

**REPORT OF THE OVERSIGHT COMMITTEE, NGT, U.P, LUCKNOW**

**IN THE MATTER OF:-**

**ORIGINAL APPLICATION NO. 116/2014**

**MEERA SHUKLA**

**VERSUS**

**MUNICIPAL CORPORATION, GORAKHPUR & ORS.**

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**UPDATED REPORT OF OVERSIGHT COMMITTEE DATED 14.06.2021 IN COMPLIANCE OF ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL PASSED IN O.A. NO. 116/2014 IN RE: MEERA SHUKLA VERSUS MUNICIPAL CORPORATION, GORAKHPUR & ORS**

**I. INTRODUCTION**

The Hon'ble National Green Tribunal dealing with the matter of O.A. NO. 116/2014 in Re: Meera Shukla Versus Municipal Corporation, Gorakhpur & Ors vide order dated 24.09.2019 considered the issue of remedial action for contamination of water bodies and groundwater, specially Ramgarh Lake, Ami River, Rapti River and Rohini River in and around District Gorakhpur, Uttar Pradesh.

**II. DIRECTIONS BY HON'BLE NGT AS PER LAST ORDER DATED 12.1.2021**

Hon'ble NGT after considering all the reports, made the following observations and directions:

- *After considering particularly the report of the Oversight Committee, it is seen that there is large scale non-compliance by the 77 concerned authorities in discharge of their public duties. It is high time that periodically the Chief Secretary personally reviews the matter to ensure compliance of directions of the Hon'ble Supreme Court requiring preventing discharge of untreated sewage and trade effluents, solid waste management and rejuvenation of Ganga. We expect and hope the Chief Secretary UP will now address the issue suitably and take remedial action in the interest of good governance and ethics of administration.*
- *We are also informed that an action plan has already been prepared for remediation of Ami and other rivers in 2019 which is available on the website of the UPPCB. The same has been duly approved by the River Rejuvenation Committee of UP in its meeting held on 17.07.2019. If it is so, the action needs to be taken promptly in accordance with the said plan. The execution of plan may be timebound and supported by the necessary budget. Persons accountable may be specified.*
- *We direct acceptance of all the recommendations of the Oversight Committee which may be faithfully implemented. Remedial action be taken inter alia for restoration of*

*the water bodies, abatement of pollution by the industries and the Local Bodies, enforcement of the Solid Waste Management Rules, 2016, removing encroachments, disconnecting electricity connection of illegally operating industries. This may be overseen by the Chief Secretary, UP by appropriate mechanism, apart from or alongwith the five-Member Committee comprising the Secretaries of Irrigation Department, Urban Development Department, Environment Department, CPCB and the State PCB. The objections to the Notification with regard to the area of the Wetland Authority may be dealt with by the State Wetland Authority.*

- *Apart from above general observations, we may particularly note that even though only 6 out of 24 drains carrying untreated effluent to the River Tapti which meets river Ghagra which in turns goes to River Ganga have been tapped. The remaining 18 drains continue to discharge untreated sewage/effluent in river Rapti. This situation is extremely unsatisfactory. Only steps mentioned are that CETP is under construction with timeline and there is proposal to set up STP again without any timeline and with no indication as to how continuing crime of pollution affecting the environment and the public health is to be prevented if the State is committed to the rule of law and protection of health of its citizens. Does it mean that crime is to continue? This is also flagrant violation of orders of this Tribunal, including the order relating to rejuvenation of river Ganga (in O.A. No. 200/2014, M.C. Mehta v. UOI read with further orders in O.A. No. 593/2017, Paryavaran Suraksha Samiti & Anr. v. UOI & Ors, in pursuance of Supreme Court judgement in (2017) 5 SCC 326 and this Tribunal in O.A. No. 673/2018, News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted). The Tribunal has already laid down compensation regime for failure to take remedial action but the same is also not been paid. If State authorities behave in such irresponsible manner, it is hardly conducive to the rule of law. Thus, the erring officers need to be proceeded against for their failure. Similar action needs to be taken against erring officers for failure to comply with the MSW Rules, 2016 in terms of order of this Tribunal in O.A. No. 606/2018. The action plans required to be prepared by the River Rejuvenation Committee in terms of order passed in O.A. No. 673/2018 need to be duly executed. We are also informed that an action plan has already been prepared for remediation of Ami and other rivers in 2019 which is available on the website of*

*the UPPCB. The same has been duly approved by the River Rejuvenation Committee of UP in the meeting held on 17.07.2019. If it is so, the action needs to be taken promptly in accordance with the said plan. The execution of plan may be timebound and supported by the necessary budget. Persons accountable may be specified. The Oversight Committee may have meeting within one month from today with the River Rejuvenation Committee to be coordinated by UP PCB to take stock of situation on implementation of draft action plan. The Oversight Committee may give report before next hearing particularly on following issues:*

*1) Quantity of sewage being discharged into river Ami, Rapti and Ghagra through drains and time bound implementation for setting up of STPs and coercive action for delay.*

*2) Current water quality of Ami, Rapti and Ghagra and Ramgarh lake.*

*3) The reasons for delay in setting up of CETP and accountability for delay. In absence of CETP, why Member industries are permitted to operate without remedial action under the Water (Prevention and Control of Pollution) Act, 1974?*

*4) Regulatory plan to check encroachment of flood plain of Ami, Rapti and Ghagra. We direct that the Chief Secretary, UP may in particular oversee the execution of river rejuvenation plans for Rivers Ami, Rapti, Rohani, Saryu and Ghagra wherein the timelines for rejuvenation of different components may be fixed with necessary budgetary support and designating the authorities/officers responsible for it. Such projects cannot be delayed on the pretext of funding by the NMCG in view of the fact that preventing discharge of pollutants in River Ganga or other water bodies a criminal offence under the Water Act and even authorities are liable to be prosecuted for such offences in the light of the judgement of the Hon'ble Supreme Court in Paryavaran Suraksha v. Union of India. Compliance of the said judgement is not dependent on funding by the NMCG.*

- Further reports may be filed within three months by the Chief Secretary UP and the Oversight Committee. A copy of this order be forwarded to the Chief Secretary U.P., Secretaries Irrigation Department, Urban Development Department, Environment Department, U.P., CPCB and State PCB by e-mail for compliance.*

### III. MEETING HELD BY OVERSIGHT COMMITTEE

The Committee reviewed the progress of the compliance of the orders of Hon NGT in **OA No. 116/2014** in re: *Meera Shukla vs Municipal Corporation, Gorakhpur and others* ON 11.06.2021. The point wise minutes of meeting are presented below:

1. **Status of major and minor drains:** There are 24 major drains in Gorakhpur city through which waste water sewage falls directly in Rapti River, Rohani River (Tributory of Rapti River) and Ramgarh Lake. Out of above 24 major drains, 6 major drains ( which were falling directly in Ramgarhtal) have been intercepted, diverted and being treated through 2 Nos S.T.P ( 15 MLD & 30 M.LD capacity) since year 2015. The total discharge from 6 major drains is 37 MLD and of 18 minor drains is 6.81. The total capacity of 2 STPs is 45 MLD. Apart from above 6 major drains which were falling directly in Ramgarhtal there are 18 minor drains also falling in Ramgarhtal.
2. The complete details about 18 minor drains is as under-
  - **7 minor drains:** The sewage of these drains will be taken care under ongoing “Gorakhpur Sewerage Scheme Zone A-1 Southern part” project under AMRUT till Dec-2021 However as an interim measure Nagar Nigam, Gorakhpur invited bid vide its NIT dt. 08.10.2020 for bio-remediation / phytoremediation of these drains. Work has been allotted to M/s Mapple Orgitech (India) Ltd, Kolkata and work has been started at site.
  - **11 minor drains:** For Interception & Diversion of these drains a project amounting Rs 34.82 crore has been forwarded by District Magistrate, Gorakhpur to U.P. Govt. vide letter dt. 21.11.2019. The sanction of this project granted vide GO No 348/2020/1569/9-5- 2021-16 Budget/2020 Dt. 30.03.2021. Tender invited and PQ cum Technical bid was opened on 25.05.2021, evaluation is in progress. These drains are likely to be intercepted by Oct-2022. As an interim measure Nagar Nigam, Gorakhpur invited bid vide letter dt. 08.10.2020 for bio-remediation / phytoremediation of these drains. Work has been allotted to M/s Mapple Orgitech (India) Ltd, Kolkata and work has been started at site.

3. There are 15 major drains falling in river Rapti and Rohini, out of which 9 are falling in River Rapti & 6 are falling in River Rohini,
  - **15 major drains falling directly in River Rapti and Rohini:** 10 major drains are proposed for bioremediation / phytoremediation by Urban Development Department, U.P. Govt., which is to be executed by NEERI, Nagpur. Remaining drains out of those proposed for Bio-remediation by NEERI, Nagpur & Nagar Nigam, Gorakhpur invited bid vide its NIT dt. 08.10.2020 for its bio-remediation/ phytoremediation. Nagar Nigam, Gorakhpur allotted work order to M/s Mapple Orgitech (India) Ltd, kolkata and work has been started at site.
4. It was informed by RO, Gorakhpur, UPPCB that both the **STPs in Gorakhpur** viz. 15 MLD and 30 MLD are fully operational. Furthermore, regarding Sahara Estate STP, Gorakhpur, RO, UPPCB submitted that this STP has also been made functional.
5. Regarding **CETP in Gorakhpur**, it was submitted that a team of NMCG had visited the site on 21.01.2020 and had raised some observations vide its letter Dt. 12.03.2020. In the compliance of above observation of NMCG, New Delhi, a revised estimate for "I&D works and construction of 7.5 MLD Common Effluent Treatment Plant at GIDA Area, Gorakhpur" (Phase-I) amounting Rs. 62.50 Cr was sent to Director General, NMCG, New Delhi vide APD, SMCG, Lucknow letter no 432 dated 11.11.2020 for approval. On Dt 28.01.2021 the meeting was held under the chairmanship of Executive Director (Technical), NMCG to appraise the DPR submitted by UP Jal Nigam. The meeting was also attended by officials of NMCG, GIDA and UPJN. After which some decision and observation were raised by NMCG Letter dated 05.02.2021. Dr. Kajmi, Professor, IIT Roorkee along with GIDA officials visited the site on dated 01.04.2021. After site visit, he agreed on 7.5 MLD capacity of CETP. He also commented that a team of his institute will visit the site for collection and quality testing of industrial sewage, which is awaited. Further action is to be taken by GIDA officials.
6. RO, Basti informed that in compliance to the direction issued by Hon'ble NGT, New Delhi in the matter of O.A.No 116/2014 (Meera Shukla V/s Nagar Nigam Gorakhpur & other) with O.A No 437/2015 (Vishwa Vijay singh V/s UP P.C.B & other) regarding pollution of Ami River by Municipal and Industrial effluent in

Distt. Sant Kabir Nagar, DPRs for I&D and **STP work for Khalilabad and Maghar Town**, Distt Sant Kabir Nagar were sent to NMCG New Delhi by Project Director SMCG, Lucknow vide letter No 997 dt. 13-08- 2019 amounting Rs. 33.20 Cr & Rs.19.88 Cr. respectively. Some observations were raised by NMCG. After removing observations, DPR for Khalilabad town amounting Rs. 46.32 crore (including O&M for 15 years) and Maghar Town amounting Rs. 28.36 crore (including O&M for 15 years) has been sent to SMCG, GoUP on dated 29-09-2020 by C.E. Ganga, U.P. Jal Nigam, Lucknow.

7. Regarding **water quality of Ramgarh lake**, it was informed by RO, Gorakhpur that water quality has improved over the period of time with collective efforts of concerned authorities. Water quality assessment is done on monthly basis. The Committee directed him to submit a copy of the latest water quality report.
8. **Saraya Distillery**: It was informed by RO, Gorakhpur that as per the latest inspection, no effluent discharge was found to be done by the unit. The Committee directed him to submit a copy of the detailed inspection report.
9. **Environmental Compensation**: RO, Gorakhpur apprised the Committee that out of the identified 6 units, 2 have deposited the full amount, 1 has deposited half of the penalty imposed and rest 3 were not traceable as they were operating on rent and have now closed their respective units.
10. The Committee demanded report regarding the **number and area of wetland** in Gorakhpur. RO, Gorakhpur was directed to submit it.
11. RO, Gorakhpur was also asked to conduct **water quality test of river Ami, Rapti and Rohini** and submit the report as soon as possible to the Committee.
12. Furthermore, it was directed to him to submit **the minutes of meeting held by State Wetland Committee**.

#### IV. REPORTS SUBMITTED BY THE CONCERNED AUTHORITIES

- **Saraya Distillery**: As per the document submitted by UPPCB (**attached as Appendix 3**) it is revealed that an inspection of the unit was done on 8.01.2021 after which the necessary consent orders regarding water and air were granted.

- **Environmental Compensation:** The details submitted as **attached as Appendix 4** are presented below:

S. No.	Name & Add of Industry	Date of E.C. Imposed	Environmental Compensation Imposed (in Rs.)	Environmental Compensation (E.C.) Received	Date of R.C. Issued	Remarks
1	B.R.D. Medical College & Hospital, Gorakhpur	18.10.2019	4,41,15000.00	Nil	Letter Issued by H.O. vide letter no. H 60813, dated. 19.03.2021to District Administration	–
2	Burnet Pharmaceutical Pvt. Ltd., FL-1, Sector- 13, GIDA, Gorakhpur	14.01.2019	50,000.00	50,000.00	Letter Issued by H.O. to District Administration	Partial Payment Deposited by Industry
		01.10.2019	12,87,500.00	3,00,000.00		
3	Bharti Research & Breeding Firm, FL-27, Sector- 13, GIDA, Gorkhpur	15.01.2019	50,000.00	50,000.00	Letter Issued by H.O. to District Administration	Industry is Closed
		01.10.2019	6,11,250.00	Nil		
4	Gorakhnath Agro Industries Pvt. Ltd., FL-20/27, Sector-13, GIDA, Gorakhpur	01.10.2019	10,18,725.00	10,18,725.00	–	Complete Payment Deposit by Industry
		10.01.2019	50,000.00	50,000.00		
5	Alkane Construction Pvt. Ltd., FL-24, Sector-13, GIDA, Gorakhpur	01.10.2019	4,25,000.00	Nil	Letter Issued by H.O. to District Administration	Industry is Closed
6	Vindhyavasini Industries (Old Name Mother Shree Dairy, D-1/3, Sector- 13, GIDA, Gorakhpur	01.10.2019	8,40,000.00	8,40,000.00	–	Complete Payment Deposit by Industry

- **Meeting of the Committee:** A meeting was scheduled on 10.06.2021 regarding granting of permission for approving maps for commercial purposes wherein environmental clearance is not required (Refer **Appendix 5**)

- **Letter from Sahara India Commercial Corporation Ltd:** Vide letter dated 10.06.2021; it has been informed by Sahara India Ltd. that 350 KLD has been installed and is operational at site (**Refer Appendix 6**).
- **Action Plan for Ami, Rapti and Ghagra:** All the actions plans have been approved and attached as **Appendix 7, 8 and 9**.
- **Meeting with River Rejuvenation Committee:** A letter has been sent by UPPCB to Deputy Secretary, Environment, Forest and Climate Change Dept.,U.P to provide a suitable date and time after 25.06.2021 to schedule a meeting with Oversight Committee. The meeting was aimed to be held earlier but got delayed on account of covid-19 pandemic (**Refer Appendix 13**). Now it has been scheduled on 29.06.2021.
- **Show cause notice by UPPCB:** UPPCB has issued show cause notice vide letter dated 19.3.2021 to RO, Basti regarding recovery of EC from 1.4.2020 till the date of default on account of not taking interim measures on drains by Nagar Panchayat, Maghar and Nagar Palika, Khalilabad. (**Refer Appendix 10 and 11**). A show cause notice has also been issued to RO, Gorakhpur regarding delay in sending the information regarding CETP in Gorakhpur (**Refer Appendix 12**).
- **Status and Action Plan for treatment of sewage generated in UP:** UPPCB submitted a document detailing out the current status of sewage generated, existing treatment capacity, number of STP under sanctioning/ tendering and DPR formulation stage (**Refer Appendix 14**).
- Works related to Khalilabad, Maghar and Gorakhpur are presented below: (**for details refer Appendix 14**).

S. No	Project	No.of drains to be tapped	Capacity	Total Cost	Works Cost	O&M Cost
1.	I&D & STP works at <b>Khalilabad</b> Town, Distt. Sant Kabirnagar	2	8	46.32	19.7	26.62
2.	I&D & STP works at <b>Maghar</b> Town, Distt. Sant Kabirnagar	1	3	28.36	13.43	14.93
3.	I&D & STP works for drains falling in River Rapti at Distt. <b>Gorakhpur</b>	8	44	432.17	271.84	160.33

V. LATEST COMPLIANCE STATUS

S. No.	Issue	Compliance Status	Reason for non-compliance
1.	<b>Status of drains</b>	Partially complied	<p>There are 24 major drains in Gorakhpur city through which waste water sewage falls directly in Rapti River, Rohani River (Tributory of Rapti River) and Ramgarh Lake. Out of above 24 major drains, 6 major drains (which were falling directly in Ramgarhtal) have been intercepted, diverted and being treated through 2 Nos S.T.P ( 15 MLD &amp; 30 M.LD capacity) since year 2015. The total discharge from 6 major drains is 37 MLD and of 18 other drains is 6.81. The total capacity of 2 STPs is 45 MLD.Apart from above 6 major drains which were falling directly in Ramgarhtal there are 18 minor drains also falling in Ramgarhtal.</p> <p>The complete details about 18 minor drains is as under-</p> <p><b>7 minor drains:</b> The sewage of these drains will be taken care under ongoing “Gorakhpur Sewerage Scheme Zone A-1 Southern part” project under AMRUT till Dec-2021 However as an interim measure Nagar Nigam, Gorakhpur invited bid vide its NIT dt. 08.10.2020 for bio-remediation / phytoremediation of these drains. Work has been allotted to M/s Mapple Orgitech (India) Ltd, Kolkata and work has been started at site.</p> <p><b>11 minor drains:</b> For Interception &amp; Diversion of these drains a project amounting Rs 34.82 crore has been forwarded by District Magistrate, Gorakhpur to U.P. Govt. vide letter dt. 21.11.2019. The sanction of this project granted vide GO No 348/2020/1569/9-5- 2021-16 Budget/2020 Dt. 30.03.2021. Tender invited and PQ cum Technical bid was opened on 25.05.2021, evaluation is in progress. These drains are likely to be intercepted by Oct-2022. As an interim measure Nagar Nigam, Gorakhpur invited bid vide letter dt. 08.10.2020 for bio-</p>

			<p>remediation / phytoremediation of these drains. Work has been allotted to M/s Mapple Orgitech (India) Ltd, Kolkata and work has been started at site.</p> <p>There are 15 major drains falling in river Rapti and Rohini, out of which 9 are falling in River Rapti &amp; 6 are falling in River Rohini, 10 major drains are proposed for bioremediation/phytoremediation by Urban Development Department, U.P. Govt., which is to be executed by NEERI, Nagpur. Remaining drains out of those proposed for Bio-remediation by NEERI, Nagpur &amp; Nagar Nigam, Gorakhpur invited bid vide its NIT dt. 08.10.2020 for its bio-remediation/ phytoremediation. Nagar Nigam, Gorakhpur allotted work order to M/s Mapple Orgitech (India) Ltd, Kolkata and work has been started at site. Details presented in report attached as <b>Appendix 1.</b></p>
2.	<b>STPs in Gorakhpur</b>	Complied	15 MLD and 30 MLD are fully operational. Furthermore, regarding Sahara Estate STP, Gorakhpur, RO, UPPCB submitted that this STP has also been made functional.
3.	<b>CETP in Gorakhpur</b>	Not complied	A team of NMCG had visited the site on 21.01.2020 and had raised some observations vide its letter Dt. 12.03.2020. In the compliance of above observation of NMCG, New Delhi, a revised estimate for "I&D works and construction of 7.5 MLD Common Effluent Treatment Plant at GIDA Area, Gorakhpur" (Phase-I) amounting Rs. 62.50 Cr was sent to Director General, NMCG, New Delhi vide APD, SMCG, Lucknow letter no 432 dated 11.11.2020 for approval. On Dt 28.01.2021 the meeting was held up in chairmanship of Executive Director (Technical), NMCG to appraise the DPR submitted by UP Jal Nigam. The meeting was also attended by officials of NMCG, GIDA and UPJN. After which some decision and observation were raised by NMCG Letter dated 05.02.2021. Dr. Kajmi, Professor, IIT Roorkee along with GIDA officials visited the site on dated 01.04.2021. After site visit, he agreed on 7.5 MLD capacity of CETP. He also commented that a team of his

			institute will visit the site for collection and quality testing of industrial sewage, which is awaited. Further action is to be taken by GIDA officials.
4.	<b>STP in Khalilabad and Maghar</b>	Not complied	RO, Basti informed that in compliance to the direction issued by Hon'ble NGT, New Delhi in the matter of O.A.No 116/2014 (Meera Shukla V/s Nagar Nigam Gorakhpur & other) with O.A No 437/2015 (Vishwa Vijay singh V/s UP P.C.B & other) regarding pollution of Ami River by Municipal and Industrial effluent in Distt. Sant Kabir Nagar, DPRs for I&D and <b>STP work for Khalilabad and Maghar Town</b> , Distt Sant Kabir Nagar were sent to NMCG New Delhi by Project Director SMCG, Lucknow vide letter No 997 dt. 13-08- 2019 amounting Rs. 33.20 Cr & Rs.19.88 Cr. respectively. Some observations were raised by NMCG. After removing observations, DPR for Khalilabad town amounting Rs. 46.32 crore (including O&M for 15 years) and Maghar Town amounting Rs. 28.36 crore (including O&M for 15 years) has been sent to SMCG, GoUP on dated 29-09-2020 by C.E. Ganga, U.P. Jal Nigam, Lucknow.
5.	<b>Water quality of Ramgarh lake</b>	Complied	It was informed by RO, Gorakhpur that water quality has improved over the period of time with collective efforts of concerned authorities. Water quality assessment is done on monthly basis. The Committee directed him to submit a copy of the latest water quality report. Steps taken by the authorities are presented in report submitted by Gorakhpur Development Authority attached as <b>Appendix 2</b> .
6.	<b>Saraya Distillery</b>	No report received	It was informed by RO, Gorakhpur that as per the latest inspection, no effluent discharge was found to be done by the unit. The Committee directed him to submit a copy of the detailed inspect report.
7.	<b>Environmental Compensation</b>	Not complied	RO, Gorakhpur apprised the Committee that out of the identified 6 units, 2 have deposited the full amount, 1 has deposited half of the penalty imposed and rest 3

			were not traceable as they were operating on rent and have now closed their respective units.
8.	<b>EC of Rs.10 crore imposed on GDA</b>	Not Complied	GDA has submitted an action taken report to the Committee which is attached as <b>Appendix 2</b> .
9.	<b>Action Plan for Ami, Rapti and Ghagra</b>	Complied	All the actions plans have been approved and attached as <b>Appendix 7, 8 and 9</b> .
10.	<b>Meeting with River Rejuvenation Committee</b>	Not Complied	A letter has been sent by UPPCB to Deputy Secretary, Environment, Forest and Climate Change Deptt, U.P to provide a suitable date and time after 25.06.2021 to schedule a meeting with Oversight Committee. The meeting was aimed to be held earlier but got delayed on account of covid-19 pandemic (Refer <b>Appendix 14</b> ).

#### VI. RECOMMENDATIONS BY THE COMMITTEE

1. It has been reported vide meeting dated 11.06.2021 that in case of STP at Maghar and Khalilabad, DPR has been sent to Executive Director, NMCG after the revisions made in the estimated cost. However, the work has still not been initiated. Such slow progress show laxity of the concerned authorities. NGT has mandated that any STP where work does not commence from 1.04.2020 will be liable to EC @5 Lakh per month. CPCB may issue notice to the Gorakhpur Municipal Corporation/GIDA for EC.
2. Regarding the work of CETP in Gorakhpur it has been submitted that Dr. Kajmi, Professor, IIT Roorkee along with GIDA officials visited the site on dated 01.04.2021. After site visit, he agreed on 7.5 MLD capacity of CETP. He also commented that a team of his institute will visit the site for collection and quality testing of industrial sewage, which is awaited. It is recommended that steps should be taken to start the as soon as possible and submit monthly progress report to this Committee.
3. Till date no public notice boards have been displayed notifying prohibited activities around wetland area. Therefore, the concerned authorities be directed to fix notice

boards regarding such prohibited activities within a month and also to demarcate the area of the wetland as per the guidelines.

4. Considering the action against the polluting industries the compliance report submitted by UPPCB reflects that recovery of EC has been minimal. It has sent the letters to respective District Magistrates and no follow-up has been done thereafter. The imposition of EC becomes unmeaningful if it is not recovered from the polluting units. The Committee suggests that UPPCB must explain the reason for non-recovery and take steps for quick realization.
5. Taking into account, the removal of Municipal Solid Waste from water bodies it is directed that every District Magistrate/ Municipal Commissioner submit an action taken report within one month.
6. There are total 24 drains falling in Ramgarh Taal. Out of which 06 are major drains and 18 are minor drains. The latest compliance status show that all 06 major drains have been tapped while tapping of 18 minor drains is ongoing. 07 minor drains are anticipated to be tapped by June, 2021. While 11 minor drain are proposed to be tapped under the project which is still awaiting approval. Nagar Nigam Gorakhpur is directed to submit the completion timelines and the progress report within one month.
7. All the municipal corporations were supposed to abide by SWM Rules, 2016 by 1.04.2020. Any violation in following SWM Rules, beyond the deadline would entail penalty. Gorakhpur Municipal Corporation has so far not started work on landfill site/processing plant. Any default in commencing work before 1.04.2020 would attract penalties (EC). CPCB may work out EC and issue notice.
8. The Committee recommends UPPCB to conduct water quality test of river Ami, Rapti and Rohini and submit a report within a month.
9. It is also suggested that RO, UPPCB may personally inspect the area around Ramgarh lake and submit a detailed report with reference to encroachment and pollution within a month.

Additional report shall be submitted by the Oversight Committee after meeting with the River Rejuvenation Committee, which has been delayed due to some compelling reasons.

The Member Secretary, UPPCB is directed to send this report to the Registrar General, National Green Tribunal, Principal Bench, New Delhi for placing the same before the Hon'ble Tribunal with a copy to the Chief Secretary, Government of Uttar Pradesh for necessary action. The report also be uploaded on the website of the Committee.

21-06-2021

X SVS Rathore

Justice SVS Rathore  
Chairman, Oversight Committee  
Signed by: SURENDRA VIKRAM SINGH RATHORE

SVS  
21.06.21

Sri Anant Kumar Singh,  
Member, Oversight Committee

June 21, 2021

Annexures: As above

Please visit our website: [oscngt.upsdc.gov.in](http://oscngt.upsdc.gov.in) for more information.

**Updated status regarding Hon'ble NGT order in O.A 116/2014 (Meera Shukla Vs Municipal Corporation, Gorakhpur &Ors)**

**Dated 11.05.2021**

There are 21 major drains in Gorakhpur city by which waste water sewage through drains falling directly in Rapti River, Rohani River (Tributory of Rapti River) and Ramgarhtal Lake. Out of above 21 major drains, 6 major drains ( which were falling directly in Ramgarhtal) have been Intercepted, Diverted and being Treated through 2 Nos S.T.P ( 15 MLD & 30 M.LD capacity) since Year 2015. Out of balance 15 major drains 9 are falling in River Rapti & 6 are falling in River Rohini, details of which are being given on next pages.

**Details of Major drains falling in Ramgarhtal:-**

**Table-1**

S.N	Name of Drains	Average Discharge (in MLD)	Intercepted & being treated	STP Capacity (in MLD)	Comment
1	Gordhaiya Nala	15.00	Yes	15.00	Intercepted, Diverted and being treated under "Pollution Prevention and Conservation of Ramgarhtal" project under NLCP
2	Kudaghat Nala				
3	Mohaddipur Power House Nala	22.00	Yes	30.00	
4	Rafi Ahmad kidwai school Nala				
5	Golf Ground Nala				
6	Paidleyganj Nala				

Apart from above 6 major drains which were falling directly in Ramgarhtal there are 18 minor drains also falling in Ramgarhtal as under:-

7 minor drains out of 18 minor drains falling directly in Ramgarhtal from its Eastern side will be taken care under "Gorakhpur sewerage scheme Zone A- 1 Southern Part" under "AMRUT". The sewage of which is proposed to be treated at existing 15 MLD STP.

**Details of 7 minor drains falling in Ramgarhtal with its average discharge is tabulated as below:-**

**Table-2**

S.N	Name of Drains	Average Discharge (in MLD)	Comment
1	Girdharganj Nala (Yadav Tola No-1)	0.276	The sewage of these drains will be taken care under ongoing "Gorakhpur Sewerage Scheme Zone A-1 Southern part" project under AMRUT till Dec-2021 However as an interim measure Nagar Nigam, Gorakhpur has invited bid vide its NIT dt. 08.10.2020 for bio-remediation / phytoremediation of these drains. Work has been allotted to M/s Mapple Orgitech (India) Ltd, Kolkata and work has been started at site
2	Girdharganj Nala (Yadav Tola No-2)	0.996	
3	Avas Vikas Kaccha Nala	0.201	
4	Vishunpurwa Nala	1.032	
5	Sighariya-Maherwa ki Bari (Near 15 MLD STP)	2.208	
6	Navalpurwa Nala (Near Jalpai Mai Mandir)	0.104	
7	Sahara Estate Nala	0.646	
	<b>Total</b>	<b>5.463</b>	

Remaining 11 minor drains out of 18 minor drains which falls directly in Ramgarhtal from its northern side are proposed to be Intercepted, Diverted under proposed project of “Construction of earthen bund and intercepting sewer line at Northern side of Ramgarhtal from Paidleyganj to R.K.B.K”, approval of which is granted vide GO No 348/2020/1569/9-5-2021-16 Budget/2020 Dt. 30.03.2021. Tender Invited and PQ cum Technical bid is opened on 25.05.2021, evaluation is in progress.

Detail of 11 minor drains with its average discharge is tabulated as below:-

**Table-3**

S.N	Name of Drains	Average Discharge (in MLD)	Comment
1	Nala Near Smart wheel's Pvt Ltd, Mohaddipur	0.171	For Interception & Diversion of these drains a project amounting Rs 34.82 crore has been forwarded by District Magistrate, Gorakhpur to U.P. Govt. vide letter dt. 21.11.2019. The Sanction of this project granted vide GO No 348/2020/1569/9-5-2021-16 Budget/2020 Dt. 30.03.2021. Tender Invited and PQ cum Technical bid is opened on 25.05.2021, evaluation is in progress. These drains were likely to be intercepted upto Oct-2022. However as an interim measure Nagar Nigam, Gorakhpur has invited bid vide its NIT dt. 08.10.2020 for bio-remediation / phytoremediation of these drains. Work has been allotted to M/s Mapple Orgitech (India) Ltd, Kolkata and work has been started at site
2	Shri Rampuram colony drain	0.118	
3	Shri Rampuram colony drain -1	0.029	
4	Shri Rampuram colony drain -2	0.031	
5	Shri Rampuram (3) colony drain	0.009	
6	Shri Rampuram colony drain near H.No. 850	0.131	
7	Shri Krishnapuram Nala	0.123	
8	Suraj Nagar / Ramnagar colony drain	0.124	
9	Satya Marg Nala (Near H.No. 112)	0.383	
10	Parha Tola drain near Ishrawati Devi	0.199	
11	Parha Tola drain (Prabhu Dayal Agrawal)	0.039	
	<b>Total</b>	<b>1.357</b>	

Out of Remaining 15 Major drains, 9 major drains are falling directly in Rapti River untreated, a project for “Interception Diversion and treatment of 8 major drains (phase-1) under Namami Gange with estimated cost Rs. 271.70 crore has been sent vide SE (Nagar), U.P. Jal Nigam , Lucknow letter no 485/022-0272 (22)/2020 Dated 17.08.2020 to APD, SMCG, Lucknow under which one STP of 44.0 MLD capacity and interception of 8 major drains (as per sl no. 1 to 8 of table no 4).

Some observations were raised vide APD, SMCG, Lucknow Letter dt. 23.09.2020 which has been complied and revised estimate amounting Rs. 271.84 Cr sent to The Director General, NMCG, New Delhi by Project Director, SMCG vide letter no 1093/0390/SMCG-UP/02 dated 28.10.2020. Again NMCG, New Delhi raised some observation vide its letter dt 15.01.2021 in respect of which compliance has been sent by Chief Engineer, UP Jal Nigam, Gorakhpur vide his letter no 991/V-28/19 Dt. 25.05.2021 to Chief Engineer (Ganga), UP Jal Nigam, Lucknow and copy of same has also been sent to Dir (T-III), NMCG, New Delhi & APD, SMCG , UP along with others which is also forwarded by CE(Ganga), UP Jal Nigam, Lucknow by its letter no 408/022-272 (22)/2021 Dt. 09.06.2021 to APD, NMCG, Lucknow.

Catchment area of remaining 1 major drain falling directly in River Rapti without treatment is separated by Gorakhpur-Lucknow four lane road. Hence for interception, diversion and treatment of this 1 major drain a separate project “Interception, Diversion and Treatment (phase-2)” has been proposed under Namami Gange. Under this project one STP of 10 MLD

capacity is proposed. The Pre Feasibility Report amounting Rs. 84.96 Cr has been sent to Additional Project Director, SMCG, U.P. by Chief Engineer (Ganga), U.P. Jal Nigam, Lucknow vide letter no 738/022-0272 (22)/2020 Dated 27.10.2020.

For remaining 6 major drains, falling directly in Rohini River, untreated, a project “Gorakhpur Sewerage Scheme Zone-C under AMRUT (estimated cost Rs. 664.59 Cr) under which 245.55 km sewer laying, one no STP of 40 MLD capacity is proposed has been sent by PPRBD Cell, U.P. Jal Nigam, Lucknow to Mission Director, Directorate of Urban Local bodies, Lucknow vide letter 479/1009-072-001(AMRUT)/PPRBD/20 Dated 14.08.2020. Approval is still awaited.

**Status of 15 Major drains falling directly in River Rapti and Rohini is as under:-**

**Table-4**

Sl. No.	Final Disposal Point	Name of Drain	Discharge in MLD as measured by V-notch (from 20.12.16 to 27.01.17)	Interception & Treatment	Proposed for Bioremediation by NEERI, Nagpur	Proposed for Bioremediation by Nagar Nigam, Gorakhpur	Remarks
1	2	3	4	5	6	7	8
1	Rapti River	Domingarh Nalla	9.03	No	-	Yes	Proposed to be intercepted, diverted and treated under “Interception, Diversion and Treatment of 8 Drains (Phase-I)” under Namami Gange for which DPR has been sent. Approval of which is awaited.
2		Bahrampur Nalla	4.33	No	Yes (Group-2)		
3		Illahibagh Nalla	20.61	No	-	Yes	
4		Mirzapur Nalla	3.281	No	Yes (Group-2)		
5		Ghasiyari Nalla	0.303	No	Yes (Group-2)		
6		Basantpur Narkatiya Nalla	1.757	No	Yes (Group-2)		
7		Hansupur Nalla	0.821	No	Yes (Group-1)		
8		Transport Nagar Nalla	0.92	No	Yes (Group-1)		
9			Kataniya / Mahewa Nalla	8.914	No	-	
<b>Total</b>			<b>49.969</b>				
10	Rohini River	Basiyadih Nalla	5.842	No	-	Yes	Proposed to be treated by laying sewer network and constructing STP under “Gorakhpur Sewerage Scheme, Zone-C” under AMRUT for which DPR has been sent Approval of which is awaited..
11		Subhash Chandra Bose Collony Nalla	4.49	No	Yes (Group-1)		
12		Stepping Stone Nalla	1.894	No	Yes (Group-1)		
13		Green City Phase-II Nalla	1.611	No	Yes (Group-1)		
14		Bargadwa Gao Jalan Nalla	8.164	No	-	Yes	
15		Mahesra Mohripur Nalla	5.005	No	Yes (Group-1)		
<b>Total</b>			<b>27.01</b>				-

As per column no 6 of table no 4, Out of 15 major drains 10 major drains are proposed for bioremediation / phytoremediation by Urban Development Department, U.P. Govt., which is to be executed by NEERI, Nagpur. As per column no 7 of table no 4, remaining drains out of those proposed for Bio-remediation by NEERI, Nagpur & Nagar Nigam, Gorakhpur has invited bid vide its NIT dt. 08.10.2020 for its bio-remediation/ phytoremediation. Nagar Nigam, Gorakhpur allotted work order to M/s Mapple Orgitech (India) Ltd, kolkata and work has been started at site.

**O.A 116/2014 (Meera Shukla Vs Municipal Corporation, Gorakhpur &Ors) Coupled  
With O.A. no. 437 / 2015  
(Vishwavijay Singh Vs. U.P. Pollution Control Board & Ors)  
Status of installation of CETP/STPs in District Gorakhpur and District Sant Kabir Nagar  
regarding Pollution of Aami River:-**

**Dated 11.05.2021**

**CETP**

As per instruction given by Hon'ble Monitoring Committee, Lucknow in meeting held on 18.07.2019, the Revised D.P.R. after compliance of Observation raised by NMCG, New Delhi letter Dt. 21.12.2018 for "I&D works and construction of 15 MLD Common Effluent Treatment Plant" at GIDA Area, Gorakhpur amounting Rs. 76.79 Cr was submitted to CEO, GIDA on Dt. 08.08.2019. The DPR was forwarded by CEO, GIDA to NMCG through SMCG for approval and allocation of funds.

After which a team of NMCG visited the site on 21.01.2020 and again raised some observations vide its letter Dt. 12.03.2020. In the compliance of above observation of NMCG, New Delhi, A revised estimate for "I&D works and construction of 7.5 MLD Common Effluent Treatment Plant at GIDA Area, Gorakhpur" (Phase-I) amounting Rs. 62.50 Cr has been sent to Director General, NMCG, New Delhi vide APD, SMCG, Lucknow letter no 432 dated 11.11.2020 for approval.

On Dt 28.01.2021 the meeting was held up in chairmanship of Executive Director (Technical), NMCG to appraise the DPR submitted by UP Jal Nigam. The meeting was also attended by officials of NMCG, GIDA and UPJN. After which some decision and observation raised by NMCG Letter dated 05.02.2021.

Dr. Kajmi, Professor, IIT Roorkee along with GIDA officials visited the site on dated 01.04.2021. After site visit he agreed on 7.5 MLD capacity of CETP. He also commented that a team of his institute will visit the site for collection and quality testing of industrial sewage, which is awaited.

Further action is to be taken by GIDA officials.

**STP**

In compliance to the direction issued by honorable NGT, New Delhi in the matter of O.A.No 116/2014 (Meera Shukla V/s Nagar Nigam Gorakhpur & other) with O.A No 437/2015 (Vishwa Vijay singh V/s UP P.C.B & other) regarding pollution of Aami River by Municipal and Industrial effluent in Distt. Sant Kabir Nagar, DPRs for I&D and STP work for Khalilabad and Maghar Town, Distt Sant Kabir Nagar were sent to NMCG New Delhi by Project Director SMCG, Lucknow vide letter No 997 dt. 13-08-2019 amounting Rs. 33.20 Cr & Rs.19.88 Cr. respectively.

Some observations were raised by NMCG. After removing observations D.P.R. for Khalilabad town amounting Rs. 46.32 crore (including O&M for 15 years) and Maghar Town amounting Rs. 28.36 crore (including O&M for 15 years) has been sent to SMCG, GoUP on dated 29-09-2020 by C.E. Ganga, U.P. Jal Nigam, Lucknow.

पत्रांक: 568 / गोवि0प्रा0 / 2021-22

प्रेषक,  
उपाध्यक्ष,  
गोरखपुर विकास प्राधिकरण,  
गोरखपुर।

सेवा में,  
मा0 अध्यक्ष,  
ओवर साइट कमेटी,  
एन0जी0टी0 (उ0प्रा0),  
लखनऊ।

दिनांक 08 / 06 / 2021

विषय: मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में विचाराधीन ओ0ए0 संख्या 116/2014, मीरा शुक्ला बनाम नगर निगम, गोरखपुर में पारित आदेश दिनांक 27.09.2019 व 12.01.2021 के क्रम में ऐक्शन टेकेन रिपोर्ट प्रेषित करने के सम्बन्ध में।

महोदय,

कृपया उपर्युक्त विषयक प्रकरण का सन्दर्भ ग्रहण करने का कष्ट करें। उपर्युक्त विषयक प्रकरण में गोरखपुर विकास प्राधिकरण से सम्बन्धित दो बिन्दुओं पर ऐक्शन टेकेन रिपोर्ट संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित है।

संलग्नक: उपरोक्तानुसार।

भवदीय

  
(आशीष कुमार)  
उपाध्यक्ष

# **Action Taken Report**

**By**

**Gorakhpur Development Authority**

**IN COMPLIANCE OF THE SUMMARY OF DISCUSSIONS AND DECISIONS TAKEN IN THE MEETING OF THE EASTERN U.P. RIVERS AND WATER RESERVOIRS MONITORING COMMITTEE HELD ON 18.7.2019 AND AFTER THAT ORDER DATED 27.09.2019 & 12.01.2021 PASSED BY HON'BLE NATIONAL GREEN TRIBUNAL.**

*IN REFERENCE TO*

**HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

**IN O.A. NO. 116/2014**

**MEERA SHUKLA VERSUS MUNICIPAL CORPORATION,  
GORAKHPUR & OTHERS**

Finalized on .0.8..06.2021

**GORAKHPUR DEVELOPMENT AUTHORITY'S COMPLIANCE OF THE SUMMARY OF DISCUSSIONS AND DECISIONS TAKEN IN THE MEETING OF THE EASTERN U.P. RIVERS AND WATER RESERVOIRS MONITORING COMMITTEE HELD ON 18.7.2019, AS WELL AS ORDER DATED 12.01.2021 PASSED BY THE HON'BLE NATIONAL GREEN TRIBUNAL.**

**Item No. 41 Of the Summary of Discussions and Decisions taken in the Meeting of the Eastern U.P. Rivers and Water Reservoirs Monitoring Committee held on 18.7.2019.**

The above item No. 41 listed at Page No. 17-19, contains the directions given by the Committee with reference to the Ramgarh Lake of Gorakhpur and in this Action Taken Report, Gorakhpur Development Authority is submitting Reply of the compliance done against the issues raised by the Committee.

**Brief Introduction of Ramgarh Lake :**

The Ramgarh Lake is a natural lake situated in south-west of the main city of Gorakhpur, originally having an area of approximately 685 hectares. Previously, this lake belonged to Nagar Nigam, Gorakhpur and was managed by the Nagar Nigam. Gorakhpur Development Authority (herein after referred to for brevity as GDA) acquired the lake from Nagar Nigam. The lake was transferred to GDA in 2009. At the time when GDA took over the lake, all drains of Gorakhpur city were discharging their effluents, directly into this lake. All the drains were uncapped and there was no sewage treatment plant. Over the past 10 years, GDA and Nagar Nigam have tirelessly worked for preventing pollution and preserving the flora and fauna of the lake. The details of the effort made by GDA to clean and maintain the lake and results achieved is given below in the compliance report along with compliance on other issues raised by the Hon'ble Committee :



Sl. No.	Summary of discussions and decisions taken in the meeting of the Eastern U.P. Rivers and Water Reservoirs Monitoring Committee held on 18.07.2019 and order of Hon'ble National Green Tribunal dated 19.01.2021	Point wise action related to Departments	Point wise Action Report by Departments.	Why action has not been taken by the Department	How much time will be taken for the action by Departments.
1	2	3	4	5	6
1	In the order dated 12.01.2021 passed by Hon'ble National Green Tribunal at page 18, it is mentioned that the monitoring committee had imposed <u>EC of Rs. 10 Cr on GDA</u> . The Vice Chairman, GDA informed that they had represented the matter before Hon'ble NGT and the Hon'ble NGT has directed GDA to present their case before the committee headed by Principal Secretary, Irrigation. The recommendation made by the said committee will be placed before Hon'ble NGT for appropriate orders.	Gorakhpur Development Authority	<p>1. <u>Inter departmental efforts made by Gorakhpur Development Authority or preserving flora and fauna and for preventing pollution of the lake.</u></p> <p><u>Establishment of sewage pumping station</u></p> <p>The Gorakhpur Development Authority and Municipal Corporation Gorakhpur has in collaboration with other agencies, setup two sewage pumping station of 15 MLD and 30 MLD on the northern bank of the lake to collect discharge coming out of the nalla's and pump it to the sewage treatment plants.</p> <p><u>Setting up of sewage treatment plant's:</u> In order to treat sewage, two sewage treatment plant of 15 MLD and 30 MLD has been setup on the south and west side of the Ramgarh Taal lake. These are modern plants which are treating polluted water before it is discharged into the lake.</p> <p><u>Aeration of the lake and setting up of Solar energy Plant for Eco-friendly power plant</u> For the aeration of the lake, several water fountains have been installed this aerate the water and increase the oxygen contents in it. Further to make the area a model green project, and in order to make Ramgarhtal vicinity eco-friendly, a 4.5 kilowatt solar energy plant has been setup and eco-friendly solar energy is being produced. The project was inaugurated by Hon'ble CM on 30-08-2019.</p> <p><u>Setting up of Nature Interpretation Center</u> For disseminating knowledge about preserving the flora and fauna of the lake, Uttar Pradesh Jal Nigam has setup a Nature Interpretation Center in the vicinity.</p>	N.A.	N.A.



