June, 2020

| River   | SI.<br>No. | Polluted River<br>stretch with<br>Priority<br>Category | Monitoring station                          | BOD<br>(mg/L)   | Fecal<br>coliform (FC)<br>(MPN/100<br>mL) | Fecal<br>Streptococci<br>(FS) (MPN/<br>100 mL) | Remark     |
|---|------------|--|---|---|---|--|------------|
| Kusumi  | 17         | Along Tangi<br>(Priority-V)                            | Along Tangi                                 | n.a.  | 1100                                      | n.a.   | Conforming |
| Water quality criteria for Bathing water<br>(GSR 742 (A) Dated 25.12.2000 |            | 3.0  | 500<br>(Desirable)<br>2500<br>(permissible) | 100<br>(Desirable)<br>500<br>(Maximum<br>Permissible) | -   |  |            |

n.a.: Not analysed

No Ground water quality monitoring in Tangi town by State Pollution Control Board, Odisha

#### June, 2020

| River   | SI.<br>No. | Polluted River<br>stretch with<br>Priority<br>Category | Monitoring station                          | BOD<br>(mg/L)   | Fecal<br>coliform (FC)<br>(MPN/100<br>mL) | Fecal<br>Streptococci<br>(FS) (MPN/<br>100 mL) | Remark     |
|---|------------|--|---|---|---|--|------------|
| Rushik  | 18         | Pratappur to   | Madhopur                                    | n.a.  | 1100                                      | 11   | Conforming |
| ulya  |            | Ganjam<br>( <b>Priority-V</b> )                        | Potagarh                                    | n.a.  | 790                                       | 7.8  |            |
| Sabulia   | 19         | Along Jagannathpatn a, Rambha (Priority-V)             | Jagannathpatna,<br>Rambha                   | n.a.  | 940                                       | n.a.   | Conforming |
| Water quality criteria for Bathing water<br>(GSR 742 (A) Dated 25.12.2000 |            | 3.0  | 500<br>(Desirable)<br>2500<br>(permissible) | 100<br>(Desirable)<br>500<br>(Maximum<br>Permissible) | -   |  |            |

n.a.: Not analysed

#### Ground Water quality of Berhampur town in the catchment of Rushikulya river

| Stn Name   | Month       | рН      | BOD,<br>mg/l | Nitrate-<br>mg/I | TC, MPN/<br>100 ml | FC, MPN/<br>100 ml |
|--|-------------|---------|--------------|------------------|--------------------|--------------------|
| Near MKCG<br>Medical College   | April, 2020 | 7.2     | 0.2          | n.a.             | <1.8               | <1.8               |
| Bus stand  | April, 2020 | 7.9     | 0.4          | n.a.             | 17                 | 4.5                |
| Badabazar  | April, 2020 | 7.1     | 0.7          | n.a.             | <1.8               | <1.8               |
| Railway station  | April, 2020 | 7.3     | 0.3          | n.a.             | <1.8               | <1.8               |
| Drinking water<br>Specification<br>(IS: 10500:2012)<br>Desirable limit |             | 6.5-8.5 | -            | 45               | Absent             | Absent             |

n.a.: Not analysed

### Comparison of Status of Polluted River Stretches, identified in the State of Odisha during the period 2017-2020 as on date