			<p><b><u>Tree plantation drive:</u></b> The Gorakhpur Development Authority along with Forest Department and U.P. Jal Nigam[ Approximate 12500] has been doing extensive tree plantation and has also been putting up tree guards around the young trees all-around the Ramgarhtal lake area. A total of approximate 12500 trees have been planted.</p> <p><b><u>Public awareness programme:</u></b></p> <p>Beside this, The Gorakhpur Development Authority in collaboration with different agencies have been organizing public Awareness Programmes for bringing awareness amongst common people with regard to cleanliness of the lake and surrounding area.</p> <p><b><u>2. Betterment of the quality of water of lake:</u></b> The efforts of The Gorakhpur Development Authority in collaboration with several departments and agencies have brought forward a remarkable result in the betterment of the quality of water of Ramgarhtal.</p> <p><b><u>Dissolved oxygen increase:</u></b> Prior to 2008, the dissolved oxygen D.O.R. (mg/l) of the lake at the bottom it was minimum 1.1, maximum 8.9. After the intervention of The Gorakhpur Development Authority and other agencies and the starting up of the STPs, there was a great improvement in the dissolved oxygen content at the bottom of the lake. In the test conducted from September, 2016 to August 2017, the D.O. at the bottom was minimum 3.6 maximum 9.2. This increase of oxygen at the bottom of the lake is beneficial for the aquatic living organisms.</p> <p><b><u>Reduction of B.O.D:</u></b> Further, the bio chemical oxygen demand B.O.D (mg/l) has also been greatly reduced. Prior to the implementation of the project on the top it was minimum 20 and maximum 80 and at the bottom it was minimum 36 maximum 108. After the intervention it became top minimum 2.25 and maximum 10.5 and at the bottom, it became minimum 2.4 and maximum 11.3. This shows that after the setting up of the sewage treatment pumping station and sewage treatment plant, there has been remarkable improvement in the quality of water of Ramgarhtal lake</p>	
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			<p><b><u>Amount spent for preventing pollution of the lake:</u></b></p> <p>GDA with the help of the state Government and Government of India has worked towards cleaning, desilting, afforestation, beautification and for the preservation of flora and fauna of Ramgarh Lake</p> <p>1. Under the National Lake Conservation Plan De-silting/cleaning/STP construction De-weeding/De-weeding machine/ aeration system etc. Rs. 196.57 Crores</p> <p>2. 25 Floating water fountains Rs. 13.31 Crores</p> <p>3. Naya Savera Project Rs. 18.85 Crores</p> <p>4. Planting of 12679 trees and their entire maintenance for 9 years Rs. 2.86 Crores</p> <p>5. Tapping of 11 out of the 18 Drains (Tender is in Process). Rs. 34.82 Crores</p> <p>6. Naya Savera phase 2 (Proposed) Rs. 39.51 Crores</p> <p>7. Environment dredging of the lake (Project sent for sanction) Rs. 348.22 Crores</p> <p>3. There are total 24 drains falling in Ramgarh Tal of which 6 are major drains and 18 are minor drains. All 6 major drains falling directly in Ramgarh Tal have been intercepted, diverted and are being treated in two STPs 15 MLD and 30 MLD capacities each. Status of 18 minor drains is as follows:</p> <ul style="list-style-type: none"> <li>• I &amp; D work of 7 minor drains (having total discharge of 5.463 MLD) is going on under "Gorakhpur sewerage Scheme, A-1 Southern Part" under AMURT. The tapping of these drains will be completed by December, 2021. However as an interim measure bioremediation / phytoremediation of these drains has been started.</li> <li>• The remaining 11 minor drains (having total discharge of 5.463 MLD) are proposed to be tapped under the project "Construction of earthen bund and intercepting sewer line at Northern side of Ramgarh Tal from Paidley Ganj to R.K.B.K Maruti Show Room". Estimated cost Rs. 34.82 Crore, submitted under State Sector to Principal Secretary, Urban Development Department - 5, U.P. Government by D.M Gorakhpur vide letter dated</li> </ul>		
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			<p>21.11.2019 for approval and allocation funds. Under this project, discharge of above 11 drains will be treated at 30 MLD existing STP. It is worth to mention that the said Proposal has been approved/granted vide G.O No. 348/2020/1569/9-5-2021 dated 30.03.2021. Tendering is in Progress (Copy of grant is as <b>Annexure 1</b>). These drains are likely to be completed by October 2022. As interim measure bioremediation / phytoremediation of these drains has been started.</p> <p style="text-align: center;"><b>Prayer</b></p> <p>Gorakhpur Development Authority is a law abiding body of State Government and has the highest regards for the Esteemed Majesty of National Green Tribunal and is duty bound to follow all laws and rules with regard to environment and preservation of flora and fauna of the lake.</p> <p>Therefore it is humbly requested to please accept Action Taken Report and discharge the penalty imposed on Gorakhpur Development Authority.</p>		
2	<p><b>Issue regarding construction of STP, Sahara Estate, Gorakhpur, is referred at Page No. 19, Serial No. 9 of the order dated 12.1.2021 passed by Hon'ble NGT.</b></p>	<p><b>Gorakhpur Development Authority</b></p>	<p>At the outset, it is reported that STP at Sahara Estate Gorakhpur, has to be constructed and operated by Private Colonizers "Sahara Estate Gorakhpur". As reported earlier RO U.P.P.C.B. submitted in the meeting held by Oversight Committee on 26.11.2020 that the work of construction of STP is in progress.</p> <p>In response to letter No. 134/Abhi. Anu./GDA/2021-22 dated 17.5.2021, Shri B.K. Singh, in-Charge of Sahara Estate, Gorakhpur, informed that construction work of STP is completed and only certain internal brick work remains to be completed. He also informed that after lock down due to CORONA, they will get connection and STP will be operational. Copy of report is <b>Annexure 2</b>.</p>		

FOR GORAKHPUR DEVELOPMENT AUTHORITY

  
 VICE CHAIRMAN

**Compliance of Observation raised by Director (T-III), NMCG, New Delhi  
vide letter no 12012/30/2018-O/o Dir (T-III) NMCG Dt 15.01.2021**

S.No	Observation	Reply / Compliance
1	As per DPR, there are 6 major (Approx. Flow 37 MLD) drains and 18 minor drains (Approx. Flow 6.82 MLD) discharging into Ramgarh tal. Out 18 drains 6 drains are Proposed to be Intercepted & Treated in Ongoing Sewerage project under "AMRUT" and will be treated at existing 15 MLD STP. Sahara Estate drain is to be treated by Private developer. Rest 11 drains Proposed to be Intercepted in a project sent to be sanctioned under State Sector. The drains will be Intercepted & Treated at existing 30 M LD STP. From above it is evident that proposal is to ensure pollution abatement of Ramgrah Tal and found in line.	For Remaining 11 minor drains out of 18 minor drains which falls directly in Ramgarh tal from its northern side are proposed to be Intercepted, Diverted under proposed project of "Construction of earthen bund and intercepting sewer line at Northern side of Ramgarh tal from Paidleyganj to R.K.B.K" under State Sector, approval of which is granted vide GO No 348/2020/1569/9-5-2021-16 Budget/2020 Dt. 30.03.2021. Tendering is in progress.
2	As per DPR, tapping of 6 major drains joining River Rohini is being considered in another project under "AMRUT" under which provision for laying of sewer network along with construction of STP has been made. SMCG UP/UPJN may provide the details like proposed STP capacity & Location with project cost to help in understanding the over view of the proposal proposed for pollution abatement of River Rapti as River Rohini is tributary of River Rapti.	For 6 major drains, falling directly in Rohini River, untreated, a project "Gorakhpur Sewerage Scheme Zone-C under AMRUT (estimated cost Rs. 664.59 Cr) under which 245.55 km sewer laying, one no STP of 40 MLD (at Subhash Chandra Bose Nagar, Lat- 26.77678 & Long- 83.345218 along with 40 MLD SPS & 12 MLD IPS) capacity is proposed. This project has been sent by PPRBD Cell, U.P. Jal Nigam, Lucknow to Mission Director, Directorate of Urban Local bodies, Lucknow vide letter 479/1009-072-001(AMRUT)/PPRBD/20 Dated 14.08.2020. Approval of which is awaited. This detail is described on page no 34 in the DPR.
3	As per DPR, there are 9 drains within the city and one drain far downstream of city on its southern side discharging the waste water into the River Rapti. However submitted proposal is for intercepting only 8 nos of drains (approx. flow 41 MLD) and diverting the flow to proposed 44 MLD STP at Domingarh for treatment.	Out of 9 major drains falling directly in Rapti River untreated, a project for "Interception Diversion and treatment of 8 major drains (avg discharge of 41.055 MLD) (phase-1) under Namami Gange with estimated cost Rs. 271.84 crore (The said DPR under consideration) sent to The Director General, NMCG, New Delhi by Project Director, SMCG vide letter no 1093/0390/SMCG-UP/02 dated 28.10.2020 in which one STP of 44.0 MLD capacity and interception of 8 major drains is proposed. Catchment area of remaining 1 major drain (Kataniya / Maheva, avg discharge 8.914 MLD) falling directly in River Rapti without treatment is separated by Gorakhpur-Lucknow four lane road. Hence for interception, diversion and treatment of this 1 major drain a separate project "Interception, Diversion and Treatment (phase-2)" has been proposed under Namami Gange. Under this project one STP of 10 MLD capacity is proposed. The Pre Feasibility Report amounting Rs. 84.96 Cr has been sent to Additional Project Director, SMCG, U.P. by Chief Engineer (Ganga), U.P. Jal Nigam, Lucknow vide letter no 738/022-0272 (22)/2020 Dated 27.10.2020.
4	UPJN/SMCG UP may provide justification for not considering Remaining 2 major drains (Kataniya / Maheva drain (8.9 MLD) and 1 drain far downstream of city on its southern side( Flow not mentioned) joining River Rapti in Phase -1	Out of 9 major drains which are falling directly in Rapti River untreated, a project for "Interception Diversion and treatment of 8 major drains (avg discharge of 41.055 MLD) (phase-1) under Namami Gange with estimated cost Rs. 271.84 crore sent to The Director General,



प्रदूषण रोकिए !  
तार - पर्यावरण  
Gram : Paryavaran



क्षेत्रीय कार्यालय  
उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड  
REGIONAL OFFICE  
UTTAR PRADESH POLLUTION CONTROL BOARD

Appendix-3  
पर्यावरण बचाइए !!  
दूरभाष एवं फ़ैक्स : 0551-2273937  
Phone & Fax : 0551-2273937

संदर्भ संख्या  
Ref. No. .... 1255/सी० 21/611/2021

दिनांक  
Dated..... 31/3/21

सेवा में,

मुख्य पर्यावरण अधिकारी (वृत्त-6),  
उ०प्र० प्रदूषण, नियंत्रण बोर्ड,  
पर्यावरण भवन टी० सी-12वी,  
गोमती नगर,  
लखनऊ

विषय- मेसर्स सरैया डिस्टिलरी, सरदारनगर, गोरखपुर के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने के सम्बन्ध में प्रेषित कारण बताओ नोटिस के संदर्भ में आख्या का प्रेषण।

महोदय,

कृपया उपरोक्त विषयक अपने पत्र सं० एच० 60168/सी०-6/ सहमति जल/1/गोरखपुर/21, दिनांक 16.03.2021 का संदर्भ ग्रहण करने की कृपा करें। उक्त पत्र के माध्यम से आप द्वारा दिये गये निर्देशों के अनुपालन में आख्या पत्र के साथ संलग्न आपके अवलोकनार्थ एवं अग्रिम आवश्यक कार्यवाही हेतु सादर प्रेषित है।  
संलग्नक- उपरोक्तानुसार।

भवदीय

(पंकज यादव)  
क्षेत्रीय अधिकारी

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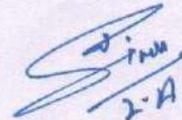
मेसर्स सरैया डिस्टिलरी, सरदारनगर, गोरखपुर के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने के सम्बन्ध में प्रेषित कारण बताओ नोटिस के संदर्भ में आख्या।

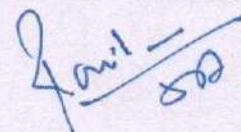
कृपया उपरोक्त विषयक बोर्ड मुख्यालय, लखनऊ के पत्र सं० एच० 60168/सी०-6/सहमति जल/1/गोरखपुर/21, दिनांक 16.03.2021 का संदर्भ ग्रहण करने की कृपा करें। बोर्ड मुख्यालय के पत्र दिनांक 16.03.2021 में यह उल्लिखित है कि इस कार्यालय के पत्र सं० 1165/सी०-21/जल/2021, दिनांक 06.03.2021 के संदर्भ में सदस्य सचिव महोदय द्वारा निम्न पृच्छा की गयी है :-

“उद्योग द्वारा पूर्व में किये गये डिफाल्ट का पूर्ण विवरण नोट शीट पर प्रस्तुत करें। प्रस्तावनुसार ई०सी० की देयता पुष्ट नहीं हो पा रही है।”

पत्र में यह भी उल्लिखित किया गया है कि सदस्य सचिव महोदय की पृच्छा के अनुसार प्रकरण पर पूर्व में किये गये डिफाल्ट का पूर्ण विवरण प्रस्तुत करते हुए पुनः आख्या एवं तदनुसार उद्योग के विरुद्ध अधिरोपित किये जाने वाले पर्यावरणीय क्षतिपूर्ति को आकलित करते हुए संस्तुति तत्काल प्रेषित करना सुनिश्चित करें, जिससे उद्योग के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित की जा सके।

अग्रेतर आपको अवगत कराना है कि बोर्ड मुख्यालय, लखनऊ के पत्र दिनांक 04.01.2021 के माध्यम से उद्योग के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने के सम्बन्ध में कारण बताओ नोटिस जारी किया गया है। जिसके संदर्भ में उद्योग द्वारा प्रेषित उत्तर/स्पष्टीकरण का परीक्षण कर आख्या आपको पूर्व में इस कार्यालय के पत्र सं० 1165/सी०-21/जल/2021, दिनांक 06.03.2021 के माध्यम से प्रेषित किया जा चुका है। पूर्व में प्रेषित आख्या में यह उल्लिखित है कि उद्योग द्वारा प्रेषित उत्तर के अवलोकन से पता चलता है कि उद्योग की उत्पादन क्षमता 110 किलोलीटर/दिन है। किन्तु उद्योग द्वारा वर्तमान में लगभग 21 प्रतिशत कैपेसिटी यूटिलाईजेशन ही किया जा रहा है। उद्योग में शून्य उत्प्रवाह निस्तारण की स्थिति प्राप्त करने हेतु ऐनारोबिक डायजेस्टर, आर०ओ० प्लान्ट, एम०ई०ई० एवं सी०पी०यू० स्थापित है। एम०ई०ई० से कन्सन्ट्रैटेड स्पेन्टवाश की सम्पूर्ण मात्रा को बायो-कम्पोस्ट बनाने हेतु प्रयोग किया जा रहा है तथा बनाये गये बायो-कम्पोस्ट को कृषि मंत्रालय, भारत सरकार से पंजीकृत ब्रान्ड के तहत ही बेचा जा रहा है। सी०पी०यू० से शुद्धिकृत उत्प्रवाह को प्रक्रिया में पुनः प्रयोग किया जा रहा है। बायो-कम्पोस्ट एरिया का निर्माण केंद्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारित मार्गदर्शिका के अनुसार किया गया है। बायो-कम्पोस्ट एरिया एच०डी०पी०ई० शीटलाइन्ड है। विण्ड्रोज पर कन्सन्ट्रैटेड स्पेन्टवाश का नियंत्रित मात्रा में ही छिड़काव किया जाता है। जिससे बायो-कम्पोस्ट एरिया में स्पेन्टवाश इकट्ठा न हो सके। उद्योग द्वारा एक पीजोमीटर स्थापित किया गया है तथा बायो-कम्पोस्ट एरिया के चारों दिशाओं में शैलो हैण्डपम्प अन्डर ग्राउण्ड वाटर की क्वालिटी पर नजर रखने हेतु बायो-कम्पोस्टिंग के प्रोटोकॉल के तहत लगाया गया है। सी०पी०यू० के इनलेट पर इलेक्ट्रोमैग्नेटिक फ्लोमीटर स्थापित है। सी०पी०यू० के इनलेट लाईन, परमीएट लाईन एवं रिजेक्ट लाईन में डिजीटल फ्लोमीटर स्थापित किया गया है। उद्योग में बनाये गये लैगून में स्लज अवश्य है। लैगून में कन्सन्ट्रैटेड स्पेन्टवाश अधिक मात्रा में नहीं है। लैगून से सत-प्रतिशत स्लज निकाल कर खाली किया जाना तकनीकी दृष्टिकोण से सम्भव नहीं प्रतीत होता है, क्योंकि लैगून डिवाइडेड नहीं है। फिर भी उद्योग द्वारा यथासम्भव स्लज समय-समय पर निकाला जा रहा है। उद्योग द्वारा वायसी ड्रेन में किसी भी प्रकार का उत्प्रवाह वर्तमान में निस्तारित नहीं किया जा

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रहा है। वर्तमान उत्पादन की मात्रा को देखते हुए उद्योग से जनित स्पेन्टवाश के भण्डारण से लैगून के ओवर फ्लो होने की सम्भावना नहीं है। बायो-कम्पोस्ट एरिया एच0डी0पी0ई0 लाईन्ड है। इसलिए स्पेन्टवाश के परकोलेट होने की सम्भावना नहीं है। उद्योग वर्ष 1948 से स्थापित एवं संचालित है। उद्योग द्वारा पूर्व में स्पेन्टवाश के शुद्धिकरण हेतु लैगूनिंग की प्रक्रिया अपनायी जाती थी। माननीय एन0जी0टी0, नई दिल्ली में पूर्व में दाखिल ओ0ए0 सं0 208/2014 कृष्णकान्त सिंह बनाम मेसर्स सरैया डिस्टिलरी, सरदार नगर, गोरखपुर में पारित आदेश के अनुपालन में उद्योग द्वारा "Assessment of Ground Water Contamination due to past storage of Spentwash in Kachha Lagoon and Suggesting Remedial Measures" सम्बन्धी स्टडी नेशनल इन्स्टीट्यूट ऑफ हाईड्रोलॉजी, रुड़की से कराया गया था तथा रिपोर्ट माननीय एन0जी0टी0 में दाखिल किया गया था तथा उसकी प्रति राज्य बोर्ड में भी जमा किया गया था। रिपोर्ट की फाईन्डिंग निम्नवत है :-

From the above investigations and discussion, the following inferences can be drawn-

The Analysis of data clearly indicated that the concentrations almost all the water quality constituents are comparable with the values observed at control sites and are well within the acceptable/missible limits for drinking water.

The colour is one of the most important indicator parameter for assessment of ground water contamination due to past storage of spentwash in kachha lagoons. The color value in the ground water sample collected from the borewell installed at kachha lagoons was well within the acceptable limit prescribed for drinking purpose.

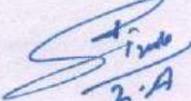
The color values in ground water samples collected from the adjoining areas of kacha lagoon were also comparable with the color values observed at control sites.

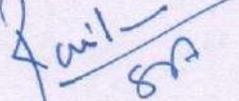
The ground water of the study area, although recorded slightly higher concentration of iron at few sites, but these were also not abnormally high considering the high content of iron in spentwash. As such, there is no apparent contamination due to past storage of spentwash in kachha lagoon.

Based on the ground water quality studies carried out in and around the surrounding of old kachha lagoons of Saraya Distillery, it is observed that there is no apparent contamination due to past storage of spentwash in kachha lagoons.

Further, since the earlier practice of storage of spentwash in kachha lagoons has already been discontinued after the notifications of Water (Prevention and Control of Pollution) Act, 1974, there seems to be no possibility of any further contamination due to past storage of spentwash in kachha lagoons on ground water quality. However, the unit should not store spentwash event in pucca lagoons beyond 30 days to avoid any likely chance of ground water contamination in future as directed by Honourable National Green Tribunal vide their order dated. 12<sup>th</sup> August, 2015".

उद्योग द्वारा सहमति जल/वायु हेतु आवेदन दिनांक 13.12.2019 को किया गया था, जिसके संदर्भ में उद्योग का स्थलीय निरीक्षण इस कार्यालय के अधिकारियों द्वारा दिनांक 08.01.2020 को किया गया था तथा आख्या ऑनलाईन पोर्टल पर अपलोड कर दिया गया था। इस कार्यालय द्वारा सहमति के सम्बन्ध में अपलोड की गयी आख्या के आधार पर बोर्ड मुख्यालय के सक्षम अधिकारी द्वारा पत्र सं0 79167/यू0पी0पी0सी0बी0/गोरखपुर (यू0पी0पी0सी0बी0आर0ओ0)/सी0टी0ओ0/वाटर/गोरखपुर/2019, दिनांक 08.02.2020 एवं पत्र सं0 78778/यू0पी0पी0सी0बी0/गोरखपुर (यू0पी0पी0सी0बी0 आर0ओ0)/सी0टी0ओ0/एयर/गोरखपुर/2019, दिनांक 08.02.2020 के माध्यम से

  
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क्रमशः सहमति जल एवं वायु आदेश निर्गत किया गया था। बोर्ड द्वारा निर्गत दोनों सहमति आदेश दिनांक 31.12.2021 तक वैध है।

माननीय एन0जी0टी0 द्वारा गठित समिति ने उद्योग का निरीक्षण दिनांक 05.08.2019 को किया था तथा मानिट्रिंग कमेटी अपनी रिपोर्ट माननीय एन0जी0टी0 में दिनांक 30.09.2019 को दाखिल किया गया था। माननीय एन0जी0टी0 द्वारा ओ0ए0 सं0 116/2014 की सुनवाई की तिथि दिनांक 09.12.2019 को नियत थी, जो दिनांक 10.02.2020 के लिए एडर्जन हो गयी थी। दिनांक 10.02.2020 को भी सुनवाई नहीं हुई तथा ओ0एस0 सं0 116/2014 की सुनवाई दिनांक 28.02.2020 के नियत की गयी थी। उक्त तिथि को भी सुनवाई दिनांक 16.04.2020 के लिए एडर्जन हो गयी थी। आ0ए0 सं0 116/2014 की सुनवाई माननीय एन0जी0टी0 द्वारा दिनांक 16.06.2020 को की गयी। आदेश में प्रकरण से सम्बन्धित अंश निम्नवत है :-

"..... Our attention has also been drawn to the following reports filed by the committee headed by Justice D.P. Singh not dealt with in the order dated 27.09.2019....

(b) Report dated 30.09.2019 with regard to M/s Saraya Distillery, Sardar Nagar, Gorakhpur, U.P.....

.... The said report may be forwarded to be current oversight committee headed by Justice S.V.S. Rathaur, who may obtain the latest status of the matter from the concerned authority and file a consolidated and updated report in the matter before the next date by e-mail at judicial-ngt@gov.in (Preferably in form of searchable/OCR PDF and image PDF)..."

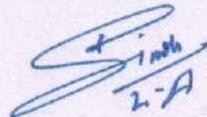
ओ0ए0 सं0 116/2014 (एम0एस0 नं0 1/2021, एम0ए0 नं0 2/2021, एम0ए0 नं0 3/2021) की सुनवाई दिनांक 12.01.2021 को माननीय एन0जी0टी0 द्वारा की गयी। माननीय न्यायाधिकरण के आदेश दिनांक 12.01.2021 में उद्योग से संदर्भित अंश निम्नवत है:-

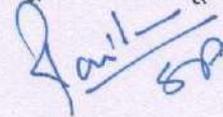
"..... On closure scrutiny, we find that the monitoring committee chaired by Justice D.P. Singh had directed action against M/s Saraya Distillery, Sardar Nagar, Gorakhpur, U.P. the oversight committee had also directed the UPPCB to inspect the unit, ensure compliance and send inspection report. However, no action seems to have been taken by the UPPCB in this regard. UPPCB shall submit its report within a week ensuring compliance of the directions...."

माननीय एन0जी0टी0 द्वारा ओ0ए0 सं0 116/2014 में पारित आदेश दिनांक 12.01.2021 में उद्योग के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने के सम्बन्ध में कोई स्पष्ट आदेश पारित नहीं किया गया है। माननीय एन0जी0टी0 द्वारा राज्य बोर्ड को उद्योग का निरीक्षण करने, अनुपालन सुनिश्चित करने तथा निरीक्षण आख्या माननीय एन0जी0टी0 को प्रस्तुत किये जाने का आदेश पारित किया गया है।

आपको अवगत कराना है कि सहमति सत्यापन के संदर्भ में उद्योग का निरीक्षण बोर्ड के अधिकारियों द्वारा दिनांक 08.01.2020 को किया गया, जिसके आधार पर उद्योग को बोर्ड द्वारा सहमति आदेश दिनांक 08.02.2020 को निर्गत किया गया था। उद्योग को बोर्ड द्वारा सहमति निर्गत किया जाना यह इंगित करता है कि उद्योग द्वारा बोर्ड द्वारा सहमति निर्गमन से पूर्व जारी बोर्ड के समस्त निर्देशों का अनुपालन सुनिश्चित कर लिया गया था, अन्यथा बोर्ड द्वारा उद्योग को सहमति आदेश जारी नहीं किया गया होता।

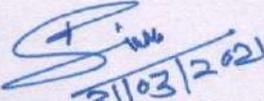
माननीय जस्टिस डी0पी0 सिंह की समिति द्वारा उद्योग का निरीक्षण दिनांक 05.08.2019 को किया गया था तथा आख्या माननीय एन0जी0टी0 में पत्रांक 432/ई0यू0पी0आर0डब्लूआर0एम0सी0

  
D.P. Singh  
2-A

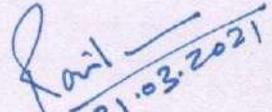
  
J. Singh  
50A

/2019, दिनांक 30.09.2019 के माध्यम से दाखिल किया गया था। समिति द्वारा माननीय एन0जी0टी0 में आख्या दाखिल किये जाने के उपरान्त ओ0ए0 सं0 116/2014 मीरा शुक्ला बनाम म्यूनिशिपल कार्पोरेशन, गोरखपुर व अन्य की सुनवाई माननीय न्यायाधिकरण द्वारा दिनांक 16.06.2020 तथा 12.01.2021 को की गयी। माननीय न्यायाधिकरण द्वारा उक्त तिथियों को उद्योग के संदर्भ में पारित आदेश का विवरण ऊपर दिया जा चुका है। माननीय न्यायाधिकरण द्वारा पारित आदेश दिनांक 16.06.2020 एवं 12.01.2021 में उद्योग के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित करने सम्बन्धी आदेश पारित नहीं किया गया है। उद्योग को बोर्ड द्वारा सहमति जल एवं सहमति वायु निर्गत किया गया है, जो दिनांक 31.12.2021 तक वैध है। सहमति निर्गमन के उपरान्त बोर्ड द्वारा उद्योग के विरुद्ध जल अधिनियम की धारा- 33ए अथवा वायु अधिनियम की धारा- 31ए के अन्तर्गत कारण बताओ नोटिस सहमति आदेश में अधिरोपित शर्तों के उल्लंघन के संदर्भ में जारी नहीं किया गया है। बोर्ड द्वारा उद्योग को जारी सहमति जल एवं सहमति वायु आदेश को खण्डित भी नहीं किया गया है। इससे प्रतीत होता है कि उद्योग द्वारा सहमति आदेश निर्गमन के उपरान्त डिफाल्ट नहीं किया गया है।

माननीय न्यायाधिकरण द्वारा ओ0ए0 सं0 116/2014 में पारित आदेश दिनांक 16.06.2020 एवं 12.01.2021 के आलोक में उद्योग के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किया जाना उचित नहीं प्रतीत होता है। अतः बोर्ड मुख्यालय, लखनऊ के पत्र दिनांक 04.01.2021 के माध्यम से उद्योग के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने के सम्बन्ध में जारी कारण बताओ नोटिस निक्षेप किये जाने की संस्तुति सहित आख्या आपके अवलोकनार्थ एवं अग्रिम आवश्यक कार्यवाही हेतु सादर प्रस्तुत है।

  
31/03/2021

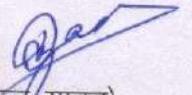
(डा0 आर0के0 सिंह)  
प्रयोगशाला सहायक

  
31.03.2021

(राम मिलन वर्मा)  
वैज्ञानिक सहायक

क्षेत्रीय अधिकारी महोदय,

उपरोक्तानुसार अग्रिम कार्यवाही किये जाने की संस्तुति सहित अग्रसारित।



(पंकज यादव)  
क्षेत्रीय अधिकारी

मुख्य पर्यावरण अधिकारी (वृत्त-6),



उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड  
UTTAR PRADESH POLLUTION CONTROL BOARD

Ref. No. 16559 / C-6 / जल / एच / एच.क. / 2021

Dated 8-4-21  
पंजीकृत

सेवा में,

मेसर्स सरैया डिस्टीलरी,  
सरदार नगर,  
गोरखपुर।

विषय: मेसर्स सरैया डिस्टीलरी, सरदार नगर, गोरखपुर को बोर्ड मुख्यालय के पत्रांक-एच.56837/सी0-6/सहमति जल/01/का0ब0नो0/2020 दिनांक 04.01.2021 द्वारा जारी कारण बताओ नोटिस को निक्षेपित किये जाने के संबंध में।

महोदय,

उपरोक्त विषयक इस कार्यालय के पत्रांक एच. 56837/सी0-6/सहमति जल/01/का0ब0नो0/2020 दिनांक 04.01.2021 का संदर्भ ग्रहण करें, जिसके द्वारा उद्योग को जारी कारण बताओ नोटिस निर्गत किया गया। क्षेत्रीय अधिकारी, गोरखपुर द्वारा पत्र दिनांक 31.03.2021 के माध्यम से कारण बताओ नोटिस को निक्षेप किये जाने की संस्तुति की गई है।

अतः क्षेत्रीय अधिकारी, गोरखपुर के पत्र दिनांक 31.03.2021 द्वारा प्रेषित आख्या को दृष्टिगत रखते हुये सक्षम अधिकारी के अनुमोदनोपरान्त उद्योग को निर्गत कारण बताओ नोटिस दिनांक 04.01.2021 को निम्न प्रमुख शर्तों के साथ निक्षेप किया जाता है :-

1. उद्योग में स्थापित ई.टी.पी. का सुचारु रूप से संचालन किया जाये, जिससे शुद्धिकृत उत्प्रवाह बोर्ड मानकों के अनुरूप निस्तारित हो सके। शुद्धिकृत उत्प्रवाह के नमूने को एनएबीएल मान्यता प्राप्त प्रयोगशाला से विश्लेषण कराकर राज्य बोर्ड को निरन्तर प्रेषित किया जाये।
2. उद्योग परिसर में हाउस कीपिंग में सुधार किया जाये।
3. उद्योग में विभिन्न पाइप लाइनों की कलर कोडिंग एवं नाम अंकित किया जाये।
4. उद्योग से जनित शुद्धिकृत उत्प्रवाह के अधिकतम मात्रा रिसाइकिल किया जाये।
5. केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा आसवनी उद्योगों हेतु चार्टर के अनुपालन के सम्बन्ध में कृत कार्यवाही से राज्य बोर्ड को अवगत कराया जाये।
6. उद्योग को निर्गत सहमति जल/वायु में जारी विशिष्ट शर्तों का अक्षरशः अनुपालन किया जाये।
7. प्रत्येक त्रैमास में उद्योग के समीपवर्ती ग्रामों के भूगर्भीय जल नमूने मान्यता प्राप्त तकनीकी संस्थानों से एकत्र एवं विश्लेषित कराकर आख्यानुसार आवश्यक कार्यवाही तथा उक्त के सम्बन्ध में प्रत्येक त्रैमास में विस्तृत आख्या बोर्ड मुख्यालय, लखनऊ एवं क्षेत्रीय कार्यालय, गोरखपुर को प्रेषित किया जाना सुनिश्चित किया जाये।

सक्षम अधिकारी द्वारा पत्र निर्गमन हेतु अधिकृत।

भवदीय,

मुख्य पर्यावरण अधिकारी

(वृत्त-6)

प्रतिलिपि:

क्षेत्रीय अधिकारी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, गोरखपुर को आवश्यक कार्यवाही हेतु प्रेषित।

मुख्य पर्यावरण अधिकारी

(वृत्त-6)

### STATUS OF RECOVERY REGARDING ENVIRONMENTAL COMPENSATION

S.No	Regional Office	Name & Add of Industry	Date of E.C. Imposed	Environmental Compensation Imposed (in Rs.)	Environmental Compensation (E.C.) Received	Date of R.C. Issued	Remark
1	Gorakhpur	B.R.D. Medical College & Hospital, Gorakhpur	18.10.2019	4,41,15000.00	Nil	Letter Issued by H.O. vide letter no. H 60813, dated. 19.03.2021 to District Administration	-
2	Gorakhpur	Burnet Pharmaceutical Pvt. Ltd., FL-1, Sector- 13, GIDA, Gorakhpur	14.01.2019	50,000.00	50,000.00	Letter Issued by H.O. to District Administration	Partial Payment Deposits by Industry
			01.10.2019	12,87,500.00	3,00,000.00		
3	Gorakhpur	Bharti Research & Breeding Firm, FL-27, Sector- 13, GIDA, Gorakhpur	15.01.2019	50,000.00	50,000.00	Letter Issued by H.O. to District Administration	Industry is Closed
			01.10.2019	6,11,250.00	Nil		
4	Gorakhpur	Gorakhnath Agro Industries Pvt. Ltd., FL-20/27, Sector- 13, GIDA, Gorakhpur	01.10.2019	10,18,725.00	10,18,725.00	-	Complete Payment Deposit by Industry
			10.01.2019	50,000.00	50,000.00		
5	Gorakhpur	Alkane Construction Pvt. Ltd., FL-24, Sector- 13, GIDA, Gorakhpur	01.10.2019	4,25,000.00	Nil	Letter Issued by H.O. to District Administration	Industry is Closed
6	Gorakhpur	Vindhyavasini Industries (Old Name Mother Shree Dairy, D-1/3, Sector- 13, GIDA, Gorakhpur	01.10.2019	8,40,000.00	8,40,000.00	-	Complete Payment Deposit by Industry



पत्रांक: ४१ /नियो०अनु०/गो०वि०प्रा०/2021-22.

प्रेषक,

सचिव,  
गोरखपुर विकास प्राधिकरण,  
गोरखपुर।

सेवा में,

1- प्रभागीय वनाधिकारी,  
वन प्रभाग, गोरखपुर।

2- प्रोफेसर, श्री गोविन्द पाण्डेय,  
डीन, मदन मोहन मालवीय इंजीनियरिंग कालेज,  
गोरखपुर।

3- मुख्य अभियन्ता,  
गोरखपुर विकास प्राधिकरण,  
गोरखपुर।

4- क्षेत्रीय अधिकारी, उ०प्र०,  
प्रदुषण नियंत्रण बोर्ड,  
गोरखपुर।

विषय: रामगढ़ ताल के 50-500 मीटर की परिधि में ऐसे व्यावसायिक मानचित्र जिसमें पर्यावरणीय अनुमति की अनिवार्यता नहीं है के मानचित्र स्वीकृति किये जाने के सम्बन्ध में। दिनांक: 8/6/2021

महोदय,

कृपया उपर्युक्त विषयक प्राधिकरण के पूर्व पत्र सं०-63/नियो०अनु०/गो०वि०प्रा०/2020-21, दिनांक 25.05.2021 का सन्दर्भ ग्रहण करने का कष्ट करें जिसके माध्यम से अवगत कराया गया था कि गोरखपुर स्थित ताल रामगढ़ के 50-500 मीटर की परिधि में, ऐसे व्यावसायिक मानचित्र जिसमें पर्यावरणीय अनुमति की अनिवार्यता नहीं है, के मानचित्र स्वीकृति किये जाने के संबंध में दिनांक: 10.03.2021 को सम्पन्न प्राधिकरण बोर्ड की 118वीं बैठक के मद सं०-118.03 पर प्राधिकरण बोर्ड द्वारा निर्णय के बिन्दु सं०-4 में उल्लेख है कि "रामगढ़ताल के 50-500 मीटर की परिधि में ऐसे व्यावसायिक मानचित्र जिसमें पर्यावरणीय अनुमति की अनिवार्यता नहीं है उनके संबंध में मानचित्र स्वीकृति से पूर्व निम्नानुसार समिति सभी पर्यावरणीय मानक सुनिश्चित करने हेतु गठित की जाती है:-

1. प्रभागीय वनाधिकारी, गोरखपुर।
2. क्षेत्रीय अधिकारी, उ०प्र०, प्रदुषण नियंत्रण बोर्ड गोरखपुर।
3. प्राधिकरण द्वारा नामित पर्यावरणविद्।
4. मुख्य अभियन्ता, विकास प्राधिकरण, गोरखपुर।

उपरोक्त समिति की संस्तुति कि प्रस्तावित गतिविधि में पर्यावरणीय संरक्षण हेतु सभी उपाय सम्मिलित कर लिए गए, के पश्चात ही मानचित्र स्वीकृति की कार्यवाही की जायेगी। समिति द्वारा अपनी आख्या अधिकतम 07 दिवस में दी जायेगी जिससे मानचित्र स्वीकृति में विलम्ब न हो।"

तत्क्रम में प्राधिकरण बोर्ड द्वारा गठित समिति की बैठक प्राधिकरण सभागार में दिनांक: 08.06.2021 को 11:00 बजे आहुत की गई थी किन्तु एक सदस्य के उपस्थित न हो पाने के कारण उक्त बैठक सम्पन्न न हो सकी। पुनः उक्त बैठक उपाध्यक्ष, गोरखपुर विकास प्राधिकरण की अध्यक्षता में दिनांक: 10.06.2021 को पुर्वाहन 11:00 बजे आहुत की गयी है।

अतः अनुरोध है कि उक्त बैठक में नियत तिथि एवं समय पर प्रतिभाग करने का कष्ट करें।

सचिव,  
8.6.21  
(राम सिंह गौतम)  
सचिव

<p>इस सबन्ध में समस्त सुरपष्ट नियमों/प्रपत्रों का अध्ययन करते हुए अपनी रिपोर्ट अगली बोर्ड बैठक में प्रस्तुत करें।"</p> <p>अवगत कराना है कि उत्तर प्रदेश शासन, पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग-4 द्वारा सरकारी गजट संख्या- 1397/81-4-2020-06-2018, दिनांक: 07 दिसम्बर, 2020 (संलग्नक-118.03(1)) जारी किया गया है। पुनः मा0 एन0जी0टी0 द्वारा O.A. No. 116/2014 में दिनांक 12/01/2021 (संलग्नक-118.03(1)) को आदेश पारित किया गया है।</p> <p>अतः उपरोक्त अधिसूचना दिनांक 07/12/2020 व मा0 एन0जी0टी0 के आदेश दिनांक 12/01/2021 का अनुपालन करते हुए रामगढ़ताल क्षेत्र में मानचित्र स्वीकृत करने की कार्यवाही हेतु प्रस्ताव प्राधिकरण बोर्ड के समक्ष प्रस्तुत है।</p>	<p>अतिरिक्त ग्रीन अधिभार का ऑकलन करने हेतु समिति बनायी जाए जो अपनी आख्या आगामी बोर्ड बैठक में प्रस्तुत करेगी।</p> <p>4- रामगढ़ताल के 50-500 मीटर की परिधि में ऐसे व्यवसायिक मानचित्र जिनमें पर्यावरणीय अनुमति की अनिवार्यता नहीं है उनके सम्बन्ध में मानचित्र स्वीकृति से पूर्व निम्नानुसार समिति सभी पर्यावरणीय मानक सुनिश्चित करने हेतु गठित की जाती है:-</p> <p>(1) प्रमाणीय वनधिकारी, गोरखपुर।</p> <p>(2) क्षेत्रीय अधिकारी, उ० प्र० प्रदूषण नियन्त्रण बोर्ड, गोरखपुर।</p> <p>(3) प्राधिकरण द्वारा नामित पर्यावरणविद्।</p> <p>(4) मुख्य अभियन्ता, विकास प्राधिकरण, गोरखपुर।</p> <p>उपरोक्त समिति की</p>
<p>समिति की बैठक अर्थात् 11.00 बजे</p> <p>5/4/2021 को</p>	

संस्तुति कि प्रस्तावित गतिविधि में पर्यावरणीय संरक्षण हेतु सभी उपाय सम्मिलित कर लिए गए, के फ्यात ही मानचित्र स्वीकृति की कार्यवाही की जायेगी। समिति द्वारा अपनी आल्या अधिकतम 07 दिवस में दी जाएगी जिससे मानचित्र स्वीकृति में विलम्ब न हो।

यह भी निर्णय दिये गये कि प्राधिकरण बोर्ड ले उक्त निर्णय का व्यापक प्रचार-प्रसार करें तथा यदि किसी को कोई आपत्ति/सुझाव है तो प्राधिकरण में दें। ऐसी समस्त आपत्तियों/सुझावों को बोर्ड के समक्ष निस्तारण/समावेशन हेतु त्वरित रूप से प्रस्तुत किया जाए। साथ ही उपरोक्त व्यवस्था की समीक्षा आगामी बोर्ड बैठक में की जाएगी।

*[Handwritten signature]*



Appendix-6

11/6/21

**SAHARA INDIA COMMERCIAL CORPORATION LIMITED**

**HEAD OFFICE:** Sahara India Centre, 8th Floor, 2 Kapoorthala Complex, Aliganj, Lucknow-226 024 [U.P.]

Phone No.: 0522-2332018, 2331408 & 2334799, Fax 0522-2330135

**Site Office:** Sahara States, Deoria By Pass Road, Near Ramgarh Tal, Gorakhpur, U.P.

**Ref.: SICCL/HO/SS-GKP/COR/584**

**Date: 10/06/2021**

To  
Regional Officer,  
Uttar Pradesh Pollution Control Board,  
Mahadeo Jharkhandi, Avas Vikas Colony,  
Deoria Road, Kunraghat,  
Gorakhpur - 273008

**Subject: Regarding installation of Sewage Treatment Plant at Sahara States- Gorakhpur.**

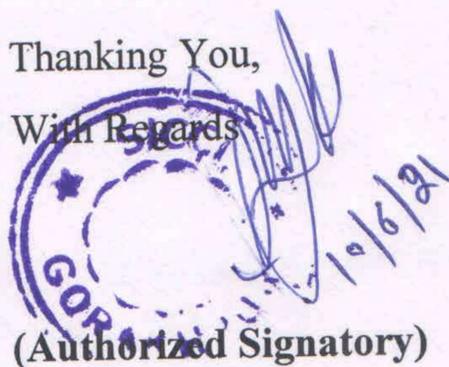
Sir,

This is with reference to your letter no. 90/ sa-50/2020, dated 11.06.2020 regarding the installation of Sewage treatment Plant at Sahara States- Gorakhpur. I beg to draw your kind attention that Sewage Treatment Plant (STP) having capacity of 350 KLD has been installed and made operational at site premises for treatment of the domestic wastewater generated from the project (copy of inlet and outlet wastewater analysis report are enclosed). Now, the plant is in operational phase and the treated water is being used for irrigation of the green areas in the premises and the spare treated water is being discharge into the taal.

This is for your kind information.

Thanking You,

With Regards

  
(Authorized Signatory)

Encl.: As above



# ENVIRO-TECH SERVICES

An Analytical Laboratory

(An ISO 9001:2015, 14001:2015 and 45001-2018 Certified Company)



ISO 9001/14001/45001

Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.) - 201001

email : etslab2012@gmail.com | Website : www.etslab.in | Ph.: 9911516076, 9811736063

## TEST REPORT

TEST REPORT NO.: ETS/1005/06/2021

DATE OF REPORT: 07.06.2021

### WASTE WATER SAMPLE ANALYSIS REPORT

Name And Address of Customer : M/s, SAHARA STATES  
 DEORIA BYPASS ROAD, NEAR RAMGARH TAAL,  
 GORAKHPUR, U.P.

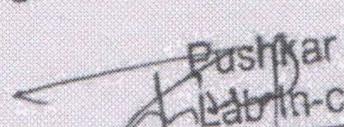
Date of Sampling : 02.06.2021  
 Analysis Start Date : 03.06.2021  
 Analysis End Date : 07.06.2021  
 Sample ID No : 1005  
 Sampling Done By : ETS STAFF  
 Sampling Description : S.T.P  
 Sampling Location : S.T.P-OUTLET  
 Sampling Method : ETS/STP/WATER-02  
 Sample Quantity : 2.0 Ltr.  
 Packing Condition : SEALED  
 Packed In : P.V.C. CANE

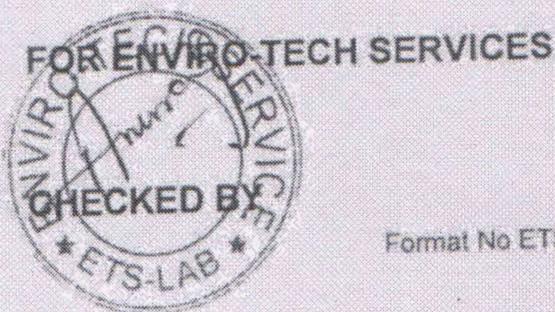
S. No.	Test Parameter	Unit	Result	Specification/Limit (As per CPCB)		Test Method
				Inland Surface Water	Public Sewers	
1	pH	...	7.36	5.5 - 9.0	5.5 - 9.0	APHA 4500-H+
2	Total Suspended Solids,(TSS)	mg/L	60.5	100	600	APHA 2540-D
3	Oil & Grease, (O & G )	mg/L	4.5	10	20	APHA 5520-D
4	Biological Oxygen Demand(BOD <sub>30</sub> 27°C)	mg/L	15.0	30	350	IS: 3025 (Part-44)
5	Chemical Oxygen Demand,(COD)	mg/L	110.0	250	Not Specified	APHA 5220-C

\*\*\*\*\*End of Test Report\*\*\*\*\*

Page 1 of 1

For Enviro-Tech Services

  
 Pushkar Mittal  
 Lab In-charge  
 AUTHORIZED SIGNATORY



Format No ETS/LAB/TR-10, Issue No. 05, Date 01.04.2019, Amd. No. 04 Date 01.04.2019

- Note:-
1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.
  2. The sample shall be destroyed after 15.days & Biological / Perishable sample shall be destroyed immediately after issue of test report.
  3. The results indicated only refer to the tested samples and listed applicable parameters.
  4. Our liability is limited to invoice value only.
  5. No complaint will be entertained if received after 7 days of issue of test report.

# ENVIRO-TECH SERVICES

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(An ISO 9001:2015, 14001:2015 and 45001-2018 Certified Company)

Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.) - 201001

email : etslab2012@gmail.com | Website : www.etslab.in | Ph.: 9911516076, 9811736063



ISO 9001/14001/45001

## TEST REPORT

DATE OF REPORT: 07.06.2021

TEST REPORT NO.: ETS/1005-1/06/2021

### WASTE WATER SAMPLE ANALYSIS REPORT

Name And Address of Customer : M/s, SAHARA STATES  
DEORIA BYPASS ROAD, NEAR RAMGARH TAAL,  
GORAKHPUR, U.P.

Date of Sampling : 02.06.2021

Analysis Start Date : 03.06.2021

Analysis End Date : 07.06.2021

Sample ID No : 1005-1

Sampling Done By : ETS STAFF

Sampling Description : S.T.P

Sampling Location : S.T.P-INLET

Sampling Method : ETS/STP/WATER-02

Sample Quantity : 2.0 Ltr.

Packing Condition : SEALED

Packed In : P.V.C. CANE

S. No.	Test Parameter	Unit	Result	Test Method
1	pH	...	6.49	APHA 4500-H+
2	Total Suspended Solids,(TSS)	mg/L	260.1	APHA 2540-D
3	Oil & Grease, (O & G )	mg/L	9.4	APHA 5520-D
4	Biological Oxygen Demand(BOD <sub>3d</sub> 27°C)	mg/L	55.0	IS: 3025 (Part-44)
5	Chemical Oxygen Demand,(COD)	mg/L	540.0	APHA 5220-C

\*\*\*\*\*End of Test Report\*\*\*\*\*

Page 1 of 1



For Enviro-Tech Services

Dushkar Mittal  
AUTHORIZED SIGNATORY

Format No ETS/LAB/TR-10, Issue No. 05, Date 01.04.2019, Amd. No. 04 Date 01.04.2019

Note:-

1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.
2. The sample shall be destroyed after 15 days & Biological / Perishable sample shall be destroyed immediately after issue of test report.
3. The results indicated only refer to the tested samples and listed applicable parameters.
4. Our liability is limited to invoice value only.
5. No complaint will be entertained if received after 7 days of issue of test report.

**ACTION PLAN  
FOR  
RESTORATION OF POLLUTED STRETCH  
OF  
RIVER AAMI  
FROM  
RUDHAULI, BASTI  
TO  
SOHGAURA, GORAKHPUR**



**UTTAR PRADESH POLLUTION CONTROL BOARD  
TC - 12V, VIBHUTI KHAND, GOMTINAGAR,  
LUCKNOW (UP)**

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## Executive Summary

Aami River is a tributary of River Rapti its origin place is Sikhara Tal of Domariyaganj Tehsil Siddharthnagar. This is a low land area located at a distance of approximately 12 Kilometer south from Rapti River. During rainy season, rain water accumulates and recharged water from the ground find its way to Aami River. It travels approximately 102 Kilometer and passes across district Siddharthnagar, Basti, Sant Kabir Nagar, Gorakhpur and finally merges with River Rapti at Sohgaora Village, Distt- Gorakhpur, U.P. After traversing approximately 24 Kilometer East. Rarua River meets with Aami River and after traversing some more distance, to old streams of Rapti River namely Buri River and Barar River meets to Aami River. Rapti River is a tributary of River Ghaghra and which merges with River Ganga in Distt- Ballia U.P.

### Analytical Data of Aami River in Basti, Sant Kabir Nagar & Gorakhpur

S. N.	Location Details	Date of Sample Collection	pH	Conductivity (uhos/cm)	D.O. (Mg/l)	BOD (mg/l)	COD (mg/l)	Total Coliform (MPN /100 ml)	Feecal Coliform (MPN /100 ml)	Class of Water as per CPCB Water Criteria
1	2	3	4	5	6	7	8	9	10	11
1	Aami River U/s Vill-Bhatpurwa, Basti	16.03.19	8.52	-	8.7	4.0	26.4	-	-	C
2	Aami River D/s Basti-Basi Road Bridge Rudhauri, Basti	07.02.17	7.41	1930	3.8	24.0	120.0	13000	79000	E
3	Aami River Balusashan, Khalilabad, Santkabir Nagar	07.02.17	7.88	517.4	7.8	4.0	24.0	220	170	D
4	Aami River U/s b/c with Dhaurahara Drain Near Vill-Dhaurahara, Khalilabad, Santkabir Nagar	08.02.17	8.72	364.4	6.3	6.0	24.0	-	-	D
5	Aami River d/s a/c with Dhaurahra Drain Near Vill-Dhaurahra, Khalilabad, Santkabir Nagar	08.02.17	7.86	2358.0	1.2	32.0	134.0	-	-	Below-E
6	Aami River N.H. 28, Road Bridge, Maghar, Santkabir Nagar	07.02.17	7.61	469.6	0.6	38.0	170.0	13000	4900	E
7	Aami River Gorakhpur-Lucknow Rail Bridge, Maghar, Santkabir Nagar	07.02.17	7.67	450.9	0.8	32.0	158.0	330	130	E
8	Aami River U/s B/c with Sariya Drain Near Vill-Bharsharh, Sahjanwa, Gorakhpur	07.02.17	7.61	453.3	2.2	28.0	116.0	-	-	E
9	Aami River D/s A/c with Sariya Drain, Near Vill-Koilahi, Sahjanwa, Gorakhpur	07.02.17	7.18	585.4	0.4	54.0	244.0	-	-	E

From the above water quality data of River Aami, it is obvious that stretch of Aami River D/s of Vill- Bhatpurwa, Basti to Sohgaura, Gorakhpur is polluted. In this stretch river receives considerable amounts of wastewater every day from the industries located in Distt- Basti, Sant Kabir Nagar and Gorakhpur. Domestic Waste Water Generated from Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar, Nagar Panchyat, Maghar also meets River Aami which leads to deterioration of its water quality.

### **Pollution Inventory:**

In the polluted stretch of River Aami, total discharge of 27.6 MLD is estimated in the form of sewage and industrial effluent through 06 drains in the river. As per desk inventory, about 12 MLD of sewage and 15.6 MLD of industrial effluent are currently being discharged into the river Aami through various drains. Treated Industrial effluent coming from mainly 10 Water Polluting Industries is being discharged into river Aami in the polluted river stretch. The treatment of sewage is a major area of concern as total estimated sewage discharge of 12 MLD is being discharged without treatment in the River. The estimates of industrial effluent are based upon the consented discharge quantified from the units but actual industrial effluent may be more than the estimates owing to over discharge by consented industries. A detailed drain wise data regarding sewage, industrial effluent and number of industries in the drain, status of tapping and status of fixing of bar meshes etc. is given in the detailed Action Plan.

As mentioned above, total sewage discharged into River Aami through 02 major drains is approximately 12 MLD. There are 02 main towns namely Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar and

Nagar Panchyat, Maghar, Sant Kabir are located in the catchment area of the river. The sewage and other effluent generated from these cities contribute to the organic load of the river. As mentioned earlier the treatment of sewage is a major issue of concern because STP has not been installed by the local bodies. Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar and Nagar Panchyat, Maghar, Sant Kabir Nagar has prepared D.P.R. and Submitted to Govt. of U.P. for Financial Sanction.

02 local bodies namely Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar and Nagar Panchyat, Maghar, Sant Kabir Nagar are located in the catchment area of River Aami from Basti to Gorakhpur. Approx. 16.5 TPD Solid Waste is generated in Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar and Nagar Panchyat, Maghar, Sant Kabir Nagar. Local bodies situated in the catchment area has been practicing door to door collection of MSW. The city wise details of municipal solid waste generation are provided in Action Plan.

### **Gap Analysis for the Projected Population in Year 2030 in the Catchment Area of River Sewage Treatment:**

There are 02 local bodies situated in the catchment area of Polluted Stretch of River Aami. Estimated Sewage Generation for year 2030 on the basis of Census 2011 is 8.197 MLD. The proposed capacity of STPs (7 MLD for Khalilabad and 5 MLD for Maghar) is 12 MLD. There is no gap in the treatment of Sewage Generated if proposed STPs are installed.

### **Municipal Solid Waste:**

There are 02 local bodies situated in the catchment area of Polluted Stretch of River Aami. Estimated MSW Generation for year 2030 on the basis of Census 2011 is 20 TPD. There is no processing facility available in

both the local bodies. Therefore, gap of 20 TPD exists in the catchment area of polluted River Stretch.

### **Bio-Medical Waste:**

In 02 local bodies located in the catchment of the stretch of river Gomti there are 84 Health Care Facilities which generate 182.7 Kg/Day of Bio-Medical Waste. All the Health Care Facilities have valid agreements with 01 Common Bio-Medical Waste Treatment Facilities situated in industrial area Khalilabad Sant kabir nagar for collection, transportation and disposal of Bio-Medical Waste. The segregation of Bio-Medical Waste and disposal in the CBWTFs as per the provisions of Bio-Medical Waste Management Rules, 2016 is a major area of concern. The mixing of Bio-Medical Waste with Municipal Solid Waste is also observed which also needs to be addressed.

### **Hazardous Waste:**

The total hazardous waste generation in the catchment area of the stretch from 04 industrial units is 192 Ton/Annum which is collected, treated and disposed by 01 Common Facilities located near Kanpur Dehat. An about 4.7 KL/annum generated by 03 industriy units oily waste is being burnt in the boiler along with fuel.

### **E-Waste:**

In the State, a total 43 Common E- Waste Disposal Facility is operational. Out of these, 10 units are collection center, 18 have the facility of collection & dismantling whereas remaining 15 are collection, dismantling and recycling centres. The cumulative capacity of these plants- 2,64,552 TPA and 10,000 Pieces/Annum. The quantum of E-Waste generated in the State is approximately 86,000 TPA. Hence there is no gap

in the generation and treatment infrastructure for safe E-Waste handling as per the provisions of E-Waste Rules, 2016. **Industries:**

Total 10 water polluting industries, mainly Sugar, Distillery, Textile, and other miscellaneous industries etc. located in the catchment area of the present stretch of Aami River. Presently polluted stretch of River Aami receives approximately 15.6 MLD treated industrial effluent. The industries situated in the catchment of the polluted river stretch utilize ground water needed for their processes. Total estimated water extraction by the industries is approximately 30 MLD against the discharge of 15.6 MLD by the industries. This indicates that about 48 percent of the treated effluent is recycled in the processes and rest accounts for the evaporation losses and consumption in the products.

### **Monitoring of Pollution Sources**

#### **Drains:**

Monitoring of drains discharging into the polluted stretch of river Aami is being done monthly. The sampling points are selected in the up stream and down stream of drains meeting with Aami River. Care has been taken that there is no backwater effect of the river at the sampling point and no source of pollution joins the drain after the sampling point.

#### **River:**

The Polluted stretch of River Aami is being monitored at 07 places to ascertain adverse effect of pollution by various sources in the river.

#### **Industries**

All the water polluting industries will be monitored regularly by UPPCB. GPIs will be monitored quarterly and other industries will be monitored randomly. Third Party Institutions shall also be entrusted with the responsibility of comprehensive monitoring by CPCB and NMCG.

**Establishment of Aami Pollution Control Room:**

A Control Room for monitoring and centralized reporting of various pollution sources shall be established in Gorakhpur with appropriate infrastructure and human resource. This control room will be under overall supervision of UPPCB.

**Polluted River Stretch Rejuvenation Action Plan:**

Some short and long term Action points were identified based on their urgency and time period required for their completion. Point wise details are provided in Action Plan. Some highlights of Action points are given below:

## **Sewage Management**

### **Short Term:**

- Estimation of total sewage generation from City/Towns where sewage treatment facility does not exist and preparation of DPR for treatment of sewage.
- Measurement of flow & load of all the drains contributing pollution load in River Aami.
- Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them.
- Untapped drains to be provided with modular treatment facilities/ In-Situ bio-remediation or Phytoid-SWAB (CSIR-NEERI) based treatment.

### **Long Term:**

- Laying of Sewerage Network & Connection of households to the sewer line.
- Establishment of Sewage Treatment Plants of adequate capacity.
- Tapping & diversion of the drains to proposed STPs.
- Infrastructure Development in Irrigation/Horticulture/Sprinkling/Industries. Ensuring use of treated water.

## **Industrial waste Management**

### **Short Term Action Point:**

- Re-inventorisation of Water Polluting Industries in the catchment area of the drains and their status with respect to consent, installation of ETP, adequacy of ETP and final discharge point.
- Monitoring of water polluting industries and ensuring closure of industries which are operating without consent or non-compliant.
- Installation of OCEEMS, Flow Meter & Web Cams in large and medium category of GPs with connectivity to the server of CPCB and UPPCB
- In Sugar industries for reducing the water consumption, improving the quality of treated effluent and reuse of water in irrigation

**Long Term Action Point:**

- Adoption of cleaner technologies by water polluting industrial sectors having major impact on water quality of the river. For eg. – Electroplating, Dyeing, Pulp & Paper industries etc.
- Imposing stringent norms in Distillery, Pulp & Paper.
- Reducing abstraction of ground water by reuse/recycle of treated effluent by installation of additional treatment facilities & process improvement.
- Use of treated effluent from CETPs for industrial and irrigation purposes.