| SI.<br>No. | Polluted River Stretches identified by CPCB             | Prio                            | Priority Category of Polluted River stretch |                            |   |  |  |
|------------|---|---------------------------------|---|----------------------------|---|--|--|
|            |   | 2017<br>(BOD mg/l,<br>max)      | 2018<br>(BOD mg/l,<br>max)                  | 2019<br>(BOD mg/l,<br>max) | 2020<br>(upto June)<br>(BOD mg/l,<br>max) |  |  |
| 1.         | Gangua River<br>(Along Bhubaneswar)                     | Priority-I<br>(39.0)            | Priority-I<br>(70.8)                        | Priority-I<br>(39.2)       | Priority-III<br>(19.9)                    | Priority has been reduced from I to III (Improved) |  |
| 2          | Daya<br>(Bhubaneswar to Bargarh)                        | Priority-IV<br>(7.3)            | Priority-IV<br>(7.4)                        | Priority-IV<br>(7.3)       | Priority-V<br>(4.5)                       | Priority has been reduced from IV to V (Improved)  |  |
| 3          | Brahmani<br>(Rourkela to Biritol)                       | Priority-V<br>(6.0)             | Priority-IV<br>(7.6)                        | Priority-V<br>(5.3)        | Priority-V<br>(6.3)                       | No Improvement                                     |  |
| 4          | Guradihnallah<br>(Rourkela)                             | Priority-III<br>(11.3)          | Priority-IV<br>(10.1)                       | Priority-IV<br>(8.5)       | Priority-V<br>(6.1)                       | Priority has been reduced from III to V (Improved) |  |
| 5          | Mangala<br>(Along Puri)                                 | Priority-V<br>(5.7)             | Priority-V<br>(5.8)                         | Priority-IV<br>(7.4)       | Priority-V<br>(4.6)                       | No Improvement                                     |  |
| 6          | Nagavali<br>(Jaykaypur to Rayagada)                     | Priority-V<br>(3.5)             | Clean<br>(2.8)                              | Clean<br>(2.2)             | Clean<br>(2.1)                            | Clean<br>(Improved)                                |  |
| 7          | Kathajodi<br>(Cuttack to Urali)                         | Priority-III<br>(11.2)          | Priority-V<br>(5.7)                         | Priority-V<br>(3.9)        | Priority-V<br>(3.2)                       | Priority has been reduced from III to V (Improved) |  |
| 8          | Serua<br>(Khandaeta to<br>Sankhatrasa)                  | Priority-V<br>(4.8)             | Priority-V<br>(5.5)                         | Priority-V<br>(3.1)        | Clean<br>(2.8)                            | Clean<br>(Improved)                                |  |
| 9          | Ratnachira  | Priority-V                      | Priority-V                                  | Clean                      | Clean                                     | Clean  |  |
| 10         | (Along Bhubaneswar, Puri)  NandiraJhor (D/s of Talcher) | (3.3)<br>Priority-III<br>(13.0) | (3.5)<br>Priority-V<br>(3.5)                | (2.7)<br>Clean<br>(1.9)    | (1.3)<br>Clean<br>(1.7)                   | (Improved) Clean (Improved)                        |  |
| 11         | Kuakhai<br>(Along Bhubaneswar)                          | Priority-IV<br>(7.7)            | Clean<br>(1.6)                              | Clean<br>(1.9)             | Clean<br>(1.5)                            | Clean<br>(Improved)                                |  |
| 12         | Mahanadi<br>(Sambalpur to Paradeep)                     | Priority-V<br>(3.2)             | Clean<br>(2.3)                              | Clean<br>(2.3)             | Clean<br>(2.7)                            | Clean<br>(Improved)                                |  |
| 13         | Rushikulya<br>(Pratappur to Ganjam)                     | Priority-V<br>(3.4)             | Priority-V<br>(3.7)                         | Clean<br>(2.6)             | Clean<br>(1.9)                            | Clean<br>(Improved)                                |  |
| 14         | Bangurunallah<br>(Along Talcher)                        | Priority-V<br>(3.2)             | Priority-V<br>(3.9)                         | Clean<br>(1.9)             | Clean<br>(1.1)                            | Clean<br>(Improved)                                |  |
| 15         | Bheden<br>(Along Bheden)                                | Priority-V<br>(3.6)             | Clean<br>(2.8)                              | Clean<br>(2.0)             | Clean<br>(1.8)                            | Clean<br>(Improved)                                |  |
| 16         | Kusumi<br>( Along Tangi)                                | Priority-V<br>(3.2)             | Clean<br>(1.7)                              | Clean<br>(2.6)             | Clean<br>(1.2)                            | Clean<br>(Improved)                                |  |
| 17         | Nuna<br>(Along Bijipur)                                 | Priority-V<br>(3.1)             | Clean<br>(2.7)                              | Clean<br>(2.5)             | Clean<br>(1.1)                            | Clean<br>(Improved)                                |  |
| 18         | Sabulia<br>(Jagannathpatna,Rambha)                      | Priority-V<br>(5.0)             | Clean<br>(2.4)                              | Clean<br>(2.2)             | Clean<br>(1.4)                            | Clean<br>(Improved)                                |  |
| 19         | Budhabalanga<br>(Mahulia to Baripada)                   | Priority-V<br>(3.5)             | Clean<br>(2.8)                              | Clean<br>(1.6)             | Clean<br>(1.6)                            | Clean<br>(Improved)                                |  |

### Summary of Number of Polluted River Stretches under Different Category during the Period 2017-2020 as on date

| Category     | No. of polluted<br>River stretch<br>(2017) | No. of polluted<br>River stretch<br>(2018) | No. of polluted<br>River stretch<br>(2019) | No. of polluted<br>River stretch<br>(2020)<br>(upto June) |
|--------------|--|--|--|---|
| Priority-I   | 1  | 1  | 1  | Nil   |
| Priority-II  | Nil  | Nil  | Nil  | Nil   |
| Priority-III | 3  | Nil  | Nil  | 1   |
| Priority-IV  | 2  | 3  | 3  | Nil   |
| Priority-V   | 13   | 7  | 3  | 5   |
|              |  | 8 (Clean)                                  | 12 (Clean)                                 | 13 (Clean)  |
| Total :      | 19   | 19   | 19   | 19  |

N.B. Clean - BOD < 3 mg/l

(Note: For Gangua nallah, BOD of June, 2020 has been taken into consideration. Whereas, for other stretches, BOD upto May, 2020 has been taken into consideration because of instrumental problem due to which BOD during June, 2020 could not be measured.)

#### **Bio-medical waste Management**

Total Bio-medical waste generation-14564 Kg/d

Total no. of hospital- 3398

Total bio-medical waste treatment-13951 Kg/d

Total units generating hazardous waste/treatment facility- Not related to this cell

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|      | OFFICE OF THE ENGINEER-IN-CHIEF, WATER RESOURCES, ODISHA,<br>SECHA SADAN, BHUBANESWAR -751001  |
|------|--|
|      | No.File No.BP&CC-GL-102/2020 85 82/ME, WE Date   |
|      | From Er. Biswa Mohan Acharya Chief Engineer, BP&CC   |
|      | The Director, Environment-Cum-Special Secretary to Government,<br>Forest & Environment Department, Odisha,<br>Bhubaneswar.   |
|      | Sub:- Progress Report on NGT- OA No.606/2018.  |
| XOJ  | Ref: Lr. No. 4725 dtd. 27.02.2020 of SPCB, Odisha.   |
| //   | Sir,   |
| le.  | With reference to the above cited subject, it is to furnish herewith the Progress Report   |
| 190  | on NGT- OA No.606/2018 for the month of January 2020 for favour of information and   |
|      | necessary action.  |
| Q    | Yours faithfully,  Encl: As above.  Chief Engineer, BP&CC 13 3 2020  |
| 1.5  | Memo No. 8583/WE / Date 13032020.  |
| 12/3 | Copy submitted to the Member Secretary, State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhuabaneswar for information and necessary action  |
|      | Encl: As above  Chief Engineer, BP&CC  |
|      | Memo No. 8584/ME / Date 13 03 2020.  |
|      | Copy submitted to the Special Secretary to Government, DoWR, Odisha, Bhubaneswar for information with respect to Lr. No. 6331 dtd 03.03.2020.  |
|      | Encl: As above   |
| CF   | Encl: As above  Chief Engineer, BP&CC  Chief Engit Engineer, BP&CC  Chief Engineer, BP&CC  Chief Engineer, BP&CC |
|      |  |

### MEASURES TAKEN FOR COMPLIANCE TO HON'BLE NGT DIRECTION FOR CONTROL OF RIVER POLLUTION (NGT ORDER NO.606/2018)

### 5. Measures taken for

### A. Control of Illegal Groundwater Abstraction

Yes

- 1. So far no such cases of illegal groundwater abstraction are noticed.
- Govt. of Odisha has formulated an act for regulation of groundwater namely "The Odisha Groundwater (Regulation, Development and Management) Act, 2011"
- Central Groundwater Directorate and District Level Evaluation Committee strictly control the groundwater abstraction by the industries,
- Chief Engineer and Director, Groundwater Development, Bhubaneswar monitors the fluctuation of the groundwater level in all 30 districts in 10 years interval.

### B. River Catchment/ Basin Management

Yes

Inflow from the catchment and outflow from the river of the basins are managed effectively by the Chief Engineer and Basin Managers for 11 Nos. of river basins of Odisha.

### C. Flood Plain Zone Protection

Yes

Out of 9 Nos. of polluted river stretches, in Gangua Nalla (Priority No-I), a proposal for construction of a cross regulator at the off taking point of Gangua Nalla has been approved in 128th TAC of DOWR to divert the flood discharge of Chandaka Catchment to Kuakhia river (Approximately 30% of flood water) through Budhi Nalla in order to save the flooding of storm water in Bhubaneswar city. This is one of the flood plain zone protection in Odisha in Gangua Nalla.

### D. E-Flow maintenance & Watershed Management

Yes

E-flow is maintained.

E. Groundwater recharge/ Rain water harvesting

Yes

Rain water harvesting

### 2018-19 Rooftop Rainwater Harvesting Structures (RRHS)

|         | Govt     | Private   | _*   |
|---------|----------|-----------|--|
|         | 358 nos. | 9438 nos. | (in 11 towns of 9 districts)   |
| 2019-20 | Nil      | Nil       |  |
| 2020-21 | 250 Nos  | 4800 Nos  | A provision of Rs. 40 crores has been kept for construction of RRHS. |

### Groundwater recharge

i) Through Wells

2019-20

nil

2020-21

234 nos. in 46 blocks of 20 districts

ii)Through Check dams

upto 03/2019

14588 nos. in 30 districts

2019-20

343 nos. in 30 districts

2020-21

A provision of Rs. 67 crores has been kept for construction of check dams in 30 districts.

F. Setting up of Biodiversity Parks, Greenery/

Plantation along the banks of river stretch.

Yes

1094699 nos. of sapling and seedling have been planted during monsoon 2018 along the bank of the rivers, dam sites, barrage sites and canal sites, out of which 329962 nos. of plants are alive (30.14% - Survival Status)

### G. Removal of encroachments

No cases of encroachment have been noticed so far.

Chief Engineer, 13/3/2020 Basin Planning & Climate Change



### Monthly Progress Report on NGT – OA No. 673/2018 Month – March, April, May- 2020 ted River Stretch :- Gangua Nalla (Along Bhubaneswar)

| SL<br>NO.    | Key Components of Proposed Action Plan for resstoration of identified polluated river stretch in the state | U. Proposed Achievable Target Proposed Time J  Proposed Achievable Target Proposed Time J  Proposed Achievable Target Complian complian complian polluted river stretch in the state                             | Proposed Time Targets for<br>compliance                             | Present Status or<br>pendency in terms of<br>%age   | Remarks  |
|--------------|--|--|---|---|--|
| -            | 2  | 3  | 4   | S   | 9  |
| Item<br>No.4 | Adoption of good Irrigation Practice   | Rotational water supply in Daya<br>West Branch Canal system<br>recharges the ground water as well<br>as river or drain.  |   | Rotational water supply is maintained in Kharif & Rabi crops.                                 |  |
| ltem<br>No.5 | Flood Plain Zone Protection & it's management  | Proposal for construction of a cross regulator at the off taking point of Gangual Nalla to divert the entire flood discharge of Chandaka catchment to Kuakhia river through Budhi Nalla in high flood situation. | 128th TAC of DoWR has approved the construction of cross regulator. |   |  |
| Item<br>No.6 | Raintwater harvesting/<br>Groundwater recharge aspects   | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Building in towns of Odisha.  | 2014-15 to 2018-19  | RRHS of 131 nos in Govt. Buildings & 4942 nos. in Private Buildings completed in Bhubaneswar. | Bhubaneswar town   |
|              |  |  | 2019-2020   | Nil   |  |
|              |  |  | 2020-21   | 300 nos in Govt.<br>buildings and 6000 nos<br>in private buildings will<br>be constructed.    | Provision for Rs. 37 crores has been kept for the year 2020-21 |
|              |  | Construction of Check Dam.   | 2019-20   | 513 nos. of Check<br>Dams completed up to   |  |
|              |  |  | 2020-21   | Dec-2019 in Khordha<br>Dist.  | Provision for Rs. 37   |