Actions related to improvement of ETPs and reduction of use of ground water by the industries

## 1. INTRODUCTION

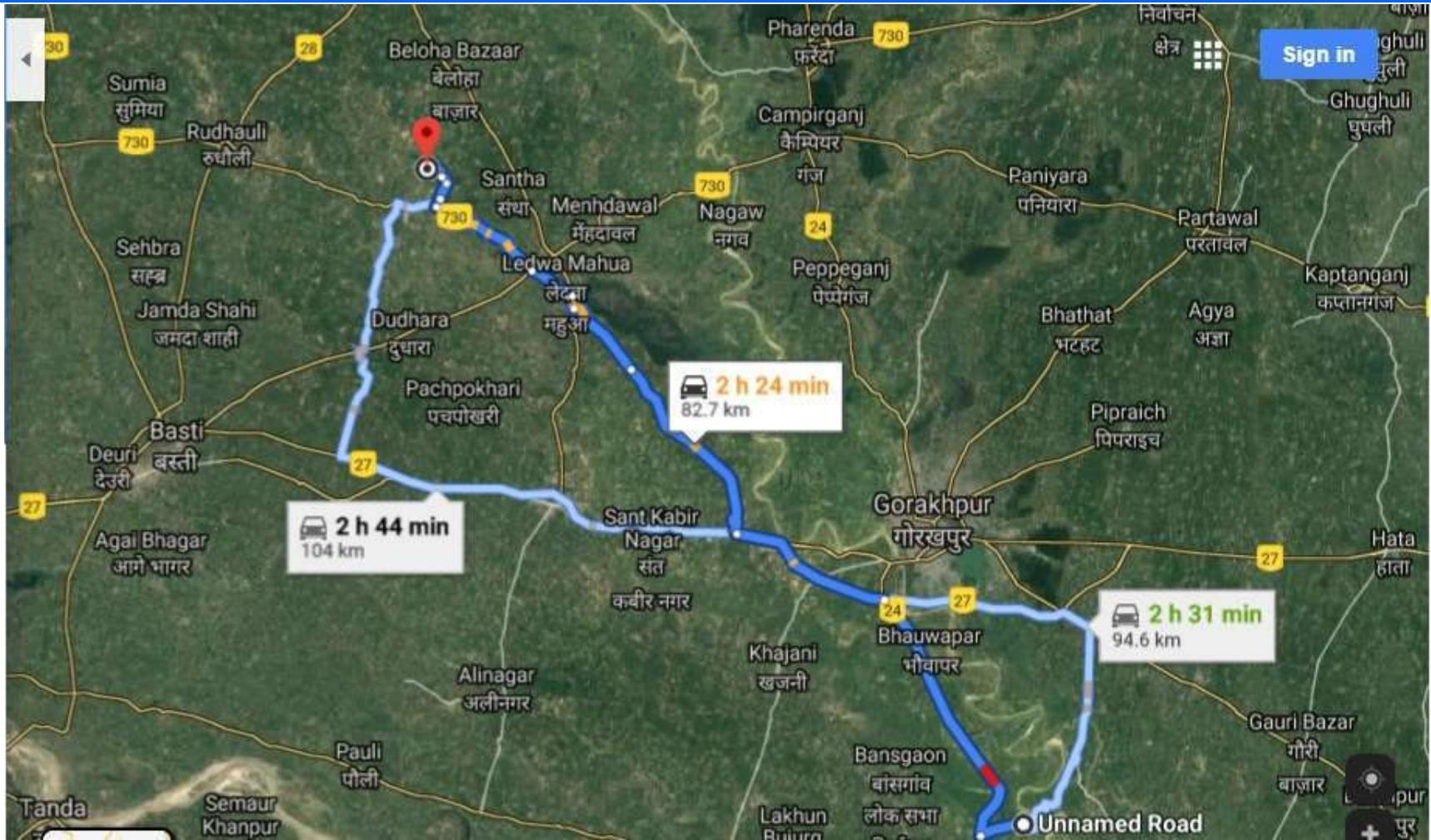
Gaon ki Ganga i.e. River Aami is known as Lifeline of Maghar, which originates from Sikhaira Tal, Siddharthnagr. The river passes through, Siddharthnagar, Basti, Sant Kabir Nagar and Gorakhpur. During its journey, it traverses approximately 102 Kms. and ultimately confluences in the River Rapti near village Sohgaon of tehsil Bansaon of district Gorakhpur.

The stretch of the river from Rudhauri, Basti to Sohgaon, Gorakhpur has been identified as a polluted stretch. As per records an approx. 12 MLD sewage is contributed in river Aami. During the journey of 102 Kms from Sikhaira district Siddharthnagar it carries rain water during monsoon through connected tributary/natural drain / manmade Nalas of both banks. Maximum flow that has been observed in rainy season and minimum flow in summer season.



**Fig : 1.1, Confluence point of River Aami in River Rapti at Vill. Sohgaon, Gorakhpur.**

*As per the last year monitoring of river water quality in the identified polluted stretch of river Aami from Bhatpurwa, Basti to Sohgaon, Gorakhpur water of River Aami is neither fit for Drinking.*



**Fig:1.2: Image showing stretch of River Aami from origin to confluence at river Rapti and the polluted stretch from Basti to Gorakhpur**

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## **1.1 POLLUTED STRETCH OF AAMI RIVER FROM RUDHAULI, BASTI TO SOHGAURA, GORAKHPUR**

Aami River originates from Sikhara Tal, Siddharthnagar and flows further towards Basti, Sant Kabir Nagar and Gorakhpur. During its journey from origin to destination, it traverses a distance of about 102 Kms out of which the polluted stretch lies in between Rudhauli, Basti to Sohgaura, Gorakhpur of approximate length of 80 Kms.

There are mainly 10 water polluting industries located in the catchment of the concerned stretch of Aami River **Appendix-** These industries have effluent treatment plants. Some Industries are of zero liquid discharge as per charter and some industries are discharging its effluent on land as per conditions imposed by UPPCB. Industrial discharge in the River is taking place through 03 drains. Out of 03 drains 01 drains is mixed drains which is carrying treated industrial effluent as well as untreated sewage.

## **2. OBJECTIVE OF THE ACTION PLAN**

The objective of the Action Plans is to restore the quality of River Aami to be made fit for at least bathing purposes within 06 months from the date of action plan as directed by Hon'ble National Green Tribunal vide its order dated 20th September 2018 passed in the original Application No 673/2018 in the matter of NEWS ITEM PUBLISHED IN 'THE HINDU' AUTHORED BY SHRI JACOB KOSHY titled " More river stretches are now critically polluted: CPCB.

## **3. POLLUTION INVENTORY**

### **3.1 DETAILS OF DRAINS POLLUTING RIVER AAMI**

**Details of drains contributing the pollution**

In the polluted stretch under question of river Aami, total discharge of 27.6 MLD is estimated in the form of sewage and industrial effluent through 06 drains directly or partially discharging into the river.

As per desk inventory, about 12 MLD of sewage and 15.6 MLD of industrial effluent are currently being discharged into the river Aami through 06 drains. Treated Industrial effluent coming from 10 industries which is approx. 15.6 MLD, is being discharged into river Aami in the polluted river stretch. The treatment of sewage is a major area of concern because local bodies situated in the catchment area has not installed STPs. The estimates of industrial effluent are based upon the consented discharge quantified from the units but actual industrial effluent may be more than the estimates owing to over discharge by consented industries. A detailed drain wise data regarding sewage, industrial effluent and number of industries in the drain, status of tapping and status of fixing of bar meshes etc. is given in **Appendix-**

### Summary of Drains

S No.	District/ City	Type of Drains	Status of Drains			Industries		Sewage Discharge (MLD)			Total Discharge in the River (MLD)
			Domestic/ Industrial/Mixed	Tapped	Untapped	Partially Tapped	Number	Treated Effluent (MLD)	Treated	Untreated	
1	Basti										
	Satnarya Nala	Industrial	-	1	-	2	0	0	0	0	0
	Sant Kabir Nagar										
2	Sarahi Nala	Domestic	-	1	-	-	-	-	7	7	7
3	Dhurahara Drain	Industrial	-	1	-	2	0.6	-	-	-	0.6
4	Nagar Panchyat Maghar Nala, Near Kabir Chauraha	Domestic	-	1	-	-	-	-	2	2	2
5	Nagar Panchyat Maghar Nala, Near Rail Bridge	Domestic	-	1	-	-	-	-	3	3	3
	Gorakhpur										
6	Sarya Drain	Mixed	-	1	-	8	3	-	12	12	15
	<b>Total</b>	-	-	<b>06</b>	-	<b>12</b>	<b>3.6</b>	-	<b>24</b>	<b>24</b>	<b>27.6</b>

\* Drains originating from Gorakhpur Industrial Development Authority (GIDA) meets natural drains know as sarya drain which meets river Aami. This drains is a mixed drain and it carries treated effluent from major 08 water polluting industries, several micro industries and untreated domestic effluent from industries situated in GIDA.

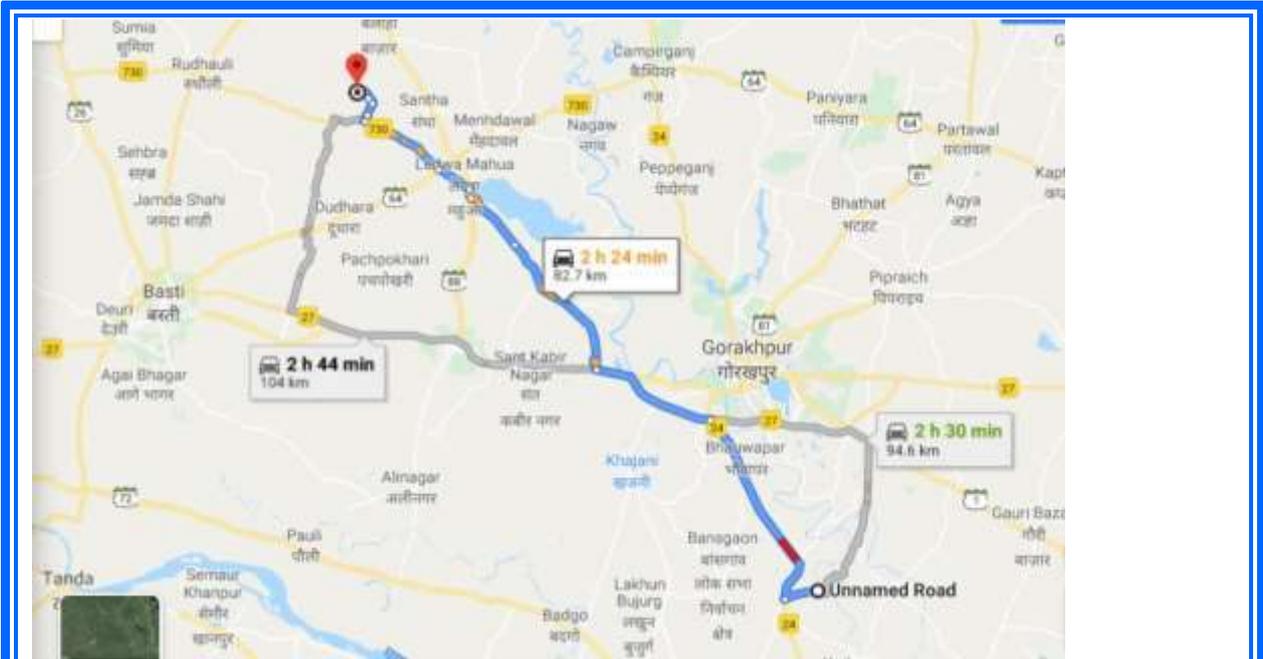


Fig : 3.1, GIS Map of Aami River Polluted Stretch with Drains

## A. Satnariya Drain (Rudhauri, Basti)

### a. Origin

Satnariya Drain originates from the near by area of Vill- Athdama, Rudhauri, Basti, Uttar Pradesh. It joins Aami River near village- Athdama, Basti. Coordinates of its meeting point in River Aami are Latitude: 27.06275000N & Longitude: 82.78425000E. Previously the Drain was carrying industrial effluent of 02 Industries in the catchment of river Aami. Presently M/s Bajaj Hindusthan Ltd. (Sugar Division) Athdama, Rudhauri, Basti is not discharging treated effluent in surface water in compliance of charter made by CPCB and M/s Bajaj Hindusthan Ltd. (Distillery Division) Athdama, Rudhauri, Basti is a zero liquid discharge industry.

### b. Length covered

Total Distance of Satnariya Drain from its origin to meeting point to Aami River is approx.: 1.75 kms.

### c. Details of industries & discharge of their effluent into the drain

Presently Satnariya Drain is carrying natural water/Excess water of irrigation canal.

Parameters	Results
pH	7.57
BOD (mg/l)	15
COD (mg/l)	104
TSS (mg/l)	372
Total Coliform (MPN/100 ml)	-
Date of Sampling	04.04.19



## B. SARAHI DRAIN (KHALILABAD SANT KABIR NAGAR)

### a. Origin

Sarahi Drain originates from Khalilabd City and meets River Aami. Coordinates of its origin point are: Latitude: 26.77891667°N & Longitude: 83.09569444E. This drain is a domestic drain carrying sewage generated from Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar. Total Discharge from Sarahi Drain is approx. 4.9 MLD.

### b. Length covered

Covered Distance of Sarahi Drain from Khalilabad City to meeting point to River Aami is approx. 7.5 km.

### c. Details of industries & discharge of their effluent into the drain

Sarahi Drain carries domestic waste water from the catchment area of Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar.

Parameters	Results
pH	7.81
BOD (mg/l)	160
COD (mg/l)	1320
TSS (mg/l)	686
Total Coliform (MPN/100 ml)	3500000
Date of Sampling	04.04.19



## C. DHAURAHARA DRAIN (DHAURAHARA, SANT KABIR NAGAR)

### a. Origin

Dhaurahara Drain originates from the near by area of Vill-Dhaurahara. The coordinates of meeting points of Dhaurahara Drain in to Aami River is Latitude: 26.762031N & Longitude: 83.105590E.

### b. Length covered :

Covered Distance of Dhaurahara Drain from its origin point to meeting point to Aami is approx.: 1.5 km.

### c. Details of industries & discharge of their effluent into the drain

Dhaurahara Drain carries Treated Industrial Effluent discharged from M/s Rayna Paper Board Industries, (Unit-2), Dhaurahara, Sant Kabir Nagar. Approx. 600 Kilo Liter treated effluent is discharge from the industry which meets river Aami through Dhaurahara Drain.

Parameters	Results
pH	7.1
BOD (mg/l)	15
COD (mg/l)	114
TSS (mg/l)	20
Total Coliform (MPN/100 ml)	-
Date of Sampling	01.03.19



## D. NAGAR PANCHYAT MAGHAR NALA, NEAR KABIR CHAURAHA

### a. Origin

This Nala originates from North portion of Nagar Panchyat, Maghar and Carries untreated domestic sewage which meets River Aami near Kabir Chauraha. Coordinates of its meeting point to Aami River are Latitude: 26.754001N & Longitude: 83.136691E.

### b. Length covered

Distance covered by Nala is approx. 2.5 km.

### c. Details of industries & discharge of their effluent into the drain

This Drain carries domestic waste water from the catchment area of Nagar Panchyat, Maghar. Total Discharge from this Drain is approx. 1.5 MLD.

Parameters	Results
pH	7.51
BOD (mg/l)	200
COD (mg/l)	1920
TSS (mg/l)	730
Total Coliform (MPN/100 ml)	1600000 n
Date of Sampling	04.04.19



## E. NAGAR PANCHYAT MAGHAR NALA, NEAR RAIL BRIDGE

### a. Origin

This Drain originates from the Southern part of Nagar Panchyat Maghar. It carries waste water generated from the houses situated in the Southern part of Nagar Panchyat, Maghar. The Coordinate of its meeting point to River Aami are Latitude: 26.750255N & Longitude: 83.139429E.

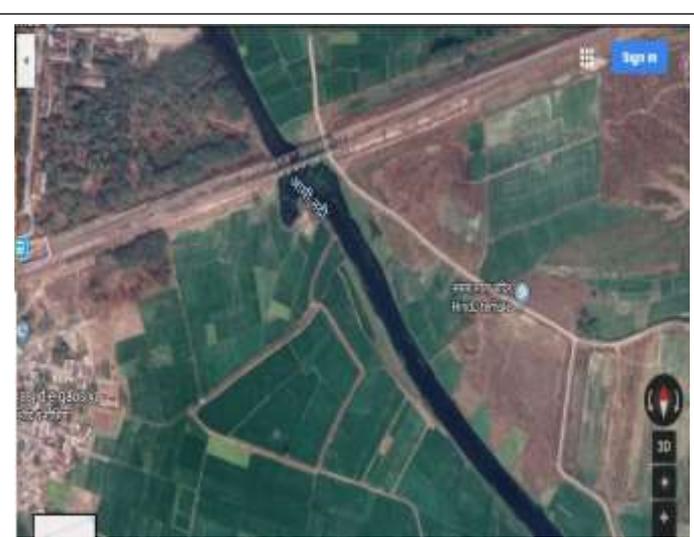
### b. Length covered

The distance covered by this Drain is approx. 1.75 Km.

### c. Details of industries & discharge of their effluent into the drain.

This Drain carries domestic waste water generated from Southern Part of Nagar Panchyat, Maghar. Total Discharge from this Drain is approx. 2.5 MLD.

Parameters	Results
pH	7.51
BOD (mg/l)	200
COD (mg/l)	1920
TSS (mg/l)	730
T. Coli (MPN /100ml)	1600000
Date of Sampling	04.04.19

A satellite map showing a river flowing through a rural area. A railway bridge crosses the river. The surrounding land is a mix of green fields and brownish soil. There are some buildings and structures visible near the riverbank. The map includes a scale bar and a compass rose.

## F. SARYA DRAIN

### a. Origin

This Drain originates from the near by area of GIDA. It carries the treated effluent of industries situated in GIDA and untreated domestic effluent discharged from industries situated in GIDA. This drain meets River Aami near vill Bhansar. Coordinates of meeting point of Sarya Drain are Latitude: 26.718722N & Longitude: 83.21747E.

### b. Length covered

Distance covered by Sarya drain is approx.: 05 km.

### c. Details of industries & discharge of their effluent into the drain

It carries about 12 MLD of sewage generated from industries situated in GIDA and 3 MLD treated industrial effluent discharge from industries situated in GIDA.

Parameters	Results
pH	8.5
BOD (mg/l)	80
COD (mg/l)	220
TSS (mg/l)	920
T. Coli (MPN /100ml)	-
Date of Sampling	14.06.19



### 3.2 DETAILS OF SEWAGE POLLUTION SOURCES

As mentioned above, total sewage discharged into River Aami through 03 domestic drains is approximately 12 MLD and through 01 mixed drain is about 12 MLD. 02 main towns namely Khalilabad, Sant Kabir Nagar and Maghar, Sant Kabir Nagar are located in the catchment of the river **(Appendix-1)**. The sewage and other effluent generated from these cities contribute to the organic load of the river. As mentioned earlier the treatment of sewage is a major issue of concern because STPs has not be installed by local bodies. The details of proposed Sewage Treatment Plants along with installed capacity is given in the table below:-

#### Details of STPs

S. No.	District	Name of Proposed STP	Installed Capacity (MLD)	Utilized Capacity (MLD)	Capacity Utilized (%)	Operating Govt. Agency	Compliance	Discharge Drain
							(Yes/ NO)	
1	Khalilabad, Sant Kabir Nagar	7 MLD STP	0	0	0	-	-	Sarahi Drain
2	Maghar, Sant Kabir Nagar	05 MLD STP	0	0	0	-	-	Nagar Panchy at Maghar Nala

Source: As per information of UP Jal Nigam, Sant Kabir Nagar.

Note: DPR of poropsed STPs has been submitted to Govt. of U.P. for Financial Sanction.

### Details of Plan for Treatment of Sewage Gap in River Aami

Sl. No.	District	Name of Drain (City)	Details of STPs proposed		Details of DPR				Expected date of completion
			Name	Capacity (in MLD)	Status (under preparation/prepared)	Amount of DPR (Rs. In crore)	Status of approval (submitted/approved)	Funding Agency	
1	Sant Kabir Nagar	Sarahi	-	07	Prepared	-	Submitted to U.P. Govt.	Namami Gange	-
2	Sant Kabir Nagar	Maghar Nagar Panchyat Nala	-	05	Prepared	-	Submitted to U.P. Govt.	Namami Gange	-

Source: Data obtained from UP Jal Nigam and Desk Inventory of UPPCB.

**Analysis of gap generated in Sewage Treatment based on projection of Population for Year 2030 in the catchment of River Aami Basti to Sohgaura**

S. NO	CITY	POPULATION (AS PER CENSUS 2011)	ESTIMATED POPULATION 2030	WATER CONSUMPTION (MLD) (@135)	ESTIMATED SEWAGE GENERATION YEAR 2030 (MLD)	INSTALLED CAPACITY OF EXISTING STP (MLD)	PROPOSED STP CAPACITY (MLD)	GAP IN STP CAPACITY UTILIZATION BASED ON POPULATION YEAR 2030 (MLD)
1	Khalilabad	47,847	55,713	7.521	6.016	NIL	7	NIL
2	Maghar	19,181	20,188	2.73	2.19	NIL	5	NiL
	<b>Total</b>	<b>67028</b>	<b>75901</b>	<b>10.251</b>	<b>8.206</b>	<b>NIL</b>	<b>12</b>	<b>NIL</b>

There are 02 local bodies situated in the catchment of Polluted Stretch of River Aami. Estimated Sewer Generation on the basis of Census 2011 is 7.24 MLD. The proposed capacity of STPs is 12MLD. There is no gap in the treatment of Sewage Generated and STPs to be installed at Khalilabad and Maghar.

### 3.3 DETAILS OF WASTE MANAGEMENT

#### 3.3 (a) Municipal Solid Waste

There are 02 Towns located in the catchment area of River Aami from Basti to Gorakhpur approx. 16.5 TPD Solid Waste is generated in both the towns namely Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar and Nagar Panchyat, Maghar, Sant Kabir Nagar. Both the local bodies has been practicing door to door collection of MSW. The details of city wise municipal solid waste generation are given below:

S.No.	District	Waste generated (TPD)	Waste Collected (TPD)	Door to Door Collection)	Remarks
1	Khalilabad, Sant Kabir Nagar	12	12	Yes	As of now the MSW processing facility is not established /functional in the ULBs. Hence it is required to work on decentralized processing of waste till the WTE plants are established.
2	Maghar, Sant Kabir Nagar	4.5	4.5	Yes	
	<b>Total</b>	<b>16.5</b>	<b>16.5</b>	Yes	

**Source : Nagar Palika Parishad and Nagar Panchyat.**

### **Details of Dumping Site 500 Meters from the edge of the River**

There is no legacy waste dumping site within 500 meter of Aami river.

**Gap Analysis of Municipal Solid Waste Treatment based on Year 2030 Population in the catchment of River Aami.**

SR. NO.	DISTRICT	CITY / TOWN	POPULATION (AS PER CENSUS)	ESTIMATED POPULATION 2030	MSW GENERATION ESTIMATED	AVAILABLE PROCESSING FACILITY (TPD)	GAP (TPD)	PROPOSED PROCESSING FACILITY & TIMELINE
1	Sant Kabir Nagar	Khalilabad	47,847	55,713	13.148	NIL	13.148	<b>As per Appendix-8</b>
2	Sant Kabir Nagar	Maghar	19,121	20,188	4.764	NIL	4.764	
	<b>TOTAL</b>				<b>17.912</b>	<b>NIL</b>	<b>17.912</b>	

There are 02 Cities situated at the catchment of Polluted Stretch of River Aami. Estimated MSW Generation on the basis of Census 2030 is 17.912TPD. Any processing facilities is not available in both the Cities. Hence, gap of 17.912 TPD exists in the catchment area of polluted River Stretch. Proposed facilities and timeline as received from Urban Development Department is enclosed as **Appendix- 8**

### 3.3 (b) Bio-Medical Waste

In 02 local bodies located in the catchment of the stretch of river Aami there are 84 Health Care Facilities which generate 182.7Kg/Day of Bio-Medical Waste. All the Health Care Facilities have valid agreements with 01 Common Bio-Medical Waste Treatment Facilities situated in industrial area Khalilabad, Sant Kabir Nagar for collection, transportation and disposal of Bio-Medical Waste. The segregation of Bio-Medical Waste and disposal in the CBWTFs as per the provisions of Bio-Medical Waste Management Rules, 2016 is a major area of concern. The mixing of Bio-Medical Waste with Municipal Solid Waste is also observed which also needs to be addressed. The details of Bio-Medical Waste generated in the Cities/Towns and details of Common Bio-Medical Waste Treatment Facilities are given below:

S.No.	District	Total No. Of H.C.Fs	Bio Medical Waste generated (Kg/Day)	Bio Medical Waste Treated (Kg/Day)	No. Of H.C.Fs attached with CBWTF	No. Of H.C.Fs having captive treatment facility	Gap between waste generated & treatment capacity available (Kg/Day)	Remarks
1	Sant Kabir Nagar	84	182.7	182.7	84	NIL	NIL	<b>All the HCFs are Members of CBWTF</b>
	<b>Total</b>	<b>84</b>	<b>182.7</b>	<b>182.7</b>	<b>84</b>	<b>NIL</b>	<b>NIL</b>	

Source: Desk Inventory of UPPCB.

**Information Regarding HCF**

Sl. NO	Name & Add. of HCFs	Private/ Government	No. Of Beds	Quantity of Waste (kg/day)
1	2	3	4	5
1	Buddha Hospital & Paramedical Center, Khalilabad, Sant Kabir Nagar	Pvt.	100	25
2	Chandraraj Buddha Hospital, Bargo Khalilabad, Sant Kabir Nagar	Pvt.	12	3
3	Ayodhya Eye Hospital, Gost Mandi, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
4	Sant Kabir Eye Hospital, Purani Sabji Mandi, Gorakhpur Road, Sant Kabir Nagar	Pvt.	15	3.75
5	Siddhanath Hospital, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	10	2.5
6	Pioneer Polyclinic, Meet Mandi Road, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
7	Kumar Hospital, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	10	2.5
8	Jamuna Hospital, Khalilabad, Sant Kabir Nagar	Pvt.	9	2.25
9	Siddharth Arthopedic & Neurocare Clinic, Chhapariya Colony, khalilbad, Sant Kabir Nagar	Pvt.	10	2.5
10	Sanjeevani Hospital & Maternity center Home, Khalilabad, Sant Kabir Nagar	Pvt.	4	1
11	Abbasi Hospital & Maternity Center, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	20	5
12	Riya Hospital, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	10	2.5
13	Anand Medical Center, Near Samay Mata Mandir, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
14	Shikha Hospital & Medical Center Pvt. Ltd., Teacher Colony, Khalilabad, Sant Kabir Nagar	Pvt.	30	7.5
15	Jivan Rekha Hospital, Sarauli, Nedula Chauraha, Khalilbad, Sant kabir Nagar	Pvt.	20	5
16	Mamta Hospital, Meet Mandi Road, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
17	Ganesh Hospital, Moti Chauraha, Madya, Achakwapur, Khalilbad, Sant Kabir Nagar	Pvt.	10	2.5
18	Krishna Devi Hospital, Near Axix Bank, Teacher Colony, Khalilbad, Sant Kabir Nagar	Pvt.	2	0.5
19	J.K. Hospital, Banjariya East, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
20	Om Sai Hospital Maternity Center & Dental Care, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	10	2.5

21	Sundaram Health Center ( Sundram Sewa Sansthan), Mukhlispur Road, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
22	Maa Vaisnao Hospital, Near Soni Hotel, Gorakhpur Road, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
23	Priyansh Hospital & Maternity Center, Near Pani Ki Tanki, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
24	Jamuna Hospital, Near Agriculture Building, Khalilabad, Sant Kabir Nagar	Pvt.	9	2.25
25	Vivekanand Hospital, Mehdawal Road, Sant Kabir Nagar	Pvt.	6	1.5
26	Jansewa Chikitsalya, Roadways Chauraha, Khalilabad, Sant Kabir Nagar	Pvt.	3	0.75
27	Shri Radhey Krishna Hospital, Mehdawal Bai-pass, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
28	Sheetla Hospital, Near District Hospital, Khalilabad, Sant Kabir Nagar	Pvt.	5	1.25
29	Rajpati Hospital, Near Kubernath Mandir, Mehdawal, Sant Kabir Nagar	Pvt.	5	1.25
30	Kabir Hospital & Medical Center, Near IOC Gas, Godam, Mukhlispur Road, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
31	Siddhawai Hospital, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
32	New Sundaram Medical Center, D-33, UPSIDC, Industrial Area, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
33	Munmun Clinic & Maternity Home, Bangla Taal, Soni Hotel ke Purab, Khalilabad, Sant Kabir Nagar	Pvt.	10	2.5
34	Dhruv Netralaya & Chikitsalya, Baba Tameshwarnath Tiraha, Near Petrol Pump, Sant Kabir Nagar	Pvt.	10	2.5
35	Ideal Pathological Laboratory, Near Samay Mata Mandir, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
36	Jivan Medical Center, Moti Chauraha, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
37	Rafeeq Clinic, Baipass Chauraha, Sant kabir Nagar	Pvt.	–	0.5
38	Bhart Eye Care, Bardahiya Bazar, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
39	Bharat Pathalogy, In Front of CHC, Sant Kabir nagar	Pvt.	–	1
40	Sadbhavna Pathalogy, In Front of CHC, Sant Kabir nagar	Pvt.	–	1
41	Maa Durga Clinic, Behind Gramin Public School, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
42	C.P. Rai Clinic, Baghauri, Khalilabad, Sant kabir Nagar	Pvt.	–	0.5
43	Shreya Clinic, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5

44	Sagar Dental Clinic, Near Mehdawal Bus Stand, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
45	Dr. N.D. Pandey, Motinagar, Dr. ND Pandey Ki Gali, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
46	Archita Pathalogy, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
47	Maa Sharda Dental Clinic, Behind SBI, Block Building, Bank Chauraha, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
48	Star Dental Clinic, Jain Dharmshala, Teacher Colony Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
49	Perfect Smile Dental Clinic, Banjariya Road, Near State bank, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
50	Nandani Pathalogy, Bargo, District Hospital, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
51	Advance Diagnostic Lab, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
52	Roshan Seefa Khana, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
53	Ojas Chikitsa Kendra, Bardahiya Bazar, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
54	Max Physiotherapy & Pathalogy Center, Near in Front of CHC' Gate No-2, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
55	Navjeevan Pathalogy, Near District Hospital, Khalilabad, Sant Kabir Nagar	Pvt.	–	2.5
56	R.B.P. Homeopathic Chikitsalay, Bheli Mandi, Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
57	Life Line Pathalogy, Bheli Mandi, Nagar Palika Parishad, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
58	New Sewa Chikitsalya & Pathalogy, Chhapariya Colony, Railway Mall Godam, khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
59	Raimbo Children Clinic, Roadways Baipas, Tubewell Colony, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
60	Khanna Clinic, Gola Bazar, Main Road, Sant Kabir Nagar	Pvt.	–	0.5
61	Dr. Agarwal Netralya, Mehdwal Road, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
62	Divya Jaccha-Baccha Kendra, Mehdwal Road, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
63	Raj Clinic, Gorkhal Mukhlispur Road, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
64	Dr. Chaudhary ka Dawakhana, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
65	Vatsalya Clinic, Saraili, Mehdawal Road, Sant kabir Nagar	Pvt.	–	0.5
66	Chisthiya Clinic, Pakka Pokhra, Karmaini Road, Mehdawa, Sant Kabir Nagar	Pvt.	–	1

67	Radhey Govind Diagnostic Center, In Front CHC, Sugar Mill Road, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
68	BDC Diagnostic Center, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
69	Apolo Pathalogy & Digital X-Ray, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
70	Kabir Pathalogy, Purani Sabji Mandi, Gorakhpur Road, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
71	Skin & Cosmetic Clinic, Mehdawal Chauk, Khalilabad, Sant Kabir Nagar	Pvt.	–	0.5
72	Shah Clinic, Bardahiya Bazar, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
73	Ashtha Dental Clinic, Sugar Mill Raod, Khalilbad, Sant Kabir Nagar	Pvt.	–	0.5
74	Shri Ram Janki Dental Clinic, Sugar Mill Road, Khalilabad, Sant Kabir Nagar	Pvt.	–	1
75	Rekha Diagnostic Center, Near, District Hospital Gate, Khalilabad, Sant Kabir Nagar	Pvt.	–	1
76	Khalilabad Diagnotic Center, Sugar Mill Road, Khalilabad, Sant Kabir Nagar	Pvt.	–	1
77	Paith Kind Diagnostioc Pvt. Ltd. Shyam Bazar, Bardahiya Bazar, Khalilabad, Sant Kabir Nagar	Pvt.	–	1
78	Tilak Paithology & Digital X-Ray, Beside District Hospital, Khalilabad, Sant Kabir Nagar	Pvt.	–	1
79	Poona Clinic, Ansar Tola, Bai-Pass, Near TVS Agency, Khalilabad, Sant Kabir Nagar	Pvt.	–	1
80	R.S. Pathology Near District Hospital Road, Khalilabad, Sant Kabir Nagar	Pvt.	–	1.5
81	CHC, Khalilabad, Sant Kabir Nagr	Govt.	30	16.2
82	District Combined Hospital, Sant Kabir Nagar	Govt.	100	25
83	District T.B. Clinic, Sant Kabir Nagar	Govt.	–	0.5
84	Urban PHC, Maghar, Sant Kabir Nagar	Govt.	02	0.5
	Total	–	572	182.7

### Details of Bio-Medical Waste Treatment Facilities

S.N.	Name of the CBWTF operator connect No. & Address	Total No. Of HCFs Being Covered	Covered District	Treatment facility available			BMW Treatment capacity Kg/day	Number of Vehicles	Status of On Line Continuous Emission Monitoring System & Connectivity	Validity of issued Authorization
				Incinerator	Auto Clave	Shredder				
1	2	3	4	5	6	7	8	9	10	11
1	M/s Medical Pollution Control Committee, Industrial Area Khalilabad, Sant Kabir Nagar	745	Gorkhpur, Sant Kabir Nagar, Basti, Siddharthnagar, Maharajganj	100 kg/hr	25 kg/shift	100 kg/hr	3100	10 With GPS	Installed & Connected	31.05.2024

*Source: Desk Inventory of UPPCB*

### 3.3(c) Hazardous Waste

The total hazardous waste generation in the catchment of the polluted stretch from 07 industrial units is 192 Ton/Annum which is collected, treated and disposed by 01 Common Facilities located near Kanpur Dehat. The details of Hazardous Waste generated and the treatment facilities are given below:

S.No.	District	Hazardous Waste Generating Units	Hazardous Waste Generated (TPA)				Facility for Treatment & Disposal of Hazardous Waste	Gap b/w waste generated & treatment capacity (TPA)
			Incinerable	Landfillable	Recyclable	Total		
1	GIDA, Gorakhpur	04	-	192	-	192	The Incinerable & Landfillable Hazardous waste is disposed to authorized TSDFs U.P. Waste Management Project, Kanpur Dehat.	There is no Gap between generation & disposal of Hazardous Waste
	<b>Total</b>	<b>04</b>	<b>-</b>	<b>192</b>	<b>-</b>	<b>192</b>		

Source :Desk Inventory of UPPCB

### **3.3(d) E-Waste**

In the State, total 43 Common E- Waste Disposal Facilities are operational. Out of these, 10 units are collection center, 16 have the facility of collection & dismantling whereas remaining 17 are collection, dismantling and recycling centers. The cumulative capacity of these plants- 2,48,000/annum. The quantum of E-Waste generated in the State is approximately 86,000 TPA. Hence, there is no gap in the generation and treatment infrastructure for safe E-Waste handling as per the provisions of E-Waste Rules, 2016. The status report of E-Waste disposal facilities in the State is enclosed at **Appendix-6**.

#### 4. DETAILS OF INDUSTRIAL POLLUTION SOURCES

There are mainly 10 water polluting industries located in the catchment of the concerned stretch of Aami River **Appendix-** These industries have effluent treatment plants. Some Industries are of zero liquid discharge as per charter and some industries are discharging its effluent on land as per conditions imposed by UPPCB. Industrial discharge in the River is taking place through 03 drains. Out of 03 drains 01 drains is mixed drains which is carrying treated industrial effluent as well as untreated sewage. The industries are grossly polluting in nature which belong to Sugar, Distillery, Textile and other miscellaneous industries. The drain wise and sector wise distribution of industries and their GIS Mapping details are given in the Figures from 4.1 to 4.2.

## 4.1 DETAILS OF INDUSTRIAL UNITS

The drain wise and sector wise distribution of industries and their discharge & the details given in the tables below:

### Summary of Industrial Units

S N	District	Drain	Type of Industry							Total Effluent Discharge (MLD)
			* The Type of Industry may be changed as per local conditions							
			Sugar	Pulp & Paper	Distillery	Textile	Slaughter House	Others	Total	
1	Basti									
		Satnariya Nala	01	0	1	0	0	0	02	0
2	Sant Kabir Nagar									
		Dhamorahara Drain	0	02	0	0	0	0	02	0.6
4	Gorakhpur									
		Saryana Nala	0	0	0	02	0	06	08	03
<b>Total</b>			<b>01</b>	<b>02</b>	<b>01</b>	<b>02</b>	<b>0</b>	<b>06</b>	<b>12</b>	<b>3.6</b>

Source : Desk Inventory of UPPCB

## 4.2 GAP ANALYSIS OF INDUSTRIES SITUATED IN THE CATCHMENT OF RIVER AAMI

Presently polluted stretch of River Aami receives approximately 15.6 MLD treated industrial effluent. The industries situated in the catchment of the polluted river stretch utilize ground water needed for their processes. Total estimated water extraction by the industries is approximately 30 MLD against the discharge of 15.6 MLD by the industries. This indicates that about 48 percent of the treated effluent is recycled in the processes and rest accounts for the evaporation losses and consumption in the products.

Sector wise Gap analysis is given below: -

- I. **Sugar:-**There are 01 Sugar industries in the catchment of polluted river stretch. The detail gap analysis may be referred to in **Appendix-3A**. These gaps are to be fulfilled within 06 months. This will help in reducing the water consumption, improving the quality of treated effluent and reuse of water in irrigation.
- II. **Textile:** - There are 02 textile/yarn dyeing industries in the catchment of polluted river stretch. For reduction of water consumption & strengthening of Pollution control system as per charter prepared by CPCB, the action points with timeline are given in **Appendix-3C**.
- III. **Distillery:-** There are 01 distillery unit in the catchment of polluted river stretch. Although the distillery is maintaining zero liquid discharge (ZLD) but improvements are required with respect to establishment of slop boiler for incineration of spent wash /slop per

CPCB guidelines. Action points with time line are given in **Appendix-3E**.

- IV. Remaining 8 no. of industries are Paper and misc. nature of industry respectively. All these units are having adequate ETPs. These industries. effluent after proper treatment & regular monitoring is done by U.P. Pollution Control Board.

## 5. STATUS OF GROUND WATER

The Priority-III polluted stretch of Gomti River from Sitapur to Kaithi Ghazipur lies in Doab region of Ganga. The river flows through 06 districts i.e. Sitapur, Lucknow, Hardoi (Sandila), Barabanki, Sultanpur & Jaunpur. The status of Groundwater in these blocks is given below:

### River Gomti Stretch from Sitapur to Kaithi, Ghazipur Ground Water Status

S. N.	Name of District	Name of Block	Pre Monsoon / Post Monsoon water level (Meters)			Status of Exploitation
			15-May	15-Nov	16-Jan	
1	Sitapur	Mishrikh	6.35	6.3	6.5	Safe
		Sidhauli	8.1	6.9		Safe
		Pisawan	7.74	8.1	8.15	Safe
2	Hardoi (Sandila)	Ahrori	6.04		19.24	
		Kothawan		5.75		
		Pihani	5.25	3.75	4.45	
3	Lucknow	Gosaiganj	1.8	1.7	2.65	Safe
		Mal	11.12	12	12.55	Over Exploited
		Bakshi Ka talaab	13.15	13.85	13.95	Semi-critical
4	Barabanki	Trivediganj	7.19	5.58	3.9	Safe
		Sidhaur	4.16	4.66	8.65	Safe
		Jagdishpur	9.05	10.2		Safe
5	Sultanpur	Kadipur	9.5	10.07		Safe
		Bhadaiyan	11	5.85	12.44	Safe
		Jaisinghpur		1.74	2.38	Safe
		Kurebhar	4.38	4.14	3.59	Safe
		Kurwar	5.11	4.33		Safe
		Sultanpur	13.45	11.4	3.25	
6	Jaunpur	Badlapur	4.34	4.3		Critical
		Muftiganj		8.07	9.15	Semi-critical
		Jaunpur(Hasanpur)		5.49	6.06	
		Kerakat(Rampur)		6.81	7.97	Over Exploited

Pre Monsoon Data--2014 Source: [http://cgwb.gov.in/District\\_Profile/UP](http://cgwb.gov.in/District_Profile/UP)

**CHEMICALS ANALYSIS DATA OF SAMPLES COLLECTED FROM  
GROUND WATER MONITORING WELLS IN UTTAR PRADESH 2015 -2016**

**River Gomti, Stretch from Sitapur to Jaunpur**

District	Block	pH	E.C.µ S/cm at25°C	CO3	HCO3	Cl	F	NO3	SO4	TH	Ca	Mg	Na	K	SiO2	PO4	TDS	RSC	SAR
				mg/l															
Sitapur	Mishrikh	8.4	500	24	207	21	0	0.1	1.6	200	32	29	15	4.2	40	ND	325	0.3	0.5
	Sidhauri	7.9	1320	NIL	525	99	0	55	29	520	136	44	45	5.6	43	ND	858	1.7	0.9
	Pisawan	8	570	NIL	293	14	0	0.18	7.6	200	44	22	30	4.5	38	ND	371	0.9	0.9
Hardoi (Sandila)	Ahrori	7.9	590	NIL	317	7.1	0	0.09	7.1	230	52	24	20	6.7	44	ND	384	0.7	0.6
	Kothawan	8.3	380	NIL	171	14	1	0.13	15	160	32	19	5.8	4	36	ND	247	0.4	0.2
	Pihani	7.9	790	NIL	390	36	0	3	10	290	56	36	40	7.8	42	ND	514	0.7	1
Lucknow	Gosaiganj	8	614	NIL	354	21	0	1.9	19	230	36	34	48	2.8	33	ND	411	1.2	1.4
	Mal	8.1	472	NIL	268	14	1	0.2	18	220	20	41	17	4	35	ND	316	0	0.5
	BKT	8	591	NIL	354	21	0	0.3	6.3	210	32	32	51	4.8	39	ND	396	1.6	1.5
Barabank i	Trivediganj	8	412	NIL	244	14	0	0.4	3	150	4	34	32	4.4	33	ND	276	1	1.2
	Sidhaur	8	458	NIL	281	14	0	0.3	2.3	210	48	22	18	3.7	34	ND	307	0.4	0.5
	Jagdishpur	8.2	1030	NIL	439	78	0	0.6	36	360	48	58	58	6.6	33	ND	690	0	1.3
Sultanpu r	Kadipur	8.2	790	NIL	342	43	0	30	15	320	56	44	29	4.3	32	ND	529	0.8	0.7
	Bhadaiyan	8.3	600	NIL	293	21	1	6.2	17	270	52	34	6	3.5	30	ND	402	0.6	0.2
	Jaisinghpur	8.4	560	24	232	14	1	0.1	16	230	44	29	16	3.1	32	ND	375	0	0.5
	Kurebhar	8.3	0	NIL	329	7.1	1	0.2	3.4	230	36	34	24	3.1	30	ND	402	0.8	0.7
	Kurwar	8.3	800	NIL	415	14	0	5	5.3	310	36	54	31	3.9	35	ND	536	0.6	0.8
	Sultanpur	7.9	640	NIL	378	7.1	0	8.6	9.1	250	40	37	42	3.3	30	ND	429	1.2	1.2
Jaunpur	Badlapur (Jamnipur)	8.2	920	NIL	525	14	0	0	51	290	40	46	98	3.4	26	ND	598	2.9	2.5
	Muftiganj	8.8	640	48	232	25	0	3.2	26	250	8	56	42	3.5	29	ND	429	0.4	1.2

	Kerakat (Rampur)	9	1190	84	451	57	1	16	31	180	8	39	210	4.1	31	ND	797	6.6	6.8
Ghazipur	Saidpur	7.8	1222	NIL	464	199	1	4.8	16	250	48	55	196	3.6	30	ND	794	2.7	5.4
Varanasi	Cholapur	8.8	685	48	268	21	1	2	19	200	8	44	74	2.8	27	ND	459	2	2.3

Source:[http://cgwb.gov.in/District\\_Profile/UP](http://cgwb.gov.in/District_Profile/UP).

## 6. MONITORING OF POLLUTION SOURCES

### 6.1 MONITORING OF DRAINS

All the 06 drains will be monitored on quarterly basis and the sampling points are selected near the confluence of the drains with the Aami River. Care has been taken that there is no backwater effect of the river at the sampling point and no source of pollution joins the drain after the sampling point. The details of drain sampling points are given below:

#### Drain Sampling Points

S. No	District	Name of Drain	Monitoring Point	Latitude	Longitude	Monitoring Frequency	Controlling Regional Office
1	Basti	Satnariya Drin	Basti	27.06275000 N	82.78425000 E	Monthly	Basti
2	Sant Kabir Nagar	Sarahi Drain	Basti	26.77891667 N	83.09569444 E	Monthly	Basti
3	Sant Kabir Nagar	Dhaurahara Drain	Basti	26.72031N	83.105590E	Monthly	Basti
4	Sant Kabir Nagar	Maghar Nala	Basti	26.754001N	83.136691E	Monthly	Basti
5	Sant Kabir Nagar	Maghar Nala, Rail Bridge	Basti	26.750255N	83.139429E	Monthly	Basti
6	Gorakhpur	Sarya Drian	Gorakhpur	26.718722N	83.21747E	Monthly	Gorakhpur

## 6.2 MONITORING OF RIVER

The priority-III polluted stretch of river Aami will be monitored at 07 places so as to ascertain adverse effect of pollution by various sources in the river. The details of sampling points are given below:

### River Sampling Points

S.No.	District	Monitoring Point			Monitoring Frequency	Controlling Regional Office
		Place	Latitude	Longitude		
1	Basti	Aami River at Bhatpurwa Road Bridge	27.06322222	82.7935833	Monthly	Basti
2		Aami River Basti-Bansi Road Bridge, Rudhauri	27.04019444	82.81275000	Monthly	Basti
3	Sant Kabir Nagar	Aami River, Khalilabad, Mehdawal Road Bridge, Balusashan	27.84594444	83.07269444	Monthly	Basti
4		Aami River N.H. 28, Road Bridge, Khalilabad	26.75827778	83.14208333	Monthly	Basti
5		Aami River, Railway Bridge, Maghar, Khalilabad	26.75122222	83.13877778	Monthly	Basti
6	Gorakhpur	Aami River, Vill-Bharsarh Road Bridge, Sahjanwa	26.71762	83.21609	Monthly	Gorakhpur
7		Aami River, Road Bridge, Chhatai, Khajani	26.69582	83.26015	Monthly	Gorakhpur

The monitoring data for the last three years is available at **Appendix-**

### **6.3 MONITORING OF WATER POLLUTING INDUSTRIES**

All the water polluting industries will be monitored regularly by UPPCB. GPIs will be monitored quarterly and other industries will be monitored randomly. Third Party Institutions shall also be entrusted with the responsibility of comprehensive monitoring by CPCB and NMCG.

### **6.4 ESTABLISHMENT OF GOMTI POLLUTION CONTROL ROOM**

A Control Room for monitoring and centralized reporting of various pollution sources shall be established in Gorakhpur with appropriate infrastructure and human resource. This control room will be under overall supervision of UPPCB.

## 7. POLLUTED RIVER STRETCH REJUVENATION ACTION PLAN

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
<b>A. SEWAGE MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Estimation of total sewage generation from City/Towns where sewage treatment facility does not exist and preparation of DPR for treatment of sewage.	02 Months	U.P. Jal Nigam & Concerned ULBs	
2	Measurement of flow & load of all the drains contributing pollution load in River Aami.	02 Months	U.P. Jal Nigam & Concerned ULBs	
3	Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them.	03 Months	Concerned ULBs	The ULBs will ensure compliance in the prescribed time line as informed by Urban Development Department.
4	Untapped drains to be provided with modular treatment facilities/ In-Situ bio-remediation or Phytoid-SWAB (CSIR-NEERI) based treatment.	06 Months	U.P. Jal Nigam & Concerned ULBs	The ULBs/Urban Development Department will ensure compliance in the prescribed time line as informed by Urban Development Department.
5	Proposed STP	July, 2020	U.P. Jal Nigam/ Govt. working Agencies	Timeline as informed by Urban Development Department, Govt. of U.P.
6	Formulation of Action Plan for long term use of treated water discharged from	03 Months	U.P. Jal Nigam, Irrigation &	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	STPs.		Concerned ULBs in consultation with UPPCB/CPCB	
7	Installation of Web Cams & OCEEMS in STPs	03 Month	U.P. Jal Nigam/ Operating Govt. Agencies	
8	Formulation of Action Plan for income generation of STPs including installation of Solar Power Plants, Energy Plantation & sale of sludge and treated water, bio-composting etc.	03 Months	U.P. Jal Nigam & ULBs	
9	Obtaining Consent to Operate/Establish and Hazardous Authorization from UPPCB	02 Months	U.P. Jal Nigam/ Operating Govt. Agencies	
10	Preparation of DPR for channelization including diversion of sewage generated from household / township / villages to sewer lines and interception of all drains (excluding drains carrying industrial wastewater) for ensuring proper treatment through upcoming STPs.	Within 3 Months	Jal Nigam / Nagar Nigam, Concerned Districts	
11	Septage Management in the areas where sewerage network does not exist	Within 6 Months	ULBs/Jal Nigam	The ULBs will ensure compliance in the prescribed time line as informed by Urban Development Department.

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
<b>B. Long Term Action Point</b>				
1	Laying of Sewerage Network & Connection of households to the sewer line in order to utilize the installed capacity of existing STPs	24Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	
2	Establishment of Sewage Treatment Plants of adequate capacity	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	Detailed plan along with details of status of DPR, source of funding etc. Is given in para-3.2 as informed by Urban Development Department, U.P.
3	Tapping & diversion of the drains having high sewage load to STPs to be constructed on I&D model	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	Detailed plan along with details of status of DPR, source of funding etc. Is given in para-3.2 as informed by Urban Development Department, U.P.
4	Infrastructure Development in Irrigation/Horticulture/ Sprinkling/Industrial use etc. And ensuring use of treated water	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	Detailed plan along with details of status of DPR, source of funding etc. Is given in para-3.2 as informed by Urban Development Department, U.P.
5	Installation of Solar Power Plant & Energy Plantations in the vacant land of STPs	12 Months from sanction of DPR	U.P. Jal Nigam/ Operating Govt. Agencies	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
6	Installation of supplementary/tertiary treatment system in existing STPs which are not able to achieve discharge norms in the present system	12 Months from sanction of DPR	U.P. Jal Nigam & Concerned ULBs	
7	Treatment of waste water in Rural areas flowing into the river by Bio-remediation/Phyto-remediation/Oxidation Pond etc.	12 Months	Gram Panchayat, Panchayati Raj, Rural Development Departments, Rashtriya Swachta Mission-Gramin	The financial resources may be arranged from MNREGA/Swachh Bharat Mission – Gramin
8	Ensuring ODF in all the villages situated along the river	12 Months	Gram Panchayat, Panchayati Raj, Rural Development Departments, Rashtriya Swachta Mission-Gramin	
<b>C. INDUSTRIAL WASTE MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Re-inventorisation of Water Polluting Industries in the catchment area of the drains and their status with respect to consent, installation of ETP, adequacy of ETP and final discharge point	03 Months	UPPCB, Department of Industries	
2	Monitoring of water polluting industries and ensuring closure of industries which	Quarterly	UPPCB & CPCB	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	are operating without consent or non-compliant			
3	Installation of OCEEMS, Flow Meter & Web Cams in large and medium category of GPIs with connectivity to the server of CPCB and UPPCB	03 Months	UPPCB	
4	Closure and legal action against the illegal water polluting industries operating in non-confirming /residential areas	Regular activity	District Level Inter-Departmental Enforcement Committee having representatives of Administration, Police, UPPCB, ULBs, Development Authority, Power Corporation, Department of Industries etc.	
5	In Sugar industries for reducing the water consumption, improving the quality of treated effluent and reuse of water in irrigation	06 months	UPPCB/CPCB/ Industry department	
<b>(b) Long Term Action Point</b>				
1	Adoption of cleaner technologies by water polluting industrial sectors having	24 Months	UPPCB, CPCB & Department of	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	major impact on water quality of the river. For eg. – Electroplating, Dyeing, Pulp & Paper industries etc.		Industries	
2	Imposing stringent norms in Distillery, Pulp & Paper, and Slaughter House.	24 Months	Departments of Environment, Industries, Excise &UPPCB	
3	Reducing abstraction of ground water by reuse/recycle of treated effluent by installation of additional treatment facilities & process improvement	12 Months	CGWA, CPCB, Department of Industries & UPPCB	
4	Use of treated effluent from CETPs for industrial and irrigation purposes	12 Months	Department of Industries, SPVs, Operating Agencies, UPPCB & CPCB	
5	Actions related to improvement of ETPs and reduction of use of ground water by the industries as per the prescriptions given in Appendices 3A, 3B, 3C, 3D & 3E.	6 to 24 Months	Department of Industries, UPPCB & CPCB	

#### **D. SOLID WASTE & FLOOD PRONE ZONE MANAGEMENT**

##### **(a) Short Term Action Point**

1	Strictly ensuring prohibition of dumping of solid & other waste within 500 Meters of the banks of the river	Immediate	ULBs, Gram Panchayat Development	
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S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
			Authorities & Urban Development Department	
2	Collection & Segregation of Solid Waste as per the provision of SWM Rules, 2016	Immediate	ULBs, Gram Panchayat Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-8)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
3	Disposal of Recyclable waste through registered recyclers	Immediate	ULBs, Gram Panchayat, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-8)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
4	Compliance of SWM Rules, 2016 by bulk generators (onsite bio-composting, disposal of recyclable waste through registered recyclers)	02 Months	ULBs, Development Authorities, Railways, Transport Corporation, Mandi Parishad, Cantonment Board, Educational Institution, RWAs & Urban Development Department etc.	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-8)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
5	Upgradation & operation of existing non-operational & non-complying Solid Waste Treatment Facilities as per prescribed norms	06 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-8)</b> as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
6	Compliance of C&D Waste Management Rules, 2016 & prohibition of illegal dumping of C&D waste	Immediate	ULBs, Development Authorities & Urban Development Department	
7	Installation of Web Cams in Solid Waste & C&D Waste Treatment & Disposal Facilities with open access to UPPCB & CPCB server connectivity	03 Month of functioning of the processing plants	ULBs, Development Authorities & Urban Development Department	
8	Formulation of Action Plan for income generation of Solid Waste & C&D Waste Treatment & Disposal Facilities including installation of Solar Power Plants, Energy Plantation & sale of RDF, compost etc.	02 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-8)</b> as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
9	Obtaining Consent to Operate/Establish and Authorization from UPPCB	02 Months	ULBs, Development Authorities, Urban Development Department & UPPCB & CPCB	
10	Ensuring idol immersion in environmental friendly manner by creation of artificial ponds with proper lining & proper disposal of sludge & effluent	Immediate	ULBs, Development Authorities & District Administration	
11	Ensure strict prohibition of encroachments & illegal constructions in FPZ	06 Months	Development Authorities, District Administration & Police and Irrigation Department	
12	Removal of solid waste & algal growth disposed in the river by use of low cost innovative techniques with involvement of local community.	06 Months	ULBs, Gram Panchayat, Development Authorities & Irrigation Department	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
<b>(b) Long Term Action Point</b>				
1	Establishment of new solid waste & C&D treatment & disposal facilities against the gap with respect to generation of solid waste	24 Months after sanction of DPR	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-8)</b> as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
2	Treatment & disposal of legacy waste dumped within 500 meters of the bank of the River	24 Months after sanction of DPR	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-8)</b> as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
3	Construction of electric/fuel efficient crematorium to stop disposal of unburnt/ semi burnt corpses in the river	24 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
4	Demarcation & notification of FPZ by introducing Pillars at suitable locations in river flood plain and preventing encroachment in river bed.	24 Months	Irrigation Department	Only after sanctioning of DPR & its other formalities including sanctioning of budget under NMCG.