| \  |    |                  |   |                                |  | 19  |   |
|--|----|------------------|---|--------------------------------|--|---|---|
| Remarks  | 9  | the year 2020-21 | Release of water to<br>Gangua Nalla is<br>enclosed.   |                                |  |   |   |
| Present Status or pendency in terms of %age  | ın |                  |   | 1                              |  | 1979 Nos. of plants are alive.  |   |
| Proposed Time Targets for compliance   | 4  | r                | In 2019 - 60 Cusecs released. Water released to Gangua Nalla from Daya West Branch Canal from 16.02.2020 to 26.02.2020 with maximum release of 77 cusecs on 21.02.2020. No water is released to Gangua Nalla from Daya West Branch Canal during March, April, May-2020. |                                |  | During Monsoon 2018.  |   |
| Proposed Achievable Target   | 3  |                  | It is a storm water drain. The minimum flow in Gangual Nalla in non-monsoon is maintained by inletting water from river Mahanadi through Daya West Branch Canal.  | t                              |  | 4900 seeding has been sown along the drainage canals by Khurdha Drainage Division during monsoon of 2018. | ,   |
| Key Components of<br>Proposed Action Plan for<br>restoration of identified<br>polluted river stretch in the<br>state | 2  |                  | Maintaining E-flows and Watershed management.   | Setting up bio-diversity parks | Removal of encroachments to<br>maintain natural flow in drains | Greenery or plantation on both sides of the river   | Capping of contaminated Ground Water Sources, Hand pump, Tube wells and alternate Water Supply Arrangement for drinking purpose in GW affected areas. |
| SL<br>NO.  | -  |                  | No.7  | Item<br>No.8                   | Item<br>No.9   | Item<br>No.10   | Item<br>No.11   |

Chief Engineer, 23/08.

# Monthly Progress Report on NGT - OA No. 673/2018 Month - March, April, May- 2020 2. Name of the Polluted River Stretch: Daya (Bhubaneswar to Baragada)

| SL<br>NO.    | Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river<br>stretch in the state | Proposed Achievable Target  | Proposed Time Targets for<br>compliance   | Present Status or<br>pendency in terms<br>of %age  | Remarks  |
|--------------|---|---|---|--|--|
|              | 7   | 3   | 4   | S  | 9  |
| No.4         | Adoption of good Irrigation<br>Practice   | Rotational water supply in Puri Main Canal system recharges the ground water as well as river or drain.         | In every year, during Kharif crop (1st July to 15th Nov.) and Rabi crop (1st week of January to 15th of May). | Rotational water supply is maintained in Kharif & Rabi crops.  |  |
| Item<br>No.5 | Flood Plain Zone Protection & it's management   |   | 1   |  |  |
| Item<br>No.6 | Rainwater harvesting/<br>Groundwater recharge aspects   | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Building in towns of Odisha. | 2014-15 to 2018-19  | RRHS of 131 nos<br>in Govt. Buildings<br>& 4942 nos. in<br>Private Buildings<br>completed in<br>Bhubaneswar. | Bhubaneswar town   |
|              |   | isti  | 2019-2020   | Nil  |  |
|              |   |   | 2020-21   | 300 nos in Govt.<br>buildings and 6000<br>nos in private<br>buildings will be<br>constructed.                | Provision for Rs. 37 crores has been kept for the year 2020-21 |
|              |   | Construction of Check Dam.  | 2019-20   | 513 nos. of Check<br>Dams completed up<br>to Dec-2019 in<br>Khordha Dist                                     |  |
|              |   |   | 2020-21   |  | Provision for Rs. 37 crores has been                           |
|              |   |   |   |  | 2020-21  |

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| itus or Remarks<br>i terms<br>ge   | 9 |  |                                |  | By Prachi<br>Division,<br>Bhubaneswar   | ,  |
|--|---|--|--------------------------------|--|---|--|
| Present Status or<br>pendency in terms<br>of %age  | 5 | Maintained.                                    | i.                             | 1  | ,   |  |
| Proposed Time Targets for<br>compliance  | 4 | During lean period from Nov to Maintained May. | ï                              | Ĭ.   | Monsoon of 2018.  |  |
| Proposed Achievable Target   | 3 | E-flows maintained.                            | I                              |  | 11865 seeding has been sown along the canal colony office premises by Prachi Division during monsoon of 2018. |  |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2 | Maintaining E-flows and Watershed management.  | Setting up bio-diversity parks | Removal of encroachments to<br>maintain natural flow in drains | Greenery or plantation on both sides of the river   | Capping of contaminated<br>Ground Water Sources, Hand<br>pump, Tube wells and alternate<br>Water Supply Arrangement for<br>drinking purpose in GW affected |
| SL<br>NO.  | 1 | Item<br>No.7                                   | Item<br>No.8                   | Item<br>No.9   | Item<br>No.10   | Item<br>No.11  |

Chief Engineer, 22, o6/20 20



# Monthly Progress Report on NGT – OA No. 673/2018 Month - March, April, May- 2020 of the Polluted River Stretch :- Bramhani (Rourkela to Biriton)

| Remarks  | 9 |   |   | Rourkela town   |         | Provision for Rs. 37 crores has been kept for the year 2020-21                    |  | Provision for Rs. 37 crores has been kept for the year 2020-21 |
|--|---|---|---|---|---------|---|--|--|
| Present Status or<br>pendency in terms<br>of %age  | 5 | l d                                     | ı   | RRHS of 07 nos.<br>in Govt. Buildings &<br>76 nos. in Private<br>Buildings completed.                           | Nil     | 300 nos in Govt. buildings and 6000 nos in private buildings will be constructed. | 720 nos. of Check<br>Dams completed up<br>to Dec-2019 in<br>Sundargarh Dist. |  |
| Proposed Time Targets for<br>compliance  | 4 | а                                       | ×   | 2014-15 to 2018-19  | 2019-20 | 2020-21   | 2019-20  | 2020-21  |
| Proposed Achievable Target   | 3 |   |   | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Building in towns of Odisha. |         |   | Construction of Check Dams.  | 8  |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2 | Adoption of good Irrigation<br>Practice | Flood Plain Zone Protection & it's management | Rainwater harvesting/<br>Groundwater recharge aspects   |         |   |  |  |
| SL<br>NO.  | 1 | Item<br>No.4                            | Item<br>No.5                                  | Item<br>No.6  |         |   |  |  |

| Item<br>No.11  | Item<br>No.10  | Item<br>No.9   | Item<br>No.8                     | Item<br>No.7                                      | _  | NO.   |
|--|--|--|----------------------------------|---|----|---|
| m Capping of contaminated 11 Ground Water Sources, Hand pump, Tube wells and alternate Water Supply Arrangement for drinking purpose in GW affected areas. | m Greenery or plantation on both sides of the river  | m Removal of encroachments to<br>maintain natural flow in drains | m Setting up bio-diversity parks | m Maintaining E-flows and 7 Watershed management. | 2  | Key Components of Proposed Components of Proposed Action Plan for restoration of identified polluted river stretch in the state |
| ă.   | 27373 nos. of sapling & seeding have been sown along the canal by Sundergarh Irr. Division & 17944 nos. of sapling & seeding have been sown along the canal by Rukura canal Division during monsoon of 2018. |  | T.                               | E-flows maintained.                               | w  | Proposed Achievable Target f  |
| ,  | Monsoon of 2018.   | c  | 1                                | During lean period from Nov to May.               | 4  | Proposed Time Targets for compliance  |
| ,  |  | ,  | 1                                | Maintained.                                       | S) | Present Status or<br>pendency in terms<br>of %age   |
|  | By Sundargarh<br>Irrigation<br>Division&<br>Rukura Canal<br>Division,<br>Rourkela.   |  |                                  |   | 6  | Remarks   |





Month - March, April, May- 2020 4. Name of the Polluted River Stretch: - Gurudih Nallah (Rourkela)

| Remarks   | 9 |   |   | Rourkela town Provision for Rs. 37 crores has been kept for the year 2020-21  |
|---|---|---|---|---|
| Present Status or<br>pendency in terms<br>of %age   | ĸ | E.                                      | ī   | RRHS of 07 no.s of Govt. Building & 76 no.s of Private Building completed Nil 300 nos in Govt. buildings and 6000 nos in private buildings will be constructed. |
| Proposed Time Targets for compliance  | 4 |   | e   | 2014-15 to 2018-19<br>2019-20<br>2020-21  |
| Proposed Achievable Target  | 3 |   |   | Construction of Rooftop Rainwater Harvesting Structure in Govt. and Private Building in towns of Odisha.  |
| Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river stretch<br>in the state | 7 | Adoption of good Irrigation<br>Practice | Flood Plain Zone Protection & it's management | Rainwater harvesting/ Groundwater recharge aspects  |
| SL NO.  | - | Item<br>No.4                            | Item<br>No.5                                  | No.6  |

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| Remarks   | 9 |  | Provision for Rs. 37 crores has been kept for the year 2020-21 |   |                                |   | By Sundargarh Irrigation Division & Rukura Canal Division, Rourkela  |
|---|---|--|--|---|--------------------------------|---|--|
| Present Status or<br>pendency in terms<br>of %age   | S | 720 nos. of Check<br>Dams completed up<br>to Dec-2019 in<br>Sundargarh Dist. |  | Maintained.                                   | ·                              | J   |  |
| Proposed Time Targets for compliance  | 4 | 2019-20  | 2020-21  | During lean period from Nov to May.           |                                | 1   | Monsoon of 2018.   |
| Proposed Achievable Target  | ю | Construction of Check Dams.  |  | E-flows maintained.                           | ,                              |   | 27373 no.s of sapling & seeding have been sown along the canal by Sundergarh Irr. Division & 17944 no.s of sapling & seeding have been sown along the canal by Rukura canal Division during monsoon of 2018. |
| Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river stretch<br>in the state | 2 |  |  | Maintaining E-flows and Watershed management. | Setting up bio-diversity parks | Removal of encroachments to maintain natural flow in drains | Greenery or plantation on both sides of the river  |
| SL NO.  | - |  |  | Item<br>No.7                                  | Item<br>No.8                   | Item<br>No.9  | Item<br>No.10  |

| Remarks   | 9    |   |
|---|------|---|
| Present Status or<br>pendency in terms<br>of %age   | ın   | 3   |
| Proposed Time Targets for<br>compliance   | 4    | v   |
| Proposed Achievable Target  | 3    | *   |
| Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river stretch<br>in the state | 2    | Capping of contaminated Ground Water Sources, Hand pump, Tube wells and alternate Water Supply Arrangement for drinking purpose in GW affected areas. |
| SL<br>NO.   | wind | Item<br>No.11   |