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
5	Removal of illegal encroachments & constructions from FPZ	24 Months	District Level Committee headed by D.M, with representative from concerned Departments.	
<b>D. ECOLOGICAL FLOW &amp; GROUND WATER MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Identification, inventorization & geo referencing of wetlands/water bodies including their zone of influence & catchment areas within 2 Km of the river	03 Months	State Wetland Authority, Forest & Wildlife, Panchayati Raj, Revenue Department, ULBs & Gram Panchayats	
2	Identification & geo referencing of vacant lands in the vicinity of the river for development of bio-diversity parks & forest areas	03 Months	Forest & Wildlife, Panchayati Raj, Revenue Department, ULBs & Gram Panchayats	
3	Identification of external water sources like canal escapes etc. for addition of water in the river for dilution purposes	03 Months	Irrigation Department	Only surplus water after fulfilling irrigation demands will be provided to nearby rivers through canal escapes.

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
4	Prohibition of illegal mining & diversion of river stream	Regular Activity	District Administration, Mining Department & Irrigation Department	Only diversion of river stream would be reported to District authorities in non monsoon period by concerned district irrigation officers.
5	Ensuring rain water harvesting/recharging structures/Rainier wells on river banks & construction of water harvesting structures	Regular Activity	Mining, Rural Development & Minor Irrigation Department	Possible funding may be arranged through MNREGA and Central assistance by NMCG.
<b>(b) Long Term Action Point</b>				
1	Notification of E-flow of the River	12 Months	Irrigation Department, MoWR (CWC)	Notification of E-flow of the River will be done by MOWR (CWC).
2	Ecological restoration of the wetlands including plantation in the catchment area & development of community based eco-tourism in the wetland	24 Months from sanction of DPR	State Wetland Authority, Forest & Wildlife Department Tourism Department & National Mission for Clean Ganga	Possible source of funding may be from Centrally Sponsored Scheme for Development of Wetlands and from NMCG.
3	Development of Bio-diversity Parks and Riverine Forests by plantation & re-generation of native species of trees, grasses & herbs and establishment of new nurseries	24 Months from sanction of DPR	State Wetland Authority, Forest & Wildlife Department & National Mission for Clean Ganga	Funds may be arranged from NMCG.

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
4	Adoption of good irrigation/Agriculture practices, suitable crop selection, use of sprinkler/drip irrigation to minimize the water consumption through awareness & support to the farmers	12 Months	Agriculture Department, Rural Development, Minor Irrigation Department	
5	Removal of encroachment from wetlands, ponds & their restoration	24 Months	Revenue, Administration, Panchayati Raj Department, ULBs & Gram Panchayats	
6	Allowing flow of fresh surplus water source like canal for restoration of E-flow	18 Months	Irrigation Department	Only surplus water after fulfilling irrigation demands will be provided to nearby rivers through canal escapes.
7	Recharge of dry Wells and Ponds	24 Months	Panchayati Raj Department, ULBs & Gram Panchayats	

#### E. MONITORING & EVALUATION

##### (a) Short Term Action Point

1	Daily Monitoring of river water quality at the upstream & downstream of cities & meeting points of the major drains	Regular Activity	UPPCB, District Ganga Committee/ District Environment Committee	
2	Weekly monitoring of drains, STPs	Regular Activity	UPPCB, District Ganga Committee/	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
			District Environment Committee	
3	Monitoring of water polluting industries	Quarterly	UPPCB, District Ganga Committee/ District Environment Committee	
4	Monitoring of ground water quality within 500 meters of the rivers & drains	Quarterly	UPPCB, CGWA, CPCB & District Ganga Committee/ District Environment Committee	
5	Pre-monsoon & post-monsoon monitoring of ground water level	Regular Activity	CGWA & Directorate of Ground Water	
6	Measurement of River flow as per the protocol	Regular	Irrigation Department & District Ganga Committee/ District Environment Committee	Annual flow discharge data of river.
7	Project formulation & funding including recurring expenses for employment of JRFs/Monitoring Assistants/Field Assistants, purchase of kits & equipments, vehicle on rental basis,	02 Months	UPPCB, District Ganga Committee/ District Environment Committee, SMCG & NMCG	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	development of Web Portal & establishment of Control Room, purchase of desktop computers, printers/ LED Monitor etc.			
8	Development of Web Portal for reporting & centralized monitoring of water quality of the river & drains and action points with access to all concern stakeholders departments/agencies responsible for implementation of the action plan	Regular	UPPCB, NMCG & CPCB	
9	Establishment of Regional Control Rooms at District/ Division Level for monitoring & uploading of data related to monitoring of water quality & compliance of action points with its integration to the State Level Control Room	04 Months	UPPCB, District Ganga Committee/ District Environment Committee	

# APPENDICES

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## APPENDIX-1

### Pollution Source Mapping of River Aami from Rudhauri, Basti to Sohgaora, Gorakhpur

S.NO	District	Name of Drain	Meeting Point of Drain		Domestic/Industrial/Mixed	Tapped/Untapped/Partially Tapped	Industries		Sewage Discharge (MLD)		Total	Status of Barmesh	Percent overflow
			Latitude	Longitude			Number	Treated Effluent (MLD)	Treated	Untreated			
1	Basti	Satnariya Drin	27.06275000 N	82.78425000 E	Industrial	-	02	0	0	0	0	No	0
2	Sant Kabir Nagar	Sarahi Drain	26.77891667 N	83.09569444 E	Domestic	Untapped	0	0	0	07	07	No	0
3	Sant Kabir Nagar	Dhaurahara Drain	26.72031N	83.105590E	Industrial	-	02	0.6	0	0	0	No	0
4	Sant Kabir Nagar	Maghar Nala	26.754001N	83.136691E	Domestic	Untapped	0	0	0	02	02	No	0
5	Sant Kabir Nagar	Maghar Nala, Rail Bridge	26.750255N	83.139429E	Domestic	Untapped	0	0	0	03	03	No	0
6	Gorakhpur	Sarya Drian	26.718722N	83.21747E	Mixed	Untapped	08	03	0	12	15	No	0
	<b>Total</b>						<b>12</b>	<b>3.6</b>	<b>0</b>	<b>24</b>	<b>24</b>	-	0

\* Drains originating from Gorakhpur Industrial Development Authority (GIDA) meets natural drains know as sarya drain which meets river Aami. This drains is a mixed drain and it carries treated effluent from major 08 water polluting industries, several micro industries and untreated domestic effluent from industries situated in GIDA.

## Appendix-2

### Details of Cities & Towns

S.No.	District	Name of City/ Town	Type of ULB	Population (Lakh) Census - 2011	Estimated Population (Lakh) Year - 2019
1	Sant Kabir Nagr	Khalilabad	Nagar Palika Parishad, Khalilabad	47,847	50,747
2	Sant Kabir Nagar	Khalilabad	Nagar Panchyat, Maghar	19,181	19,552
	<b>Total</b>			<b>67028</b>	<b>70299</b>

### Appendix-3 Details of Industries

S. N.	District	Name and Address	Location		Type	Treatment Mechanism (ETP/CETP)	Effluent Discharge (KLD)	Effluent Discharge Drain	Compliance Status
			Latitude (N)	Longitude (E)					
1	Gorakhpur	Tripurari Lubricant Pvt. Ltd., A-2/22, Sector-15, GIDA, Gorakhpur	26.744883	83.231455	Refined Lubricating Oil	ETP	01	River Aami	Yes
2	Gorakhpur	Ambey Processer, FL-2, Sector-13, GIDA, Gorakhpur	26.745452	83.235603	Cloth Dying	ETP	300	River Aami	Yes
3	Gorakhpur	Bathwal Udyog Pvt. Ltd., FL-3, Sector-13, GIDA, Gorakhpur	26.745001	83.235471	Cloth Dying	ETP	200	River Aami	Yes
4	Gorakhpur	Burnet Pharmaceutical Pvt. Ltd., AL-1, Sector-13 GIDA, Gorakhpur	26.749048	83.236466	Oral Syrup	ETP	2.5	River Aami	Yes
5	Gorakhpur	Azam Rubber Products Ltd., AL-9, Sector-13, GIDA, Gorakhpur	26.736403	83.244031	Hawai Chappal, Shoes & Slippers	ETP	140	River Aami	Yes
6	Gorakhpur	Crazy Snack Pvt. Ltd., BL-2, Sector- 13, GIDA, Gorakhpur	26.745862	83.239312	Bread	ETP	03	River Aami	Yes
7	Gorakhpur	Faithful Commercial Ltd., FL-4, Sector-13, GIDA, Gorkhpur	26.744561	83.237506	Solvent Extracted Oil	ETP	25	River Aami	Yes
8	Gorakhpur	S.P. Chemical Works, D-1/4A, Sector- 13, GIDA, Gorakhpur	26.743567	83.238941	Lubricating Oil	ETP	01	River Aami	Yes

9	Sant Kabir Nagar	Raina Paper Board Industry Unit-I, Po-Deegha, Khalilabad, Sant Kabir Nagar	26.759972	83.104016	Media Craft Paper	ETP	ZLD	and Rest being use in ferti irrigation Treated Effluent	
10	Sant Kabir Nagar	Raina Paper Board Industry Unit-II, Po-Deegha, Khalilabad, Sant Kabir Nagar	26.759257	83.05747	Writing Printing Paper	ETP	600	River Aami	Yes
11	Basti	Bajaj Hindusthan Ltd. (Sugar Unit) Athdama, Rudhauri	27.056735	82.786004	Sugar	ETP	420	Treted Effluent being used in process & Rest is being fertili irrigation	Yes
12	Basti	Bajaj Hindusthan Ltd. (Distillary Unit) Athdama, Rudhauri	27.061362	82.784811	R.S./ E.N.A.	ETP	ZLD	-	Unit line Closed

## Appendix 3 A

### GAP Analysis of Industries Situated in the Polluted Stretch of River Aami

Sl. No.	District	Name of Industry	Sector	Effluent Discharge (KLD)	Details of ETP	Gap Analysis	Remark
1	2	3	4	5	6	7	8
1	Gorakhpur	Tripurari Lubricant Pvt. Ltd., A-2/22, Sector-15, GIDA, Gorakhpur	Refined Lubricating Oil	900	Oil & Greas Tank, Primary Setling Tank, Aeration Tank, Secondary Setling Tank, SDB, Sand & Carbon Filter	No Gap	
2	Gorakhpur	Ambey Processer, FL-2, Sector-13, GIDA, Gorakhpur	Cloth Dying	1000	Oil & Greas Tank, Saparator Tank, Equalisation Tank, Chemical Mixing Tank, Setling Tank, Primary Clarifire, Aeration Tank, Secondary Clarifire, Sand Filter, Activated Corban Filter SDB.	Water Consumption to be reduse and charter of CPCB to be follow as per appendix 3C	
3	Gorakhpur	Bathwal Udyog Pvt. Ltd., FL-3, Sector-13, GIDA, Gorakhpur	Cloth Dying	60	Bar Screen, Oil Grease Trap ,Chemical Dosing Tank, Equalization Tank, Sedimentation Tank, aeration Tank, Settling Tank, Sludge Drying Bed	Water Consumption to be reduse and charter of CPCB to be follow as per appendix 3C	
4	Gorakhpur	Burnet Pharmaceutical Pvt. Ltd., AL-1, Sector-13 GIDA, Gorakhpur	Oral Syrup	500	Bar Screen, Chemical Dozing Tank, Aeration Tank, Sludge Drying Bed.	No Gap	

5	Gorakhpur	Azam Rubber Products Ltd., AL-9, Sector-13, GIDA, Gorakhpur	Hawai Chappal, Shoes & Slippers	ZLD	Collection Tank, Equalisation Tank, Setling Tank,	No Gap	
6	Gorakhpur	Crazy Snack Pvt. Ltd., BL-2, Sector- 13, GIDA, Gorakhpur	Bread	ZLD	Br Screening Oil & Grease Skimer, Equalisation Tank, Primary Tube Setler, Aeration Tank, Multi Grade Filter, Activited Carbon Filter	No Gap	
7	Gorakhpur	Faithful Commercial Ltd., FL-4, Sector- 13, GIDA, Gorkhpur	Solvent Extracted Oil	ZLD	Bar Screen, Oil Grease Trap ,Primary Setling Tank, Aeration Tank, Sludge Drying Bed	No Gap	
8	Gorakhpur	S.P. Chemical Works, D-1/4A, Sector- 13, GIDA, Gorakhpur	Lubricating Oil	65	Bar Screening, Oil & Grease trapped, Equalisation Tank, Primary Tube Setler, Aeration Tank, Activited Carbon Filter	No Gap	
9	Sant Kabir Nagar	Raina Paper Board Industry Unit-I, Po-Deegha, Khalilabad, Sant Kabir Nagar	Media Craft Paper	ZLD	Bar Screen , Oil Skimmer, Chemical Doding, Equilisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Multi Grate Sand & Carbon Filter Sladuge, SDB.	Water Consumption to be reduced & charter of CPCB to be followed.	

10	Sant Kabir Nagar	Raina Paper Board Industry Unit-II, Po-Deegha, Khalilabad, Sant Kabir Nagar	Writing Printing Paper	600	Bar Screen , Oil Skimmer, Chemical Doging, Equilisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Multi Grate Sand & Carbon Filter Sladuge, SDB.	No gap Water Consumption to be reduced & charter of CPCB to be followed	
11	Basti	Bajaj Hindusthan Ltd. (Sugar Unit) Athdama, Rudhauri	Sugar	420	Bar Screen , Oil Skimmer, Chemical Doging, Equilisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Multi Grate Sand & Carbon Filter Sladuge, SDB.	Water Consumption to be reduced & charter of CPCB to be followed	
12	Basti	Bajaj Hindusthan Ltd. (Distillary Unit) Athdama, Rudhauri	R.S./ E.N.A.	ZLD	Bio Methanisation, MEE, Bio Composting	Phase Wise Reduction of fress water consumption and to achieve ZLD as per appendix- 3E	

## Appendix 3B

### Action Points for Slaughter Houses

The Slaughter House unit shall take time bound steps as detailed below for fulfilling the existing gaps with reference to discharge of effluent, effluent treatment infrastructure, solid waste management as per the norms laid down in CPCB document :

1. The Water consumption and effluent discharge in the unit shall be restricted as below :

Animal	Specific water consumption M <sup>3</sup> /TLWK			Timeline
	Large Category	Medium Category	Small Category	
	(More than 200 Large animal i.e. bovines per day, or more than 1000 small animal i.e. goat and sheep per day)	(50 to 200 Large animal i.e. bovines per day, or 300 to 1000 small animal i.e. goat and sheep per day)	(Less than 50 Large animal i.e. bovines per day, or less than 300 small animal i.e. goat and sheep per day)	
Buffalo	0.30 - 0.50	0.1-0.25	0.05 - 0.25	06 Months
Goat/Sheep	1.2 - 2.1	1.3 - 2.5	0.8 - 1.7	06 Months

\* M<sup>3</sup>/TLWK - Cubic Meter per Ton of Live Weight killed.

**Source :** Central Pollution Control Board vide its office memorandum dated 23-11-2017 has released a document titled "Revised Comprehensive Industry Document on Slaughter Houses".

2. Action Points with timeline for upgrading the Effluent Treatment Plant and its monitoring-

<b>S.No.</b>	<b>Action Point</b>	<b>Timeline</b>
1	ETP must be provided with tertiary treatment units like Pressure Sand Filter, Activated Carbon Filter, Ultra Filtration	03 Months
2	Calibration of Online Continuous Effluent Monitoring System as per CPCB protocol and ensure continuous linkage with server of CPCB	01 Month
3	Installation of High Definition Open to Network Web Camera on ETP, final outlet point, final discharge point and its connectivity with UPPCB.	01 Month.
4	Ensuring Zero Liquid Discharge by way of recycling of treated effluent in process or utilization of effluent treated as per norms for irrigation on land.	06 Months.
5	Installation of sealed flow metering system along with running hours at the inlet water source (Bore well or other sources) and outlet and at inlet pipeline of different process operation and outlet of ETP	30-06-2019
6	Colour Coding of Pipelines carrying recycled process water and fresh process water.	06 Months
7	Segregation of salt bearing stream and installation of salt recovery/evaporation system.	06 Months

## Appendix 3C

### Action Points for Textile Industries

Central Pollution Control Board has released a document titled "Charter for Water Recycling & Pollution Prevention for Textile Industry". The Textile unit shall take time bound steps as detailed below for fulfilling the existing gaps with reference to water consumption & discharge of effluent, effluent treatment infrastructure etc. as below with timeline for upgrading the Effluent Treatment Plant –

S.No.	Objective	Action Point	Timeline
1.	Water Consumption	Reduce Water consumption by 20 % per kg of product by Completing upgradation of ETP.	31-12-2019
2.	Water Consumption	Reduce Water consumption by 15 % in addition to last year's 20 % per kg of product by Completing upgradation of ETP by adding tertiary treatment units.	31-12-2020
3.	Water Consumption	Confirmation of 30 % Water Recycle against total input (in other words water consumption per kg should be reduced by 30 % minimum)	Beyond 31-12-2020
4.	Monitoring of Water Consumption	Installation of sealed flow meter and running hours meter on bore wells and inlet pipeline of different process section.	01 Month
5.	Colour coding of pipe lines	Colour coding of pipe lines carrying recycled process water and fresh process water	06 Months
6.	Self-Assessment of ETP adequacy	Preparation of ETP adequacy assessment report	01 Month
7.	Installation of sealed flow	Installation of sealed flow metering system along with	30-06-2019

	metering system	running hours at the inlet water source (Bore well or other sources) and outlet and at inlet pipeline of different process operation and outlet of ETP	
<b>8.</b>	Setting up of Online Effluent Monitoring System	Setting up of Online Effluent Monitoring System to Monitor final outlet discharge, units connected to CETPs can have Common System Installed at CETP discharge	06 Months

## Appendix 3 D

### Action Points for Electroplating Industries

The Electroplating units shall take time bound steps as detailed below for fulfilling the existing gaps with reference to adoption of cleaner technology, water consumption & discharge of effluent-

S.N	Gap	Action Point	Timeline
1	Adoption of cleaner technology	Usage of cyanide in electroplating should be phased out. Non-Cyanide Plating Processes should be adopted	31-12-2019
2	Proper segregation of metal bearing effluent streams	Different metal bearing streams shall be segregated by way of dedicated marked lines, to segregate waste water according to its characteristics	03 Months
3	Reducing Water Consumption	Unit shall achieve the target of 50% reduction in water consumption by adopting cleaner technologies such as: Introduction of rinse water recirculation, Using of counter current rinsing systems; recycling rinse waters to the process after treatment. Regenerate and recycle process baths and rinse water after treatment.	31-12-2019
4	Reducing waste water discharge	Unit shall reduce the waste water discharge up to 50% by adopting cleaner technologies such as: Controlling spillages by using troughs between tanks and avoiding haphazard rinsing and washing	31-12-2019

		Recycling of treated effluent for rinsing.	
5	Upgradation of ETP	ETP must be provided with tertiary treatment units like Reverse Osmosis Plant, Ultra Filtration, Ion Exchange etc, to enable recycling of treated effluent in the process	31-12-2019
6	Self-Assessment of ETP adequacy	Preparation of ETP adequacy assessment report	01 Month
7	Installation of sealed flow metering system	Installation of sealed flow metering system along with running hours at the inlet water source (Bore well or other sources) and outlet and at inlet pipeline of different process operation and outlet of ETP.	03 Months
8	Setting up of Online Effluent Monitoring System	Setting up of Online Effluent Monitoring System to Monitor final outlet discharge.	06 Months
9	Colour Coding of Pipelines	Colour Coding of Pipelines carrying recycled process water and fresh process water.	06 Months
10	Monitoring of pollution control systems	Installation of High Definition Open to Network Web Camera on ETP, final outlet point, final discharge point and its connectivity with UPPCB.	01 Month.

### Appendix 3E

#### Action Plan for Distillery & Fermentation Sector for Mitigation of Pollution to ensure ZLD

Sr.no.	GAP	Action Point	Time Line
1.	MEE condensate management	MEE condensate management through CPU	12 Months
2.	Mass flow meter at inlet & outlet	Installation of online mass flow meter at inlet & outlet of MEE & its connectivity to CPCB/UPPCB server	03 Months
3.	Restriction on spent wash storage capacity	Restriction on Spent wash storage capacity I. 01 Month in case of Bio-compost II. 01 Week in case of incineration	03 Months
4.	Installation of web cam	Installation of PTZ cameras and connectivity	01 Month
5.	Ground water monitoring	Setting up of adequate no. of bore well and peizometers around the bio compost area for Ground water monitoring.	03 Months
6.	OCEMS on boilers.	Installation of OCEMS on boilers.	06 Months
7.	Implementation of notification regarding compost	Registration from Agriculture Department as per notification of compost & sale of bio-compost in bag packing	Immediate
8.	Safe storage of Molasses	Safe storage of Molasses as per CPCB guidelines.	Immediate

## Appendix-4

### Details of Gram Panchayats & Revenue Villages on the banks of River

#### VILLAGE SITUATED ALONG THE RIVER GOMTI RIVER LEFT BANK

#### VILLAGE SITUATED ALONG THE RIVER GOMTI LEFT BANK

SR NO	DISTRICT	NAME OF VILLAGE / REVENUE VILL	LAT	LONG	DECADAL POPULATION (2011)	GROWTH RATE (%)	ESTIMATED POPULATION (2019)	SEWAGE GENERATION (MLD)	ESTIMATED SOLID WASTE (Kg/day)
1	Sitapur	Bhagvanpur Grant,	27°44'12.0"N	80°26'49.3"E	4,383	23.88	5,220	0.564	1305.08
2		Maholi	27°39'27.5"N	80°28'25.0"E	1,151	23.88	1,371	0.148	342.722
3		Misrikh-cum-Neemsar	27°20'59.1"N	80°29'04.3"E	1,135	23.88	1,352	0.146	337.958
4	Hardoi	Newada Lochan	27°18'48.7"N	80°29'45.7"E	3005	20.44	3,496	0.378	874.094
5		Kakarghata	27°16'04.6"N	80°36'00.9"E	2700	20.44	3,142	0.339	785.376
6		Kunwarpur	27°15'56.2"N	80°37'29.7"E	1,094	20.44	1,273	0.137	318.223
7		Dharawa	27°09'29.4"N	80°49'28.2"E	1,960	20.44	2,280	0.246	570.125
8	Lucknow	Raitha	26°59'07.9"N	80°50'37.2"E	3,286	25.82	3,965	0.428	991.189
9		Dhovaila,	26°56'38.7"N	80°51'00.8"E	470	25.82	567	0.061	141.771
10		Ghaila	26°54'28.6"N	80°53'05.3"E	3,323	25.82	4,009	0.433	1002.35
11		Kamala Pur	26°43'07.6"N	81°15'41.9"E	1347	25.82	1,625	0.176	406.309
12	Faizabad	Duwarika Pur	26°41'23.7"N	81°36'09.3"E	1,808	46.48	2,480	0.268	620.072
13		Raichh	26°38'26.0"N	81°38'39.3"E	4081	18.29	4,678	0.505	1169.53
14		Sunwa	26°35'31.8"N	81°42'00.5"E	3366	18.29	3,859	0.417	964.628

15		Imamganj	26°31'27.5"N	81°42'35.0"E	1,431	18.29	1,640	0.177	410.096
16	Sultanpur	Saifulla Ganj	26°17'30.1"N	82°07'16.3"E	1,326	18.11	1,518	0.164	379.528
17		Odara	26°17'11.8"N	82°07'35.9"E	1784	18.11	2,042	0.221	510.616
18		Arjunpur	26°11'14.8"N	82°12'56.5"E	424	18.11	485	0.052	121.357
19		Shodhanpur	26°04'53.5"N	82°22'44.2"E	5906	18.11	6,762	0.73	1690.42
20		Gudara	26°03'52.4"N	82°22'34.1"E	707	18.11	809	0.087	202.358
21		Pratap Sulempur	26°00'38.3"N	82°25'38.6"E	533	18.11	610	0.066	152.555
22		Satthin	26°31'31.3"N	81°40'27.9"E	1633	18.11	1,870	0.202	467.397
23		Pichhuti	26°30'54.6"N	81°43'21.3"E	2686	18.11	3,075	0.332	768.787
24		Nara Adhanpur	26°27'00.8"N	81°46'08.2"E	7,544	18.11	8,637	0.933	2159.24
25		Saraiya Sabal Shah	26°26'26.8"N	81°46'27.0"E	2369	18.11	2,712	0.293	678.055
26		Gajanpur Duwariya,	26°25'35.3"N	81°47'07.0"E	5,703	18.11	6,529	0.705	1632.31
27		Mithnepur	26°22'37.6"N	81°54'24.8"E	2,011	18.11	2,302	0.249	575.588
28		Rasul Pur	26°19'08.0"N	82°04'28.5"E	584	18.11	669	0.072	167.152
29		Dhakhva	26°17'33.9"N	82°04'13.4"E	3570	18.11	4,087	0.441	1021.81
30		Bhoyen	26°16'57.2"N	82°05'46.4"E	1734	18.11	1,985	0.214	496.305
31		Kolhuamau	26°10'35.4"N	82°13'56.8"E	1,163	18.11	1,331	0.144	332.874
32		Chaurariya	26°12'24.9"N	82°17'28.5"E	938	18.11	1,074	0.116	268.474
33		Sabsukhpur	26°11'01.5"N	82°18'13.4"E	801	18.11	917	0.099	229.262
34		Lotiya	26°10'06.1"N	82°17'45.2"E	2,602	18.11	2,979	0.322	744.744
35		Banbhokar	26°07'21.7"N	82°20'24.9"E	1,344	18.11	1,539	0.166	384.68
36	Jaunpur	Amiliya	25°58'37.7"N	82°29'47.3"E	2334	14.89	2,612	0.282	653.007
37		Anguli	25°55'02.1"N	82°33'53.8"E	4168	14.89	4,664	0.504	1166.12
38		Narauli	25°52'59.7"N	82°35'05.4"E	1,782	14.89	1,994	0.215	498.568
39		Chak Mirzapur	25°49'07.3"N	82°36'08.1"E	412	14.89	461	0.05	115.269
40		Kohara Sultanpur	25°46'44.7"N	82°38'45.5"E	5,279	14.89	5,908	0.638	1476.96

41		Pasewan	25°38'42.3"N	82°50'56.4"E	5,284	14.89	5,913	0.639	1478.36
42		Sarauni Paschhim	25°38'01.3"N	82°52'28.3"E	2,503	14.89	2,801	0.303	700.289
43		Narhan	25°37'34.9"N	82°55'34.1"E	5,761	14.89	6,447	0.696	1611.81
44		Kusarna	25°37'15.1"N	82°56'50.4"E	4,712	14.89	5,273	0.57	1318.32
45		Hariharpur	25°36'27.9"N	82°58'09.0"E	125	14.89	140	0.015	34.973
46		Khaliyabankat	25°34'32.1"N	83°00'29.2"E	117	14.89	131	0.014	32.734
47	GHAZIPUR	Biri-Bari	25°34'31.7"N	83°01'39.3"E	4,859	19.18	5,605	0.605	1401.14
48		Barahpur	25°33'30.0"N	83°03'39.4"E	7,012	19.18	8,088	0.873	2021.98
49		Badura	25°31'20.6"N	83°04'28.4"E	3,016	19.18	3,479	0.376	869.694
50		Nuruddinpur	25°31'31.7"N	83°06'46.4"E	854	19.18	985	0.106	246.259
<b>Total</b>							<b>147,390</b>	<b>16</b>	<b>36,849</b>

## VILLAGES SITUATED ALONG THE RIVER GOMTI RIGHT BANK

SR NO	DISTRICT	NAME OF VILLAGE / REVENUE VILL.	LAT.	LONG.	DECADAL POPULATION (2011)	GROWTH RATE (%)	ESTIMATED POPULATION (2019)	SEWAGE GENERATION (MLD)	ESTIMATED SOLID WASTE (Kg/day)
1	Sitapur	Amdari	27°43'36.4" N	80°25'30.4" E	758	23.88	903	0.098	225.702
2		Rustam Nagar	27°42'28.2" N	80°26'14.3" E	2,373	23.88	2,826	0.305	706.584
3		Hariaya	27°41'33.7" N	80°26'03.3" E	1,679	23.88	2,000	0.216	499.939
4		Chandra,	27°39'46.5" N	80°27'07.5" E	3,737	23.88	4,451	0.481	1112.73
5		Patabojha	27°36'08.7" N	80°27'09.5" E	3,041	23.88	3,622	0.391	905.488
6		Pahari	27°34'59.9" N	80°27'31.8" E	433	23.88	516	0.056	128.93
7		Fattepur	27°33'07.3" N	80°26'41.9" E	1,450	23.88	1,727	0.187	431.752
8		Mustafa Bad	27°31'14.0" N	80°24'41.9" E	910	23.88	1,084	0.117	270.962
9		Harni Kala	27°29'41.7" N	80°23'41.9" E	3,128	23.88	3,726	0.402	931.393
10		Dadhnamau	27°28'56.9" N	80°23'26.8" E	1,724	23.88	2,053	0.222	513.338
11	Hardoi	Raotapur	27°23'17.6" N	80°26'39.6" E	980	20.44	1,140	0.123	285.062

12	Karem Nagar Jalalpur,	27°21'48.2" N	80°27'15.6" "E	2,208	20.44	2,569	0.277	642.263
13	Jamuniya	27°21'06.1" N	80°27'05.1" "E	1,361	20.44	1,584	0.171	395.888
14	Gohlari	27°16'56.9" N	80°30'59.5" "E	2,329	20.44	2,710	0.293	677.46
15	Harraiya	27°16'17.6" N	80°35'06.7" "E	382	20.44	444	0.048	111.116
16	Bhikhpur Eama	27°15'57.0" N	80°36'58.2" "E	675	20.44	785	0.085	196.344
17	Maheshpur,	27°15'16.2" N	80°39'24.1" "E	1,653	20.44	1,923	0.208	480.825
18	Gathiya	27°14'57.4" N	80°38'25.5" "E	959	20.44	1,116	0.121	278.954
19	Ram Madarpur	27°13'25.0" N	80°39'09.8" "E	2,067	20.44	2,405	0.26	601.249
20	Jajupur	27°12'50.8" N	80°40'58.1" "E	4,285	20.44	4,986	0.538	1246.42
21	Kourondh	27°13'45.7" N	80°42'36.3" "E	3,586	20.44	4,172	0.451	1043.1
22	Chawan	27°11'54.4" N	80°45'57.5" "E	4,064	20.44	4,729	0.511	1182.14
23	Bhatpur	27°10'27.7" N	80°48'03.5" "E	7,167	20.44	8,339	0.901	2084.74
24	Katka	27°08'46.7" N	80°48'43.3" "E	1,241	20.44	1,444	0.156	360.982
25	Mahitha	27°07'22.8" N	80°48'08.6" "E	2,471	20.44	2,875	0.311	718.764

26		Auna	27°06'21.3" N	80°49'16.1" E	1,000	20.44	1,164	0.126	290.88
27	Lucknow	Makaria Kalan	27°03'48.9" N	80°50'26.0" E	3,441	25.82	4,152	0.448	1037.94
28		Manjhi Nikrojpur,	27°02'19.6" N	80°50'28.5" E	2,484	25.82	2,997	0.324	749.274
29		Raniya Mau	26°59'36.6" N	80°49'14.6" E	839	25.82	1,012	0.109	253.076
30		Gopramau	26°58'39.1" N	80°49'27.2" E	839	25.82	1,012	0.109	253.076
31		Banshigarhi	26°57'20.3" N	80°49'15.8" E	1,499	25.82	1,809	0.195	452.158
32		Saitha	26°55'54.4" N	80°51'45.0" E	2,505	25.82	3,022	0.326	755.608
33		Sureya Mau	26°49'40.8" N	81°07'39.3" E	2,349	25.82	2,834	0.306	708.552
34		Gaureyakala	26°48'32.6" N	81°08'42.1" E	3,963	25.82	4,782	0.516	1195.4
35		Dhaurahra	26°47'20.2" N	81°09'43.1" E	3,879	25.82	4,680	0.505	1170.06
36		Mohammadab ad	26°46'23.8" N	81°09'42.3" E	617	25.82	744	0.08	186.112
37		Salempur	26°43'42.1" N	81°11'59.6" E	7,542	25.82	9,100	0.983	2274.97
38	Barabanki	Jauras	26°43'28.7" N	81°13'06.0" E	5,023	21.96	5,905	0.638	1476.36
39		Chaksar	26°43'45.8" N	81°13'07.0" E	1,939	21.96	2,280	0.246	569.911

40		Manjhar	26°44'11.5" N	81°14'46.4" E	2374	21.96	2,791	0.301	697.766
41		Daulat Pur	26°44'20.4" N	81°15'55.0" E	1306	21.96	1,535	0.166	383.86
42		Bhitri	26°41'40.3" N	81°18'52.2" E	1,624	21.96	1,909	0.206	477.326
43		Dandoopur	26°39'17.5" N	81°21'21.0" E	1,664	21.96	1,956	0.211	489.083
44		Gosiyamau	26°39'32.3" N	81°27'36.4" E	1,993	21.96	2,343	0.253	585.783
45		Thalwara	26°38'40.6" N	81°29'05.9" E	6,103	21.96	7,175	0.775	1793.79
46		Sharifabad	26°40'10.7" N	81°32'49.4" E	4,291	21.96	5,045	0.545	1261.21
47		Mustafa Bad	26°38'26.6" N	81°32'47.8" E	2,315	21.96	2,722	0.294	680.425
48	<b>Pratapgarh</b>	Nadi	26°34'53.6" N	81°40'07.6" E	969	17.5	1,105	0.119	276.165
49		Satthin	26°31'31.3" N	81°40'27.9" E	1633	18.11	1,870	0.202	467.397
50		Pichhuti	26°30'54.6" N	81°43'21.3" E	2686	18.11	3,075	0.332	768.787
51	<b>Sultanpur</b>	Nara Adhanpur	26°27'00.8" N	81°46'08.2" E	7,544	18.11	8,637	0.933	2159.24
52		Saraiya Sabal Shah	26°26'26.8" N	81°46'27.0" E	2369	18.11	2,712	0.293	678.055

53		Gajanpur Duwariya,	26°25'35.3" N	81°47'07.0" E	5,703	18.11	6,529	0.705	1632.31
54		Mithnepur	26°22'37.6" N	81°54'24.8" E	2,011	18.11	2,302	0.249	575.588
55		Rasul Pur	26°19'08.0" N	82°04'28.5" E	584	18.11	669	0.072	167.152
56		Dhakhva	26°17'33.9" N	82°04'13.4" E	3570	18.11	4,087	0.441	1021.81
57		Bhoyen	26°16'57.2" N	82°05'46.4" E	1734	18.11	1,985	0.214	496.305
58		Kolhuamau	26°10'35.4" N	82°13'56.8" E	1,163	18.11	1,331	0.144	332.874
59		Chaurariya	26°12'24.9" N	82°17'28.5" E	938	18.11	1,074	0.116	268.474
60		Sabsukhpur	26°11'01.5" N	82°18'13.4" E	801	18.11	917	0.099	229.262
61		Lotiya	26°10'06.1" N	82°17'45.2" E	2,602	18.11	2,979	0.322	744.744
62		Banbhokar	26°07'21.7" N	82°20'24.9" E	1,344	18.11	1,539	0.166	384.68
63	Pratapgarh	Mahdaura	26°00'38.5" N	82°24'30.9" E	1,910	17.5	2,177	0.235	544.35
64		Anusar	25°59'54.1" N	82°28'26.0" E	1025	14.89	1,147	0.124	286.775
65	Jaunpur	Krishnapur	25°57'45.4" N	82°31'19.0" E	1,211	14.89	1,355	0.146	338.814

66		Ramnipur	25°57'42.6" N	82°31'52.0" "E	552	14.89	618	0.067	154.439
67		Mahmadpur	25°56'21.9" N	82°34'06.2" "E	701	14.89	785	0.085	196.126
68		Baderi	25°55'47.6" N	82°32'28.7" "E	2,972	14.89	3,326	0.359	831.506
69		Dariyawganj	25°50'48.1" N	82°35'18.2" "E	5,913	14.89	6,617	0.715	1654.34
70	Ghazipur	Lilapur	25°45'21.5" N	82°39'39.2" "E	2,079	19.18	2,398	0.259	599.5
71		Kesheopur	25°39'45.3" N	82°47'28.8" "E	917	19.18	1,058	0.114	264.426
72		Dharmapur	25°44'39.1" N	82°43'55.1" "E	4,027	19.18	4,645	0.502	1161.23
73	Varanasi	Zafarabad	25°42'02.8" N	82°44'15.5" "E	1,328	17.15	1,510	0.163	377.55
74		Patkhauli	25°39'18.6" N	82°48'04.0" "E	957	17.15	1,088	0.118	272.075
75	Jaunpur	Kevati	25°38'10.7" N	82°48'45.1" "E	456	14.89	510	0.055	127.58
76		Bansbari	25°37'16.2" N	82°54'06.3" "E	2,206	14.89	2,469	0.267	617.195
77		Bhainsa	25°34'30.2" N	82°58'47.4" "E	4,506	14.89	5,043	0.545	1260.69
78	Varanasi	Babatpur	25°32'00.9" N	83°03'45.8" "E	2,293	17.15	2,608	0.282	651.9
79		Bhagwanpur Khurd	25°29'38.4" N	83°06'50.5" "E	2038	17.15	2,318	0.25	579.403

80		Saraiya	25°30'34.8" N	83°07'32.6" E	1,596	17.15	1,815	0.196	453.743	
81		Rajwari	25°30'15.3" N	83°08'07.1" E	5233	17.15	5,951	0.643	1487.74	
82		Kaithi	25°30'06.4" N	83°09'35.8" E	5,903	17.15	6,713	0.725	1678.22	
<b>Total</b>								<b>2,30,060</b>	<b>24.848</b>	<b>57,515.19</b>

## Appendix-5

### WET LANDS / WATER BODIES ALONG THE RIVER GOMTI

SR. NO.	DISTRICT	NAME OF WETLAND	LAT	LONG	DISTANCE FROM RIVER (Km)	WET LAND SIDE BY RIVER	
						LEFT	RIGHT
1	Sitapur	Sitapur	27°38'57.53"N	80°28'42.46"E	1.37	Yes	
2		Akabarpur	27°33'39.57"N	80°25'58.93"E	1.5		Yes
3		Near Nirhana	27°26'2.83"N	80°26'32.16"E	1.99	Yes	
4		Kolhua	27°24'33.33"N	80°24'22.05"E	1.59		Yes
5		Bhatpur	27°11'7.97"N	80°47'24.05"E	1.15		Yes
6		Bhatpur	27°10'28.68"N	80°48'6.27"E	0.42		Yes
7		Bhatpur	27° 9'43.22"N	80°48'19.44"E	0.76		Yes
8		Dhudhara	27° 4'56.02"N	80°50'33.72"E	0.59	Yes	
9		near sultanpur	27° 3'14.92"N	80°50'52.80"E	0.45	Yes	
10		Ghaila	26°55'5.83"N	80°53'16.16"E	1.42	Yes	
11		Lucknow	26°54'29.25"N	80°51'53.59"E	0.4		Yes
12		Near Maholi Village	27°39'56.88"N	80°28'23.58"E	0.95	Yes	
13		Near Gohlari Village Gohlari	27°15'27.05"N	80°30'12.39"E	1.24		Yes
14	Lucknow	Kukrail Nadi	26°51'39.72"N	80°58'33.05"E	0.86		Yes
15		Butler Lake	26°51'13.80"N	80°57'42.48"E	0.69	Yes	
16		Behind Bharat Ratna Atal Bihari Vajpayee Cricket Stadium	26°48'27.56"N	81° 1'18.20"E	1.13	Yes	
17		Ardonamau	26°48'49.77"N	81° 0'44.71"E	0.17	Yes	

18		B/w Chaurhiya and Bakkas	26°48'33.88"N	81° 3'20.55"E	0.99	Yes	
19		Near Sikandarpur Khurd	26°50'46.87"N	81° 4'51.77"E	1.69		Yes
20			26°49'19.92"N	81° 4'36.35"E	0.67		
21		Nawajgah	25°45'46.35"N	82°40'37.82"E	0.62		Yes
22		Narhan	25°38'10.31"N	82°56'2.88"E	1.29	Yes	
23		Dalal Tola	25°38'16.77"N	82°55'2.60"E	0.44	Yes	
24		chaura	25°38'13.56"N	82°55'47.11"E	0.94	Yes	
25		Dalal Tola	25°38'16.23"N	82°55'6.72"E	0.39	Yes	
26		Patkhauli, Ramgarh	25°33'38.41"N	82°59'33.02"E	1.4	Yes	
27	Jaunpur	Ramgarh	25°33'44.72"N	82°59'39.88"E	1.19		Yes
28	Ghazipur	Ghazipur	25°31'16.18"N	83° 9'18.82"E	1.3	Yes	

## Appendix-6

### Status of E-Waste Management

#### Status of E-waste Recycling / Collection /Dismantling Units in the State of U.P.

S. No.	Name & Address of Unit	Regional Office	Status of Authorisation	Status of Registration & Validity	Type	Capacity (T/Annum)
1	M/s Auctus -E Recycling Solutions Pvt. Ltd., F-637, M.G. Road, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 30.08.2019	Collection, Dismantle	1800
2	M/s Mahaluxmi Metal Alloys (India) Pvt. Ltd., Modinagar, Ghaziabad.	Ghaziabad	Grant	Registered 22.05.2023	Collection, Dismantle, Recyclers	30000
3	M/s N.K. Products, 58-59, M.G. Road, Ghaziabad.	Ghaziabad	Refused	Registered 22.06.2016	Collection, Dismantle	9000
4	M/s Bharat Oil Co., E-18, Site-IV, Sahibabad, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 16-05-18	Collection, Dismantle	4000
5	M/s Planet Green Recycling Pvt. Ltd., G-129, Phase -1, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 23.08.2018	Collection, Dismantle, Recyclers	1500
6	M/s Rocket Sales, Plot No. 1-12, I/A, M.G. Raod, Hapur.	Ghaziabad	Grant	Registered 27.08.2019	Collection,, Dismantle	300
7	M/s Arsh Recycling Pvt. Ltd., Plot No. 203, UPSDIC, I/A, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 20.06.2023	Collection, Dismantle, Recycling,	15000
8	M/s Auctus Recycling Solutions Pvt. Ltd.Habibpur, Greater Noida.	Greater Noida	Grant	Registered 06.12.2021	Dismantle, Collection	19500
9	M/s Khan Traders, B-5, site4, Panki Industrial Area, Kanpur.	Kanpur	Grant	Registered 15-11-2020	Collection, Dismantle	7190
10	M/s Green Tech Recycling, Khasra No.-645, Acchraunds, Bahadurpur Road, Partapur, Meerut .	Meerut	Grant	Registered 12.01.2022	Collection, Dismantle	1800

11	M/s Narora Atomic Power Station, Narora, Bulandshahar.	Bulandshahar	Not Applied	-	Collection' Dismantling & Recycling	10
12	M/s Metal Alloys, E-46, Industrial Area, Ramnagar, Varanasi	Varanasi	Grant	Registered 31-05-2019	Collection	1825
13	M/s Comwen Information Technologies Pvt.Ltd., 127/35B, ChakRagunath, Naini, Allahabad.	Allahabad	Grant	Registered 11-08-2017	Collection	300
14	M/s Dasia ECO E-Waste Recyclers E-160 Industrial areas, Khalilabad, SantKabairnagar.	Basti	Grant	Registered 31-12-2017	Collection, Dismantling	720
15	M/s Sims Recycling Solutions Plot no.1 Udyog KendraII Ecotech-III Greater Noida.	Greater Noida	Grant	Registered 31.12.2019	Collection, Dismantle, Recycling	1250
16	M/s J.A.O. E-Waste Recycling Co, Vill-Jaitpur, Distt-Moradabad.	Moradabad	Grant	Registered 23.11.2020	Collection	3001
17	M/s HIN Green E-waste Recycling (P) Ltd, B-19/1, Summer Garden Colony, Meerut.	Meerut	Grant	Registered 12.04.2018	Collection, Dismantle,	750
18	M/s S.R. Metcast India (P) Ltd 11.8 Km.Agra Mathura Road, Agra.	Agra	Grant	Registered 02.08.2022	Collection	600
19	M/s K.M. Metals Suppliers 9/270,271,Mathura Agra.	Agra	Not Applied	-	Collection	5000
20	M/s Prakash Metal House 39/223, Karwan Lohamandi,Agra.	Agra	Grant	Registered 02.05.2023	Collection	1500
21	M/s Shree MahaveerJi Trading Company, 30/127, Chippitala, Agra.	Agra	Not Applied	Reject	Collection	4500
22	M/s E-Waste Recyclers India E-50, UPSIDC Industrial area, NH-2 Kosikalan, Mahura.	Mathura	Grant	Registered 01.03.2022	Collection, Dismantle	6000
23	M/s Supar Trading Company, Plot No.-3 Govt. Industrial Estate, Talkatora Road, Lucknow.	Lucknow	Not Applied	Registered 03.04.2016	Collection	365
24	M/s V.R. Techno Enviro Services pvt. Ltd. khasra No. 440, indira Priyedarshni ward, jarhra Indira Nagar, Lucknow.	Lucknow	Not Applied	Registered 09.04.2016	Collection, Dismantle	365

25	M/s Sachin enterprises,84/1,Plot no.34-35 Fazalganj, Kanpur.	Kanpur	Grant	Registered One Time	Collection	5000 Pieces Per Annum
26	M/s Gandhi Traders, 91/103, Dalelpurwa, Kanpur.	Kanpur	Grant	Registered 04.06.2018	Collection	5000 Pieces Per Annum
27	M/s Greezon Recycling Pvt. Ltd., R 30, UPSIDC, Industrial Area, Sikandrabad, Bulandshahar.	Bulandshaha	Grant	Registered 27.08.2022	Collection Dismantle, Recycling	16.5
28	M/s Sachin Enterprises, 123/751, block-T 74 pratapganj Gadariyan Purwa, Fazal gang, Kanpur.	Kanpur	Grant	Registered 16.11.2022	Collection, Dismantling, Refurbishing	2500
29	M/s Greeniva Recycler Pvt. Ltd., Plot No. G-284, M.G. Road, Industrial Area, Hapur.	Hapur	Grant	Registered 18.06.2019	Collection, Dismantling, Recycling.	1500
30	M/s S. Malik Traders, Plot No.-93, 94 Vill-Budhera Jahidpur, Meerut.	Meerut	Grant	Registered 12.01.2022	Collection, Dismantling	365
31	M/s Royal Faiz Recycling (p) Ltd. , I-22, I.A. M.G. Road, Hapur.	Ghaziabad	Grant	Registered 29.01.2023	Collection, Dismantle, Recycling	12000
32	M/s 3 C Recycler, F-326, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 31.12.2022	Collection, Dismantle, Recycling	9000
33	M/s Life E- Recycling (P) Ltd., F- 435, UPSIDC I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 05.06.2023	Collection, Dismantle,	9000
34	M/s Hind Recycling (P) Ltd., Plot No. F-203, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 01.03.2022	Collection, Dismantle,	9000
35	M/s Hayat Recycler, F-53, 54, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 21.06.2023	Collection, Dismantle, Recycling	15000
36	M/s B.R.P. Infotech Private Limited, F-394, Phase-I, M.G.Road, Industrial Area, Hapur	Hapur	Grant	Registered 28.06.2023	Recycling, Dismantling, Segregation, Collection	9000 MT/Year

37	M/s Sky Green Waste Recycling Management , Khasra No.- 174, Alipur Jijmana, Meerut, U.P.	Meerut	Grant	Registered 20.12.2023	Dismantling, Recycling	5475 MT/Y 4500 MT/A
38	M/s Swachh Bharat Recycling Company, Gali-N0-4, 2083, Saipuram Industrial Area, Delhi Road, Meerut, U.P.	Meerut	Grant	Registered 08.05.2023	Recycling	4800 MT/A
39	M/s Rudra Enterprises, Plot No. A- 96, Sector-A-4, Tronica City, Loni, Ghaziabad	Ghaziabad	Grant	Registered 03.05.2023	Disposal & Dismantling	500 MT/Month
40	M/s Avgree Recycling Pvt. Ltd. KH No. 549, Vill.-Tiyala, Meerut- Bulandshahar Road, Hapur Bypass, Hapur	Ghaziabad	Grant	Registered 10.09.2023	Dismantling & Segregation	11000 MT/A
41	M/s Faiz Recycling, G-235, MG Road, Industrial Area, Hapur	Ghaziabad	Grant	Registered 13.02.2024	Dismantling & Segregation	36.67 MT/Day
42	M/s Horizon Recycling Pvt. Ltd., Khasra no.-35, Kumarhera, 7th km Dehradun Road, Saharanpur, U.P.	Saharanpur	Grant	Registered 02.08.2022	Recycling, Dismantling, Segregation, Collection	12000 MT/A
43	M/s Golden Ewaste Recyclers Pvt. Ltd., Plot No.- 12A, Gagol Road, Behind Sophia School Udyog Puram, Partapur, Meerut	Meerut	Grant	Registered 01.04.2024	Transportation, Refurbishing, Dismantling, Segregation, Storage, Disposal	9600 MT/A

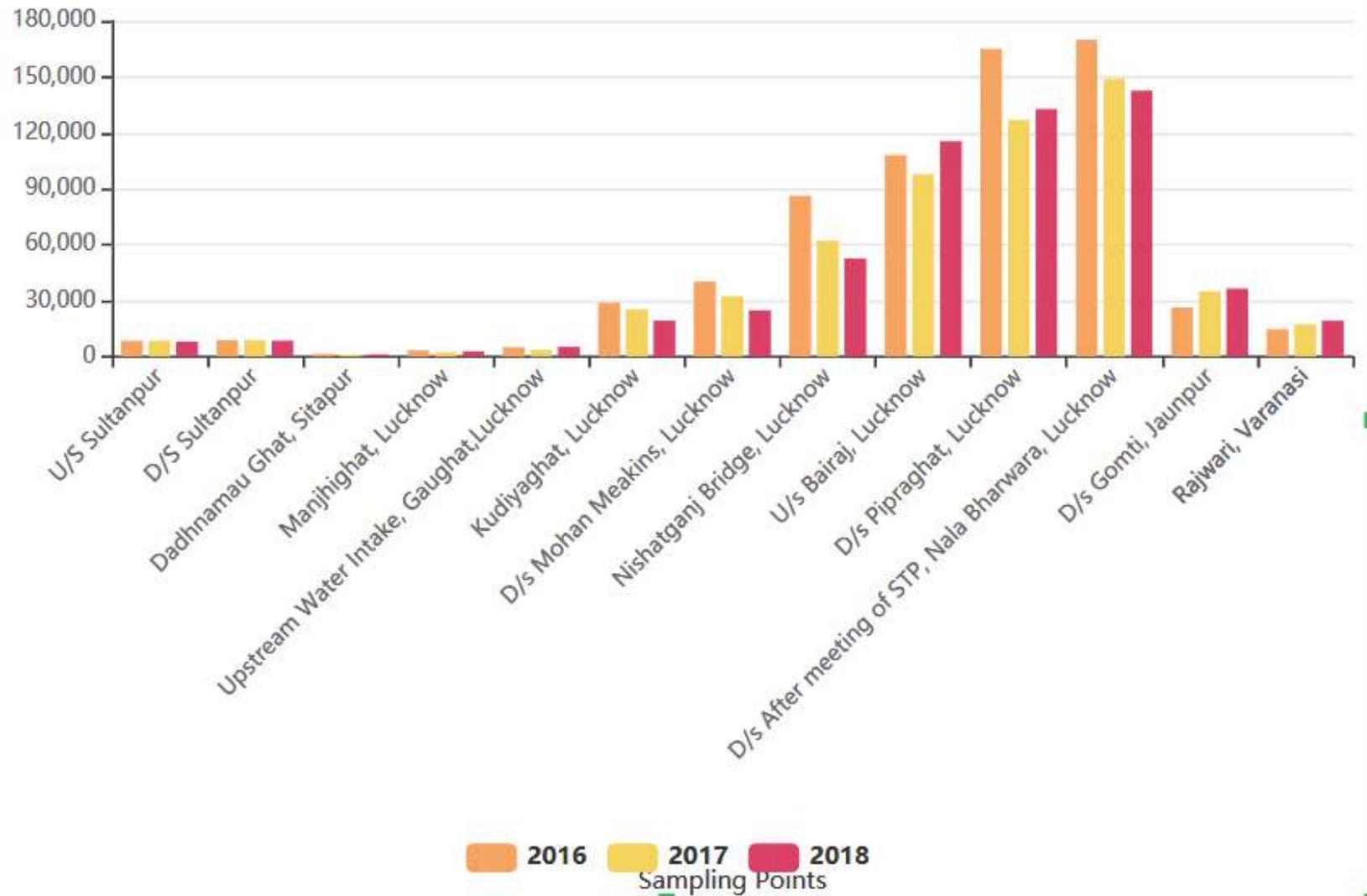
## Appendix-7

### River Water Quality Data Water Quality of River Gomti in UP Year 2016-2018

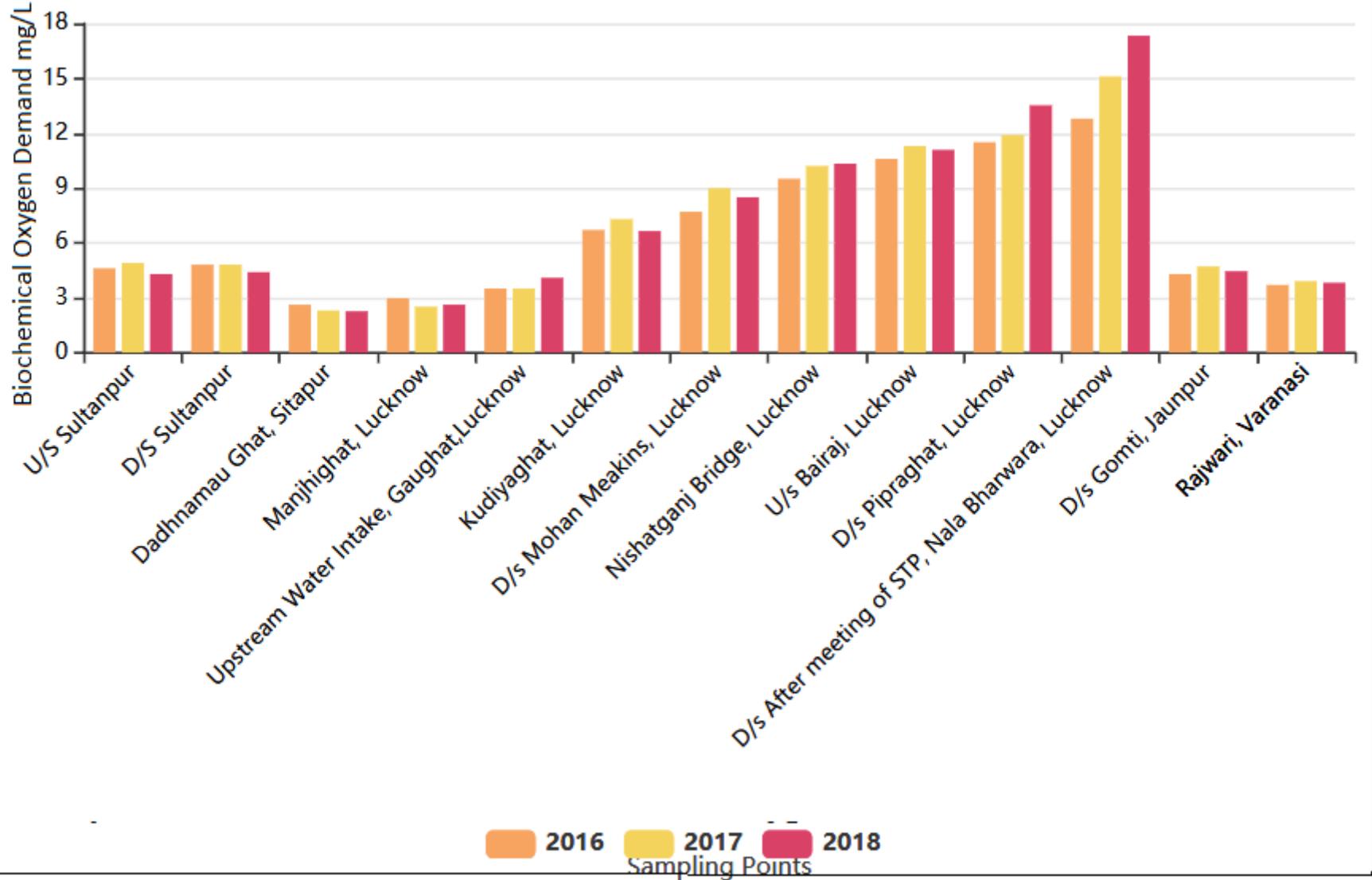
S No	Sample Collection Point	2016			2017			2018		
		DO (mg/l)	BOD(mg/l)	Total Coliform (MPN/100ml)	DO (mg/l)	BOD(mg/l)	Total Coliform (MPN/100ml)	DO (mg/l)	BOD(mg/l)	Total Coliform (MPN/100ml)
1	U/S Sultanpur	5.9	4.6	8316	6.6	4.9	8350	7.1	4.3	7941
2	D/S Sultanpur	5.6	4.8	8691	6.4	4.8	8600	6.9	4.4	8366
3	Dadhnamau Ghat, Sitapur	9.94	2.61	1312	9.40	2.30	1064	7.96	2.25	1147
4	Manjhighat, Lucknow	7.95	2.98	3192	8.30	2.50	2108	6.93	2.61	2800
5	Upstream Water Intake, Gaughat, Lucknow	6.50	3.50	4842	6.90	3.50	3375	5.59	4.08	5117
6	Kudiyaghat, Lucknow	3.00	6.70	28667	2.60	7.30	25167	2.68	6.64	19183
7	D/s Mohan Meakins, Lucknow	3.10	7.70	40083	2.40	9.00	32167	2.41	8.49	24750
8	Nishatganj Bridge,	2.70	9.50	86167	2.20	10.20	62000	2.58	10.34	52500

S No	Sample Collection Point	2016			2017			2018		
		DO (mg/l)	BOD(mg/l)	Total Coliform (MPN/100ml)	DO (mg/l)	BOD(mg/l)	Total Coliform (MPN/100ml)	DO (mg/l)	BOD(mg/l)	Total Coliform (MPN/100ml)
	Lucknow									
9	U/s Bairaj, Lucknow	2.60	10.60	108000	2.40	11.30	97667	2.64	11.08	115333
10	D/s Pipraghat, Lucknow	2.50	11.50	165000	1.90	11.90	126700	1.71	13.52	132667
11	D/s After meeting of STP, Nala Bharwara, Lucknow	1.90	12.80	170000	1.50	15.10	148667	2.50	17.33	142500
12	D/s Gomti, Jaunpur	7.60	4.30	26267	7.40	4.70	34833	7.39	4.44	36333
13	Gomti before meeting to Ganga, Rajwari, Varanasi	8.00	3.70	14500	7.80	3.90	17083	7.83	3.81	19083

### Comparative Chart of Total Coliform in River Gomti



**Comparitive Chart of Total Biochemical Oxygen Demand in River Gomti**



<b>Classification</b>	<b>TYPE OF USE</b>
Class A	Drinking water source without conventional treatment but after disinfection
Class B	Outdoor bathing
Class C	Drinking water source with conventional treatment followed by disinfection.
Class D	Fish culture and wild life propagation
Class E	Irrigation, industrial cooling or controlled waste disposal

## TOLERANCE LIMITS

**TABLE-1: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – A**

S. No.	Characteristic	Tolerance
(1)	(2)	(3)
(i)	pH	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l,	6.0
(iii)	Bio-chemical Oxygen Demand	2.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	50
(v)	Colour, Hazen units, Max	10
(vi)	Odour	unobjectionable
(vii)	Taste	Agreeable taste
(viii)	Total Dissolved Solids, mg/l, Max	500
(ix)	Total Hardness (as CaCO <sub>3</sub> ), mg/l, Max	300
(x)	Calcium Hardness (as CaCO <sub>3</sub> ), mg/l, Max	200
(xi)	Magnesium (as CaCO <sub>3</sub> ), mg/l, Max	100
(xii)	Copper (as Cu), mg/l, Max	1.5
(xiii)	Iron (as Fe), mg/l, Max	0.3
(xiv)	Manganese (as Mn), mg/l, Max	0.5
(xv)	Chlorides (as Cl), mg/l, Max	250
(xvi)	Sulphate (as SO <sub>4</sub> ), mg/l, Max	400
(xvii)	Nitrates (as NO <sub>2</sub> ), mg/l, Max	20
(xviii)	Fluorides (as F <sub>2</sub> ), mg/l, Max	1.5
(xix)	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max	0.002
(xx)	Mercury (as Hg), mg/l, Max	0.001
(xxi)	Cadmium (as Cd), mg/l, Max	0.01
(xxii)	Selenium (as Se), mg/l, Max	0.01
(xxiii)	Arsenic (as As), mg/l, Max	0.05
(xxiv)	Cyanides (as CN), mg/l, Max	0.05
(xxv)	Lead (as Pb), mg/l, Max	0.1
(xxvi)	Zinc (as Zn), mg/l, Max	15
(xxvii)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	0.05
(xxviii)	Anionic detergents, (as MBAS), mg/l, Max	0.2
(xxix)	Poly-nuclear aromatic hydrocarbons (PAH),	0.2
(xxx)	Mineral oil, mg/l, Max	0.01
(xxxi)	Barium (as Ba), mg/l, Max	1.0
(xxxii)	Silver (as Ag), mg/l, Max	0.05
(xxxiii)	Pesticides	Absent
(xxxiv)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>
(xxxv)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 2: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – B**

S.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l, Max	5.0
(iii)	Biochemical Oxygen Demand (5 days at 20 °C),	3.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	500
(v)	Fluorides (as F <sup>-</sup> ), mg/l, Max	1.5
(vi)	Colour, Hazen units, Max	300
(vii)	Cyanides (as CN), mg/l, Max	0.05
(viii)	Arsenic (as As), mg/l, Max	0.2
(ix)	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH) mg/l, Max	0.005
(x)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	1.0
(xi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xii)	Alpha emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE - 3: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – C**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l Minimum	4.0
(iii)	Biochemical Oxygen Demand	3.0
(iv)	Total coliform organisms, MPN/100 ml, Max	5000
(v)	Colour, Hazen units, Max	300
(vi)	Fluorides (as F), mg/l, Max	1.5
(vii)	Cadmium (as Cd), mg/l, Max	0.01
(viii)	Chlorides (as Cl), mg/l, Max	600
(ix)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	0.05
(x)	Cyanides (as CN), mg/l, Max	0.05
(xi)	Total Dissolved Solids, mg/l, Max	1500
(xii)	Selenium (as Se), mg/l, Max	0.05
(xiii)	Sulphates (as SO <sub>4</sub> ), mg/l, Max	400
(xiv)	Lead (as Pb), mg/l, Max	0.1
(xv)	Copper (as Cu), mg/l, Max	1.5
(xvi)	Arsenic (as As), mg/l, Max	0.2
(xvii)	Iron (as Fe), mg/l, Max	50
(xviii)	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l,	0.005
(xix)	Zinc (as Zn), mg/l, Max	15
(xx)	Insecticides, mg/l, Max	Absent
(xxi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xxii)	Oils and grease, mg/l, Max	0.1
(xxiii)	Nitrates (as NO <sub>3</sub> ), mg/l, Max	50
(xxiv)	Alpha emitters, µc/mg, Max	10 <sup>-9</sup>
(xxv)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 4: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – D**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l, Min,	4.0
(iii)	Free Ammonia (as N), mg/l, Max,	1.2
(iv)	Electrical Conductance at 25 °C, µS, Max	1000
(v)	Free Carbon Dioxide (as CO <sub>2</sub> ), mg/l, Max	6.0
(vi)	Oils and Grease, mg/l, Max	0.1
(vii)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>
(viii)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 5: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – E**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.0 to 8.5
(ii)	Electrical Conductance at 25°C, µS, Max	2250
(iii)	Sodium Adsorption Ratio, Max	26
(iv)	Boron (as B), mg/l, Max	2.0
(v)	Total Dissolved Solids, (inorganic), mg/l, Max	2100
(vi)	Sulphates (as SO <sub>4</sub> ), mg/l, Max	1000
(vii)	Chlorides (as Cl), Mg/l, Max	600
(viii)	Sodium Percentage, Max	60
(ix)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>
(x)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

## Appendix-8

### MSW improvement action plan time-line for the ULBs of Department of Urban Development, UP

S.N.	Key Activities	Timeline (In Months)								
		1	2	3	4	5	6	7	8	9
1	Policy Framework adoption  (During the period the ULBs are required to adopt various rules /regulation in terms of bylaws for effective implementation of SWM rules)									
2	With adoption action plan the ULBs along the river will formulate IEC campaign (Specifically designing of promotional materials related to not only just for better waste management in the area but also making common people/institutions aware and sensitise about river pollution and its control measure for making an effective behaviour change. The first 2 months will be needed for preparing the material and widely spreading the message and then it's going to be a									

	continuous effort for a sustained drive to make perceptible change among stakeholders.)									
3	Detail Gap Analysis of existing resources in terms of human resource/equipment/vehicles that are presently deployed and further required for full compliance of SWM rules. During the period each ULB shall prepare a detail micro plan (ward -wise) in sync with the action plan for effective implementation.									
4	Procurement of Required Material / Services after Gap Analysis									
5	Capacity Building. All the key stakeholders from senior officials to the level of safaikarmi is required to be sensitize and trained for the effective compliance of SWM rules and during the period intensive capacity building programmes shall be conducted.									
6	Identification of Land/ Building for waste processing shall be completed for all ULBs within 2 months (decentralised									

	composting/MRF).									
7	Construction /Setting up of decentralised processing facility (composting for wet waste and MRF for dry waste) in all ULBs.									
8	Bulk waste Generators Identification and consultation/capacity building for onsiteWaste Management.									
9	Identification and integration of Informal Rag Pickers									
10	Segregation/ collection / transport / processing (10 percent) (by 4th month of Action Plan adoption)									
11	Segregation/ collection / transport / processing (20 percent)									
12	Segregation/ collection / transport / processing (35 percent)									
15	Segregation/ collection / transport / processing (50 percent)									
16	Segregation/ collection / transport / processing (65 percent)									

17	Segregation/ collection / transport / processing (80) percent)									
18	Segregation/ collection / transport / processing (100) percent) Within 12 months.									

## Appendix-9

### Other Relevant Information

1. Address of Environment Monitoring Portal- <http://upecp.in/>
2. Link for Resource Persons, Weblink for Central Ground Water Board (CGWB) & Miyawaki Forestry.

S.No.	Institution	Address	Website Link
1	Akhil Bhartiya Sewa Sasthan, Chitrakoot- Gopal Bhai	Akhil Bhartiya Samaj Sewa Sansthan Bharat Janani Parisar Village: Ranipur Bhatt Post: Sitapur District: Chitrakoot Uttar Pradesh India PIN: 210 204	<a href="http://absss.in/">http://absss.in/</a>
2	Muskan jyoti samiti – Mewa Lalji	Chaudhary Purwa, Old Kechwa Farm, Madiyawa Village, Kursi Road, Lucknow-226021 Madiyawa Village, Kursi Road, Lucknow-226021	<a href="http://www.muskanjyoti.org/">http://www.muskanjyoti.org/</a>
3	Nirmal Kuteya Seechewal- Sant Balveer Singh Ji Seechewal	Post Office Chak Chella, Tehsil Shahkot, Distt Jalandhar, Punjab 144701, INDIA	<a href="http://www.nirmalkuteya.com/portal/">http://www.nirmalkuteya.com/portal/</a>
4	Central Ground Water Authority	Central Ground Water Board, Northern Region, Bhujal Bhavan, Sector-B. Sitapur Road Yojna, Ram Ram Bank Chauraha, Lucknow - 226021.	<a href="http://cgwb.gov.in/aboutcgwb.html">http://cgwb.gov.in/aboutcgwb.html</a>
5	Miyawaki, saytrees		<a href="https://saytrees.org/miyawaki.html">https://saytrees.org/miyawaki.html</a>

**3. Re-constitution of District Environment Committee by Chief Secretary, Govt. of Uttar Pradesh vide Office Order No- 13/2019/NGT-257/55-Parya-2-2019-44(Writ)/2016 dated 14 June, 2019 is as follows.**

1	District Magistrate	Chairman
2	C.D.O.	Member
3	S.S.P.	Member
4	Nominee of CEO, Industrial Development Authority	Member
5	ADM/Incharge, Local Bodies	Member
6	V.C., Development Authority	Member
7	Municipal Commissioner	Member
8	All Executive Officer, Nagar Palika/Panchayat	Member
9	District Supply Officer	Member
10	C.M.O.	Member
11	Ex. En., Irrigation Department,	Member
12	Ex. En., PWD	Member
13	Ex. En., UPPCL	Member
14	R.T.O.	Member
15	G.M., DIC	Member
16	R.M., UPSIDC	Member
17	D.P.R.O.	Member

18	District Agriculture Officer	Member
19	District Horticulture Officer	Member
20	D.E.S.T.O	Member
21	District Information Science Officer	Member
22	Representatives of all Oil & Gas Companies	Member
23	All City Gas Network Companies	Member
24	Regional Officer, U.P. Pollution Control Board.	Member
25	02 NGOs (Environment), nominated by District Magistrate	Member
26	Other Officers/Representatives of Cantonment Board, Jila Panchayat, Jal Nigam, Railways, Ground Water, Industrial Association, Common Bio-Medical Waste Facility, Educational institutions, Specialist etc. nominated by District Magistrate	Member
27	District Forest Officer	Member Convenor

**ACTION PLAN  
FOR  
RESTORATION OF POLLUTED STRETCH  
OF  
RIVER RAPTI  
FROM  
DOMINGARH (GORAKHPUR)  
TO  
RAJGHAT (GORAKHPUR)**



**UTTAR PRADESH POLLUTION CONTROL BOARD  
TC - 12V, VIBHUTI KHAND, GOMTINAGAR,  
LUCKNOW (UP)**

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## 1. INTRODUCTION

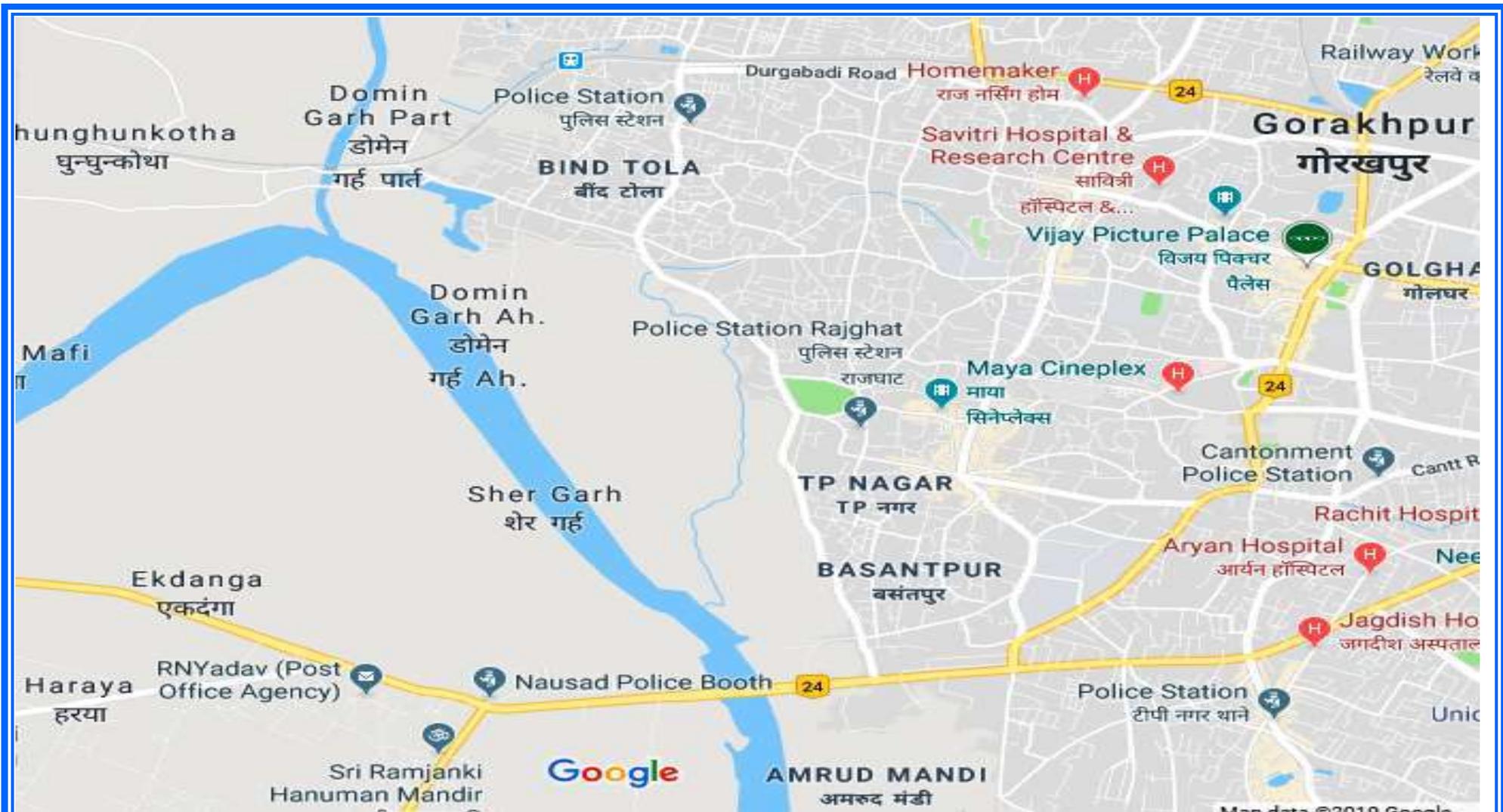
The River Rapti is a Perenner Trans Boundary River originating from Himalayan Hills in Nepal at a altitude of 348 meter from Mean Sea Level (MSL) and ultimately joints river Ghaghra at Kaparwar Ghat in Distt- Deoria, U.P. Total streach of river Rapti is 782 kilometer out of which 331 kilometer streach in situated in Nepal and rest streach is in U.P. India. Rapti River enters in the territory of India in the district Bahraich of U.P. In India travies through the District Gonda, Balrampur, Basti, Siddharth Nagar, Gorakhpur and Deoria of U.P. The measure tributaries of River Rapti are Budhi Rapti, Kura River, Rohin River, Ami River and Gurra River. Ghaghra River Joins River Ganga at Sitab Diyara in Bihar.

As per Water Quality Monitoring Data of River Rapti for the year 2018, water quality in the identified polluted stretch of river (i.e. Domingarh to Rajghat) falls in the Class- D as per water quality criteria of Central Pollution Control Board. River Water is fit for propagation of Wild Life and Fisheries.

The climate of the identified stretch falls in the category of subtropical monsoon. The average annual rainfall in the area is about 1227 mm. Maximum percentage of averge rain fall is received during Mansoon Period. The major land use in the region is agriculture and there is no significant forest cover. The soil of the area is loam to silty loam.

The river receives considerable amounts of wastewater every day from the industries situated in municipal limit of Nagar Nigam, Gorakhpur and sewage discharge from Nagar Nigma, Gorakhpur. Discharge of Industrial and domestic sewage leads to deterioration of its water quality.

There are 13 Water Polluting Industries situated Within the municipal limit of Nagar Nigam, Gorakhpur 13 Water Polluting Industries has been Identified. In the Identified inudsty 01 is of fabric dyeing, 02 solvent extracton units, 02 used lube oil refining units, 01 millboard unit, 02 aluminium untensil units, 01 namkeen/dalmot unit, 01 rail coach repairing mechanical work shop and 03 light weight four wheeler Vehicel service centre. Industrial discharge from the identified industries joins domestic sewage carrying drains. Discharge from Rail Coatch Repairing Machnical Work Shop and 02 light weight four wheeler Vehicel service centre ultimately meets Gordhoiya Nala which has been trapped and diverted to 15 MLD STP situated in Maherwa Ki Bari near Ramgarh Tal. Discharge from rest 10 units joins domestic drains and ultimately meets river rohin. River Rohin joins river rapti near Domingarh.



**Fig: Google Earth image showing stretch of identified polluted stretch of River Rapti (Domingarh to Rajghat)**

## **1.1 POLLUTED STRETCH OF RAPTI RIVER FROM DOMINGARH (GORAKHPUR) TO RAJGHAT (GORAKHPUR)**

Rapti River from its origin situated in Himalayan Hills of Nepal to its confluence in River Ganga at Sitab Diyara, it traverses a distance of about 782 Kms, out of which polluted stretch is about 05 kilometres which lies in districts Gorakhpur, Uttar Pradesh.

Gorakhpur City is situated on the Cis Side of River Rapti. As per census of year 2011 population of Gorakhpur City is 6,73,446. The total sewage generation from Nagar Nigam, Gorakhpur is approximate 96.13 MLD. Out of 96.13 MLD sewage 66.4 MLD sewage discharges in to River Rapti and Rohin River. Rest 29.73 MLD sewage goes to Ramgarh Tal. Presently all the quantity of sewage going towards Ramgarh Tal has been diverted to 15 MLD and 30 MLD STP installed near Ramgarh Tal. D.P.R. of 03 STP has been prepared by Uttar Pradesh Jal Nigam and submitted to Government of U.P. of Financial Sanction for the treatment of 66.4 MLD untreated sewage discharging in to River Rohin and Rapti.

There are 10 water polluting industries located in the catchment area of the identified polluted stretch. Details of Industries located in the catchment area of indentified polluted stretch is given in **Appendix -01**. These industries have effluent treatment plants and their treated effluent is discharged through 01 drain in to Rohin River. This drain is a mixed drain which carries domestic as well as industrial effluent. Rest 05 drains discharging in to Rohin River are purely domestic drains. Total Industrial effluent discharge in the Rohin River is a approximetly 356.4 KLD.

## 2. OBJECTIVE OF THE ACTION PLAN

The objective of the Action Plans is to restore the water quality of identified polluted stretch of River Rapti from Domingarh to Rajghat to make fit for at least bathing purposes within 06 months from the date of action plan gets approved, as directed by Hon'ble National Green Tribunal vide its order dated 20th September 2018 passed in the original Application No 673/2018 in the matter of NEWS ITEM PUBLISHED IN '*THE HINDU*' AUTHORED BY *SHRI JACOB KOSHY titled* " More river stretches are now critically polluted: CPCB.

### **3. POLLUTION INVENTORY**

#### **3.1 DETAILS OF DRAINS POLLUTING RIVER ROHIN & RIVER RAPTI**

In the polluted stretch under question of River Rapti, total discharge of approximately 45.10 MLD is estimated in the form of sewage which is directly discharging through 09 drains. Approximately 21.3 MLD domestic sewage and approximately 0.3564 MLD Industrial effluent is discharging into Rohin River through 06 drains. The treatment of sewage is a major area of concern because all the sewage quantity which is being discharged either directly into Rapi River or through Rohin River is untreated. The estimates of industrial effluent are based upon the consented discharge quantity from the units but actual industrial effluent may be more than or less than the estimated quantity. A detailed drain wise data regarding sewage, industrial effluent, number of industries discharging into drain, status of tapping and status of installing of bar meshes etc. is as given below.

### Summary of drains polluting River Rohin

S No.	Name of Drain	Type of Drains	Status of Drain	Industries		Sewage Discharge (MLD)		
				Number	Treated Effluent (MLD)	Treated	Untreated	Total Discharge in the River
1	Basiya Dih Drain	Domestic	Untapped	0	0	0	4.9	4.9
2	Neta Ji Subhash Chandra Bose Colony Drains	Domestic	Untapped	0	0	0	3.1	3.1
3	Steping Stone School Drain	Domestic	Untapped	0	0	0	2.4	2.4
4	Green City Colony Phase- 2 Dains	Domestic	Untapped	0	0	0	2.7	2.7
5	Bargdwa Drain	Mixed	Untapped	10	0.3564	0	5.6	5.9564
6	Maheshra-Mohripur Drain	Domestic	Untapped	0	0	0	2.6	2.6
	<b>Total</b>			<b>10</b>	<b>0.3564</b>	<b>0</b>	<b>21.3</b>	<b>21.6564</b>



Fig :GIS Map of River Rapti Stretch from Nepal to Rajghat Gorakhpur

## BASIA DIH DRAIN

### a. Origin

Basia Dih Drain originates from old Gorakhpur and traverses to mohallas Rasoolpur, Andhiyaribagh, Surajkund, New Madhopur Colony and Finally meets River Rohin. Approximety length of the drain is about 03 kilometer. Co-ordinates of Basia Dih Drain sewage pumping station is 26.7614N, 83.33576E

### b. Length covered

Total length of Basiadih Drain is approximetly 03 kilometer.

### c. Details of industries & discharge of their effluent into the drain

Any industrial unit has not been identified in the catchment area of Basiadih Drain.

Parameters	Results
pH	7.48
BOD (mg/l)	70
COD (mg/l)	196
TSS (mg/l)	132
Total Coliform (MPN/100 ml)	-
Date of Sampling	11.04.19



## B. Neta Ji Subhas Chandra Bose Colony Drains

### a. Origin

Neta Ji Subhas Chandra Bose Colony Drain originates from Rasoolpur Bhatta area and traverses to mohallas Neta Ji Subhas Chandra Bose Colony and Abdullah Nagar Finally meets River Rohin. Approximetly length of the drain is about 1.9 kilometer. Co-ordinates of Neta Ji Subhas Chandra Bose Colony Drain sewage pumping station is 26.77462N, 83.34215E

### b. Length covered

Total length of Basiadih Drain is approximetly 1.9 kilomete.

### c. Details of effluent discharge & water quality of Neta Ji Subhas Chandra Bose Colony Drain

Any industrial unit has not been identified in the catchment area of Neta Ji Subhas Chandra Bose Colony Drain. This Drain carries domestic effluent and discharges in to Rohin River.

### WATER QUALITY Neta Ji Subhas Chandra Bose Colony Drain

Parameters	Results
pH	7.84
BOD (mg/l)	78
COD (mg/l)	216
TSS (mg/l)	108
Total Coliform (MPN/100 ml)	-
Date of Sampling	11.04.19



## C. Steping Stone School Drain

### a. Origin

Steping Stone School Drain originates from the village Bilandpur Khatta and Finally Discharges in to Rohin River. Total length of approximetly 1.3 kilometer. Co-ordinates of Steping Stone School Drain is 26.77N, 83.34597E.

### b. Length covered

Distance covered by Steping Stone Schoola Drain is approx. 1.3 km.

### c. Details of effluent discharge & water quality of Steping Stone Schoola Drain.

Any industrial unit has not been identified in the catchment area of Steping Stone School Drain. This Drain carries domestic effluent and discharges in to Rohin River.

### WATER QUALITY Steping Stone School Drain

Parameters	Results
pH	8.1
BOD (mg/l)	140
COD (mg/l)	310
TSS (mg/l)	128
Total Coliform (MPN/100 ml)	-
Date of Sampling	11.04.19



## D. Green City Colony Phase- 2 Drain

### a. Origin

Green City Colony Phase- 2 Drain originates from Bankatwa Area and Passes through Malin Basti and Green City Phse-2 Colony and finally discharges in to River Rohin. Total length of the drain approximatelry 1.8 kilometer. Co-ordinates of Green City Colony Phase- 2 Drain is 26.7839N, 83.74725E.

### b. Length covered

Distance covered by Green City Colony Phase-2 drain is approx.: 1.8 km.

### c. Details of effluent discharge & water quality of Green City Colony Phase-2 Drain

Any industrial unit has not been identified in the catchment area of Green City Colony Phase-2 Drain. This Drain carries domestic effluent and discharges in to Rohin River.

WATER QUALITY of Green City Colony Phase-2 Drain

Parameters	Results	
pH	7.9	
BOD (mg/l)	72	
COD (mg/l)	196	
TSS (mg/l)	122	
T. Coli (MPN /100ml)	-	
Date of Sampling	11.04.19	

## E. Bargadwa Drain

### a. Origin

Bargadwa Drain originates from Gorakhnath Area and Passes through industrial state Vikas Nagar Colony and Bargadwa and finally meets River Rohin. Total length of the drain approximately 4.5 kilometer. Coordinates of Bargadwa Drain is 26.798343N, 83.354040E.

### b. Length covered

Distance covered by Bargadwa drain is approx.: 4.5 km.

### c. Details of effluent discharge & water quality of Bargadwa Drain

10 industries discharge their effluent into the Bargadwa Drain. Bargadwa Drain carries mixed effluent. Total industrial effluent discharge from Bargadwa drain to River Rohin is 0.3564 MLD. Total industrial effluent is being treated before discharging into the River Rohin. Total mixed effluent is 5.9564 MLD. Domestic wastewater which is being discharged into River Rohin through Bargadwa drain is untreated.

#### WATER QUALITY OF BARGADWA DRAIN

Parameters	Results
pH	6.8
BOD (mg/l)	210
COD (mg/l)	490
TSS (mg/l)	160
T. Coli (MPN /100ml)	-
Date of Sampling	11.04.19



## F. Maheshra Mohripur Drain

### a. Origin

Maheshra Mohripur Drain originates from Mohripur area and traverses through Maheshra Village and discharges in to Chilualatal. Chilatal is well connected with Rohin River. The Total length of Drain is approximetly 1.65 kilometer. Co-ordinates of Maheshra Mohripur Drain is 26.82085N, 83.35021E.

### b. Length covered

Distance covered by Maheshra Mohripur Drain is approx.: 1.25 km.

### c. Details of effluent discharge & water quality of Maheshra Mohripur Drain

Hindustan Urvarak and Rasayan Ltd. (HURL) Gorakhpur which is under construction is situated in the catchment area of Maheshra Mohripur Drain. Presently this Drain is carrying domestic effluent only and discharges goes in to Chilualatal which is well connected with River Rohin.

WATER QUALITY of Maheshra Mohripur Drain	
Parameters	Results
pH	7.46
BOD (mg/l)	72
COD (mg/l)	208
TSS (mg/l)	112
T. Coli (MPN /100ml)	-
Date of Sampling	11.04.19



### Summary of Drains Polluting River Rapti

S. No.	Name of Drain	Type of Drain	Staats of Drain	Industries		Sewage Discharge (MLD)		
				Number	Treated Effluent (MLD)	Treated	Untreated	Total Discharge in River
1.	Domingarh Drain	Domestic	Untapped	0	0	0	6.75	6.75
2.	Bahrampur Drain	Domestic	Untapped	0	0	0	6.10	6.10
3.	Ilahibagh Drain	Domestic	Untapped	0	0	0	4.96	4.96
4.	Mirzapur Drain	Domestic	Untapped	0	0	0	4.25	4.25
5.	Ghasiyari Tola Drain	Domestic	Untapped	0	0	0	4.36	4.36
6.	Basantpur Drain	Domestic	Untapped	0	0	0	4.95	4.95
7.	Hasunpur Drain	Domestic	Untapped	0	0	0	4.65	4.65
8.	Transport Nagar Drain	Domestic	Untapped	0	0	0	4.90	4.90
9.	Katniya/Mahewa Drain	Domestic	Untapped	0	0	0	4.38	4.38
	Total			0	0	0	45.3	45.3

## Domingarh Drain

### a. Origin

Catchment area of Domingarh Drain starts from Dharmshala Bazar and Dilejakpur area. Durgabari, Humayupur North, Jatepur North, Chaksa Husain, Janpriy Vihar, Andhiyari Bag South, And some part of Gorakhpur Junction Railway Station falls Hindi Coverage area of Domingarh Drain. Co-ordinates of Domingarh sewage pumping station is 26.75883N, 83.33563E.

### b. Length covered

Distance covered by Domingarh drain is approx. 6.5 km.

### c. Details of discharge & quality of water of Domingarh Drain

Domingarh Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Domingarh drain. Untreated sewage is being discharged in to Rapti River through Domingarh Drain.

WATER QUALITY OF DOMINGARH DRAIN	
Parameters	Results
pH	7.42
BOD (mg/l)	120
COD (mg/l)	480
TSS (mg/l)	86
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## BAHARAMPUR DRAIN

### a. Origin

Catchment area of Baharampur Drain is Baharampur and Ilahibag Mohalla of Gorakhpur City. Co-ordinates of Baharampur sewage pumping station is 26.75539N, 83.34062E.

### b. Length covered

Distance covered by Baharampur drain is approx. 2.5 km.

### a. Details of discharge & quality of water of Baharampur Drain

Baharampur Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Baharampur drain. Untreated sewage is being discharged in to Rapti River through Baharampur Drain.

WATER QUALITY OF BAHARAMPUR DRAIN	
Parameters	Results
pH	7.36
BOD (mg/l)	64
COD (mg/l)	184
TSS (mg/l)	116
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## ILAHIBAG DRAIN

### a. Origin

Catchment area of Ilahibag Drain is Roadways bus station, Pollice Line , Purdilpur, Miya Bazar, Golghar, Ali Nagar, Zafara Bazar, Ghasikatra and Narsinghpur. Co-ordinates of Ilahibag Drain sewage pumping station is 26.7540N, 83.34429E.

### b. Length covered

Distance covered by Ilahibag drain is approx. 6.5 km.

### c. Details of discharge & quality of water of Ilahibag Drain

Ilahibag Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Ilahibag drain. Untreated sewage is being discharged in to Rapti River through Ilahibag Drain.

WATER QUALITY OF ILAHIBAG DRAIN	
Parameters	Results
pH	7.25
BOD (mg/l)	40
COD (mg/l)	216
TSS (mg/l)	109
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## MIRZAPUR DRAIN

### a. Origin

Catchment area of Mirzapur Drain is Mirzapur ward and some part of Sahabganj, Co-ordinates of Mirzapur Drain sewage pumping station is 26.75006N, 83.3490E.

### b. Length covered

Distance covered by Mirzapur drain is approx. 2.5 km.

### c. Details of discharge & quality of water of Mirzapur Drain

Mirzapur Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Mirzapur drain. Untreated sewage is being discharged in to Rapti River through Mirzapur Drain.

WATER QUALITY OF MIRZAPUR DRAIN	
Parameters	Results
pH	7.37
BOD (mg/l)	60
COD (mg/l)	288
TSS (mg/l)	145
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## GHASIYARI TOLA DRAIN

### a. Origin

Catchment area of Ghasiyari Tola Drain is Ghasiyari Colony Co-ordinates of Ghasiyari Tola Drain sewage pumping station is 26.7390N, 83.53129E.

### b. Length covered

Distance covered by Ghasiyari Tola drain is approx. 1.25 km.

### c. Details of discharge & quality of water of Ghasiyari Tola Drain

Ghasiyari Tola Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Ghasiyari Tola drain. Untreated sewage is being discharged in to Rapti River through Ghasiyari Tola Drain.

WATER QUALITY OF GHASIYARI TOLA DRAIN	
Parameters	Results
pH	7.31
BOD (mg/l)	180
COD (mg/l)	688
TSS (mg/l)	315
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## BASANTPUR DRAIN

### a. Origin

Catchment area of Basantpur Drain is Basantpur Mohlla and some part of Mirzapur Mohalla. Co-ordinates of Basantpur Drain sewage pumping station is 26.73909N, 83.35018E.

### b. Length covered

Distance covered by Basantpur drain is approx. 1.5 km.

### c. Details of discharge & quality of water of Basantpur Drain

Basantpur Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Basantpur drain. Untreated sewage is being discharged in to Rapti River through Basantpur Drain.

WATER QUALITY OF BASANTPUR DRAIN	
Parameters	Results
pH	7.30
BOD (mg/l)	90
COD (mg/l)	336
TSS (mg/l)	150
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## HANSUPUR DRAIN

### a. Origin

Catchment area of Hansupur Drain is Hasupur Mohlla and Barafkhan Road. Co-ordinates of Hasupur Drain sewage pumping station is 26.73614N, 83.35294E.

### b. Length covered

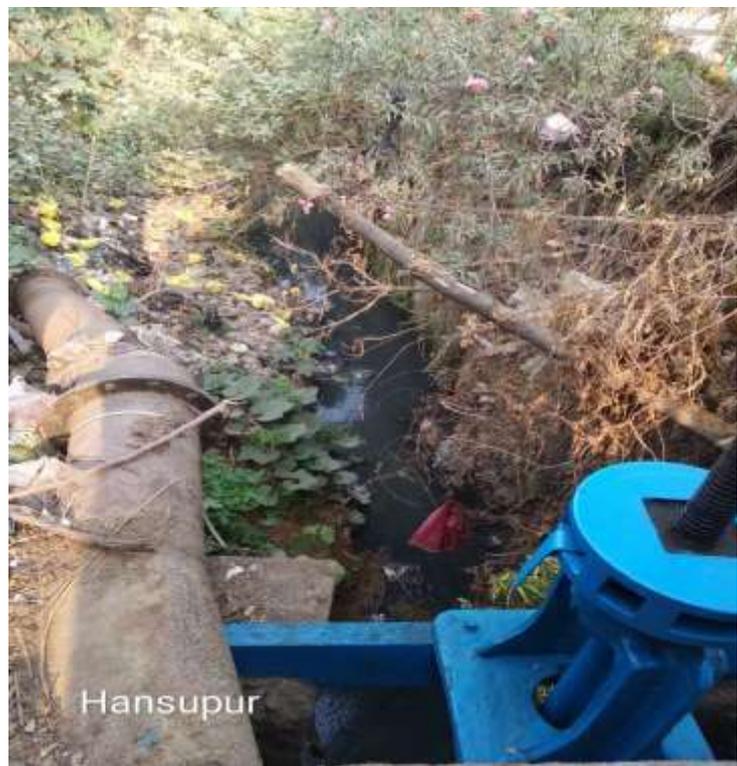
Distance covered by Hasupur drain is approx. 1.85 km.

### c. Details of discharge & quality of water of Hasupur Drain

Hasupur Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Hasupur drain. Untreated sewage is being discharged in to Rapti River through Hasupur Drain.

## WATER QUALITY OF HASUNPUR DRAIN

Parameters	Results
pH	7.23
BOD (mg/l)	150
COD (mg/l)	432
TSS (mg/l)	215
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## TRANSPORT NAGAR DRAIN

### a. Origin

Catchment area of Transport Nagar Drain is Transport Nagar Mohlla. Co-ordinates of Transport Nagar Drain sewage pumping station is 26.73383N, 83.35332E.

### b. Length covered

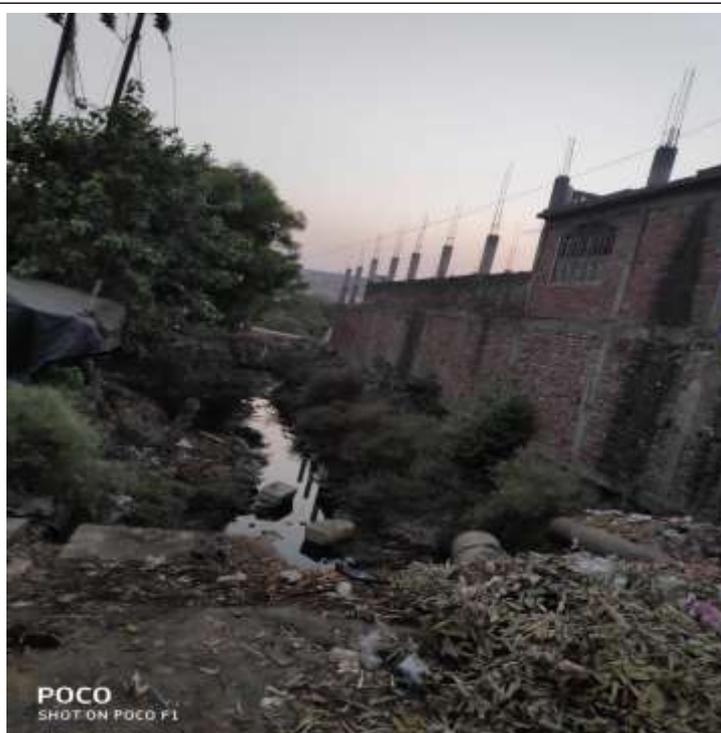
Distance covered by Transport Nagar drain is approx. 1.15 km.

### c. Details of discharge & quality of water of Transport Nagar Drain

Transport Nagar Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Transport Nagar drain. Untreated sewage is being discharged in to Rapti River through Transport Nagar Drain.

### WATER QUALITY OF TRANSPORT NAGAR DRAIN

Parameters	Results
pH	7.16
BOD (mg/l)	18
COD (mg/l)	140
TSS (mg/l)	42
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



## Kataniya/Mahewa Drain

### a. Origin

Catchment area of Kataniya/Mahewa Drain is Maahui sugharpur , Rustampur and Mahewa Ward. Co-ordinates of Kataniya/Mahewa Drain sewage pumping station is 26.72388N, 83.36304E.

### b. Length covered

Distance covered by Kataniya/Mahewa drain is approx. 4.5 km.

### c. Details of discharge & quality of water of Kataniya/Mahewa Drain

Kataniya/Mahewa Drain is a domestic drain. Any industrial unit has not been identified in the catchment area of Kataniya/Mahewa drain. Untreated sewage is being discharged in to Rapti River through Kataniya/Mahewa Drain.

WATER QUALITY OF KATANIYA/MAHEWA DRAIN	
Parameters	Results
pH	7.42
BOD (mg/l)	92
COD (mg/l)	260
TSS (mg/l)	140
T. Coli (MPN /100ml)	-
Date of Sampling	15-02-2017



### 3.2 DETAILS OF SEWAGE POLLUTION SOURCES

As mentioned above, total sewage discharged into Rapti River through 09 major drains and in to Rohin River through 06 major drains is approximately 66.4 MLD. Nagar Nigam Gorakhpur is located in the catchment area of the river Rohin and Rapti. The sewage and other effluent generated from Nagar Nigam Gorakhpur contribute to the organic load of the rivers. As mentioned earlier, the treatment of sewage is a major issue of concern. Any STP has not been installed by Nagar Nigam Gorakhpur. Approximately 66.4 MLD Untreated sewage is being discharged in to Rohin/Rapti River.

#### Details of STPs

As mentioned above that any STP has not been installed by Nagar Nigam Gorakhpur. As per information made available by Nagar Nigam Gorakhpur and UP Jal Nigam Gorakhpur DPR of 03 STP has been sent to Government of UP for financial sanction. One STP is proposed to be installed at Mahewa, One at Neta ji Subhash Chandra Bose Nagar and One at behind the FCI (HURL), Gorakhpur.

Total Quantity of domestic sewage generated from Nagar Nigam Gorakhpur is 96.13 MLD. Natural gradient of 29.73 MLD sewage is towards the catchment area of Ramgarh Tal. 29.73 MLD Sewage flows through 06 major drains towards the catchment area of Ramgarh Tal. Details of average discharge of various drains joining to Ramgarh Lake at different stages provided by UP Jal Nigam Gorakhpur is as given below-

S.No	Nalla	Average Discharge (LPM)			
		2010	2020	2025	2040
1	Kudaghat Nalla	2328	1773	2049	3158
2	Gordhaiya Nalla	6592	8796	10165	15676
3	Mohaddipur Power House Nala	860	1143	1320	2042
4	Rafi Ahmad Kidwai School Nalla	1444	1925	2224	3427
5	Golf Ground Nalla	211	284	328	503
6	Padleyganj Nalla	12848	17150	19819	30574
	Total	23283	31073	35905	55380
	Discharge in MLD	33.52	44.75	51.70	79.75
	Say	34.00	45.00	52.00	80.00

All the mentioned Nallas has been tapped and diverted to STPs. Kudaghat Nalla and Gordhaiya Nalla has been diverted to sewage pumping station (SPS) situated near Smart Wheels Private Limited. Mohddipur. This SPS supplies sewage to 15 MLD, STP situated at Maherwa Ki Bari. Rest 04 Nallas has been diverted to SPS situated at Padleyganj. This SPS supplies sewage to 30 MLD, STP situated near Manyavar Kanshiram Shahari Garib Awas Yojana Taramandal Gorakhpur. Both STPs has been funded by NRCD, Government of India. Both STPs are presently functional. Treated sewage from 15 MLD STP is being discharge in to Ramgarh Lake for maintaining the Water level of Lake. Discharge of 30 MLD STP goes to Gaura Nalla and Gaura Nalla ultimately meets River Rapti.

S. No.	Name of STP	Installed Capacity (MLD)	Utilized Capacity (MLD)	Capacity Utilized (%)	Operating Govt. Agency	Compliance	Discharge Drain
						(Yes/ NO)	
1	Maherwa Ki Bari, Near Ramgarh Tal	15	15	100%	UP Jal Nigam Gorakhpur	Yes	Ramgarh Tal
2	Manyavar Kanshiram Shahari Garib Awas Yojana Taramanda 1 Gorakhpur	30	22	73%	UP Jal Nigam Gorakhpur	Yes	Gaura Nalla
		<b>45</b>	<b>37</b>	<b>82.2%</b>			

*Source: Desk Inventory of UPPCB*

The above STPs has been installed for treatment of sewage 29.73 MLD which was previously being discharge directly in to Ramgarh Tal.

DPR of Proposed 03 STPs to be installed for the treatment of rest 66.4 MLD domestic sewage discharging directly in to identified polluted stretch of River Rapti and through Rohin River has been prepared by UP Jal Nigam Gorakhpur and has been submitted to Government for financial sanction.



Fig : GIS map showing Installed STP at Ramgarh Tal.

**Details of Proposed Sewage Treatment Plant for Sewage discharging in to River Rapti in Polluted Stretch (Domingarh to Rajghat) and in River Rohin at Gorakhpur City**

Proposed Place of STP	Details of STPs proposed		Details of DPR				Expected date of completion
	Name of River	Capacity (in MLD)	Status (under preparation/ prepared)	Amount of DPR (Rs. In crore)	Status of approval (submitted/ approved)	Funding Agency	
Mahewa	Rapti	54	Prepared	359.80	Submitted to Govt of UP	-	-
Neta Ji Subhash Chandraboss Nagar	Rohin	60	Prepared	For All Proposed	Submitted to Govt of UP	-	-
Behind FCI	Rohin	54	Prepared	03 STPs	Submitted to Govt of UP	-	-

## Analysis of generation and treatment based on projection of Population for Year 2030 in the identified Polluted catchment of River Rapti.

S. NO.	CITY	POPULATION (AS PER CENSUS 2011)	ESTIMATED POPULATION 2030	WATER CONSUMPTION (MLD) (@135)	SEWAGE GENERATION (MLD)	INSTALLED CAPACITY OF EXISTING STP (MLD)	PROPOSED STP CAPACITY (MLD)	GAP IN STP CAPACITY UTILIZATION BASED ON POPULATION YEAR 2030 (MLD)
	Gorakhpur	673446	862011	116.371	87.27	N/A	54,60,54	-

Gorakhpur city is situated in the catchment area of River Rohin and Polluted Stretch of River Rapti. Estimated projected Sewage Generation on the basis of Census 2011 for the year 2030 is 87.27 MLD. The proposed capacity of STPs is 168 MLD for treatment of Sewage Generated and STPs to be installed at Mahewa, Neta ji Subhash Chandra Bose Nagar and behind FCI.

## 3.3 DETAILS OF WASTE MANAGEMENT

### 3.3 (a) Municipal Solid Waste

Gorakhpur city is located in the catchment area of River Rohin and Rapti. Estimated total Municipal Solid Waste is 598.0 TPD. Gorakhpur city has been declared ODF by QCI. Although, Nagar Nigam Gorakhpur has been adopting the practice of door to door collection of MSW in few parts of the city. However, there has been lack of processing facility and it is required that Nagar Nigam Gorakhpur should establish Municipal Solid Waste Treatment & Disposal Facility as early as possible for restoring and maintaining the water quality of the river stretch under consideration.

Nagar Nigam Gorakhpur has identified 11.567 Hectare land for disposal of Municipal solid waste at Village Jungle Bahadur Ali near Mahesara. Identified land fill site is on the south bank of Chiluwa Tal. Identified land fill site is in the high flood River Rohin. Chiluwa Tal is a wet land having area more than 25 Hectare and is well connected with River Rohin and River Rohin meets to River Rapti near Domingarh.

**Details of**  
**Dumping Site 500 Meters**  
**from the edge of the River Rapti**

S N	Name of Dumping site	Location		Area (Ha)	Legacy / Curren t	Estimate d quantity of MSW (MTD)	Name of ULB/ Pancha yat	Dispo sal Plan (Yes /No)
		Latitude	Longitude					
	Village- Jungle Bahadur Ali	28°53' 25.3"N	77°35' 31.3"E	11.567	Legacy	598	Nagar Nigam, Gorakh pur	No

**Analysis of  
Municipal Solid Waste Treatment  
based on Year 2030 Population in the catchment of  
River Rohin and Rapti.**

S. NO.	CITY	POPULATION (AS PER CENSUS 2011)	ESTIMATED POPULATION 2030	MSW GENERATION ESTIMATED (TPD) (@828 gm/capita/day)	AVAILABLE PROCESSING FACILITY (TPD)	GAP (TPD)	PROPOSED PROCESSING FACILITY & TIMELINE
1	Nagar Nigam Gorakhpur	673446	862011	713.74	NO	713.74	-

Nagar Nigam Gorakhpur is situated in the catchment area of Polluted Stretch of River Rapti and Rohin Estimated MSW Generation on the basis of Census 2011 for the year 2030 is 713.74 TPD. There is no processing facility available in the Nagar Nigam Gorakhpur. Therefore, gap of 713.74 TPD exists in the catchment area of polluted Stretch of River Rapti and Rohin.