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### Month - March, April, May- 2020

### 5. Name of the Polluted River Stretch :- Mangala (Along Puri)

| Remarks  | 9 |   |   | Puri town Provision for Rs. 37 crores has been kept for the year 2020-21.  |
|--|---|---|---|--|
| Present Status or<br>pendency in terms<br>of %age  | ю | r                                       | ā   | RRHS of 34 nos in Govt. Buildings & 529 nos. in Private Buildings completed.  Nil  Nil  300 nos in Govt. buildings and 6000 nos in private buildings and 6000 constructed. |
| Proposed Time Targets for<br>compliance  | 4 | e e                                     | 11  | 2014-15 to 2018-19<br>2019-20<br>2020-21   |
| Proposed Achievable Target   | 6 | ľ                                       | 1   | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Buildings in towns of Odisha.   |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2 | Adoption of good Irrigation<br>Practice | Flood Plain Zone Protection & it's management | Rainwater harvesting/ Groundwater recharge aspects   |
| SL NO.   | 1 | Item<br>No.4                            | Item<br>No.5                                  | No.6   |

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| s for Present Status or Remarks pendency in terms of %age   | 9 | 115 nos. of Check<br>Dams completed up<br>to Dec-2019 in Puri<br>Dist. | Provision for Rs. 37 crores has been kept for the vear 2020-21. | Maintained.                                      | T.                             | а   | By Puri Irr. Division, Puri  |   |
|---|---|--|---|--|--------------------------------|---|--|---|
| Proposed Time Targets for<br>compliance   | 4 | 2019-20  | 2020-21   | During lean period from Nov to<br>May.           | i.                             | 1   | Monsoon of 2018.   |   |
| Proposed Achievable Target  |   | Construction of Check Dams.  |   | E-flows maintained.                              | Ē                              | T.  | 1700 sapling has been sown along the canal colony, office premises by Puri Irr. Division during monsoon of 2018. |   |
| Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river stretch<br>in the state | 7 |  |   | Maintaining E-flows and<br>Watershed management. | Setting up bio-diversity parks | Removal of encroachments to maintain natural flow in drains | Greenery or plantation on both sides of the river  | Capping of contaminated<br>Ground Water Sources, Hand |
| SL NO.  | 1 |  |   | Item<br>No.7                                     | Item<br>No.8                   | Item<br>No.9  | Item<br>No.10  | Item<br>No.11   |



### Month - March, April, May- 2020 6. Name of the Polluted River Stretch :- Nagavali (JK Pur to Rayagada)

| Remarks   | 9 |   |   | Provision for Rs. 37 crores has been kept for the year 2020-21   |  | Provision for Rs. 37 crores has been kept for the year 2020-21 |
|---|---|---|---|--|--|--|
| Present Status or<br>pendency in terms<br>of %age   | 5 |   | ,   | Nil 300 nos in Govt. buildings and 6000 nos in private buildings will be constructed.                            | 801 nos. of Check<br>Dams completed up<br>to Dec-2019 in<br>Rayagada Dist. |  |
| Proposed Time Targets for<br>compliance   | 4 | i.                                      | ,   | 2019-20  | 2019-20  | 2020-21  |
| Proposed Achievable Target  | 3 | 1                                       | i.  | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Buildings in towns of Odisha. | Construction of Check Dams.  | 3  |
| Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river stretch<br>in the state | 7 | Adoption of good Irrigation<br>Practice | Flood Plain Zone Protection & it's management | Rainwater harvesting/ Groundwater recharge aspects   | 3  |  |
| SL<br>NO.   | 1 | Item<br>No.4                            | Item<br>No.5                                  | Item<br>No.6   |  |  |

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| Remarks  | 9  |   |                                |  | By Rayagada<br>Minor Irr.<br>Division   |  |
|--|----|---|--------------------------------|--|---|--|
| Present Status or<br>pendency in terms<br>of %age  | ın | Maintained.                                   | .4                             |  |   | 1  |
| Proposed Time Targets for<br>compliance  | 4  | During Iean period from Nov to May.           |                                |  | Monsoon of 2018.  | )<br>J.  |
| Proposed Achievable Target   | e  | E-flows maintained.                           |                                | ,  | 5160 nos. of sapling has been sown in<br>Rayagada district by Rayagada Minor Irr.<br>Division during monsoon of 2018. |  |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2  | Maintaining E-flows and Watershed management. | Setting up bio-diversity parks | Removal of encroachments to<br>maintain natural flow in drains | Greenery or plantation on both sides of the river   | Capping of contaminated<br>Ground Water Sources, Hand<br>pump, Tube wells and alternate<br>Water Supply Arrangement for<br>drinking purpose in GW affected<br>areas. |
| SL NO.   | -  | Item<br>No.7                                  | Item<br>No.8                   | Item<br>No.9   | Item<br>No.10   | Item<br>No.11  |

Chief Engineer, 406 2020



7. Name of the Polluted River Stretch :- Kathajodi (Cuttack to Uralli)

|  | 1 | _  |   |   |  |
|--|---|--|---|---|--|
| Remarks  | 9 |  |   | Cuttack town  | Provision for Rs. 37 crores has been kept for the year 2020-21   |
| Present Status or<br>pendency in terms<br>of %age  | w |  | ì   | RRHS of 07 nos in Govt. Buildings & 123 nos. inPrivate Buildings completed Nil                                  | buildings and 6000 nos in private buildings will be constructed. |
| Proposed Time Targets for<br>compliance  | 4 |  | 1   | 2014-15 to 2018-19<br>2019-20   | 2020-21  |
| Proposed Achievable Target   | 3 | No irrigation water recharges river Kathajodi<br>(from Cuttack to Uralli). |   | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Building in towns of Odisha. |  |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2 | Adoption of good Irrigation<br>Practice                                    | Flood Plain Zone Protection & it's management | Rainwater harvesting/ Groundwater recharge aspects  |  |
| NO.  | 1 | Item<br>No.4   | Item<br>No.5                                  | No.6  |  |

| Remarks   | 9  | Provision for Rs. 37 crores has been kept for the year 2020-21   |   |                                |  | By Mahanadi<br>South Division-1<br>&<br>by Mahanadi  |
|---|----|--|---|--------------------------------|--|--|
| Present Status or<br>pendency in terms<br>of %age   | ıo | 659 nos. of Check Dams completed up to Dec-2019 in Cuttack Dist. | Maintained.                                   |                                | ,  |  |
| Proposed Time Targets for<br>compliance   | 4  | 2019-20  | During lean period from Nov to May.           |                                | ,  | Monsoon of 2018.   |
| Proposed Achievable Target  | ro | Construction of Check Dams.                                      | E-flows maintained.                           |                                |  | 3250 no.s of sapling has been sown along the canal colony, office premises by Mahanadi South Division-1 & 10610 no.s of sapling has been sown along the canal colony, office premises by Mahanadi Barrage Division, Cuttack during |
| Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river stretch<br>in the state | 7  |  | Maintaining E-flows and Watershed management. | Setting up bio-diversity parks | Removal of encroachments to<br>maintain natural flow in drains | Greenery or plantation on both sides of the river  |
| SL NO.  | 1  |  | Item<br>No.7                                  | Item<br>No.8                   | Item<br>No.9   | Item<br>No.10  |

| - |   |    |                  |   |
|---|---|----|------------------|---|
| ) | Remarks   | 9  | Cuttack.         |   |
|   | Present Status or<br>pendency in terms<br>of %age   | ıΩ |                  | ı   |
|   | Proposed Time Targets for<br>compliance   | 4  |                  |   |
|   | Proposed Achievable Target  | 8  | monsoon of 2018. | 1   |
|   | Key Components of Proposed<br>Action Plan for restoration of<br>identified polluted river stretch<br>in the state | 2  |                  | Capping of contaminated Ground Water Sources, Hand pump, Tube wells and alternate Water Supply Arrangement for drinking purpose in GW affected areas. |
|   |   |    |                  |   |

Item No.11

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Chief Engineer, 22/06/2020



### Month - March, April, May- 2020

### 8. Name of the Polluted River Stretch :- Serua(Khandaeta to Sankhatrasa) River

| Remarks  | 9  |   |   | Cuttack town  | Provision for Rs. 37 crores has been kept for the year 2020-21                    |
|--|----|---|---|---|---|
| Present Status or<br>pendency in terms<br>of %age  | ın | Rotational water supply is maintained in Kharif & Rabi crops.   | *   | RRHS of 07 nos of Govt. Building & 123 nos. of Private Building completed.                                      | 300 nos in Govt. buildings and 6000 nos in private buildings will be constructed. |
| Proposed Time Targets for<br>compliance  | 4  | In every year, during Kharif E crop (1st July to 15th Nov. and s Rabi crop (1st week of January it to 15th of May). | ×   | 2014-15 to 2018-19<br>2019-20   | 2020-21   |
| Proposed Achievable Target   | г. | Rotational water supply in Kakatpur Branch Canal system recharges the groundwater as well as river or drain.        |   | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Building in towns of Odisha. |   |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2  | Adoption of good Irrigation<br>Practice   | Flood Plain Zone Protection & it's management | Rainwater harvesting/<br>Groundwater recharge aspects   |   |
| SL<br>NO.  | 1  | Item<br>No.4  | Item<br>No.5                                  | Item<br>No.6  |   |

|   |    | 1  |
|---|----|----|
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| T | t  | 1  |
|   | -1 | )  |
|   |    |    |

| Action Flan for restoration of<br>identified polluted river stretch<br>in the state |   | compliance                                     | pendency in terms<br>of %age  |   |
|---|---|--|---|---|
| 2   | 8   | 4  | S   | 9   |
|   | Construction of Check Dams.   | 2019-20  | 659 nos. of Check<br>Dams completed up<br>to Dec-2019 in<br>Cuttack Dist. | Provision for Rs. 37 crores has been kept for the year 2020-21                              |
| Maintaining E-flows and<br>Watershed management.                                    | E-flows maintained.   | During lean period from Nov to Maintained May. | Maintained.   |   |
| Setting up bio-diversity parks  |   | · · ·  | c   |   |
| Removal of encroachments to<br>maintain natural flow in drains                      | 31  | a a  | ,   |   |
| Greenery or plantation on both sides of the river                                   | 3250 no.s of sapling has been sown along the canal colony, office premises by Mahanadi South Division-1 & 4260 nos. of sapling and seeding have been sown along the canal colony, office premises by Jagatsinghpur Irr. Division, Jagatsinghpur during monsoon of 2018. | Monsoon of 2018.                               |   | By Mahanadi<br>South Division-1<br>&<br>by Jagatsinghpur<br>Irr. Division,<br>Jagatsinghpur |