### **3.3 (b) Bio-Medical Waste**

Gorakhpur city is located in the catchment of polluted stretch of river Rapti and River Rohin. There are 589 Health Care Facilities has been identified which generate Bio Medical Waste. Total amount of Bio Medical Waste generated is estimated approximetly 978.25Kg/Day @ of 250gm/bed/day. All the Health Care Facilities have valid agreements with 03 Common Bio-Medical Waste Treatment Facilities namely M/s Medical Pollution Control Committee, U.P.S.I.D.C. Industrail Area, Khalilabad, Sant Kabir Nagar, M/s Silkon Welfare Society, Banka, Bahadurganj, Ghazipur and M/s Royal Pollution Control Committee, Sultanpur. C.B.W.T.Fs collect Bio Medical Waste from Member Health Care Facility and transport to C.B.W.T.F.s site for treatment and disposal of Bio-Medical Waste. Almost all the Health Care Facility located in the catchment area of River Rohin and Rapti have valid authorization under B.M.W. Rules, 2016. Although C.B.W.T.Fs are collecting B.M.W. from Health Care Facilities but segregation of Bio-Medical Waste and disposal in the CBWTFs as per the provisions of Bio-Medical Waste Management Rules, 2016 is a major area of concern. The mixing of Bio-Medical Waste with Municipal Solid Waste is also observed which also needs to be addressed. Adoption of Bar Coded Bio degradable plastic bags for collection of Bio Medical Waste may be usefull for identifying the Health Care Facility not segregating B.M.W. at site.

### **3.3 (c) Hazardous Waste**

Total 10 Water polluting industries have been identified in the catchment area of the Rohin River stretch. Any industrial unit has not been identified in the polluted stretch of River Rapti ( Domingarh to Rajghat). 646 industrial units is 73278.733 Ton/Annum which is collected, treated and disposed by 02 Common Facilities located near Kanpur Dehat. The details of Hazardous Waste generated and the treatment facilities are given below.

S.No.	Name of industries	Hazardous Waste Generated (TPA)				Facility for Treatment & Disposal of Hazardous Waste	Gap between waste generated & treatment capacity available (TPA)
		Incinerable	Landfillable	Recyclable	Total		
1	M/s V.N. Dyers and Processors Pvt. Ltd Bargadawa 80	-	6.0	-	6.0	Landfillable Hazardous waste is disposed to authorized TSDFs M/s Bharat Oil & Waste Management, Kanpur Dehat	There is no gap between generation & disposal of Hazardous Waste
2	M/s Deewan industries, E.46/11 UPSIDC, Industrial area, Gorakhpur	90	-	-	90	Incinerable Hazardous waste is disposed to authorized TSDFs M/s UP Waste Management, Kumbhi, Kanpur Dehat	There is no gap between generation & disposal of Hazardous Waste

3	M/s Indo Lube Refinery G-21 UPSIDC, Industrial area, Gorakhpur	90	-	-	<b>90</b>	Incinerable Hazardous waste is disposed to authorized TSDFs M/s Bharat Oil & Waste Management, Kanpur Dehat	There is no gap between generation & disposal of Hazardous Waste
4	M/s Jai Laxmi Solvent Pvt.Ltd Lacchipur, Gorakhpur	0.6	-	-	<b>0.6</b>	Burnt in boiler of the unit alongwith fuel	N/A
5	M/s Jai Laxmi Solvent Pvt.Ltd UPSIDC Industrial area, Gorakhpur	0.6	-	-	<b>0.6</b>	Burnt in boiler of the unit alongwith fuel	N/A

Source :Desk Inventory of UPPCB

### 3.3 (d) E-Waste

In the State, total 43 Common E- Waste Disposal Facilities are operational. Out of these, 10 units are collection center, 16 have the facility of collection & dismantling whereas remaining 17 are collection, dismantling and recycling centers. The cumulative capacity of these plants- 2,48,000/annum. The quantum of E-Waste generated in the State is approximately 86,000 TPA. Hence, there is no gap in the generation and treatment infrastructure for safe E-Waste handling as per the provisions of E-Waste Rules, 2016. The status report of E-Waste disposal facilities in the State is enclosed at **Appendix-02**.

#### 4. DETAILS OF INDUSTRIAL POLLUTION SOURCES:

There are 10 water polluting industries located in the catchment area of River Rohin within municipal limit. These industries have effluent treatment plants and their treated effluent is discharged through Bargadwa drain. Bargadwa Drain is a mixed drain carrying treated industrial effluent as well as untreated domestic sewage. In the identified industries 02 is grossly polluting in nature (i.e. 01 Textile Industry and 01 Mill Board Unit). Rest 8 Industries are not belonging to grossly polluting industries. These non grossly polluting industries are covered in the orange category. The effluent of Textile Industry and Mill Board Unit is treated by individual Industries in the effluent treatment plant installed by the Industry. Treated effluent meets Rohin River through Bargadwa Drain. Solvent extraction plant, used lube oil refining units, aluminium utensils units and Light four wheeler workshop have installed their own effluent treatment plant and treated effluent discharge from these industries meets Bargadwa Drain. Total Industrial Effluent Discharge in Bargadwa Drain is approximately 358.4 KLD.

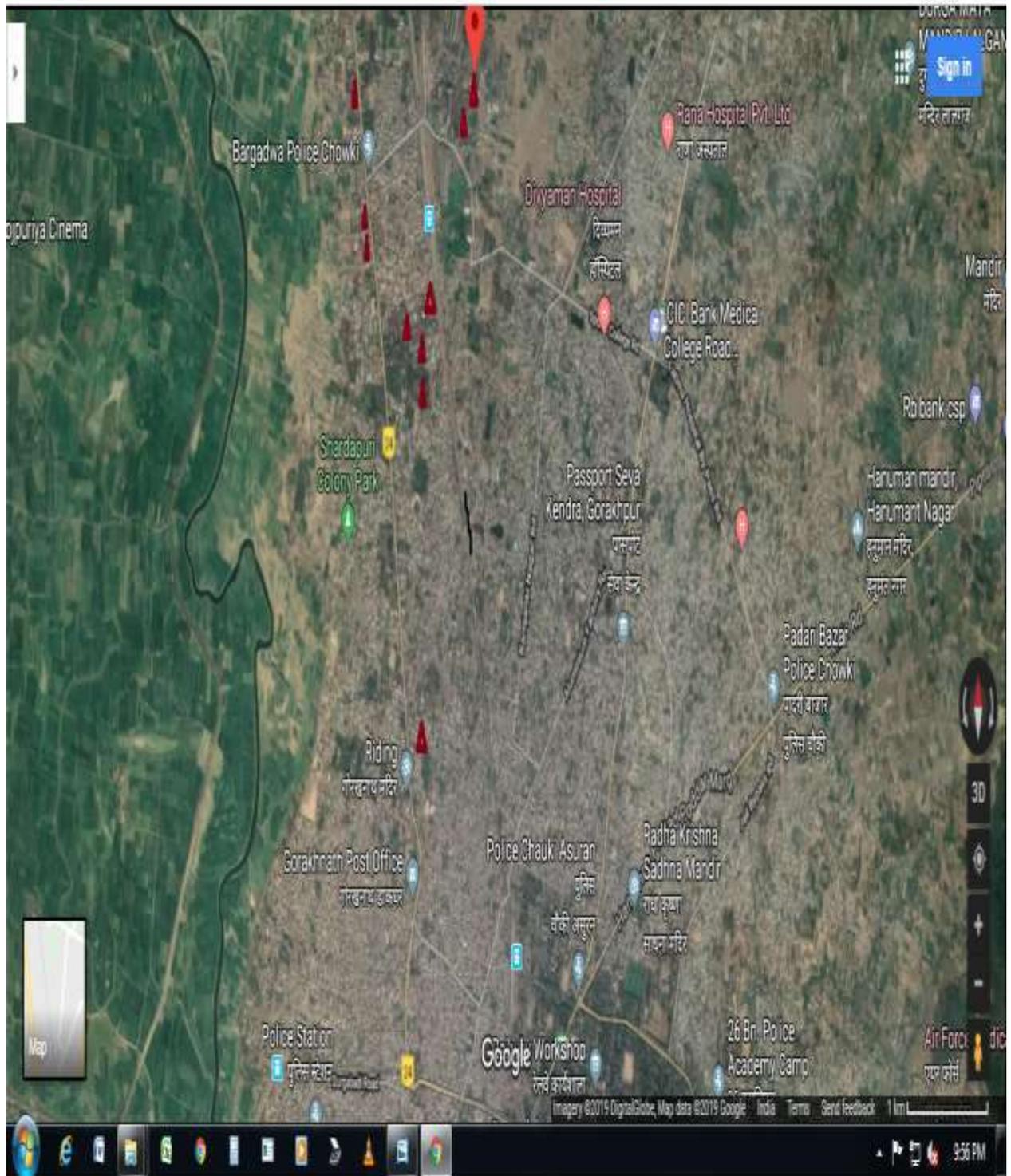


Fig : GIS map showing Industries in the catchment area of river Rohin within municipal limit of Nagar Nigam, Gorakhpur

#### **4.1 DETAILS OF INDUSTRIAL UNITS SITUATED IN THE CATCHMENT AREA OF RIVER ROHIN WITH MUNICIPAL LIMITS OF NAGAR NIGAM, GORAKHPUR.**

The Details of industries situated in the catchment area of River Rohin within municipal limits of Nagar Nigam, Gorakhpur is given in **APPENDIX-03**. Total quantity of industrial effluent discharge from industries located in the catchment area of River Rohin is a approximetly 358.4 KLD. All the industries have their own effluent treatment plant within industry premises.

## 4.2 GAP ANALYSIS OF INDUSTRIES SITUATED IN THE CATCHMENT OF RIVER ROHIN WITHIN MUNICIPAL LIMITS OF NAGAR NIGAM, GORAKHPUR

Presently identified polluted stretch of River Rapti receives approximately 358.4 KLD treated industrial effluent through River Rohin. Industries situated in the catchment of River Rohin within Municipal Limits of Nagar Nigam, Gorakhpur utilize ground water required for industrial as well as domestic purposes. Total estimated water extraction by the industries is approximately 459 KLD against the discharge of 358.4 KLD by the industries. This indicates that about 21-22 per cent of the treated effluent is recycled in the processes and rest amounts for the evaporation losses and consumption in the products.

Sector wise Gap analysis is given below: -

- I. **Paper:-** There is only 01 Mill Board Unit in the catchment area of River Rohin within municipal limits of Nagar Nigam, Gorakhpur. Unit consumes 35 KLD groundwater and 30.4 KLD treated effluent is discharged.
- II. **Textile :** - There is only 01 Textile Dyeing Unit in the catchment area of River Rohin within municipal limits of Nagar Nigam, Gorakhpur. Unit consumes 380 KLD groundwater and 300 KLD treated effluent is discharged. For reduction of water consumption & strengthening of Pollution control system as per charter prepared by CPCB, the action points with timeline are given in **Appendix -04**.
- III. Remaining industries are Solvent Extraction Units , Used Lube Oil Refinig Units, Aluminium Untensils Units, Namkeen Units and Light Four Wheeler Service Workshop. All these units are having ETPs & regular monitoring is done by U.P. Pollution Control Board.
- IV. **CETP :-** Units located in the catchment area of River Rohin within Municipal Limits of Nagar Nigam, Gorakhpur have their own effluent treatment plant. Any CETP has not been installed.

## 5. STATUS OF GROUND WATER

The identified polluted stretch of River Rapti from Domingarh to Rajghat, Gorakhpur lies within the Municipal Limits of Nagar Nigam, Gorakhpur. The status of Groundwater within the Municipal Limits of Nagar Nigam, Gorakhpur is given below :

### River Rapti, Stretch from Domingarh to Rajghat Ground Water Status

S. N.	Name of District	Name of Place	Pre Monsoon water level (mbgl) Year 2012	Post Monsoon water level (mbgl) Year 2012	Status of Exploitation
1	Gorakhpur	Nagar Nigam Limits	3.572-7.66	1.472-4.49	Safe

**Source :-** Ground water brochure of Gorakhpur District, U.P. (A.A.P. : 2012-13)

**CHEMICALS ANALYSIS DATA OF SAMPLES COLLECTED FROM  
GROUND WATER WITHIN MUNICIPAL LIMITS OF NAGAR NIGAM, GORAKHPUR ON MARCH 06, 2018  
Catchment Area of River Rohin and River Rapti within Municipal Limits, Gorakhpur**

Sl. No.	Location	Type of Source	pH	E.C.µ S/cm at25°C	TDS	NO <sub>3</sub>	F	Hardness	Ca	Mg	Alkalinity	Cr.-T	Fe	Mn
1	Gorakhnath Temple	D/W No. 2	7.5	550	636	<5.0	0.77	110	36	4.8	240	<0.05	0.10	<0.05
2	Gorakhnath Temple	H/P IMH	7.16	700	462	<5.0	<0.2	290	96	12	235	<0.05	0.3418	0.0587
3	Bargadwa Opp. Kunal Auto Petrol Pump (HP) on Sonauli Road	H/P IMH	7.35	630	415.8	53.8	0.28	280	82	18	190	<0.05	0.1723	<0.05
4	Ram Janki Nagar	Mini T/W	7.39	450	297	<5.0	0.39	180	50	13.2	220	<0.05	0.1497	0.0650
5	Ram Janki Nagar Opp. H.No. 449-D	H/P IMH	7.72	807	532.6	19.9	<0.2	300	100	12	310	<0.05	2.025	0.4365
6	Shivpur, Fatima By Pass Road	H/P IMH	7.27	545	359.7	<5.0	0.23	205	72	06	230	<0.05	0.1158	<0.05
7	Mahadev Jharkhandi Zone -1 Near Over Head Tank No. 4	Hand Pump IM-II	7.01	844	599	19.7	0.176	243	33.5	38.7	364	<0.05	1.56	0.14

Sl. No.	Location	Type of Source	pH	E.C.µ S/cm at25°C	TDS	NO <sub>3</sub>	F	Hardness	Ca	Mg	Alkalinity	Cr.-T	Fe	Mn
8	Mahadev Jharkhandi Zone -1 Near Over Head Tank No. 4	Tube Well	7.27	680	436	1.14	0.283	222	62.0	16.2	300	<0.05	0.22	0.06
9	Rafi Ahmad Kidwai Inter College, Mohaddipur	Hand Pump IM-II	6.98	12.81	848	20.9	0.161	239	21.5	45.0	530	<0.05	0.18	0.26
10	Jamuna Lal Bajaj Public Park, Civil Lines	Tube Well	7.54	767	507	2.94	0.916	118	34.0	8.11	482	<0.05	0.30	0.07
11	Betiyahata Chauraha, Kasia Road, Civil Line	Hand Pump IM-II	6.99	1295	867	76.7	0.322	207	22.0	36.9	320	<0.05	2.05	0.75
12	Harriya Chungi, Nausad Adj. Gorakhpur-Lko Road	Tube Well	7.10	591	420	2.93	0.103	211	58.8	15.5	358	<0.05	2.15	0.18
13	R/O Shri Sukhu Seth Harriya Chungi, Nausad Adj. Gorakhpur-	Punjab Machine (Shallo Hand Pump)	7.08	913	587	1.59	<0.1	182	55.0	10.7	444	<0.05	5.17	1.57

Sl. No.	Location	Type of Source	pH	E.C.µ S/cm at25°C	TDS	NO <sub>3</sub>	F	Hardness	Ca	Mg	Alkalinity	Cr.-T	Fe	Mn
	Lko Road													
14	Kaushal Vikas Kendra, Laldiggi Adj. Bandha Road	Hand Pump IM-II	6.93	1347	854	0.689	<0.1	291	48.6	41.1	520	<0.05	15.7	0.21
15	Bahrampur Madarsa Road, Pipra Ilahibagh	Hand Pump IM-II	7.14	1148	690	112.5	0.662	364	128.26	10.69	428	<0.05	1.834	0.948
16	Maanbella Near Medical College Gorakhpur to Maharajganj Road	Punjab Machine (Shallo Hand Pump)	7.84	442.4	268	6.36	0.586	236	50.50	26.73	244	<0.05	<0.10	0.06
17	Ilahibagh Lala Toli	Mini Tube Well	7.29	878.3	526	10.89	4.60	340	75.35	36.94	390	<0.05	0.509	0.08
<b>Drinking Water Standars Permissible Limit BIS: 10500 : 2012/2015</b>			<b>6.5-8.5</b>	<b>-</b>	<b>2000</b>	<b>45</b>	<b>1.5</b>	<b>600</b>	<b>200</b>	<b>100</b>	<b>600</b>	<b>0.05</b>	<b>1.0</b>	<b>0.3</b>

## 6. MONITORING OF POLLUTION SOURCES

### 6.1 MONITORING OF RIVERS.

09 drains are discharging into river Rapti and 06 drains are discharging into river Rohin. River Rohin joins river Rapti near Domingarh. Polluted stretch of river Rapti identified by SPSB is from Domingarh to Rajghat, Gorakhpur. The reason of identified stretch pollution is discharge of domestic sewage into Rapti river through 09 drains and discharge of domestic sewage and industrial effluent through 06 drains in Rohin river. Pumping stations has been made near bandha made on the cis bank of river Rapti and Rohin. Monitoring of each drains discharging into Rapti and Rohin river in every season is not possible. For estimation of pollution load due to confluence of Rohin river into Ami river one sampling point in the up stream of confluence point of river Rohin and Rapti is essential. Contribution of pollution load in polluted stretch of river Rapti can only be assessed after taking water sample of Rapti river in the down stream of confluence point of river Rohin and Rapti. Contribution of pollution load due to discharge of sewage into Rapti river through 09 drains can only be assessed after taking the water sample of river Rapti from down stream of Gorakhpur city. Contribution of Pollution load in Rohin River due to discharge of sewage and industrial effluent can only be assessed after taking the water sample of Rohin River from up stream of Gorakhpur city and before confluence to Rapti River. The details of sampling points are given below:

#### Rivers Sampling Points

S N	Name of River	Monitoring Point			Monitoring Frequency	Controlling Regional Office
		Place	Latitude	Longitude		
1	Rohin River	Gorakhpur - Sonauli Road bridge near village	26.85403	83.32613	Monthly	Gorakhpur

S N	Name of River	Monitoring Point			Monitoring Frequency	Controlling Regional Office
		Place	Latitude	Longitude		
		chiutaha				
2	Rohin River	Gorakhpur -Jagatbela Road bridge near domingarh	26.758318	83.331462	Monthly	Gorakhpur
3	Rapti River	Rapti River near villge koliya	26.749576	83.321545	Monthly	Gorakhpur
4	Rapti River	Near Domingarh	26.753566	83.33595	Monthly	Gorakhpur
5	Rapti River	N.H 28 Gorakhpur bypass Roadways	26.705232	83.349789	Monthly	Gorakhpur

The monitoring data of year 2018 is annexed at **Appendix-05**

## **6.2 MONITORING OF WATER POLLUTING INDUSTRIES**

All the water polluting industries will be monitored regularly. GPIs will be monitored quarterly and other industries will be monitored randomly by UPPCB/Zila Paryavaran Samiti. For Monitoring of GPI Third Party Institutions shall also be engaged by CPCB and NMCG for comprehensive monitoring.

## **6.3 ESTABLISHMENT OF RAPTI RIVER POLLUTION CONTROL ROOM**

Polluted Stretch of Rapti River identified CPCB is of the length of approximately 5.0Km from Domingarh to Rajghat. Establishment of separate control room is not required. Regional office, Gorakhpur can easily monitor but sufficient manpower will be required for the same.

## 7. POLLUTED RIVER STRETCH REJUVENATION ACTION PLAN

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
<b>A. SEWAGE MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Estimation of total sewage generation from Gorakhpur City where sewage treatment facility does not exist and preparation of DPR for treatment of sewage	DPR already prepared	U.P. Jal Nigam & Nagar Nigam Gorakhpur	
2	Measurement of flow & load of all the drains contributing pollution load in River Rohin and Rapti.	Already done	U.P. Jal Nigam & Nagar Nigam Gorakhpur	
3	Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them	03 Months	Nagar Nigam Gorakhpur	Nagar Nigam Gorakhpur shall ensure compliance in the prescribed time line.
4	Untapped drains to be provided with modular treatment facilities/ In-Situ bio-remediation or Phytoid-SWAB (CSIR-NEERI) based treatment	06 Months	U.P. Jal Nigam & Nagar Nigam Gorakhpur	Nagar Nigam Gorkhpur shall ensure compliance in the prescribed time line.
5	Completion and commissioning of under construction STP.	Any STP is not under Construction	-	-
6	Formulation of Action Plan for long term use of treated water discharged from STPs	03 Months	U.P. Jal Nigam, Irrigation & Nagar Nigam Gjorakhpur	-

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
7	Installation of Web Cams & OCEEMS in already installed STPs	03 Month	U.P. Jal Nigam/ Operating Govt. Agencies	
8	Formulation of Action Plan for income generation of STPs including installation of Solar Power Plants, Energy Plantation & sale of sludge and treated water, bio-composting etc.	03 Months	U.P. Jal Nigam & Nagar Nigam Gorakhpur	
9	Obtaining Consent to Operate/Establish and Hazardous Authorization from UPPCB	02 Months	U.P. Jal Nigam/ Operating Govt. Agencies	
10	Preparation of DPR for channelization including diversion of sewage generated from household / township to sewer lines and interception of all drains (excluding drains carrying industrial wastewater) for ensuring proper treatment through upcoming STPs.	Within 03 Months	U.P Jal Nigam / Nagar Nigam, Gorakhpur	
11	Septage Management in the areas where sewerage network does not exist	Within 6 Months	Nagar Nigam Gorakhpur/U.P Jal Nigam	Nagar Nigam Gorakhpur shall ensure compliance in the prescribed time line.
<b>B. Long Term Action Point</b>				
1	Laying of Sewerage Network & Connection of households to the sewer line in order to utilize the installed capacity of existing STPs	24Months from sanction of DPR	U.P. Jal Nigam & Nagar Nigam Gorakhpur	

<b>S. No.</b>	<b>Action Point</b>	<b>Timeline</b>	<b>Implementing Department/Agency</b>	<b>Remark</b>
2	Establishment of Sewage Treatment Plants of adequate capacity	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Nagar Nigam Gorakhpur	
3	Tapping & diversion of the drains having high sewage load to STPs to be constructed on I&D model	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Nagar Nigam Gorakhpur	
4	Infrastructure Development in Irrigation/Horticulture/Sprinkling/Industrial use etc. And ensuring use of treated water	24 to 30 Months from sanction of DPR	U.P. Jal Nigam & Nagar Nigam Gorakhpur	
5	Installation of Solar Power Plant & Energy Plantations in the vacant land of STPs	12 Months from sanction of DPR	U.P. Jal Nigam/ Nagar Nigam Gorakhpur	
6	Installation of supplementary/tertiary treatment system in existing STPs which are not able to achieve discharge norms in the present system	Tertiary treatment system already installed in the existing STPs	-	-

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
<b>C. INDUSTRIAL WASTE MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Re-inventorisation of Water Polluting Industries in the catchment area of the drains and their status with respect to consent, installation of ETP, adequacy of ETP and final discharge point	03 Months	UPPCB, UPSIDC, Nagar Nigam & Department of Industries	
2	Monitoring of water polluting industries and ensuring closure of industries which are operating without consent or non-compliant	Quarterly	UPPCB & CPCB	
3	Installation of OCEEMS, Flow Meter & Web Cams in large and medium category of GPIs with connectivity to the server of CPCB and UPPCB	03 Months	UPPCB	
4	Closure and legal action against the illegal water polluting industries operating in non-confirming /residential areas	Regular activity	District Level Inter-Departmental Enforcement Committee having representatives of Administration, Police, UPPCB, ULBs, Development Authority, Power Corporation, Department of Industries etc.	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
<b>(b) Long Term Action Point</b>				
1	Adoption of cleaner technologies by water polluting industrial sectors having major impact on water quality of the river. For eg. – Electroplating, Dyeing, Pulp & Paper industries etc.	24 Months	UPPCB, CPCB & Department of Industries	
2	Imposing stringent norms in Distillery, Pulp & Paper, Slaughter House & Tannery sectors	24 Months	Departments of Environment, Industries, Excise & UPPCB	
3	Reducing abstraction of ground water by reuse/recycle of treated effluent by installation of additional treatment facilities & process improvement	12 Months	CGWA, CPCB, Department of Industries & UPPCB	
4	Use of treated effluent from CETPs for industrial and irrigation purposes	Any CETP is not installed	-	
5	Actions related to improvement of ETPs and reduction of use of ground water by the industries as per the prescriptions given in Appendices 3A, 3C.	6 to 24 Months	Department of Industries, UPPCB & CPCB	
<b>D. SOLID WASTE &amp; FLOOD PRONE ZONE MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Strictly ensuring prohibition of dumping of solid & other waste within 500 Meters of the banks of the river	Immediate	Nagar Nigam Gorakhpur,	
2	Collection & Segregation of Solid Waste as	Immediate	Nagar Nigam	Nagar Nigam Gorakhpur shall ensure

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
	per the provision of SWM Rules, 2016		Gorakhpur	compliance as per timeline given according to the Action Plan <b>(Appendix-06)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
3	Disposal of Recyclable waste through registered recyclers	Immediate	ULBs, Gram Panchayat, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-06)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
4	Compliance of SWM Rules, 2016 by bulk generators (onsite bio-composting, disposal of recyclable waste through registered recyclers)	02 Months	ULBs, Development Authorities, Railways, Transport Corporation, Mandi Parishad, Cantonment Board, Educational Institution, RWAs & Urban Development Department etc.	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-06)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
5	Upgradation & operation of existing non-operational & non-complying Solid Waste Treatment Facilities as per prescribed norms	06 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-06)</b> as informed by Urban Development Department, UP. Development Authorities will also

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
				ensure compliance in concerned areas.
6	Compliance of C&D Waste Management Rules, 2016 & prohibition of illegal dumping of C&D waste	Immediate	ULBs, Development Authorities & Urban Development Department	
7	Installation of Web Cams in Solid Waste & C&D Waste Treatment & Disposal Facilities with open access to UPPCB & CPCB server connectivity	03 Month of functioning of the processing plants	ULBs, Development Authorities & Urban Development Department	
8	Formulation of Action Plan for income generation of Solid Waste & C&D Waste Treatment & Disposal Facilities including installation of Solar Power Plants, Energy Plantation & sale of RDF, compost etc.	02 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-06)</b> as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
9	Obtaining Consent to Operate/Establish and Authorization from UPPCB	02 Months	ULBs, Development Authorities, Urban Development Department & UPPCB & CPCB	
10	Ensuring idol immersion in environmental friendly manner by creation of artificial ponds with proper lining & proper	Immediate	ULBs, Development Authorities & District Administration	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
	disposal of sludge & effluent			
11	Ensure strict prohibition of encroachments & illegal constructions in FPZ	06 Months	Development Authorities, District Administration & Police and Irrigation Department	
12	Removal of solid waste & algal growth disposed in the river by use of low cost innovative techniques with involvement of local community	06 Months	ULBs, Gram Panchayat, Development Authorities & Irrigation Department	
<b>(b) Long Term Action Point</b>				
1	Establishment of new solid waste & C&D treatment & disposal facilities against the gap with respect to generation of solid waste	24 Months after sanction of DPR	Nagar Nigam Gorakhpur, & Urban Development Department	Nagar Nigam Gorakhpur shall ensure compliance as per timeline given according to the Action Plan <b>(Appendix-06)</b> as informed by Urban Development Department, UP.
2	Treatment & disposal of legacy waste dumped within 500 meters of the bank of the River	24 Months after sanction of DPR	Nagar Nigam Gorakhpur, Development Authority, Gorakhpur & Urban	Nagar Nigam Gorakhpur & Development Authority, Gorakhpur shall ensure compliance as per timeline given according to the Action Plan <b>(Appendix-06)</b> as informed by Urban

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
			Development Department	Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
3	Construction of electric/fuel efficient crematorium to stop disposal of unburnt/ semi burnt corpses in the river	24 Months	Nagar Nigam Gorakhpur, Development Authority Gorakhpur & Urban Development Department	Nagar Nigam Gorakhpur shall ensure compliance as per timeline given as informed by Urban Development Department, UP. Development Authority will also ensure compliance in concerned areas.
4	Demarcation & notification of FPZ by introducing Pillars at suitable locations in river flood plain and preventing encroachment in river bed.	24 Months	Irrigation Department	Only after sanctioning of DPR & its other formalities including sanctioning of budget under NMCG.
5	Removal of illegal encroachments & constructions from FPZ	24 Months	District Level Committee headed by D.M, with representative from concerned Departments.	
<b>D. ECOLOGICAL FLOW &amp; GROUND WATER MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Identification, inventorization & geo	03 Months	State Wetland	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
	referencing of wetlands/water bodies including their zone of influence & catchment areas within 2 Km of the river		Authority, Forest & Wildlife, Revenue Department, Nagar Nigam Gorakhpur & Gorakhpur Development Authority	
2	Identification & geo referencing of vacant lands in the vicinity of the river for development of bio-diversity parks & forest areas	03 Months	Forest & Wildlife, Revenue Department, Nagar Nigam Gorakhpur & Gorakhpur Development Authority	
3	Identification of external water sources like canal escapes etc. for addition of water in the river for dilution purposes	03 Months	Irrigation Department	Only surplus water after fulfilling irrigation demands will be provided to near by rivers through canal escapes.
4	Prohibition of illegal mining & diversion of river stream	Regular Activity	District Administration, Mining Department & Irrigation Department	Only diversion of river stream would be reported to District authorities in non monsoon period by concerned district irrigation officers.
5	Ensuring rain water harvesting/recharging structures/rainier wells on river banks & construction of	Regular Activity	Mining, Rural Development & Minor Irrigation	Possible funding may be arranged through MNREGA and Central assistance by NMCG.

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
	water harvesting structures		Department	
<b>(b) Long Term Action Point</b>				
1	Notification of E-flow of the River	12 Months	Irrigation Department, MoWR (CWC)	Notification of E-flow of the River will be done by MOWR (CWC).
2	Ecological restoration of the wetlands including plantation in the catchment area & development of community based eco-tourism in the wetland	24 Months from sanction of DPR	State Wetland Authority, Forest & Wildlife Department Tourism Department & National Mission for Clean Ganga	Possible source of funding may be from Centrally Sponsored Scheme for Development of Wetlands and from NMCG.
3	Development of Bio-diversity Parks and Riverine Forests by plantation & re-generation of native species of trees, grasses & herbs and establishment of new nurseries	24 Months from sanction of DPR	State Wetland Authority, Forest & Wildlife Department & National Mission for Clean Ganga	Funds may be arranged from NMCG.
4	Adoption of good irrigation practices, suitable crop selection, use of sprinkler/drip irrigation to minimize the water consumption through awareness & support to the farmers	12 Months	Agriculture Department, Rural Development, Minor Irrigation Department	
5	Removal of encroachment from wetlands, ponds & their restoration	24 Months	Revenue, Administration, Nagar Nigam Gorakhpur & Gorakhpur	

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
			Development Authority	
6	Allowing flow of fresh surplus water source like canal for restoration of E-flow	18 Months	Irrigation Department	Only surplus water after fulfilling irrigation demands will be provided to near by rivers through canal escapes.
<b>E. MONITORING &amp; EVALUATION</b>				
<b>(a) Short Term Action Point</b>				
1	Monthly Monitoring of river water quality at the upstream & downstream of Polluted stretch & meeting points of River Rohin.	Regular Activity	UPPCB, /District Environment Committee	
2	Monitoring of water polluting industries	Quarterly	UPPCB, / District Environment Committee	
3	Monitoring of ground water quality within 500 meters of the rivers & drains	Quarterly	UPPCB, CGWA, CPCB & / District Environment Committee	
4	Pre-monsoon & post-monsoon monitoring of ground water level	Regular Activity	CGWA & Directorate of Ground Water	
5	Measurement of River flow as per the protocol	Regular	Irrigation Department & / District Environment Committee	Annual flow discharge data of river .

S. No.	Action Point	Timeline	Implementing Department/Agency	Remark
6	Project formulation & funding including recurring expenses for employment of JRFs/Monitoring Assistants/Field Assistants, purchase of kits & equipments, vehicle on rental basis, development of Web Portal & establishment of Control Room, purchase of desktop computers, printers/ LED Monitor etc.	02 Months	UPPCB, / District Environment Committee, SMCG & NMCG	
7	Development of Web Portal for reporting & centralized monitoring of water quality of the river & drains and action points with access to all concern stakeholders departments/agencies responsible for implementation of the action plan	Regular	UPPCB, NMCG & CPCB	
9	Establishment of Regional Control Rooms at District/ Division Level for monitoring & uploading of data related to monitoring of water quality & compliance of action points with its integration to the State Level Control Room	04 Months	UPPCB, / District Environment Committee	

# APPENDICES

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### **Appendix-1**

#### **Details of Industries Situated in Catchment Area of River Rohin Within Municipal Limits**

S. N.	District	Name and Address	Location		Type	Treatment Mechanism (ETP/CETP)	Effluent Discharge (KLD)	Effluent Discharge Drain	Compliance Status (yes/No)
			Latitude (N)	Longitude (E)					
1	Gorakhpur	M/s V.N. Dyres and Processor Pvt. Ltd.	26.80634	83.35185	Processing and Dying of Cloths	ETP Installed	300	Bargadwa Drain	Yes
2	Gorakhpur	M/s Jai Laxmi Solvent Pvt. Ltd. Near Industrial Area, Lachhipur, Gorakhpur	26.80186	83.35256	Rice Bran Oil	ETP Installed	06	Bargadwa Drain	Yes
3	Gorakhpur	M/s Jai Laxmi Solvent Pvt. Ltd., Unit- 02 UPSIDC, Industrial Area, Gorakhpur	26.79824	83.36115	Rice Bran Oil	ETP Installed	05	Bargadwa Drain	Yes
4	Gorakhpur	M/s Deewan Industries, E-46/11, UPSIDC, Industrial Area, Gorakhpur	26.7964	83.35773	Used Mobile Oil	ETP Installed	0.5	Bargadwa Drain	Yes
5	Gorakhpur	M/s Indo Lube Refinery, G-21, UPSIDC, Industrial Area, Gorakhpur	26.79651	83.35855	Used Mobile Oil	ETP Installed	0.5	Bargadwa Drain	Yes
6	Gorakhpur	M/s Ideal Industries, Nakha No. 2, Bhagwanpur, Gorakhpur	26.80773	83.36571	Mill Board	ETP Installed	30.4	Bargadwa Drain	Yes
7	Gorakhpur	M/s Laxmi Metal Industries, B-7, Industrial Eastate, Gorakhnath, Gorakhpur	26.78132	83.35972	Alluminium Utensiles	ETP Installed	4.0	Bargadwa Drain	Yes
8	Gorakhpur	M/s Laxmi Bartan Pvt. Ltd., Nakha No. 2, Bhagwanpur, Gorakhpur	26.8081	83.36619	Alluminium Utensiles	ETP Installed	4.0	Bargadwa Drain	Yes
9	Gorakhpur	M/s Rakesh Grih Udyog, G-20, Industrial Area, Gkp.	26.79679	83.35842	Namkeen	ETP Installed	3.0	Bargadwa Drain	Yes
10	Gorakhpur	M/s Smart Wheels Pvt. Ltd, (Old Name R.K.B.K. Automobiles) Lachhipur, Gorakhpur	26.80193	83.35463	Washing & Servicing of Four Wheelers	ETP Installed	05	Bargadwa Drain	Yes
<b>Total</b>							<b>358.4</b>		

### Appendix 3

#### GAP Analysis of Industries Situated in the Catchment of River Rohin within Municipal Limit.

Sl. No.	District	Name of Industry	Sector	Water Consumption (KLD)	Effluent Discharge (KLD)	Details of ETP	Gap Analysis	Remark
1	2	3	4	5	6	7	8	9
1	Gorakhpur	M/s V.N. Dyres and Processor Pvt. Ltd.	Processing and Dying of Cloths	380	300	Oil & Grease trap ,Bar Screen ,Reaction cum Chemical dosing Tank, Primary clarifier, Aeration Tank, Secondary Clarifier, Snd and Carbon Filter Sludge Drying Beds.	No Gap	--
2	Gorakhpur	M/s Jai Laxmi Solvent Pvt. Ltd. Near Industrial Area, Lachhipur, Gorakhpur	Rice Bran Oil	08	06	Oil & Grease trap ,Bar Screen, Primary srttling tank, Aeration Tank,Final settling Tank Sludge Drying Beds.	No Gap	--
3	Gorakhpur	M/s Jai Laxmi Solvent Pvt. Ltd., Unit- 02 UPSIDC, Industrial Area, Gorakhpur	Rice Bran Oil	10	05	Oil & Grease trap ,Bar Screen, Primary srttling tank, Aeration Tank,Final settling Tank Sludge Drying Beds.	No Gap	--
4	Gorakhpur	M/s Deewan Industries, E-46/11, UPSIDC, Industrial Area, Gorakhpur	Used Mobile Oil	1.0	0.5	Oil & Grease trap ,Bar Screen, Primary srttling tank, Aeration Tank, Secondary settling Tank Sludge	No Gap	--

						Drying Beds.		
5	Gorakhpur	M/s Indo Lube Refinery, G-21, UPSIDC, Industrial Area, Gorakhpur	Used Mobile Oil	1.0	0.5	Oil & Grease trap ,Bar Screen, Primary srttling tank, Aeration Tank, Secondary settling Tank Sludge Drying Beds.	No Gap	--
6	Gorakhpur	M/s Ideal Industries, Nakha No. 2, Bhagwanpur, Gorakhpur	Mill Board	35	30.4	Bar screen, Equalization Tank, chemical dosing tank Primary Settling tank, Aeration Tank, Secondary settling tank, Sludge Drying beds	No Gap	--
7	Gorakhpur	M/s Laxmi Metal Industries, B-7, Industrial Eastate, Gorakhnath, Gorakhpur	Alluminium Utensiles	6.0	4.0	Equalization cum Collection Tank, Chemical Dosing Cum Reaction Tank ,Reaction Tank ,Settling Tank, Sludge Drying beds	No Gap	--
8	Gorakhpur	M/s Laxmi Bartan Pvt. Ltd., Nakha No. 2, Bhagwanpur, Gorakhpur	Alluminium Utensiles	6.0	4.0	Oil & Grease trap, collection tank, flocculation cum tube settler multigrade filker,activated carbon filter , Sludge Drying beds	No Gap	--

9	Gorakhpur	M/s Rakesh Grih Udyog, G-20, Industrial Area, Gkp.	Namkeen	5.0	3.0	Bar screen, Equalization Tank, Flash mixing tank, Flocculation Tank, Tube Settler, Multi grade Filter, Activated carbon filter, Sludge Drying Beds	No Gap	--
10	Gorakhpur	M/s Smart Wheels Pvt. Ltd, (Old Name R.K.B.K. Automobiles) Lachhipur, Gorakhpur	Washing & Servicing of Four Wheelers	07	05	Bar screen, Oil skimmer, Equalization Tank, Reaction Cum Dosing Tank, Settling Tank, Sand And Carbon Filter, Sludge Drying Beds.	No Gap	--
<b>Total</b>				<b>459</b>	<b>358.4</b>			

## Appendix 4

### Action Points for Textile Industries

**Central Pollution Control Board** has released a document titled "**Charter for Water Recycling & Pollution Prevention For Textile Industry**".

The Textile unit shall take timebound steps as detailed below for fulfilling the existing gaps with reference to water consumption & discharge of effluent, effluent treatment infrastructure etc. as below with timeline for upgrading the Effluent Treatment Plant –

S.No.	Objective	Action Point	Timeline
1.	Water Consumption	Reduce Water consumption by 20 % per kg of product by Completing upgradation of ETP.	31-12-2019
2.	Water Consumption	Reduce Water consumption by 15 % in addition to last years 20 % per kg of product by Completing upgradation of ETP by adding tertiary treatment units.	31-12-2020
3.	Water Consumption	Confirmation of 30 % Water Recycle against total input (in other words water consumption per kg should be reduced by 30 % minimum)	Beyond 31-12-2020
4.	Monitoring of Water	Installation of sealed flow meter and running hours meter on bore wells	01 Month

	Consumption	and inlet pipeline of different process section.	
5.	Colour coding of pipe lines	Colour coding of pipe lines carrying recycled process water and fresh process water	06 Months
6.	Self-Assessment of ETP adequacy	Preperation of ETP adequacy assessment report	01 Month
7.	Installation of sealed flow metering system	Installation of sealed flow metering system along with running hours at the inlet water source (Borewell or other sources) and outlet and at inlet pipeline of different process operation and outlet of ETP	30-06-2019
8.	Setting up of Online Effluent Monitoring System	Setting up of Online Effluent Monitoring System to Monitor final outlet discharge, units connected to CETPs can have Common System Installed at CETP discharge	06 Months

**Appendix-2**  
**Status of E-Waste Management**

**Status of E-waste Recycling / Collection / Generation Units in the State of U.P.**  
**(As on 09.10.2018)**

<b>S. No.</b>	<b>Name &amp; Address of Unit</b>	<b>Regional Office</b>	<b>Status of Authorisation</b>	<b>Status of Registration &amp; Validity</b>	<b>Type</b>	<b>Capacity (T/Annum)</b>
1	M/s Auctus -E Recycling Solutions Pvt. Ltd., F-637, M.G. Road, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 30.08.2019	Collection, Dismantle	1800
2	M/s Mahaluxmi Metal Alloys (India) Pvt. Ltd., Modinagar, Ghaziabad.	Ghaziabad	Grant	Registered 22.05.2023	Collection, Dismantle, Recyclers	30000
3	M/s N.K. Products, 58-59, M.G. Road, Ghaziabad.	Ghaziabad	Refused	Registered 22.06.2016	Collection, Dismantal	9000
4	M/s Bharat Oil Co., E-18, Site-IV, Sahibabad, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 16-05-18	Collection, Dismantal	4000
5	M/s Planet Green Recycling Pvt. Ltd., G-129, Phase -1, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 23.08.2018	Collection, Dismantal, Recyclers	1500
6	M/s Rocket Sales, Plot No. 1-12, I/A, M.G. Raod, Hapur.	Ghaziabad	Grant	Registered 27.08.2019	Collection,, Dismantal	300
7	M/s Arsh Recycling Pvt. Ltd., Plot No. 203, UPSDIC, I/A, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 20.06.2023	Collection, Dismantal, Recycling,	15000
8	M/s Auctus Recycling Solutions Pvt. Ltd.Habibpur, Greater Noida.	Greater Noida	Grant	Registered 06.12.2021	Dismantal, Callection	19500
9	M/s Khan Traders, B-5, site4, Panki Industrial Area, Kanpur.	Kanpur	Grant	Registered 15-11-2020	Collection, Dismantal	7190
10	M/s Green Tech Rcycling, Khasra No.-645, Acchraunds, Bahdaurpur Road, Partapur, Meerut .	Meerut	Grant	Registered 12.01.2022	Collection, Dismantal	1800

11	M/s Narora Atomic Power Station, Narora, Bulandshahar.	Bulandshahar	Not Applied	-	Collection' Dismantaling & Recycling	10
12	M/s Metal Alloys, E-46, Industrial Area, Ramnagar, Varanasi	Varanasi	Grant	Registered 31-05-2019	Collection	1825
13	M/s Comwen Information Technologies Pvt.Ltd., 127/35B, ChakRagunath, Naini, Allahabad.	Allahabad	Grant	Registered 11-08-2017	Collection	300
14	M/s Dasia ECo E-Waste Recyclers E-160 Industrial area, Khalilabad, SantKabairnagar.	Basti	Grant	Registered 31-12-2017	Collection, Dismantaling	720
15	M/s Sims Recycling Solutions Plot no.1 Udyog KendraII Ecotech-III Greater Noida.	Greater Noida	Grant	Registered 31.12.2019	Collection, Dismental, Recycling	1250
16	M/s J.A.O. E-Waste Recycling Co, Vill-Jaitpur, Distt-Moradabad.	Moradabad	Grant	Registered 23.11.2020	Collection	3001
17	M/s HIN Green E-waste Recycling (P) Ltd, B-19/1, Summer Garden Colony, Meerut.	Meerut	Grant	Registered 12.04.2018	Collection, Dismental,	750
18	M/s S.R. Metcast India (P) Ltd 11.8 Km.Agra Mathura Road, Agra.	Agra	Grant	Registered 02.08.2022	Collection	600
19	M/s K.M. Metals Suppliers 9/270,271,Mathura Agra.	Agra	Not Applied	-	Collection	5000
20	M/s Prakash Metal House 39/223, Karwan Lohamandi,Agra.	Agra	Grant	Registered 02.05.2023	Collection	1500
21	M/s Shree MahaveerJi Trading Company, 30/127, Chippitala, Agra.	Agra	Not Applied	Reject	Collection	4500
22	M/s E-Waste Recyclers India E-50, UPSIDC Industrial area, NH-2 Kosikalan, Mahura.	Mathura	Grant	Registered 01.03.2022	Collection, Dismantle	6000
23	M/s Supar Trading Company, Plot No.-3 Govt. Industrial Estate, Talkatora Road, Lucknow.	Lucknow	Not Applied	Registered 03.04.2016	Collection	365
24	M/s V.R. Techno Enviro Services pvt. ltd. khasra No. 440, indira Priyedarshni ward, jarhra Indira Nagar, Lucknow.	Lucknow	Not Applied	Registered 09.04.2016	Collection, Dismantle	365

25	M/s Sachin enterprises,84/1,Plot no.34-35 Fazalganj, Kanpur.	Kanpur	Grant	Registered One Time	Collection	5000 Pieces Per Annum
26	M/s Gandhi Traders, 91/103, Dalelpurwa, Kanpur.	Kanpur	Grant	Registered 04.06.2018	Collection	5000 Pieces Per Annum
27	M/s Greezon Recycling Pvt. Ltd., R 30, UPSIDC, Industrial Area, Sikandrabad, Bulandshahar.	Bulandshaha	Grant	Registered 27.08.2022	Collection Dismental, Recycling	16.5
28	M/s Sachin Enterprises, 123/751, block-T 74 pratapganj Gadariyan Purwa, Fazalgang, Kanpur.	Kanpur	Grant	Registered 16.11.2022	Collection, Dismantling, Refurbishing	2500
29	M/s Greeniva Recycler Pvt. Ltd., Plot No. G-284, M.G. Road, Industrial Area, Hapur.	Hapur	Grant	Registered 18.06.2019	Collection, Dismantling, Recycling.	1500
30	M/s S. Malik Traders, Plot No.-93, 94 Vill-Budhera Jahidpur, Meerut.	Meerut	Grant	Registered 12.01.2022	Collection, Dismantling	365
31	M/s Royal Faiz Recycling (p) Ltd. , I-22, I.A. M.G. Road, Hapur.	Ghaziabad	Grant	Registered 29.01.2023	Collection, Dismental, Recycling	12000
32	M/s 3 C Recycler, F-326, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 31.12.2022	Collection, Dismental, Recycling	9000
33	M/s Life E- Recycling (P) Ltd., F- 435, UPSIDC I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 05.06.2023	Collection, Dismental,	9000
34	M/s Hind Recycling (P) Ltd., Plot No. F-203, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 01.03.2022	Collection, Dismental,	9000
35	M/s Hayat Recycler, F-53, 54, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 21.06.2023	Collection, Dismental, Recycling	15000
36	M/s B.R.P. Infotech Private Limited, F-394, Phase-I, M.G.Road, Industrial Area, Hapur	Hapur	Grant	Registered 28.06.2023	Recycling, Dismantling, Segregation, Collection	9000 MT/Year

37	M/s Sky Green Waste Recycling Managememt , Khasra No.- 174, Alipur Jijmana, Meerut, U.P.	Meerut	Grant	Registered 20.12.2023	Dismantling, Recycling	5475 MT/Y 4500 MT/A
38	M/s Swachh Bharat Recycling Company, Gali-N0-4, 2083, Saipuram Insutrial Area, Delhi Road, Meerut, U.P.	Meerut	Grant	Registered 08.05.2023	Recycling	4800 MT/A
39	M/s Rudra Interprises, Plot No. A- 96, Sector-A-4, Tronica City, Loni, Ghaziabad	Ghaziabad	Grant	Registered 03.05.2023	Disposal & Dismantling	500 MT/Month
40	M/s Avgree Recycling Pvt. Ltd. KH No. 549, Vill.-Tiyala, Meerut- Bulandshahar Road, Hapur Bypass, Hapur	Ghaziabad	Grant	Registered 10.09.2023	Dismantling & Segregation	11000 MT/A
41	M/s Faiz Recycling, G-235, MG Road, Industrial Area, Hapur	Ghaziabad	Grant	Registered 13.02.2024	Dismantling & Segregation	36.67 MT/Day
42	M/s Horizon Recycling Pvt. Ltd., Khasra no.-35, Kumarhera, 7th km Dehradun Road, Saharanpur, U.P.	Saharanpur	Grant	Registered 02.08.2022	Recycling, Dismantling, Segregation, Collection	12000 MT/A
43	M/s Golden Ewaste Recyclers Pvt. Ltd., Plot No.-12A, Gagol Road, Behind Sophia School Udyog Puram, Partapur, Meerut	Meerut	Grant	Registered 01.04.2024	Transporttion, Refurbishing, Dismantling, Segregation, Storage, Disposal	9600 MT/A

## Appendix-5

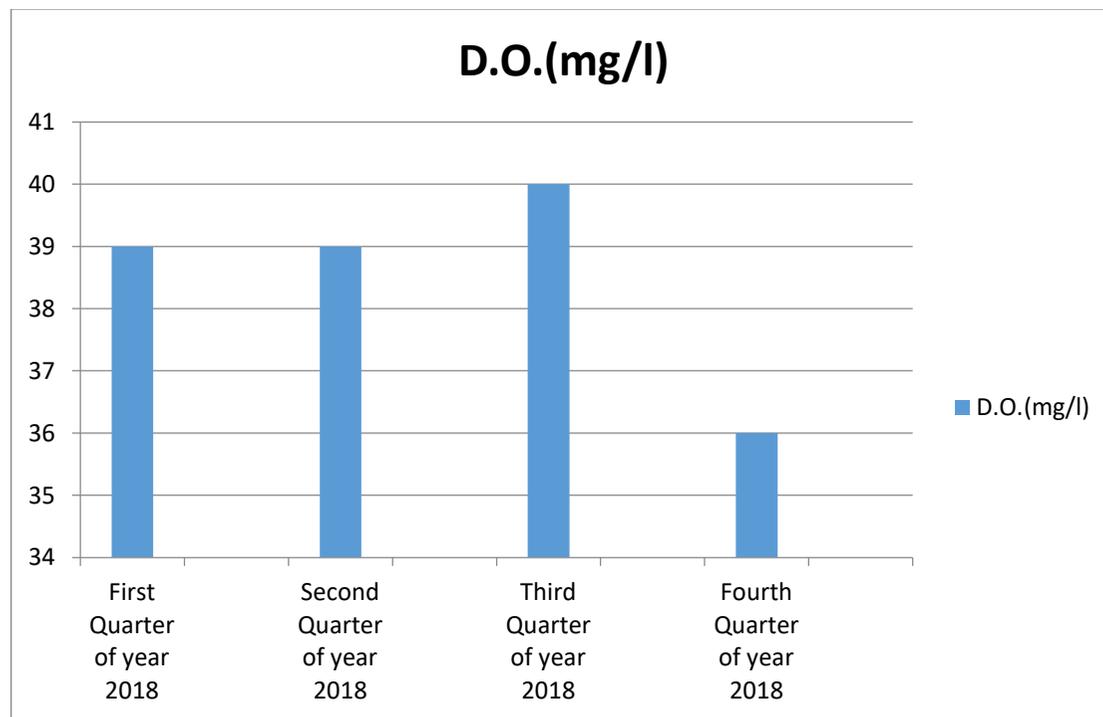
### River Water Quality Data Quarterly Water Quality of River Rapti Year-2018

S No	Sample Collection Point	First Quarter of 2018			Second Quarter of 2018			Third Quarter of 2018			Fourth Quarter 2018		
		DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)
1	Rapti River before meeting to River Rohin at Domingarh	7.4	4.7	25	-	-	-	-	-	-	-	-	-
2	Rapti River D/S of Gorakhpur at Rajghat	7.6	4.9	39	-	-	-	-	-	-	-	-	-
3	Rapti River before meeting to River Rohin at	-	-	-	7.6	5.0	26	-	-	-	-	-	-