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| Kemarks  | 9  |   | Provision for Rs. 37 crores has been kept for the year 2020-21 |   |                                |   | By Mahanadi<br>South Division-1<br>&<br>by Jagatsinghpur<br>Irr. Division,<br>Jagatsinghpur   |
|--|----|---|--|---|--------------------------------|---|---|
| Fresent Status or<br>pendency in terms<br>of %age  | 10 | 659 nos. of Check<br>Dams completed up<br>to Dec-2019 in<br>Cuttack Dist. |  | Maintained.                                   | 71.                            | ,   | 3   |
| Proposed time largets for compliance   | 4  | 2019-20   | 2020-21  | During lean period from Nov to<br>May.        | T)                             |   | Monsoon of 2018.  |
| Froposed Achievable Larget   | 3  | Construction of Check Dams.   |  | E-flows maintained.                           |                                |   | 3250 no.s of sapling has been sown along the canal colony, office premises by Mahanadi South Division-1 & 4260 nos. of sapling and seeding have been sown along the canal colony, office premises by Jagatsinghpur Irr. Division, Jagatsinghpur during monsoon of 2018. |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 7  |   |  | Maintaining E-flows and Watershed management. | Setting up bio-diversity parks | Removal of encroachments to maintain natural flow in drains | Greenery or plantation on both sides of the river   |
| NO.  | 1  |   |  | Item<br>No.7                                  | Item<br>No.8                   | Item<br>No.9  | Item<br>No.10   |

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| Remarks   | 9 |  |
|---|---|--|
| Present Status or<br>pendency in terms<br>of %age                             | w |  |
| Proposed Time Targets for compliance  | 4 |  |
| Proposed Achievable Target  | 3 |  |
| Action Plan for restoration of identified polluted river stretch in the state | 2 | Capping of contaminated<br>Ground Water Sources, Hand<br>pump, Tube wells and alternate<br>Water Supply Arrangement for<br>drinking purpose in GW affected<br>areas. |
| NO.   | 1 | Item<br>No.11  |

Chief Engineer, 22/06/1020
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### 9. Name of the Polluted River Stretch: - Ratnachira (Along Bhubaneswar)

| Remarks   | 9 |   |   | Puri town Provision for Rs. 37 crores has been kept for the year 2020-21   |                                |
|---|---|---|---|--|--------------------------------|
| Present Status or<br>pendency in terms<br>of %age                             | 5 | Rotational water<br>supply is maintained<br>in Kharif & Rabi<br>crops.  |   | of Govt. Building & 529 nos. of Private Building completed Nil 300 nos in Govt. buildings and 6000 nos in mivate in mivate | buildings will be constructed. |
| Proposed Time Targets for<br>compliance                                       | 4 | In every year, during Kharif I crop (1st July to 15th Nov. and s Rabi crop (1st week of January ito 15th of May).   |   | 2014-15 to 2018-19<br>2019-20<br>2020-21   |                                |
| Proposed Achievable Target  | 3 | Rotational water supply in Sakhigopal Branch<br>Canal, Puri Main Canal and Gobardhanpur<br>Barrage recharges the ground water as well as<br>river or drain. |   | Construction of Rooftop Rainwater Harvesting Structure (RRHS) in Govt. and Private Building in towns of Odisha.            |                                |
| Action Plan for restoration of identified polluted river stretch in the state | 2 | Adoption of good Irrigation Practice  | Flood Plain Zone Protection & it's management | Rainwater harvesting/ Groundwater recharge aspects   |                                |
| NO.   | 1 | Item<br>No.4  | Item<br>No.5                                  | No.6   |                                |

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|-----|--|
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| Remarks  | 9 |   | Provision for Rs. 37 crores has been kept for the year 2020-21 |  | 1                              | r   | By Puri Irr.<br>Division, Puri   |   |
|--|---|---|--|--|--------------------------------|---|--|---|
| Present Status or<br>pendency in terms<br>of %age  | 2 | 513 nos. of Check<br>Dams completed up<br>to Dec-2019 in<br>Khurdha Dist. |  | Maintained.                                      | T                              | r   |  |   |
| Proposed Time Targets for<br>compliance  | 4 | 2019-20   | 2020-21  | During lean period from Nov to May.              | _ Y                            | T.  | Monsoon of 2018.   | 1   |
| Proposed Achievable Target   | 3 | Construction of Check Dams.   |  | E-flows maintained.                              | a                              |   | 1700 sapling has been sown along the canal colony, office premises by Puri Irr. Division during monsoon of 2018. |   |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2 |   |  | Maintaining E-flows and<br>Watershed management. | Setting up bio-diversity parks | Removal of encroachments to maintain natural flow in drains | Greenery or plantation on both sides of the river  | Capping of contaminated<br>Ground Water Sources, Hand<br>pump, Tube wells and alternate<br>Water Supply Arrangement for |
| SL<br>NO.  | ı |   |  | Item<br>No.7                                     | Item<br>No.8                   | Item<br>No.9  | Item<br>No.10  | Item<br>No.11   |

| nr Remarks   | 9   |  |
|--|-----|--|
| Present Status or<br>pendency in terms<br>of %age  | to. |  |
| Proposed Time Targets for<br>compliance  | 4   |  |
| Proposed Achievable Target   | 3   |  |
| Key Components of Proposed Action Plan for restoration of identified polluted river stretch in the state | 2   | drinking purpose in GW affected areas. |

SL NO.

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Chief Engineer, 24 06 16 W