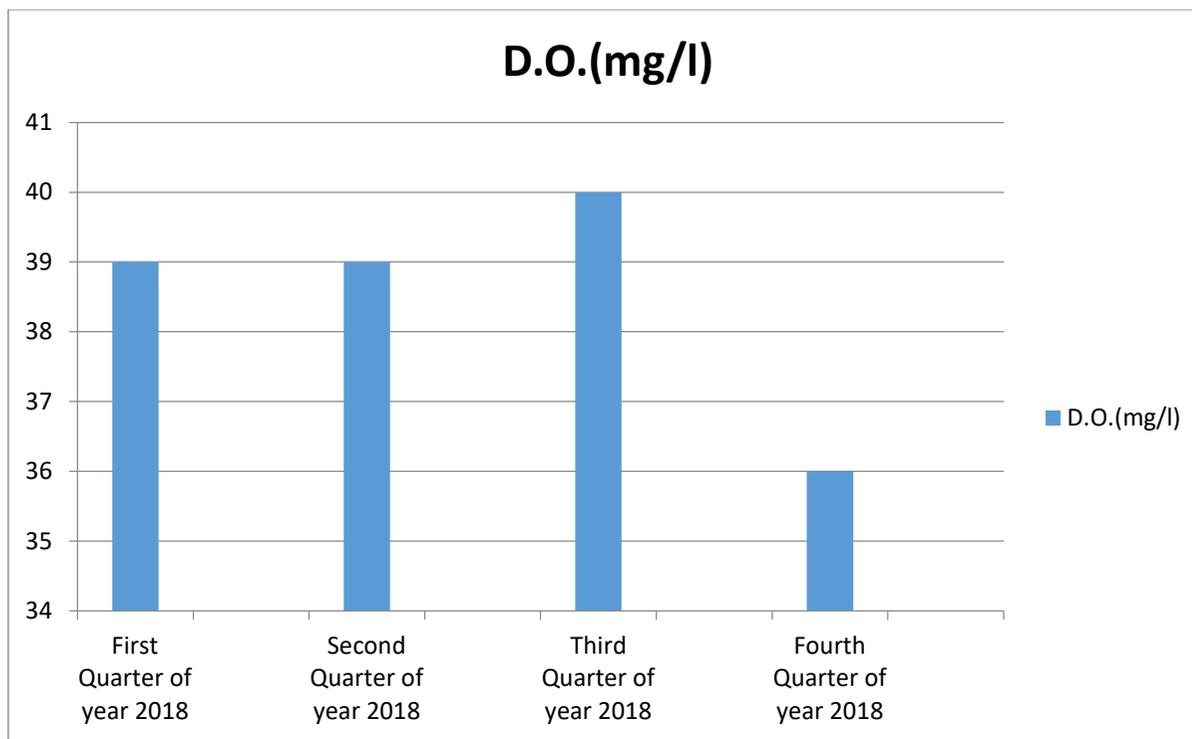
S No	Sample Collection Point	First Quarter of 2018			Second Quarter of 2018			Third Quarter of 2018			Fourth Quarter 2018		
		DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)
	Domingarh												
4	Rapti River D/S of Gorakhpur at Rajghat	-	-	-	7.5	5.0	39	-	-		-	-	-
5	Rapti River before meeting to River Rohin at Domingarh	-	-	-	-	-	-	7.0	5.0	25	-	-	-

S No	Sample Collection Point	First Quarter of 2018			Second Quarter of 2018			Third Quarter of 2018			Fourth Quarter 2018		
		DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)
6	Rapti River D/S of Gorakhpur at Rajghat			-	-	-	-	6.8	5.2	40	-	-	-
7	Rapti River before meeting to River Rohin at Domingarh	-	-	-	-	-	-	-	-	-	6.9	5.2	23
8	Rapti River D/S of Gorakhpur at Rajghat	-	-	-	-	-	-	-	-	-	6.9	5.5	36

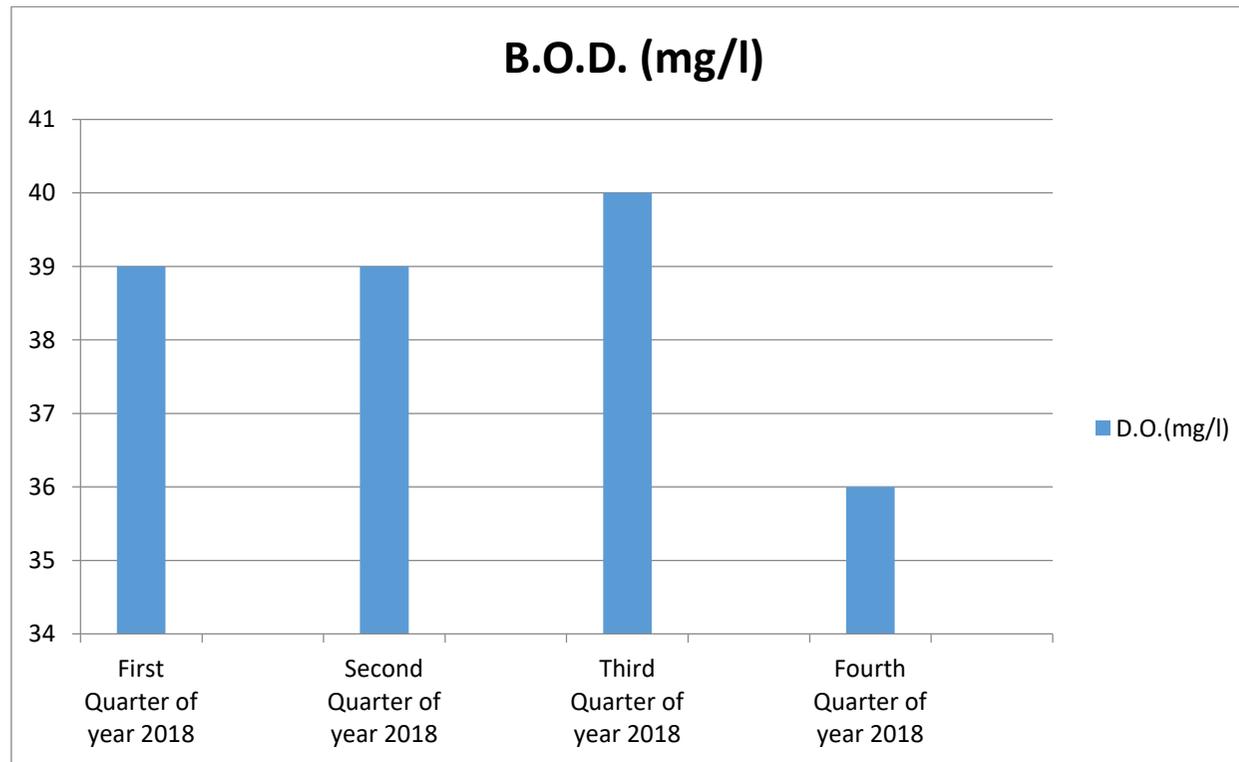
## Comprative Chart of Dissolved Oxygen in River Rapti before meeting to Rohin River at Domingarh on Quarterly Basis in 2018



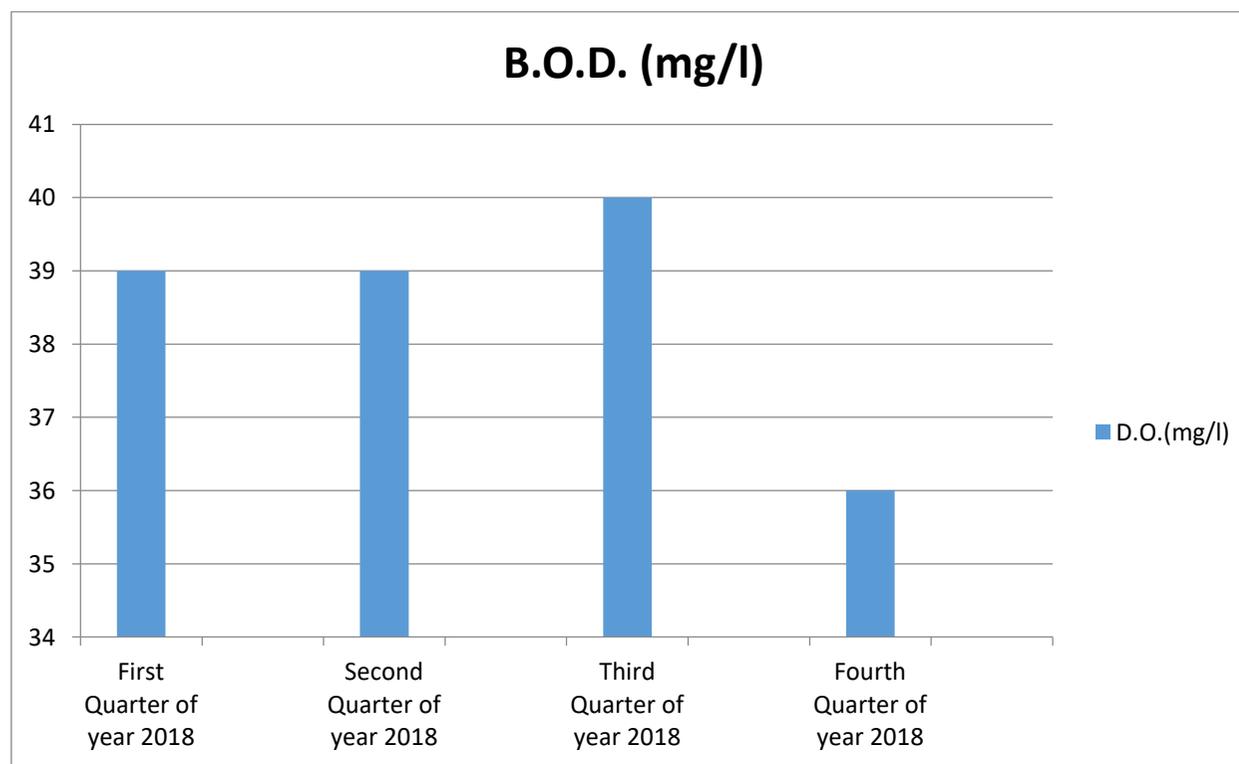
## Comprative Chart of Dissolved Oxygen in River Rapti D/S of Gorakhpur at Rajghat on Quarterly Basis in 2018



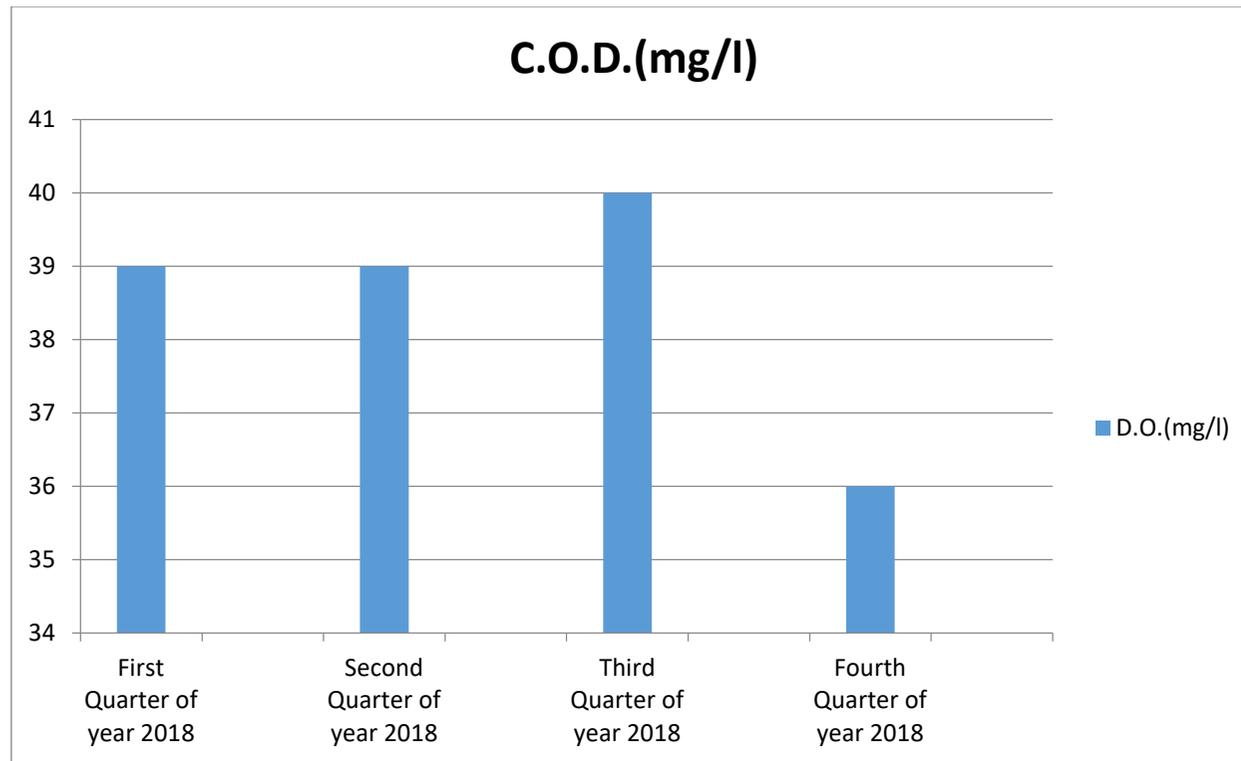
## Comprative Chart of Bio-Chemical Oxygen Demand in River Rapti before meeting to Rohin River at Domingarh on Quarterly Basis in 2018



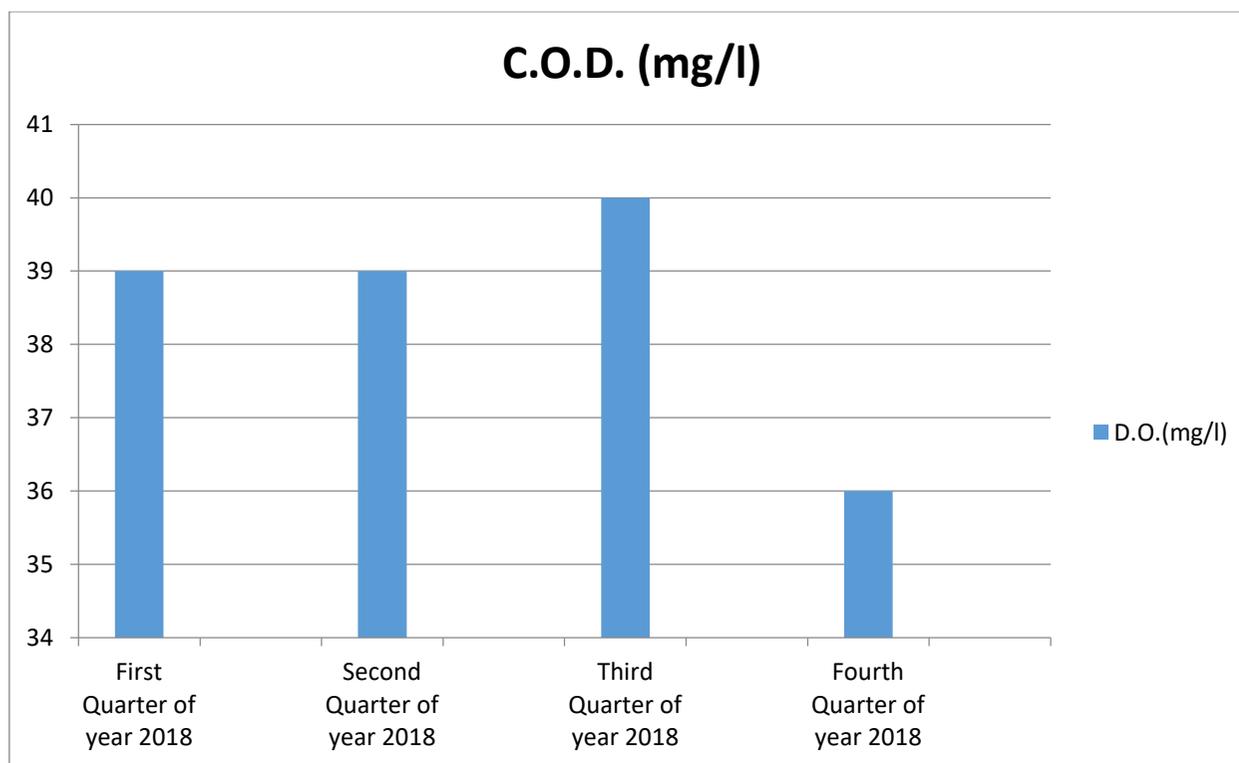
## Comprative Chart of Bio-Chemical Oxygen Demand in River Rapti D/S of Gorakhpur at Rajghat on Quarterly Basis in 2018



## Comprative Chart of Chemical Oxygen Demand in River Rapti before meeting to Rohin River at Domingarh on Quarterly Basis in 2018



## Comprative Chart of Chemical Oxygen Demand in River Rapti D/S of Gorakhpur at Rajghat on Quarterly Basis in 2018



**CLASS OF WATER AS PER IS:2296**

<b>Classification</b>	<b>TYPE OF USE</b>
ClassA	Drinking water source without conventional treatment but after disinfection
ClassB	Outdoor bathing
ClassC	Drinking water source with conventional treatment followed by disinfection.
ClassD	Fish culture and wild life propagation
ClassE	Irrigation, industrial cooling or controlled waste disposal

## TOLERANCE LIMITS

**TABLE-1: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – A**

S. No. (1)	Characteristic (2)	Tolerance (3)
(i)	pH	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l,	6.0
(iii)	Bio-chemical Oxygen Demand	2.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	50
(v)	Colour, Hazen units, Max	10
(vi)	Odour	unobjectionable
(vii)	Taste	Agreeable taste
(viii)	Total Dissolved Solids, mg/l, Max	500
(ix)	Total Hardness (as CaCO <sub>3</sub> ), mg/l, Max	300
(x)	Calcium Hardness (as CaCO <sub>3</sub> ), mg/l, Max	200
(xi)	Magnesium (as CaCO <sub>3</sub> ), mg/l, Max	100
(xii)	Copper (as Cu), mg/l, Max	1.5
(xiii)	Iron (as Fe), mg/l, Max	0.3
(xiv)	Manganese (as Mn), mg/l, Max	0.5
(xv)	Chlorides (as Cl), mg/l, Max	250
(xvi)	Sulphate (as SO <sub>4</sub> ), mg/l, Max	400
(xvii)	Nitrates (as NO <sub>2</sub> ), mg/l, Max	20
(xviii)	Fluorides (as F), mg/l, Max	1.5
(xix)	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max	0.002
(xx)	Mercury (as Hg), mg/l, Max	0.001
(xxi)	Cadmium (as Cd), mg/l, Max	0.01
(xxii)	Selenium (as Se), mg/l, Max	0.01
(xxiii)	Arsenic (as As), mg/l, Max	0.05
(xxiv)	Cyanides (as CN), mg/l, Max	0.05
(xxv)	Lead (as Pb), mg/l, Max	0.1
(xxvi)	Zinc (as Zn), mg/l, Max	15
(xxvii)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	0.05
(xxviii)	Anionic detergents, (as MBAS), mg/l, Max	0.2
(xxix)	Poly-nuclear aromatic hydrocarbons (PAH),	0.2
(xxx)	Mineral oil, mg/l, Max	0.01
(xxxi)	Barium (as Ba), mg/l, Max	1.0
(xxxii)	Silver (as Ag), mg/l, Max	0.05
(xxxiii)	Pesticides	Absent
(xxxiv)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>
(xxxv)	Beta emitters, µc/ml, Max	10 <sup>-9</sup>

**TABLE- 2: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – B**

S. (1)	Characteristic (2)	Tolerance Limit (3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l, Max	5.0
(iii)	Biochemical Oxygen Demand (5 days at 20 °C),	3.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	500
(v)	Fluorides (as F) <mg/l, Max	1.5
(vi)	Colour, Hazen units, Max	300
(vii)	Cyanides (as CN), mg/l, Max	0.05
(viii)	Arsenic (as As), mg/l, Max	0.2
(ix)	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH) mg/l, Max	0.005
(x)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	1.0
(xi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xii)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>

**TABLE - 3: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – C**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l Minimum	4.0
(iii)	Biochemical Oxygen Demand	3.0
(iv)	Total coliform organisms, MPN/100 ml, Max	5000
(v)	Colour, Hazen units, Max	300
(vi)	Fluorides (as F), mg/l, Max	1.5
(vii)	Cadmium (as Cd), mg/l, Max	0.01
(viii)	Chlorides (as Cl), mg/l, Max	600
(ix)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	0.05
(x)	Cyanides (as CN), mg/l, Max	0.05
(xi)	Total Dissolved Solids, mg/l, Max	1500
(xii)	Selenium (as Se), mg/l, Max	0.05
(xiii)	Sulphates (as SO <sub>4</sub> ), mg/l, Max	400
(xiv)	Lead (as Pb), mg/l, Max	0.1
(xv)	Copper (as Cu), mg/l, Max	1.5
(xvi)	Arsenic (as As), mg/l, Max	0.2
(xvii)	Iron (as Fe), mg/l, Max	50
(xviii)	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l,	0.005
(xix)	Zinc (as Zn), mg/l, Max	15
(xx)	Insecticides, mg/l, Max	Absent
(xxi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xxii)	Oils and grease, mg/l, Max	0.1
(xxiii)	Nitrates (as NO <sub>3</sub> ), mg/l, Max	50
(xxiv)	Alpha emitters, µc/mg, Max	10 <sup>-9</sup>
(xxv)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 4: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – D**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l, Min.	4.0
(iii)	Free Ammonia (as N), mg/l, Max.	1.2
(iv)	Electrical Conductance at 25 °C, µS, Max	1000
(v)	Free Carbon Dioxide (as CO <sub>2</sub> ), mg/l, Max	6.0
(vi)	Oils and Grease, mg/l, Max	0.1
(vii)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>
(viii)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 5: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – E**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.0 to 8.5
(ii)	Electrical Conductance at 25°C, µS, Max	2250
(iii)	Sodium Adsorption Ratio, Max	26
(iv)	Boron (as B), mg/l, Max	2.0
(v)	Total Dissolved Solids, (inorganic), mg/l, Max	2100
(vi)	Sulphates (as SO <sub>4</sub> ), mg/l, Max	1000
(vii)	Chlorides (as Cl), mg/l, Max	600
(viii)	Sodium Percentage, Max	60
(ix)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>
(x)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

## Appendix-06

### MSW improvement action plan time-line for the ULBs of Department of Urban Development, UP

S.N.	Key Activities	Timeline (In Months)								
		1	2	3	4	5	6	7	8	9
1	Policy Framework adoption (During the period the ULBs are required to adopt various rules /regulation in terms of bylaws for effective implementation of SWM rules)									
2	With adoption action plan the ULBs along the river will formulate IEC campaign (Specifically designing of promotional materials related to not only just for better waste management in the area but also making common people/institutions aware and sensitise about river pollution and its control measure for making an effective behaviour change. The first 2 months will be needed for preparing the material and widely spreading the message and then it's going to be a continuous effort for a sustained drive to make perceptible change among stakeholders.)									

3	Detail Gap Analysis of existing resources in terms of human resource/equipment/vehicles that are presently deployed and further required for full compliance of SWM rules. During the period each ULB shall prepare a detail micro plan (ward -wise) in sync with the action plan for effective implementation.									
4	Procurement of Required Material / Services after Gap Analysis									
5	Capacity Building. All the key stakeholders from senior officials to the level of safaikarmi is required to be sensitize and trained for the effective compliance of SWM rules and during the period intensive capacity building programmes shall be conducted.									
6	Identification of Land/ Building for waste processing shall be completed for all ULBs within 2 months (decentralised composting/MRF).									
7	Construction /Setting up of decentralised processing facility (composting for wet waste and MRF for dry waste) in all ULBs.									
8	Bulk waste Generators Identification and consultation/capacity building foronsite									

	Waste Management.								
<b>9</b>	Identification and integration of Informal Rag Pickers								
<b>10</b>	Segregation/ collection / transport / processing (10 percent) (by 4th month of Action Plan adoption)								
<b>11</b>	Segregation/ collection / transport / processing (20 percent)								
<b>12</b>	Segregation/ collection / transport / processing (35 percent)								
<b>15</b>	Segregation/ collection / transport / processing (50 percent)								
<b>16</b>	Segregation/ collection / transport / processing (65 percent)								
<b>17</b>	Segregation/ collection / transport / processing (80) percent)								
<b>18</b>	Segregation/ collection / transport / processing (100) percent) Within 12 months.								

**ACTION PLAN  
FOR  
RESTORATION OF POLLUTED STRETCH  
OF  
RIVER GHAGHRA  
FROM  
BARHALGANJ (GORAKHPUR)  
TO  
BHAGALPUR (DEORIA)**



**UTTAR PRADESH POLLUTION CONTROL BOARD  
TC - 12V, VIBHUTI KHAND, GOMTINAGAR,  
LUCKNOW (UP)**

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## 1. INTRODUCTION

River Ghaghra is a perennial Trans - Boundry River. It originates on the Tibetan Plateau of Himalaya's near Lake Mansarover. It traverses through Nepal and joins the Sharda River at Bramhaghat in India. Ghaghra River is a major left bank tributary of the River Ganges. Total stretch of River Ghaghra is approx. 1080 K.M. Length of Ghaghra River in Nepal is approx 507 K.M and rest stretch of the River before confluence with the River Ganges lies in India. Ghaghra River joins River Ganga at Sitab Diyara in Distt-Ballia of UP. It is the largest tributary of the River Ganga by volume.



Fig: 1.1, Ghaghra River Upstream of Barhalganj (Gorakhpur)

As per Water Quality Monitoring Data of River Ghaghra for the year 2018, water quality in the identified polluted stretch of river (i.e. Barhalganj to Bhagalpur) falls in the Class- D as per water quality criteria of Central Pollution Control Board. River Water is fit for propagation of Wild Life and Fisheries.

Town Area Barhalganj is an ancient city of Distt-Gorakhpur. It is situated on the left Bank of River Ghaghra. Barahalganj town is connected to Town Area

Doharight of District Mau by a bridge over the River Ghaghra. Barahalganj Town Area is situated along N.H.-29, Gorakhpur-Varanasi Highway. As per census of India made in the Year 2011, population of Barhalganj Town was 21,290. Main source of water supply of Town Area is Ground water. For meeting the requirement of peoples residing within the Town Area Limit, Tube wells have been installed by Town Area. Waste water generated from Town area Barahlganj is directly discharged in to River Ghagahra through four major drains. Sewage treatment plant has not been installed by Town Area. Within the limit of Town Area Barahalganj a crematorium named as Mukti Path is situated along the River Ghaghra, where approx. 10-12 dead bodies are cremated per day. Dead bodies are cremated traditionally using firewood. An electrical crematorium at Mukti Path has also been constructed but presently it is non functional. The Ash generated from the funeral piere is dumped in the River Ghaghra.

Nagar Panchyat, Doharighat, Mau is situated on the right bank of River Ghaghra. Nagar panchyat Doharighat Mau is connected with Town Area Barahalganj Gorakhpur through road bridge of NH 29 made on the River Ghaghra. As per census of the year 2011 population of Nagar Panchyat Doharighat, Mau was 11,799. Main source of water supply of Town Area is ground water. Waste water generated from Nagar Panchyat Doharighat, Mau is directly discharged in to Ghaghra River through 03 drains. Nagar Panchyat Doharighat, Mau has not installed sewage treatment plant for the treatment of sewage generated from local body. A cremation place is situated along the bank of the River in the West direction of Nagar Panchyat Doharighat, Mau where dead bodies are cremated traditionally on an average 6-8 per day.

Along the River stretch in the down stream of Town Area Barhalganj there is another local body called Gaura Barhaj is situated. Nagar Palika Parishad Gaura Barhaj falls in the jurisdiction of Distt – Deoria. As per census 2011 population of Nagar Palika Parishad Gaura Barhaj was 36,459. Main source of water supply of

Nagar Palika Parishad Gaura Barhaj is Ground water. Domestic sewage generated from Nagar Palika Parishad Gaura Barhaj is directly discharged in to River Ghaghra through one major drain. Sewage treatment plant has not been installed by local body.

In the downstream of Nagar Palika Parishad Gaura Barhaj, River Rapti Joins River Ghaghra at the place known as Kaparwar Ghat. In the downstream of Kaparwar Ghat there is a village Panchyat named Bhagalpur is also situated along the river bank. Total Population of Bhagalpur as per census of the year 2011 is 7,264. Sewage generated from Village Panchayat Bhagalpur is also discharged in to Ghaghra River through one major drain. Sewage treatment plant has not been installed by Village Panchyat local body.



**Fig 2.1: Google Earth image showing identified polluted stretch of River Ghaghra (Barhlganj, Gorakhpur to Bhagalpur, Deoria)**

### **1.1 IDENTIFIED POLLUTED STRETCH OF RIVER GHAGHRA (BARHALGANJ, GORAKHPUR TO BHAGALPUR, DEORIA).**

As per report of Central Pollution Control Board, the most polluted stretch of River Ghaghra is from Barhalganj, Gorakhpur to Bhagalpur Deoria. Length of polluted river stretch is 50 Km. The water quality of River Ghaghra in this stretch has been observed in a poor state. Hence, the said stretch of the river from Barhalganj to Bhagalpur has to be rejuvenated. The sewage generated from the local bodies is discharged through drains in to River Ghaghra. No industrial unit has been identified along the River Bank within identified polluted stretch of River Ghaghra. 03 local bodies namely town area Barahalganj, Gorakhpur, Town Area Doharighat Mau and Nagar Palika Parishad Gaura Barhaj Deoria and 01 Village Panchayat namely Bhagalpur, Deoria is situated along the River Bank within identified polluted stretch.

Approx. 3.5 MLD sewage is generated from Town area Barhalganj, Gorakhpur, which is directly discharged into River through 04 drains. Approx. 2.0 MLD sewage generated from Town Area Dohari Ghat, Mau, is directly discharged into River through 03 drains. Approx. 7.0 MLD sewage generated from Nagar Palika Gaura Barhaj, Deoria is directly discharged into River through 01 drain and approx. 1.5 MLD sewage generated from village Panchyat Bhagalpur, Deoria is discharged into River through 01 drain. So the total 14MLD untreated sewage is discharged through 09 no. of drains in the polluted river stretch of Ghaghra.

Domestic sewage generated from local bodies and village Panchyat situated on the bank of River Ghaghra in the identified polluted stretch is directly discharged in the River without any treatment. Local bodies and village Panchyat situated in the identified polluted stretch of River Ghaghra has not installed sewage treatment plant. Tapping and diversion of drains directly discharging into River Ghaghra is utmost important for abatement of pollution in the identified polluted stretch. Construction of sewage treatment

plants for each local body and Village Panchyat situated on the bank of River is essential for control of pollution in the identified Polluted stretch.

## **2. OBJECTIVE OF THE ACTION PLAN**

The objective of the Action Plan is to restore the water quality of identified polluted stretch of River Ghaghra from Barahalganj Gorakhpur to Bhagalpur, Deoria to make fit for at least bathing purposes within 06 months from the date of Action Plan gets approved, as directed by Hon'ble Nation Green Tribunal vide its order dated 20<sup>th</sup> September 2018 passed in the original application number 673/2018 in the matter of News Item Published in '***THE HINDU' AUTHORED BY SHRI JACOB KOSHY titled "* More River stretches are now critically polluted: CPCB.**

### 3. Pollution Inventory

#### 3.1 DETAILS OF DRAINS POLLUTING RIVER GHAGHRA

In the polluted stretch of River Ghaghra total industrial discharge is zero. Since any industrial unit has not been identified along the River Bank within the identified polluted stretch. Total domestic discharge within the polluted stretch is approximately 14 MLD. Total 09 drains are discharging domestic sewage into the River within identified polluted stretch. Details of the drains are as tabulated below.

#### Summary of drains polluting River Ghaghra within the identified polluted stretch

S No.	Name of Drain	Type of Drains	Status of Drain	Industries		Sewage Discharge (MLD)		
				Number	Treated Effluent (MLD)	Treated	Untreated	Total Discharge in the River
<b>A</b>	Town Area, Barahganj, Gorakhpur							
1	Kanoongo Ghat Drain, Near Laxmi Narayan Mandir.	Domestic	Untapped	0	0	0	1.5	1.5
2	Drain in the down stream of kanoongoghat and up stream of Tarakulahi Ghat.	Domestic	Untapped	0	0	0	0.9	0.9
3	Tarkulahi Ghat Drain	Domestic	Untapped	0	0	0	0.7	0.7
4	Badhanpura drain Near Mukti Path.	Domestic	Untapped	0	0	0	0.5	0.5
	<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>3.5</b>	<b>3.5</b>
<b>B</b>	Nagar Panchayat, Doharighat, Mau							
1	KhatikTola drain	Domestic	Untapped	0	0	0	0.7	0.7
2	MallahTola drain	Domestic	Untapped	0	0	0	0.8	0.8
3	Tiwaripur drain	Domestic	Untapped	0	0	0	0.5	0.5
	<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>2.0</b>	<b>2.0</b>
<b>C</b>	Nagar PalikaParishadGauraBarhaj, Deoria							
1	RavidasGhatNalla	Domestic	Untapped	0	0	0	7.0	7.0
<b>D</b>	Bhagalpur Deoria.							
1	SabjiMandiNalla	Domestic	Untapped	0	0	0	1.5	1.5
	<b>Grand Total (A+B+C+D)</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>14.0</b>	<b>14.0</b>

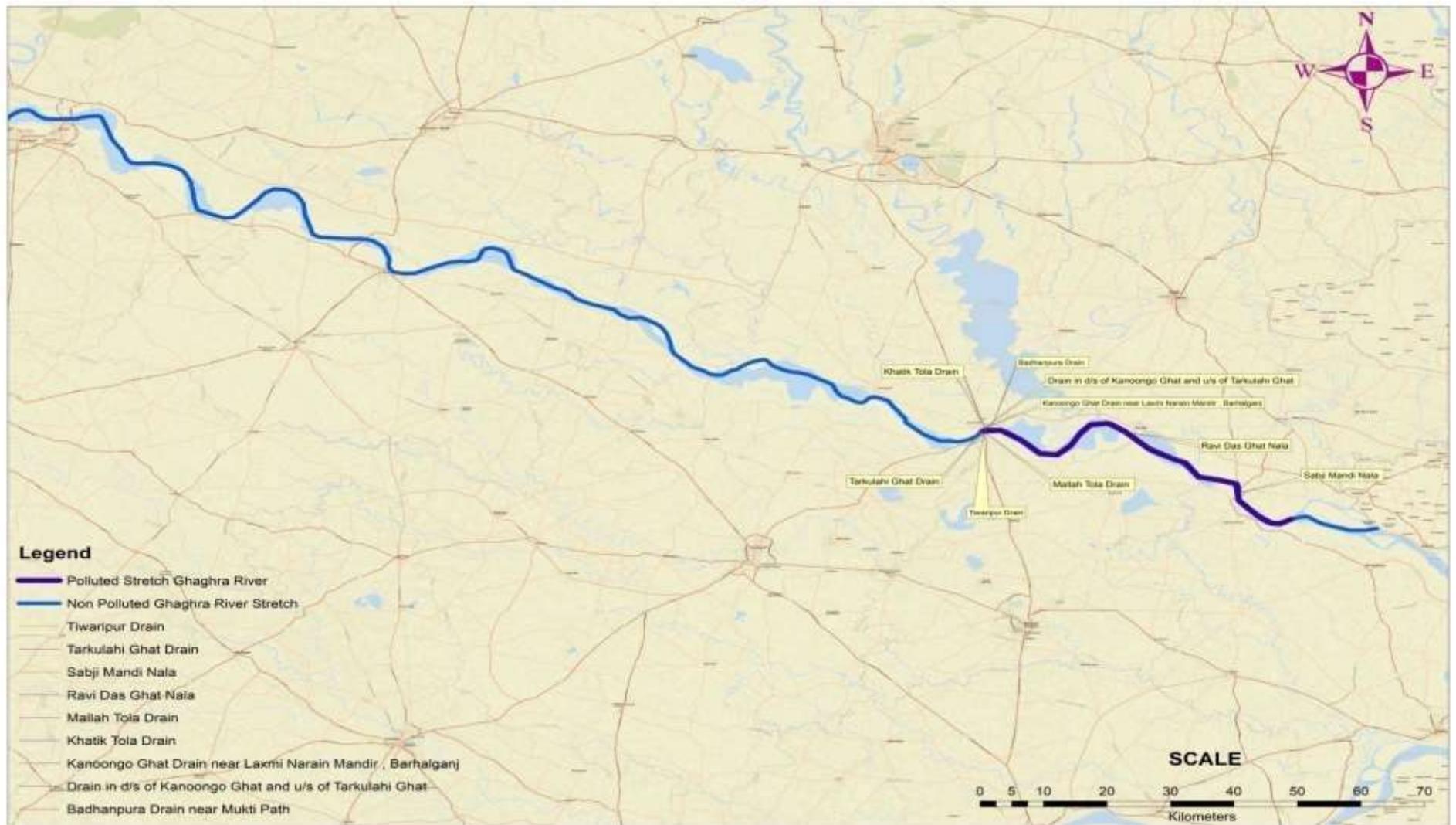


Fig : 3.1, GIS Map of Ghaghra River Polluted Stretch with Drains

## A. Kanoongo Ghat drain near Laxmi Narain Mandir, Barhalganj.

### a. Origin

Kanoongo Ghat Drain originates from Barhalganj Town area and traverses from different Mohallas and ultimately meets to River Ghaghra. The approximate length of the drain is 700 meter. Barhalganj is a small town area and the domestic discharge from different parts of the town area ultimately meets in to the River through various drains. Co-ordinates of Kanoongo Ghat Drain is 26.28056N and 83.50807E

### b. Length covered

Total length of KanoongoGhat Drain is approximetly 700 meter.

### c. Details of industries & discharge of their effluent into the drain

Any industrial unit has not been installed in Barhalganj Town area and the adjacent areas of Barhalganj. This Drain carries only domestic effluent and discharged 1.5 MLD in to Ghaghra River.

### Water Quality of Kanoongo Ghat drain near Laxmi Narain Mandir, Barhalganj.

Parameters	Results
pH	7.35
BOD (mg/l)	36.5
COD (mg/l)	202
Total Coliform (MPN/100 ml)	92,00,000
Date of Sampling	23.05.2019



## B. Drain in the Down stream of Kanoongo Ghat and up stream of Tarakulahi ghat origin.

This drain is situated at a distance of approx 15 meters down stream from Kanoongo Ghat Drain. It originates from Barhalganj Town area and traverses from different Mohallas and ultimately meets to River Ghaghra. The approximate length of this drain is 900 meter. This drain carries only domestic discharge of the Barhalganj Town area. Any industrial unit has not been identified within the limit of town area. Co- ordinates of the Drain is 26.28044N and 83.50839E

### a. Length covered

Total length of this drain is approximately 900 meter

### b. Details of effluent discharge & water quality of drain

Any industrial unit has not been identified in the catchment area of Drain. This Drain carries only domestic effluent and discharged 0.9 MLD in to Ghaghra River.

### Water Quality Of drain in the Down stream of kanoongo ghat-2 and up stream of Tarakulahi Ghat

Parameters	Results
pH	7.33
BOD (mg/l)	36
COD (mg/l)	119
Total Coliform (MPN/100 ml)	92,00,000
Date of Sampling	23.05.2019



## C. Tarkulahi Ghat Drain

### a. Origin

Tarkulahi Ghat Drain originates from Barhalganj Town area and traverses from different Mohallas and ultimately meets to River Ghaghra approx 40 meters down stream of Kanoongo Ghat Drain. The approximate length of this drain is 1.2 kilometer. This drain carries only domestic discharge of the Barhalganj Town area because any industrial unit has not been identified in the catchment area of the drain. Co-ordinates of Tarkulahi Ghat Drain is 26.28048N and 83.50937E

### b. Length covered

Distance covered by TarkulahiGhat Drain is approx. 1.2 km.

### c. Details of effluent discharge & water quality of Tarkulahi Ghat Drain.

Any industrial unit has not been identified in the catchment area of TarkulahiGhat Drain. This Drain carries only domestic effluent and discharged 0.7 MLD in to Ghaghra River.

Water Quality of Tarkulahi Ghat Drain	
Parameters	Results
pH	7.64
BOD (mg/l)	38
COD (mg/l)	145
Total Coliform (MPN/100 ml)	1,30,00,000
Date of Sampling	23.05.2019



## D. Badhanpura Drain near Mukti Path

### a. Origin

Badhanpura Drain near Mukti Path originates from Village Kalyanpur and traverses from village Bandhanpura and different Mohallas of Barhalganj Town area and ultimately meets to River Ghaghra approx 1.8 kilometers down stream of Tarkulahi Ghat Drain near Mukti path which is a cremation centre. The approximate length of this drain is 2.0 kilometer. This drain carries only domestic discharge of the Barhalganj Town area and Village Kalyanpur as well as Bandhanpura. The Co-ordinates of Badhanpura Drain near Mukti Path is 26.28007N and 83.51681E

### b. Length covered

Distance covered by Badhanpura Drain is approx.: 2.0 km.

### c. Details of effluent discharge & water quality of Badhanpura Drain

Any industrial unit has not been identified in the catchment area of Badhanpura Drain. This Drain carries domestic effluent and discharged 0.5 MLD in to Ghaghra River.

Water Quality OF Badhanpura Drain	
Parameters	Results
pH	7.48
BOD (mg/l)	33
COD (mg/l)	160
T. Coli (MPN /100ml)	1,30,00,000
Date of Sampling	23.05.2019



## E. Khatik Tola drain.

### a. Origin

Khatik Tola Drain carries the domestic waste water generated from khatiktola and near by areas. This is a purely domestic drain. Khatik tola drain discharges in to River Ghaghra. Approximate length of the khatik tola drain is about 1.05 KM. The Co-ordinates of Khatik tola Drain is 26.275988N, and 83.512138E.

### d. Length covered

Distance covered by Khatik tola Drain is approx 1.05 km.

### e. Details of effluent discharge & water quality of Khatik Tola Drain

Any industrial unit has not been identified in the catchment area of Khatik tola Drain. This Drain carries domestic effluent and discharged 0.7 MLD in to Ghaghra River.

Water Quality of KhatikTola Drain	
Parameters	Results
pH	7.32
BOD (mg/l)	66
COD (mg/l)	360
TSS (mg/l)	603
T. Coli (MPN /100ml)	49,00,000
Date of Sampling	24.05.2019



## F. Mallah Tola drain

### a- Origin

Mallah Tola Drain carries the domestic waste water generated from Mallah tola and near by areas. This is a purely domestic drain. Mallah tola drain discharges in to River Ghaghra. Approximate length of the Mallah tola drain is about 1.15 KM. The Co- ordinates of Mallah tola Drain is 26.275877N, and 83.511537E.

### b- Length covered

Distance covered by Mallah Drain is approx.: 1.15 km.

### c- Details of effluent discharge & water quality of MallahTola Drain

Any industrial unit has not been identified in the catchment area of MallahDrain. This Drain carries domestic effluent and discharged 0.8 MLD in to Ghaghra River.

Water Quality of MallahTola Drain	
Parameters	Results
pH	7.55
BOD (mg/l)	114
COD (mg/l)	440
TSS (mg/l)	404
T. Coli (MPN /100ml)	6300000
Date of Sampling	24.05.2019



## G. Tiwaripur drain.

### a- Origin

Tiwaripur Drain carries the domestic waste water generated from Tiwaripur and near by areas. This is a purely domestic drain. Tiwaripur drain discharges in to River Ghaghra. Approximate length of the Tiwaripur drain is about 0.98 KM. The Co- ordinates of Tiwaripur Drain is 26.273261N, and 83.505444E,

### b- Length covered

Distance covered by Tiwaripur Drain is approx.: 0.98 km.

### c- Details of effluent discharge & water quality of Tiwaripur Drain

Any industrial unit has not been identified in the catchment area of Tiwaripur Drain. This Drain carries domestic effluent and discharged 0.5 MLD in to Ghaghra River.

Water Quality of Tiwaripur Drain	
Parameters	Results
pH	7.73
BOD (mg/l)	42
COD (mg/l)	296
TSS (mg/l)	237
T. Coli (MPN /100ml)	3400000
Date of Sampling	24.05.2019



## H. Ravidas Ghat Nallah.

### a- Origin

RavidasGhatNallahoriginates from Nagar PalikaGauraBarhaj, Deoriaand ultimately meets to River GhaghraatRavidasGhatdown stream of Barhajcity. The approximate length of this nallah is 2.0 kilometer. This nallah carries only domestic discharge of the Nagar PalikaGauraBarhaj. The Co- ordinates of RavidasGhatNallais26.27167N and 83.72142E

### b- Length covered

Distance covered by Ravidas Ghat Nallahis approx.: 2.0 km.

### c- Details of effluent discharge & water quality of RavidasGhatNallah

Any industrial unit has not been identified in the catchment area of Ravidas Ghat Nallah. This Drain carries domestic effluent and discharged 7 MLD in to Ghaghra River.

Water Quality of Ravidas Ghat Nallah	
Parameters	Results
pH	7.31
BOD (mg/l)	119
COD (mg/l)	363
T. Coli (MPN /100ml)	3,40,000
Date of Sampling	23.05.2019



## I. Sabji Mandi Nallah.

### a- Origin

Sabji Mandi Nallah originates from Bhagalpur village Panchyat and ultimately meets to River Ghaghra at sabji mandi down stream of Bhagalpur Village Panchyat. The approximate length of this nallah is 1.0 kilometer. This nallah carries only domestic discharge of the Bhagalpur Village Panchyat. The Co- ordinates of Sabji Mandi Nallah is 26.16974N and 83.8677E.

### b- Length covered

Distance covered by Sabji Mandi Nallah is approx.: 1.0 km.

### c- Details of effluent discharge & water quality of Sabji Mandi Nallah

Any industrial unit has not been identified in the catchment area of Sabji Mandi Nallah. This Drain carries domestic effluent and discharged 1.5 MLD in to Ghaghra River.

Water Quality of Sabji Mandi Nallah	
Parameters	Results
pH	7.2
BOD (mg/l)	114
COD (mg/l)	496
T. Coli (MPN /100ml)	92,00,000
Date of Sampling	23.05.2019



### 3.2 Details of sewage pollution sources:

As mentioned above, total sewage discharged in the identified polluted stretch of River Ghaghra is 14 MLD. Total 09 drains are discharging into River Ghaghra within identified polluted stretch. Local bodies Barahalganj, Dohari Ghat, Gaura Barhaj and village Panchyat Bhagalpur has not installed STP for the treatment of sewage generated from local bodies and village Panchyat. 14 MLD untreated sewage is being discharged into River within identified polluted stretch. Nagar Palika Parishad, Gaura Barhaj, Town Area Barahalganj, Town Area Dohari Ghat as well as Nagar Panchyat Bhagalpur has not been submitted any DPR regarding installation of sewage treatment plant.

#### Analysis of generation and treatment based on projection of population for year 2030 in the identified polluted stretch of River Ghaghra.

S.N	Name of Local body/village Panchyat	Population ( As Per census.2011)	Estimated polulation 2030	Water consumption (MLD) (@135LPCD)	Sewage generation (MLD)	Installed capacity of existing STP (MLD)	Proposed STP capacity (MLD)	Gap in STP capacity utilization based on popultion year 2030 (MLD)
1	Town area Barahalganj	21290	52586	7.9	6.32	0	0	6.32
2	Town are Dohari Ghat,	11799	29143	3.93	3.14	0	0	3.14
3	Nagar Palika Gaura Barhaj	36459	90053	12.15	9.72	0	0	9.72
4	Village Panchyat, Bhagalpur	7264	17941	2.42	1.93	0	0	1.93
	<b>Total</b>			<b>26.40</b>	<b>21.11</b>	<b>0</b>	<b>0</b>	<b>21.11</b>

S. No.	District	Proposed Place of STP	Details of STPs proposed		Details of DPR				Expected date of completion
			Name of River	Capacity (in MLD)	Status (under preparation/prepared)	Amount of DPR (Rs. In crore)	Status of approval (submitted/approved)	Funding Agency	
1	Gorakhpur	Mahewa	Rapti	54	Prepared	359.80	Submitted to Govt of UP	-	24 Months after approval of DPR
2	Gorakhpur	NetajiSubhashChandraboss Nagar	Rohin	60	Prepared		Submitted to Govt of UP	-	24 Months after approval of DPR
3	Gorakhpur	Behind FCI (HURL)	Rohin	54	Prepared		Submitted to Govt of UP	-	24 Months after approval of DPR

### 3.3 DETAILS OF WASTE MANAGEMENT

#### 3.3 (a) Municipal Solid Waste

Local bodies Barahalganj, Doharighat, Gaura Barhaj and village Panchyat Bhagalpur are situated along the River Bank of identified polluted stretch. Neither any local body nor village Panchyat has not developed treatment and disposal facility of municipal solid waste. However, there has been lack of processing facility and it is required that local bodies and village Panchyat situated within the identified polluted stretch along the River Bank should establish Municipal Solid Waste Treatment & Disposal Facility as early as possible for restoring and maintaining the water quality of the river stretch under consideration.

#### **Analysis of Municipal Solid Waste Treatment based on year 2030** **Population within the identified Polluted stretch of River Ghaghra**

S.N	Name of Local body/village Panchyat	Population ( As Per census.2011)	Estimated polulation 2030	MSW Generation Estimated (TPD) (@750gm/Capita/Day)	Available processing facility (TPD)	GAP (TPD)	Proposed processing facility and timeline
1	Town area Barahalganj	21290	52586	39.44	0.0	39.44	N/A
2	Town are Dohari Ghat,	11799	29143	21.86	0.0	21.86	N/A
3	Nagar Palika Gaura Barhaj	36459	90053	67.54	0.0	67.54	N/A
4	Village Panchyat, Bhagalpur	7264	17941	13.46	0.0	13.46	N/A
	<b>Total</b>			<b>142.30</b>	<b>0.0</b>	<b>142.30</b>	<b>N/A</b>

Town Area Barahalganj, Gorakhpur, Town Area Doharighat, Mau, Nagar PalikaParishadGauraBarhaj, Deoria and village Panchyat Bhagalpur are situated along the bank of River within identified polluted stretch (Barahalganj to Bhagalpur). Estimated MSW Generation on the basis of census 2011 for the year 2030 is 142.30 TPD. There is no processing facility available in any local body as well as village Panchyat situated within the identified polluted stretch of River Ghaghra.

### 3.3 (b) Bio-Medical Waste

Town Area Barhalganj, Gorakhpur, Town Area Doharighat, Mau, Nagar Palika Parishad, Gaura Barhaj Deoria and village Panchayat Bhagalpur are located in the identified polluted stretch on the Bank of the River. There are 22 Health Care Facilities which generate 83.4Kg/Day of Bio-Medical Waste @ of 250gm/bed/day. All the Health Care Facilities have valid agreements with 03 Common Bio-Medical Waste Treatment Facilities situated in Sant kabir Nagar, Sultanpur and Ghazipur for collection, transportation and disposal of Bio-Medical Waste. The segregation of Bio-Medical Waste and disposal in the CBWTFs as per the provisions of Bio-Medical Waste Management Rules, 2016 is a major area of concern. The mixing of Bio-Medical Waste with Municipal Solid Waste is also observed which also needs to be addressed. Details of HCFs situated within the town area Barhalganj, Gorakhpur, Town area Dohrighat, Mau, Nagar Palika Parishad, Gaura Barhaj, Deoria and village panchayat Baghalpur, Deoria is given below:-

S.No.	Town/District	Total No. Of H.C.Fs	Bio Medical Waste generated (Kg/Day)	Bio Medical Waste Treated (Kg/Day)	No. Of H.C.Fs attached with CBWTF	No. Of H.C.Fs having captive treatment facility	Gap between waste generated & treatment capacity available (Kg/Day)	Remarks
1	Barhalganj], Distt. Gorakhpur	18	79.4	79.4	18	NIL	NIL	All the HCFs are Members of CBWTF
2	Gaura Barhaj, Deoria	1	1	1	1	NIL	NIL	All the HCFs are Members of CBWTF
3	Baghalpur, Distt. Deoria	3	3	3	3	NIL	NIL	All the HCFs are Members of CBWTF
<b>Total</b>		<b>22</b>	<b>83.4</b>	<b>83.4</b>	<b>22</b>	<b>NIL</b>	<b>NIL</b>	

### Details of Bio-Medical Waste Treatment Facilities

S.N.	Name of the CBWTF Operator connect No. & Address	Total No. Of HCFs Being Covered	Coverd District	Treatment facility available			BMW Treatment capacity Kg/day	Number of Vehicles	Status of On Line Continuous Emission Monitoring System & Connectivity	Validity of issued Authorization
				Incinerator	Auto Clave	Shredder				
1	2	3	4	5	6	7	8	9	10	11
1	M/s Royal Pollution Control services, Vill. Chaspur, saduwahi, Sultanpur	184	Badohi, Juanpur, Azamgarh, Gorakhpur	150 kg/hr	500 kg/day	200 kg/hr	2800	2 with GPS i	Installed & Connected	5.8.2023
2	M/s MPCC Khalilabad, Sant Kabeer Nagar	596	Sant Kabeer Nagar, Basti, Siddharth Nagar, Kushhi Nagar, Maharaj ganj, Gorakhpur	100kg/hr	414 kg/Shift	100 kg/hr	2000	7 with GPS	Installed & not Connected	31.12.2019
3	M/s Silicon Welfare Society vILL. Banka, Ghazipur	130	Ghazipur, Ballia, Azamgarh, Gorakhpur, Ambedkar Nagar, Varanasi, Mau, Chandauli	100kg/hr	200 ltr/Shift	150 kg/hr	1600	7 with GPS	Installed & Connected	31.12.2019

Source: Desk Inventory of UPPCB

### **3.3 (c) Hazardous Waste**

Any industrial unit has not been identified along the River Bank within identified polluted stretch (Barahalganj to Bhagalpur) of River Ghaghra. Hence, possibility of Hazardous waste generation from industrial units is not possible within identified polluted stretch of the River.

### 3.4(d) E-Waste

In the State, total 43 Common E- Waste Disposal Facilities are operational. Out of these, 10 units are collection center, 16 have the facility of collection & dismantling whereas remaining 17 are collection, dismantling and recycling centers. The cumulative capacity of these plants is 2,48,000/annum. The quantum of E-Waste generated in the State is approximately 86,000 TPA. Hence, there is no gap in the generation and treatment infrastructure for safe E-Waste handling as per the provisions of E-Waste Rules; 2016. The status report of E-Waste disposal facilities in the State is enclosed at **Appendix-6**.

#### **4. DETAILS OF INDUSTRIAL POLLUTION SOURCES:**

Any industrial unit has not been identified along the River Bank within identified polluted stretch (Barahalganj to Bhagalpur) of River Ghaghra. Hence, possibility of Pollution in the identified polluted stretch of River Ghaghra is not possible.

## 5. STATUS OF GROUND WATER

The identified polluted stretch of River Ghaghra from Barahalganj (Gorakhpur) to Bhagalpur (Deoria) lies between district Gorakhpur and Deoria. The status of Groundwater in district Gorakhpur, Deoria and Mau is given below:

### River Ghaghra, Stretch from Barahalganj to Bhagalpur Ground Water Status

Name of District	Name of Block	Pre Monsoon / Post 5. Monsoon water level (Meters)						Status of Exploitation
		May-14	Nov-14	Jan-15	May-15	Nov-15	Jan-16	
Gorakhpur	Uruwa	3.42	1.52	2.84	2.93			Safe
Ballia	Haldi		6.02	6.35	7.8	6.82	8.1	Safe
Deoria	Lar Road	3.57	1.78	3.12	3.67	3.72	2.21	Safe
Mau	Dohrighat	7.35	6.66	7.06	5.65	5.35	6.65	Safe

*Source:-Ground water brochure of U.P. (A.A.P.: 2012-13)*

**CHEMICALS ANALYSIS DATA OF SAMPLES COLLECTED FROM  
GROUND WATER MONITORING WELLS IN UTTAR PRADESH 2015 -2016  
RiverGhaghra, Stretch from Barhalganj (Gorakhpur) to Bhagalpur (Deoria)**

District	Block	pH	E.C.µ S/cm at 25°C	CO <sub>3</sub>	HCO <sub>3</sub>	Cl	F	NO <sub>3</sub>	SO <sub>4</sub>	TH	Ca	Mg	Na	K	SiO 2	PO 4	TDS	RSC	SAR
Gorakhpur	Barhalganj	7.7	730	NIL	390	14	0.41	0.02	7.8	310	48	46	20	3.8	42	nd	474.5	0.31	0.49
Deoria	Barhaj	7.8 1	740	NIL	281	71	0.9	6.2	21	280	64	29	37	1.5	31	ND	496	-0.97	0.96
	Lar	8.1	398	NIL	220	7.1	0.33	Nd	2.9	160	40	15	10	2.4	36	ND	258.7	0.46	0.34
	Nawanganj	8	451	NIL	207	14	nd	Nd	11	170	60	4.8	1.3	3.2	32	nd	293.15	0.05	0.43

ND – Not Detectable

RSC – Residual Sodium Carbonate

SAR – Sodium Absorption Ratio

Source: GWYB – NR – 2014-15 and 2015 -16

## 6. MONITORING OF POLLUTION SOURCES

### 6.1 MONITORING OF DRAINS

All the 09 drains will be monitored on monthly basis and the sampling points are selected near the confluence of the drains with the Ghaghra River. Proper Care has been taken to avoid backwater effect of the river at the sampling point and no source of pollution joins the drain after the sampling point. The details of drain sampling points are given below:

S N	District	Name of Drain	Monitoring Point			Monitoring Frequency	Controlling Regional Office
			Place	Latitude (N)	Longitude (E)		
1.	Gorakhpur	KanoongoGhat drain near LaxmiNarainMandir, Barhalganj	Laxmi NarainMandir, Barhalganj	26.28056 N	83.50807 E	Monthly	Gorakhpur
2.	Gorakhpur	Drain in the down steam of kanoongoghat and up steam of TarkulahiGhat.	Down steam of kanoongoghat and up steam of Tarkulahi Ghat	26.28044 N	83.50839 E	Monthly	Gorakhpur
3.	Gorakhpur	Tarkulahi Ghat Drain.	Tarkulahi Ghat	26.28048 N,	83.50937 E	Monthly	Gorakhpur
4.	Gorakhpur	Badhanpura Drain near Mukti Path	Near Mukti Path	26.28007 N,	83.51681 E	Monthly	Gorakhpur
5.	Mau	Khatik Tola drain	Khatik Tola	26.27598 8N,	83.51213 8E	Monthly	Gorakhpur
6.	Mau	MallahTola drain	MallahTola	26.27587 7N	,83.5115 37E	Monthly	Gorakhpur

## 6.2 MONITORING OF RIVER.

09 drains are discharging into river Ghaghra within identified polluted stretch (Barahalganj to Bhagalpur). The reason of identified stretch pollution is due to discharge of domestic sewage into Ghaghrariver through 09 drains. Monitoring of each drains discharging into Ghaghrariver in every season is not possible. For estimation of pollution load due to discharge of drains from Town Area Barahalganj, Gorakhpur, Town Area Doharighat, Mau, Nagar Palika Parishad Gaura Barhaj Deoria and village Panchayat Bhagalpur Deoria and confluence of Rapti River into Ghaghra River Near Nakawar Ghat Deoria one sampling point in the up stream of Barahalganj, Gorakhpur and one sampling point in the down stream of Bhagalpur, Deoria is essential. For estimation of pollution load due to confluence of Rapti River into Ghaghra River one sampling point of Rapti River before confluence is also required. The details of sampling points are given below:

### River Sampling Points

S. No.	Name of River	Monitoring Point			Monitoring Frequency	Controlling Regional Office
		Place	Latitude	Longitude		
1	Ghaghra River	U/P Stream of Town Area Barahalganj , Gorakhpur	26.27988	83.50697	Monthly	Gorakhpur
2	Ghaghra River	D/S of Bhagalpur,Deoria at Road bridge	26.16197	83.86716	Monthly	Gorakhpur
3	Rapti River	Rapti River near confluence point NakawarGhat	26.295275	83.670434	Monthly	Gorakhpur

The monitoring data of River Ghaghra for the year 2018 is annexed at **appendix -07**

## **6.2 ESTABLISHMENT OF GHAGHRA RIVER POLLUTION CONTROL ROOM**

Length of Identified polluted stretch of River Ghaghra starting from Barahalganj, Gorakhpur to Bhagalpur Deoria is approximately 50 km. This length comes within the jurisdiction of district Gorakhpur, Mau and Deoria. In regional office Gorakhpur is functional while in regional office Azamgarh laboratory has not been installed by Board. Any industrial cluster or individual unit has not been identified along the River Bank within polluted stretch. Only domestic discharge from local bodies and village Panchyat as mentioned above is meeting in to the River. Establishment of separate control room is not required. Regional office Gorakhpur can easily monitor the water quality of River within the identified polluted stretch if sufficient and qualified man power is provided to regional office Gorakhpur.

## 7.1 POLLUTED RIVER STRETCH REJUVENATION ACTION PLAN

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
<b>A. SEWAGE MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Estimation of total sewage generation from Town Area Barahalganj, Gorakhpur, Town Area Doharighat, Mau, Nagar Palika Parishad Gaura Barhaj Deoria and Village Panchyat Bhagalpur Deoria where sewage treatment facility does not exist and preparation of DPR for treatment of sewage	DPR not prepared	U.P. Jal Nigam, Gorakhpur/Mau/Deoria&Town Area Barahalganj, Gorakhpur, Town Area Doharighat, Mau, Nagar Palika Parishad Gaura Barhaj Deoria and Village Panchya,t Bhagalpur, Deoria	
2	Measurement of flow & load of all the drains contributing pollution load in River Ghaghra.	To be done by U.P Jal Nigam, Gorakhpur/Mau/Deoria	U.P Jal Nigam, Gorakhpur/Mau/Deoria	
3	Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them	03 Months	Town Area Barahalganj/Doharighat, Nagar Palika Parishad, Gaura Barhaj & Village Panchayat Bhagalpur.	Concerned local bodies and village Panchyat shall ensure compliance in the prescribed time line.
4	Untapped drains to be provided with modular treatment facilities/ In-Situ	06 Months	U.P. Jal Nigam of concerned district & concerned local bodies and village Panchyat.	U.P. Jal Nigam of concerned district & concerned local bodies and village

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	bio-remediation or Phytoid-SWAB (CSIR-NEERI) based treatment			Panchayat.shallensure compliance in the prescribed time line.
5	Completion and commissioning of under construction STP.	Any STP is not under Construction	-	-
6	Formulation of Action Plan for long term use of treated water discharged from STPs	03 Months	U.P. Jal Nigam, Irrigation & concerned local bodies and village Panchayat	-
7	Installation of Web Cams & OCEEMS in already installed STPs	STP not installed	-	
8	Formulation of Action Plan for income generation of STPs including installation of Solar Power Plants, Energy Plantation & sale of sludge and treated water, bio-composting etc.	STP not installed	-	
9	Obtaining Consent to Operate/Establish and Hazardous Authorization from UPPCB	STP not installed	-	
10	Preparation of DPR for channelization including diversion of sewage generated	Within 03 Months	U.P Jal Nigam of concerned district /concerned local bodies and village Panchayat.	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	from household / township to sewer lines and interception of all drains (excluding drains carrying industrial waste water) for ensuring proper treatment through upcoming STPs.			
11	Septage Management in the areas where sewerage network does not exist	Within 6 Months	U.P Jal Nigam of concerned district /concerned local bodies and village Panchayat	Concerned local bodies/village Panchayat shall ensure compliance in the prescribed time line.
<b>B. Long Term Action Point</b>				
1	Laying of Sewerage Network & Connection of households to the sewer line in order to utilize the installed capacity of existing STPs	24 Months from sanction of DPR	U.P Jal Nigam of concerned district /concerned local bodies and village Panchayat.	
2	Establishment of Sewage Treatment Plants of adequate capacity	24 to 30 Months from sanction of DPR	U.P Jal Nigam of concerned district /concerned local bodies and village Panchayat.	
3	Tapping & diversion of the drains having high sewage load to STPs to be constructed on I&D model	24 to 30 Months from sanction of DPR	U.P Jal Nigam of concerned district /concerned local bodies and village Panchayat.	
4	Infrastructure Development in Irrigation/Horticulture/	24 to 30 Months from sanction of DPR	U.P Jal Nigam of concerned district /concerned local	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	Sprinkling etc. And ensuring use of treated water		bodies and village Panchayat	
5	Installation of Solar Power Plant & Energy Plantations in the vacant land of STPs	12 Months from sanction of DPR	U.P Jal Nigam of concerned district/concerned local bodies and village Panchayat	
6	Installation of supplementary/tertiary treatment system in existing STPs which are not able to achieve discharge norms in the present system	STP not installed	-	-
<b>C. INDUSTRIAL WASTE MANAGEMENT</b>				
Any industrial unit has not been identified along the River bank within identified polluted stretch of River Ghaghra. (Barahalganj to Bhagalpur)				
<b>D. SOLID WASTE &amp; FLOOD PRONE ZONE MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Strictly ensuring prohibition of dumping of solid & other waste within 500 Meters of the banks of the river	Immediate	concerned local bodies and village Panchayat,	
2	Collection & Segregation of Solid Waste as per the	Immediate	concerned local bodies and village Panchayat,	Concerned local bodies and village Panchayat, shall

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	provision of SWM Rules, 2016			ensure compliance as per timeline given according to the Action Plan <b>(Appendix-07)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
3	Disposal of Recyclable waste through registered recyclers	Immediate	ULBs, Gram Panchayat, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-07)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance in Rural Areas.
4	Compliance of SWM Rules, 2016 by bulk generators (onsite bio-composting, disposal of recyclable waste through registered recyclers)	02 Months	ULBs, Development Authorities, Railways, Transport Corporation, Mandi Parishad, Cantonment Board, Educational Institution, RWAs & Urban Development Department etc.	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-03)</b> as informed by Urban Development Department, UP. Panchayati Raj Department, UP will ensure compliance

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
				in Rural Areas.
5	Upgradation & operation of existing non-operational & non-complying Solid Waste Treatment Facilities as per prescribed norms	06 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-07)</b> as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
6	Compliance of C&D Waste Management Rules, 2016 & prohibition of illegal dumping of C&D waste	Immediate	ULBs, Development Authorities & Urban Development Department	
7	Installation of Web Cams in Solid Waste & C&D Waste Treatment & Disposal Facilities with open access to UPPCB & CPCB server connectivity	03 Month of functioning of the processing plants	ULBs, Development Authorities & Urban Development Department	
8	Formulation of Action Plan for income generation of Solid Waste & C&D Waste Treatment & Disposal Facilities including installation of Solar Power	02 Months	ULBs, Development Authorities & Urban Development Department	The ULBs will ensure compliance as per timeline given according to the Action Plan <b>(Appendix-07)</b> as informed by Urban

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	Plants, Energy Plantation & sale of RDF, compost etc.			Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
9	Obtaining Consent to Operate/Establish and Authorization from UPPCB	02 Months	ULBs, Development Authorities, Urban Development Department & UPPCB &CPCB	
10	Ensuring idol immersion in environmental friendly manner by creation of artificial ponds with proper lining & proper disposal of sludge & effluent	Immediate	ULBs, Development Authorities & District Administration	
11	Ensure strict prohibition of encroachments & illegal constructions in FPZ	06 Months	Development Authorities, District Administration & Police and Irrigation Department	
12	Removal of solid waste & algal growth disposed in the river by use of low cost innovative techniques with involvement of local community	06 Months	ULBs, Gram Panchayat, Development Authorities & Irrigation Department	
<b>(b) Long Term Action Point</b>				

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
1	Establishment of new solid waste & C&D treatment & disposal facilities against the gap with respect to generation of solid waste	24 Months after sanction of DPR	Concerned local bodies/village Panchyat, & Urban Development Department	Concerned local bodies/village Panchyat shall ensure compliance as per timeline given according to the Action Plan <b>(Appendix-07)</b> as informed by Urban Development Department, UP.
2	Treatment & disposal of legacy waste dumped within 500 meters of the bank of the River	24 Months after sanction of DPR	Concerned local bodies/village Panchyat, Concerned Development Authority, & Urban Development Department	Concerned local bodies/village Panchyat & concerned Development Authority, shall ensure compliance as per timeline given according to the Action Plan <b>(Appendix-07)</b> as informed by Urban Development Department, UP. Development Authorities will also ensure compliance in concerned areas.
3	Construction of electric/fuel efficient crematorium to stop disposal of unburnt/ semi burnt corpses in the river	24 Months	Concerned local bodies/village Panchyat, Concerned Development Authority & Urban Development	Concerned local bodies/village Panchyat shall ensure compliance as per timeline given as informed by Urban

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
			Department	Development Department, UP. Development Authority will also ensure compliance in concerned areas.
4	Demarcation & notification of FPZ by introducing Pillars at suitable locations in river flood plain and preventing encroachment in river bed.	24 Months	Irrigation Department	Only after sanctioning of DPR & its other formalities including sanctioning of budget under NMCG.
5	Removal of illegal encroachments & constructions from FPZ	24 Months	District Level Committee headed by D.M, with representative from concerned Departments.	
<b>D. ECOLOGICAL FLOW &amp; GROUND WATER MANAGEMENT</b>				
<b>(a) Short Term Action Point</b>				
1	Identification, inventorization & geo referencing of wetlands/water bodies including their zone of influence & catchment areas within 2 Km of the river	03 Months	State Wetland Authority, Forest & Wildlife, Revenue Department, Concerned local bodies/village Panchyat & Concerned Development Authority	
2	Identification & geo	03 Months	Forest & Wildlife, Revenue	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	referencing of vacant lands in the vicinity of the river for development of bio-diversity parks & forest areas		Department, Concerned local bodies/village Panchyat&Concerned Development Authority	
3	Identification of external water sources like canal escapes etc. for addition of water in the river for dilution purposes	Not required	-	-
4	Prohibition of illegal mining & diversion of river stream	Regular Activity	District Administration, Mining Department & Irrigation Departmen	Only diversion of river stream would be reported to District authorities in non monsoon period by concerned district irrigation officers.
5	Ensuring rain water harvesting/recharging structures/rainer wells on river banks & construction of water harvesting structures	Regular Activity	Mining, Rural Development & Minor Irrigation Department	Possible funding may be arranged through MNREGA and Central assistance by NMCG.
<b>(b) Long Term Action Point</b>				
1	Notification of E-flow of the River	12 Months	Irrigation Department, MoWR (CWC)	Notification of E-flow of the River will be done by MOWR (CWC).
2	Ecological restoration of the	24 Months from	State Wetland Authority,	Possible source of funding

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	wetlands including plantation in the catchment area & development of community based eco-tourism in the wetland	sanction of DPR	Forest & Wildlife Department Tourism Department & National Mission for Clean Ganga	may be from Centrally Sponsored Scheme for Development of Wetlands and from NMCG.
3	Development of Bio-diversity Parks and Riverine Forests by plantation & re-generation of native species of trees, grasses & herbs and establishment of new nurseries	24 Months from sanction of DPR	State Wetland Authority, Forest & Wildlife Department & National Mission for Clean Ganga	Funds may be arranged from NMCG.
4	Adoption of good irrigation practices, suitable crop selection, use of sprinkler/drip irrigation to minimize the water consumption through awareness & support to the farmers	12 Months	Agriculture Department, Rural Development, Minor Irrigation Department	
5	Removal of encroachment from wetlands, ponds & their restoration	24 Months	Revenue, Administration, Concerned local bodies / village Panchyat&Concerned Development Authority	
6	Allowing flow of fresh surplus water source like canal for restoration of E-flow	18 Months	Irrigation Department	Only surplus water after fulfilling irrigation demands will be provided to near by

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
				rivers through canal escapes.
<b>E. MONITORING &amp; EVALUATION</b>				
<b>(a) Short Term Action Point</b>				
1	Monthly Monitoring of river water quality at the upstream & downstream of Polluted stretch & meeting points of River Ghaghra.	Regular Activity	UPPCB, /District Environment Committee	
2	Monitoring of ground water quality within 500 meters of the rivers & drains	Quarterly	UPPCB, CGWA, CPCB & / District Environment Committee	
3	Pre-monsoon & post-monsoon monitoring of ground water level	Regular Activity	CGWA & Directorate of Ground Water	
4	Measurement of River flow as per the protocol	Regular	Irrigation Department & / District Environment Committee	Annual flow discharge data of river.
5	Project formulation & funding including recurring expenses for employment of JRFs/Monitoring Assistants/Field Assistants, purchase of kits & equipments, vehicle on rental basis,	03 Months	UPPCB, / District Environment Committee, SMCG & NMCG	

S.No.	Action Point	Timeline	Implementing Department/Agency	Remark
	development of Web Portal & establishment of Control Room, purchase of desktop computers, printers/ LED Monitor etc.			
6	Development of Web Portal for reporting & centralized monitoring of water quality of the river & drains and action points with access to all concern stakeholders departments/agencies responsible for implementation of the action plan	Regular	UPPCB, NMCG & CPCB	
7	Establishment of Regional Control Rooms at District/ Division Level for monitoring & uploading of data related to monitoring of water quality & compliance of action points with its integration to the State Level Control Room	04 Months	UPPCB, / District Environment Committee	

# APPENDICES

## Appendix-1

### Pollution Source Mapping of Ghaghra from Barhalganj (Gorakhpur) to Bhagalpur (Deoria)

S. No.	District	Name of Drain	Meeting Point of Drain		Domestic/Industrial / Mixed	Tapped/Untapped / Partially Tapped	Industries		Sewage Discharge (MLD)			Status of Bar-mesh
			Latitude	Longitude			Number	Treated Effluent (MLD)	Treated	Untreated	Total	
1	Gorakhpur	KanoongoGhat drain near LaxmiNarainM andir, Barhalganj	26.28056 N	83.50807E	Domestic	Untapped	00	00	00	1.5	1.5	No
2	Gorakhpur	Drain in the down steam of kanoongoghat and up steam of TarkulahiGhat.	26.28044 N	83.50839E	Domestic	Untapped	00	00	00	0.9	0.9	No
3	Gorakhpur	TarkulahiGhat Drain.	26.28048 N,	83.50937E	Domestic	Untapped	00	00	00	0.7	0.7	No
4	Gorakhpur	Badhanpura Drain near Mukti Path	26.28007 N,	83.51681E	Domestic	Untapped	00	00	00	0.5	0.5	No
5	Mau	KhatikTola drain	26.27598 8N,	83.512138 E	Domestic	Untapped	00	00	00	0.7	0.7	No

S. No.	District	Name of Drain	Meeting Point of Drain		Domestic/ Industrial / Mixed	Tapped/ Untapped / Partially Tapped	Industries		Sewage Discharge (MLD)			Status of Bar-mesh
			Latitude	Longitude			Number	Treated Effluent (MLD)	Treated	Untreated	Total	
6	Mau	MallahTola drain	26.275877N	83.511537E	Domestic	Untapped	00	00	00	0.8	0.8	No
7	Mau	Tiwaripur drain	26.273261N,	83.505444E	Domestic	Untapped	00	00	00	0.5	0.5	No
8	Deoria	Ravi Das Ghat Nalla	26.27167N,	83.72142E	Domestic	Untapped	00	00	00	7.0	7.0	No
9	Deoria	Sabji Mandi Nalla	26.16974N,	83.8677E	Domestic	Untapped	00	00	00	1.5	1.5	No

## Appendix-2

### Details of Cities & Towns

<b>SR. NO.</b>	<b>DISTRICT</b>	<b>CITY / TOWN</b>	<b>TYPE OF ULB</b>	<b>POPULATION (AS PER CENSUS 2011)</b>	<b>DECADAL GROWTH RATE</b>	<b>ESTIMATED POPULATION 2019</b>
<b>1</b>	Gorakhpur	Barhalganj	Nagar Panchayat	21,290	17.81	24323
<b>2</b>	Mau	Town are DohariGhat,	Nagar Panchayat	11799	18.98	13591
<b>3</b>	Deoria	Nagar PalikaGauraBarhaj	Nagar PalikaParishad	36459	14.31	40633
<b>4</b>	Deoria	Village Panchyat, Bhagalpur	Village Panchyat	7264	14.31	8096
<b>Total</b>				<b>76,812</b>		<b>86642</b>

## Appendix-3

### Details of Gram Panchayats & Revenue Villages on the banks of River

#### VILLAGE SITUATED ALONG THE RIVER GHAGHRA LEFT BANK

Sr. No		Name of village	LAT	LONG	Distance (Km)	Population (2011)	Decadal growth rate (%)	Estimated population (2019)	Sewage Generation (MLD)	Estimated MSW (Kg/day)
1	<b>Deoria</b>	Kaparwar	26°17'19.64"N	83°41'43.74"E	0.04	10,839	14.31	12080	1.31	3019.97
2		ParasiaKur	26°16'48.82"N	83°42'17.00"E	0.02	899	14.31	1002	0.11	250.48
3		Paina	26°15'16.97"N	83°46'27.02"E	0.2	10,499	14.31	11701	1.27	2925.24
5		Deosia/Sisawania	26°11'24.22"N	83°51'52.92"E	0.2	2,137	14.31	2382	0.26	595.42
4		Chhittipur	26°10'52.44"N	83°52'16.37"E	0.18	963	14.31	1073	0.12	268.32
6		Dewasiabangar/bhagalpur	26°10'23.76"N	83°52'11.49"E	0.19	2,750	14.31	3065	0.34	766.21
<b>TOTAL</b>						<b>28,087</b>		<b>31302</b>	<b>3.41</b>	<b>7825.64</b>

#### VILLAGE SITUATED ALONG THE RIVER GHAGHRA RIGHT BANK

Sr. No.	District	Name of village	LAT	LONG	Distance (Km)	Population (2011)	Decadal growth rate (%)	Estimated population (2019)	Sewage Generation (MLD)	Estimated MSW (Kg/day)
1	<b>Deoria</b>	Surajpur Khas	26°13'24.65"N	83°36'2.35"E	0.23	1,148	14.31	1279	0.14	319.86
2		ChainpurGulaura	26°10'56.33"N	83°50'0.71"E	0.2	1,417	14.31	1579	0.18	394.81
3	<b>Ballia</b>	Turtipur	26° 9'10.67"N	83°51'45.24"E	0.15	5,123	17.31	5832	0.63	1458.11
<b>Total</b>						<b>7,688</b>		<b>8691</b>	<b>0.95</b>	<b>2172.78</b>

## Appendix-4

### WET LANDS / WATER BODIES ALONG THE RIVER GHAGHRA

S. No.	NAME OF DISTRICT	NAME OF TOWN	NAME OF NEARBY VILLAGE	LATITUDE	LON GITUDE	DISTANCE FROM RIVER (KM)	LOCATION OF WETLAND	
							LEFT BANK	RIGHT BANK
1	Deoria	Deoria	SurajpurKhas	26°13'29.55"N	83°35'52.19"E	0.8		Y
2		Deoria	SurajpurKhas	26°13'22.12"N	83°36'42.62"E	0.75		Y
3		Deoria	Pirhani	26°18'27.59"N	83°33'58.81"E	1.15	Y	
4		Deoria	MahalManjharia	26° 9'16.39"N	84° 0'8.10"E	0.6	Y	
5		Deoria	Churia	26° 9'12.30"N	84° 1'4.95"E	1.12	Y	
6		Deoria	Churia	26° 8'59.64"N	84° 1'25.21"E	0.88	Y	
7		Deoria	Kausad	26° 9'47.36"N	83°59'7.76"E	0.67	Y	
8	Ballia	Ballia	ChandairWalipur	26°10'35.81"N	83°50'4.80"E	1.09		Y
9	Ballia	Ballia	Chandayar Kala	26°10'23.52"N	83°49'50.97"E	1.11		Y

## Appendix-5

### Status of E-Waste Management

#### **Status of E-waste Recycling / Collection / Generation Units in the State of U.P.**

S. No.	Name & Address of Unit	Regional Office	Status of Authorisation	Status of Registration & Validity	Type	Capacity (T/Annum)
1	M/s Auctus -E Recycling Solutions Pvt. Ltd., F-637, M.G. Road, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 30.08.2019	Collection, Dismantle	1800
2	M/s Mahaluxmi Metal Alloys (India) Pvt. Ltd., Modinagar, Ghaziabad.	Ghaziabad	Grant	Registered 22.05.2023	Collection, Dismantle, Recyclers	30000
3	M/s N.K. Products, 58-59, M.G. Road, Ghaziabad.	Ghaziabad	Refused	Registered 22.06.2016	Collection, Dismantal	9000
4	M/s Bharat Oil Co., E-18, Site-IV, Sahibabad, Industrial Area, Ghaziabad.	Ghaziabad	Grant	Registered 16-05-18	Collection, Dismantal	4000
5	M/s Planet Green Recycling Pvt. Ltd., G-129, Phase -1, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 23.08.2018	Collection, Dismantal, Recyclers	1500
6	M/s Rocket Sales, Plot No. 1-12, I/A, M.G. Raod, Hapur.	Ghaziabad	Grant	Registered 27.08.2019	Collection,, Dismantal	300
7	M/s Arsh Recycling Pvt. Ltd., Plot No. 203, UPSDIC, I/A, M.G. Road, Ghaziabad.	Ghaziabad	Grant	Registered 20.06.2023	Collection, Dismantal, Recycling,	15000
8	M/s Auctus Recycling Solutions Pvt.Ltd.Habibpur, Greater Noida.	Greater Noida	Grant	Registered 06.12.2021	Dismantal, Collection	19500
9	M/s Khan Traders, B-5, site4, Panki Industrial Area, Kanpur.	Kanpur	Grant	Registered 15-11-2020	Collection, Dismantal	7190
10	M/s Green Tech Rcycling, Khasra No.-645, Acchraunds, Bahdaurpur Road, Partapur, Meerut.	Meerut	Grant	Registered 12.01.2022	Collection, Dismantal	1800

11	M/s Narora Atomic Power Station, Narora, Bulandshahar.	Bulandshahar	Not Applied	-	Collection' Dismantaling & Recycling	10
12	M/s Metal Alloys, E-46, Industrial Area, Ramnagar, Varanasi	Varanasi	Grant	Registered 31-05-2019	Collection	1825
13	M/s Comwen Information Technologies Pvt.Ltd., 127/35B, ChakRagunath, Naini, Allahabad.	Allahabad	Grant	Registered 11-08-2017	Collection	300
14	M/s DasiaECo E-Waste Recyclers E-160 Industrial area, Khalilabad, SantKabairnagar.	Basti	Grant	Registered 31-12-2017	Collection, Dismantaling	720
15	M/s Sims Recycling Solutions Plot no.1 UdyogKendraIIEcotech-III Greater Noida.	Greater Noida	Grant	Registered 31.12.2019	Collection, Dismental, Recycling	1250
16	M/s J.A.O. E-Waste Recycling Co, Vill-Jaitpur,Distt-Moradabad.	Moradabad	Grant	Registered 23.11.2020	Collection	3001
17	M/s HIN Green E-waste Recycling (P) Ltd, B-19/1, Summer Garden Colony, Meerut.	Meerut	Grant	Registered 12.04.2018	Collection, Dismental,	750
18	M/s S.R. Metcast India (P) Ltd 11.8 Km.Agra Mathura Road, Agra.	Agra	Grant	Registered 02.08.2022	Collection	600
19	M/s K.M. Metals Suppliers 9/270,271,Mathura Agra.	Agra	Not Applied	-	Collection	5000
20	M/s Prakash Metal House 39/223, KarwanLohamandi,Agra.	Agra	Grant	Registered 02.05.2023	Collection	1500
21	M/s Shree Mahaveerji Trading Company, 30/127, Chippitala, Agra.	Agra	Not Applied	Reject	Collection	4500
22	M/s E-Waste Recyclers India E-50, UPSIDC Industrial area, NH-2 Kosikalan, Mahura.	Mathura	Grant	Registered 01.03.2022	Collection, Dismantle	6000
23	M/s Supar Trading Company, Plot No.-3 Govt. Industrial Estate, Talkatora Road, Lucknow.	Lucknow	Not Applied	Registered 03.04.2016	Collection	365
24	M/s V.R. Techno Enviro Services pvt.ltd. khasra No. 440, indiraPriyedarshni ward, jarhra Indira Nagar, Lucknow.	Lucknow	Not Applied	Registered 09.04.2016	Collection, Dismantle	365

25	M/s Sachin enterprises,84/1,Plot no.34-35 Fazalganj, Kanpur.	Kanpur	Grant	Registered One Time	Collection	5000 Pieces Per Annum
26	M/s Gandhi Traders, 91/103, Dalelpurwa, Kanpur.	Kanpur	Grant	Registered 04.06.2018	Collection	5000 Pieces Per Annum
27	M/s Greezon Recycling Pvt. Ltd., R 30, UPSIDC, Industrial Area, Sikandrabad, Bulandshaha.	Bulandshaha	Grant	Registered 27.08.2022	Collection Dismental, Recycling	16.5
28	M/s Sachin Enterprises, 123/751, block-T 74 pratapganjGadariyanPurwa, Fazalgang, Kanpur.	Kanpur	Grant	Registered 16.11.2022	Collection, Dismentling, Refurbishing	2500
29	M/s GreenivaRecyclerPvt. Ltd., Plot No. G-284, M.G. Road, Industrial Area, Hapur.	Hapur	Grant	Registered 18.06.2019	Collection, Dismentling, Recycling.	1500
30	M/s S. Malik Traders, Plot No.-93, 94 Vill-BudheraJahidpur, Meerut.	Meerut	Grant	Registered 12.01.2022	Collection, Dismentling	365
31	M/s Royal Faiz Recycling (p) Ltd. , I-22, I.A. M.G. Road, Hapur.	Ghaziabad	Grant	Registered 29.01.2023	Collection, Dismental, Recycling	12000
32	M/s 3 C Recycler, F-326, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 31.12.2022	Collection, Dismental, Recycling	9000
33	M/s Life E- Recycling (P) Ltd., F- 435, UPSIDC I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 05.06.2023	Collection, Dismental,	9000
34	M/s Hind Recycling (P) Ltd., Plot No. F-203, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 01.03.2022	Collection, Dismental,	9000
35	M/s Hayat Recycler, F-53, 54, I/A, M.G. Road, Hapur.	Ghaziabad	Grant	Registered 21.06.2023	Collection, Dismental, Recycling	15000
36	M/s B.R.P. Infotech Private Limited, F-394, Phase-I, M.G.Road, Industrial Area, Hapur	Hapur	Grant	Registered 28.06.2023	Recycling, Dismentling, Segregation, Collection	9000 MT/Year

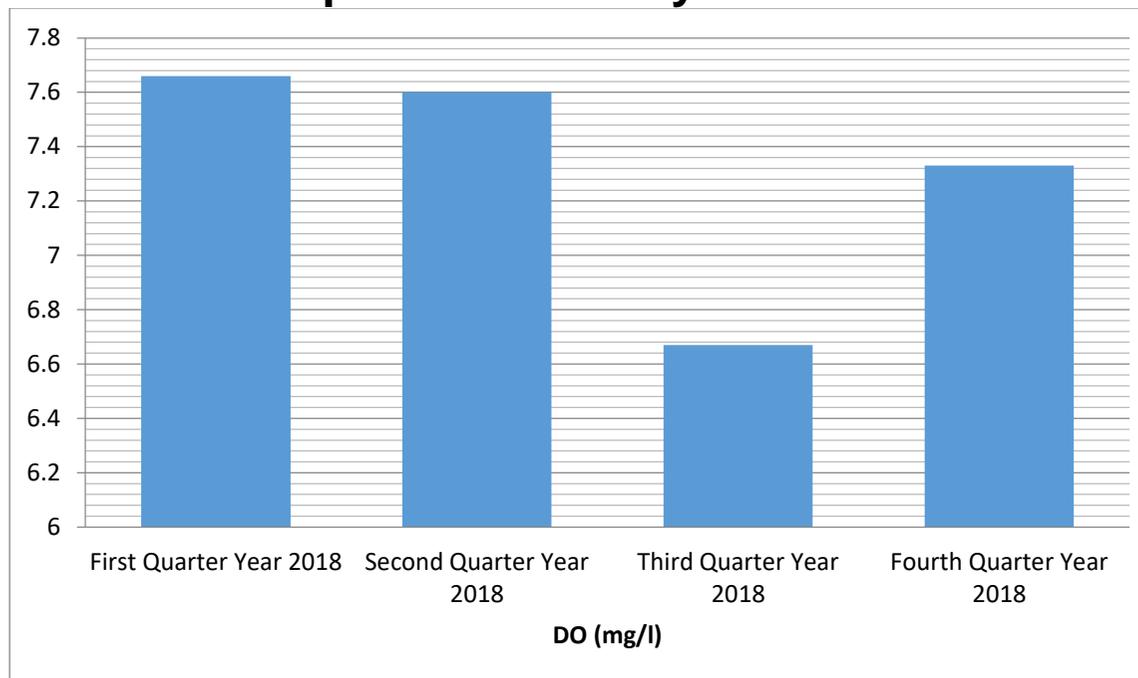
37	M/s Sky Green Waste Recycling Management , Khasra No.- 174, AlipurJijmana, Meerut, U.P.	Meerut	Grant	Registered 20.12.2023	Dismantling, Recycling	5475 MT/Y 4500 MT/A
38	M/s Swachh Bharat Recycling Company, Gali-N0-4, 2083, SaipuramInsutrial Area, Delhi Road, Meerut, U.P.	Meerut	Grant	Registered 08.05.2023	Recycling	4800 MT/A
39	M/s RudraInterprises, Plot No. A- 96, Sector-A-4, Tronica City, Loni, Ghaziabad	Ghaziabad	Grant	Registered 03.05.2023	Disposal & Dismantling	500 MT/Month
40	M/s Avgree Recycling Pvt. Ltd. KH No. 549, Vill.-Tiyala, Meerut- Bulandshahar Road, Hapur Bypass, Hapur	Ghaziabad	Grant	Registered 10.09.2023	Dismantling & Segregation	11000 MT/A
41	M/s Faiz Recycling, G-235, MG Road, Industrial Area, Hapur	Ghaziabad	Grant	Registered 13.02.2024	Dismantling & Segregation	36.67 MT/Day
42	M/s Horizon Recycling Pvt. Ltd., Khasra no.-35, Kumarhera, 7th km Dehradun Road, Saharanpur, U.P.	Saharanpur	Grant	Registered 02.08.2022	Recycling, Dismantling, Segregation, Collection	12000 MT/A
43	M/s Golden Ewaste Recyclers Pvt. Ltd., Plot No.-12A, Gagol Road, Behind Sophia School UdyogPuram, Partapur, Meerut	Meerut	Grant	Registered 01.04.2024	Transporttion, Refurbishing, Dismantling, Segregation, Storage, Disposal	9600 MT/A

## Appendix-6

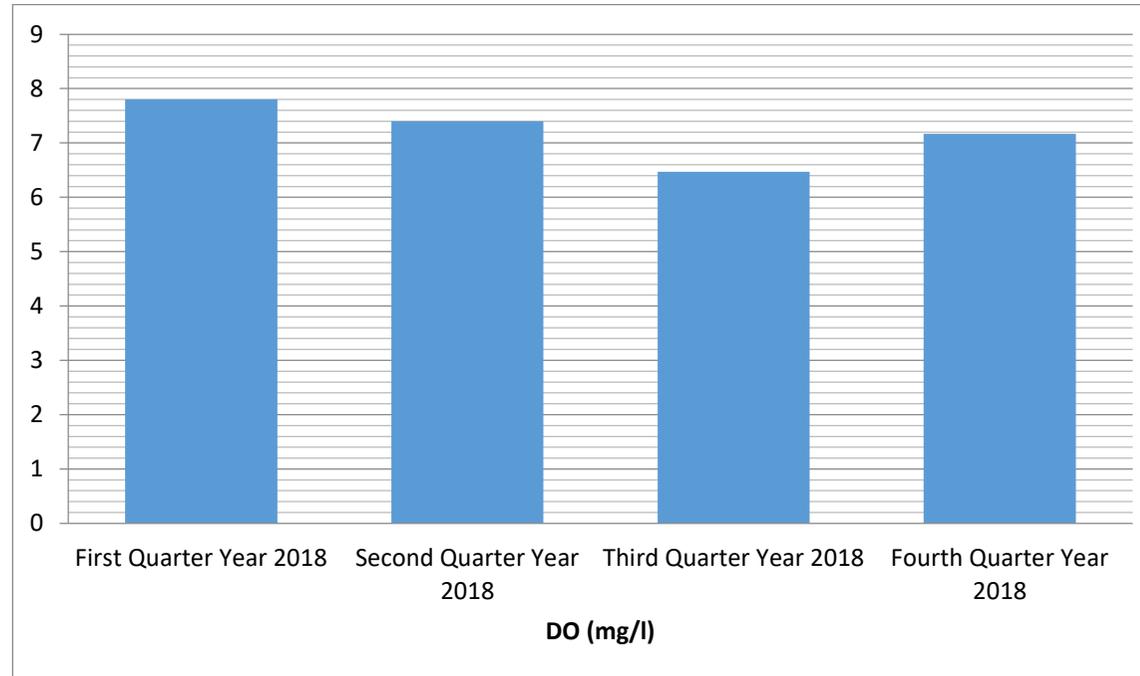
### River Water Quality Data Quarterly Water Quality of River Ghaghra Year-2018

S No	Sample Collection Point	First Quarter of 2018			Second Quarter of 2018			Third Quarter of 2018			Fourth Quarter 2018		
		DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	DO (mg/l)	BOD(mg/l)	COD(mg/l)
1	Ghaghra River up stream of Barahalganj,Gorakhpur	7.66	4.60	17.00	7.06	4.63	20.67	6.67	5.26	24.00	7.33	5.20	24.00
2	Ghaghra River Near Road, bridge Bhagalpur, Deoria	7.80	4.56	22.00	7.40	4.80	22.67	6.47	5.20	23.33	7.17	5.13	22.67
3	Ghaghra River after meeting with Rapti River at kaparawarGhat, Deoria	7.63	5.26	21.67	7.20	5.33	25.00	6.29	6.00	26.67	7.00	5.40	22.00

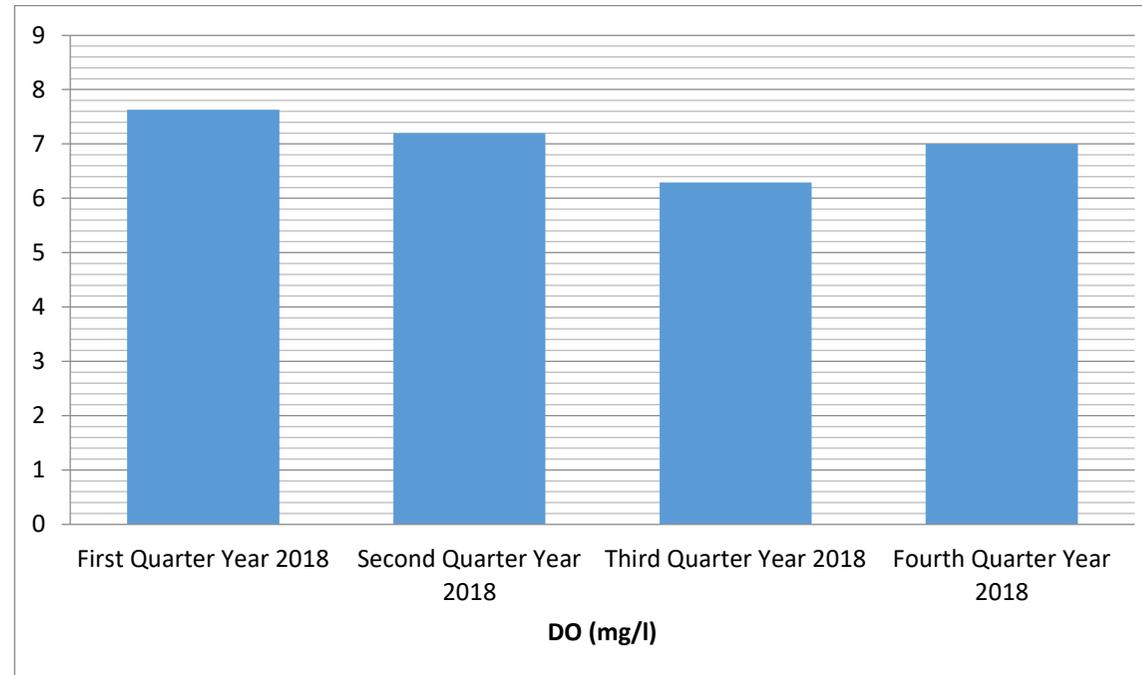
## Comprative Chart of Dissolved Oxygen in Ghaghra River up stream of Barahalganj, Gorakhpur on Quarterly Basis in 2018



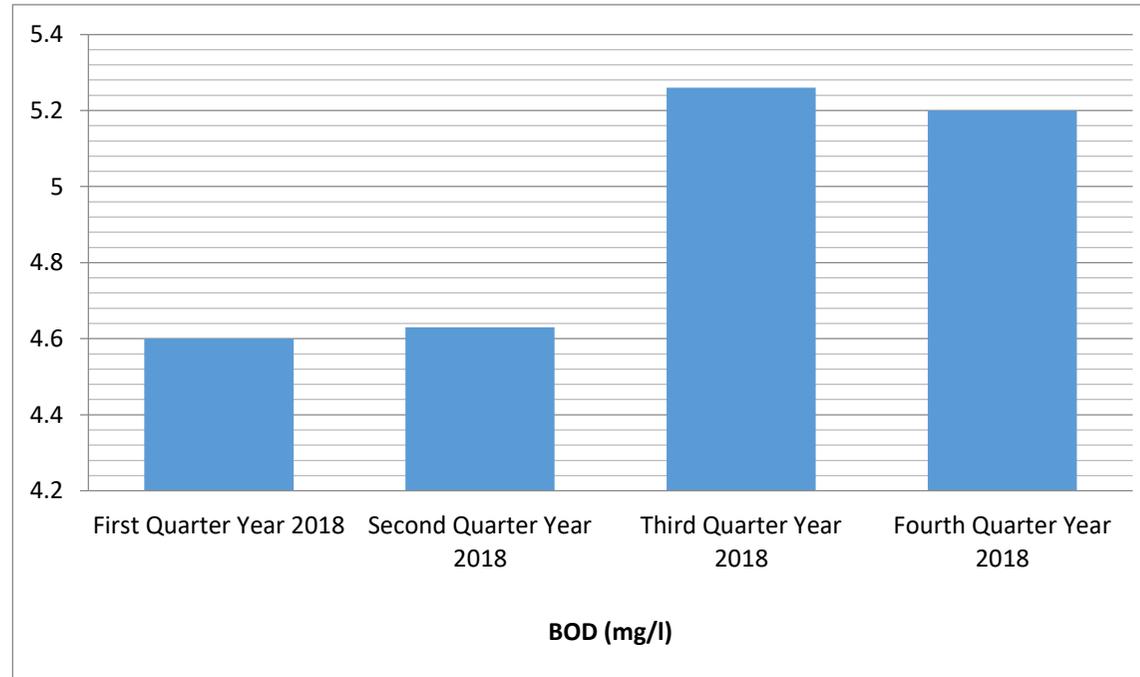
## Comprative Chart of Dissolved Oxygen in Ghaghra River Near Roadbridge Bhagalpur, Deoria on Quarterly Basis in 2018



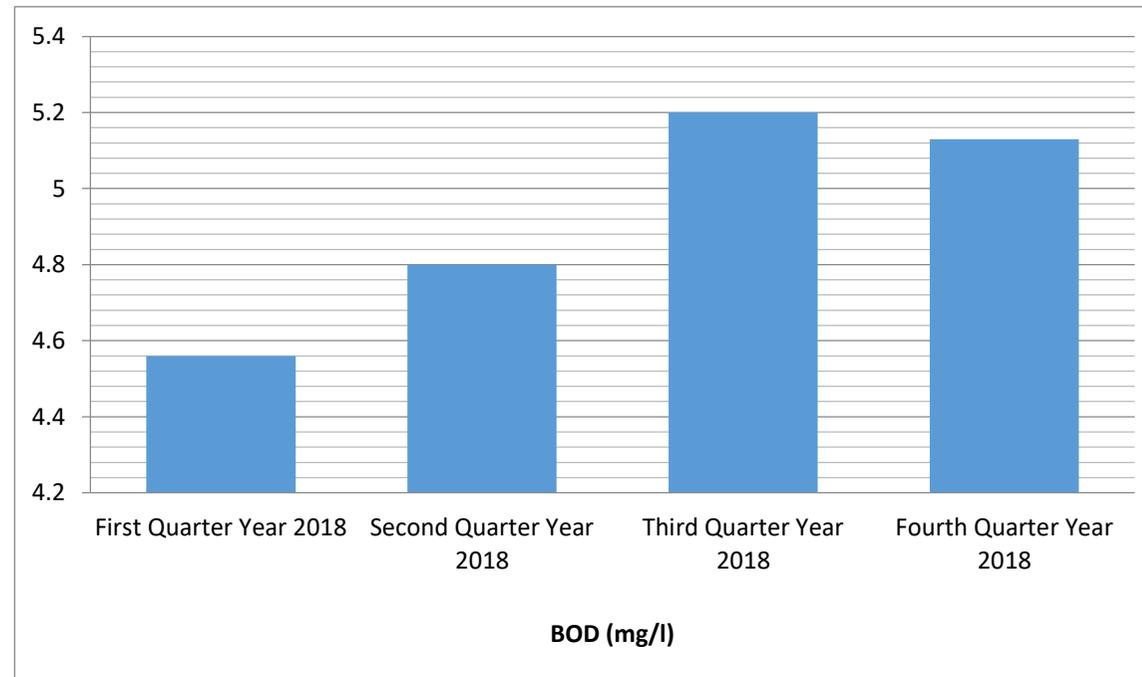
## Comprative Chart of Dissolved Oxygen in Ghaghra River after meeting with Rapti River at kaparawarGhat, Deoria on Quarterly Basis in 2018



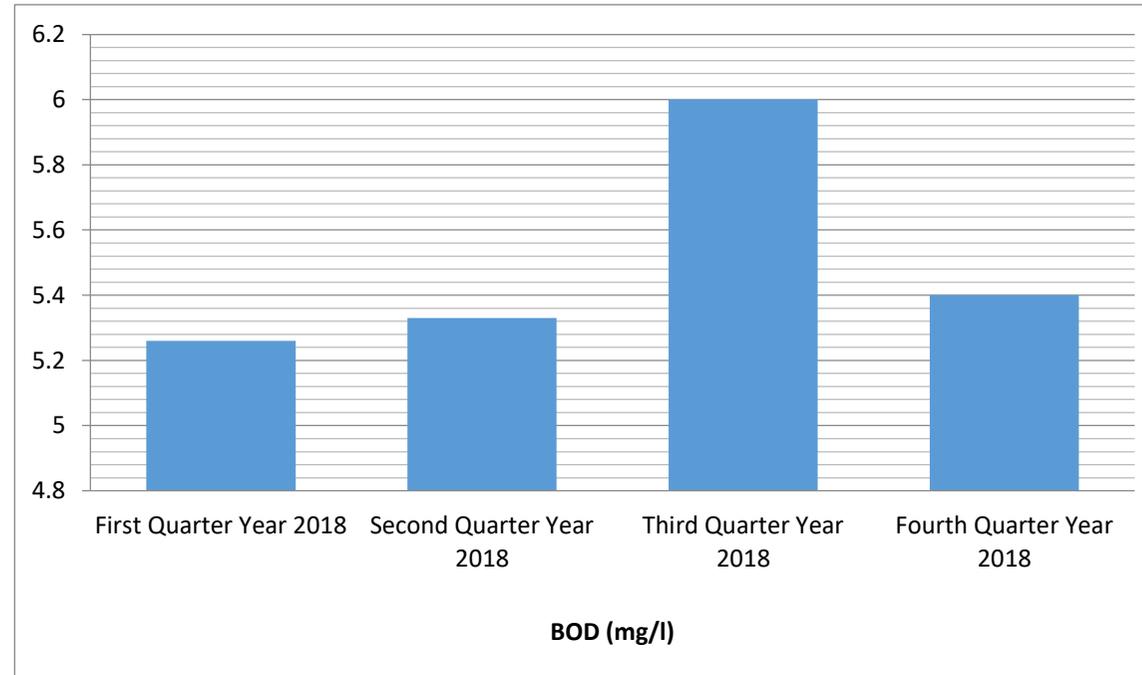
## Comprative Chart of Bio-Chemical Oxygen Demand in Ghaghra River up stream of Barahalganj, Gorakhpur on Quarterly Basis in 2018



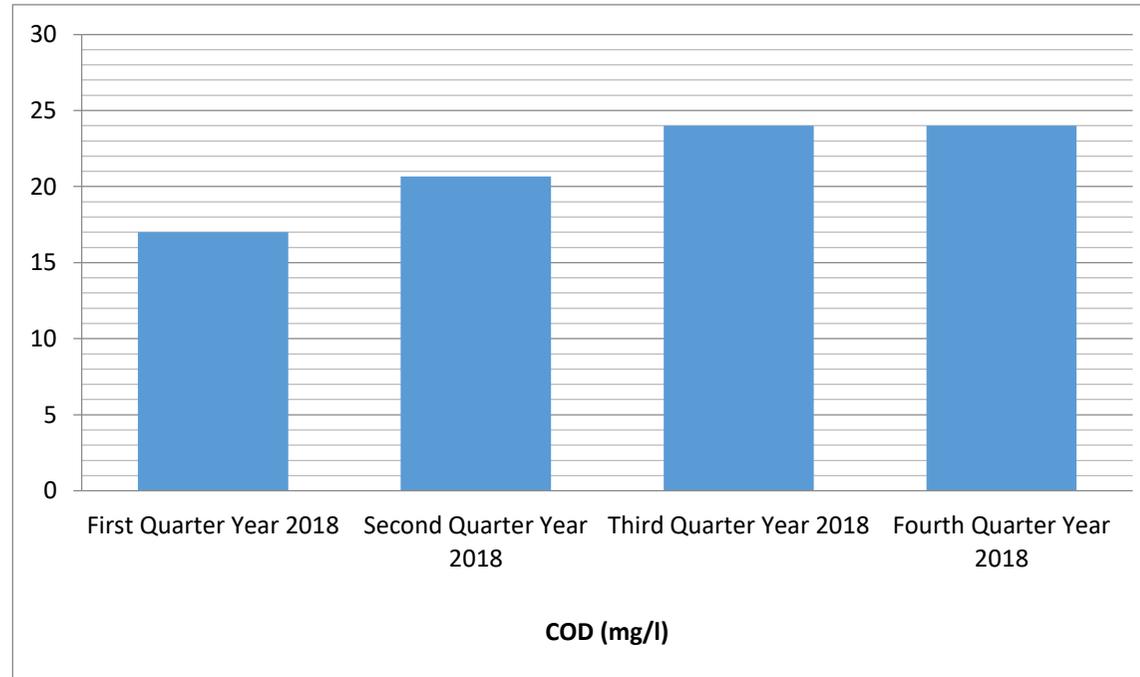
## Comprative Chart of Bio-Chemical Oxygen Demand in Ghaghra River Near Roadbridge Bhagalpur, Deoria on Quarterly Basis in 2018



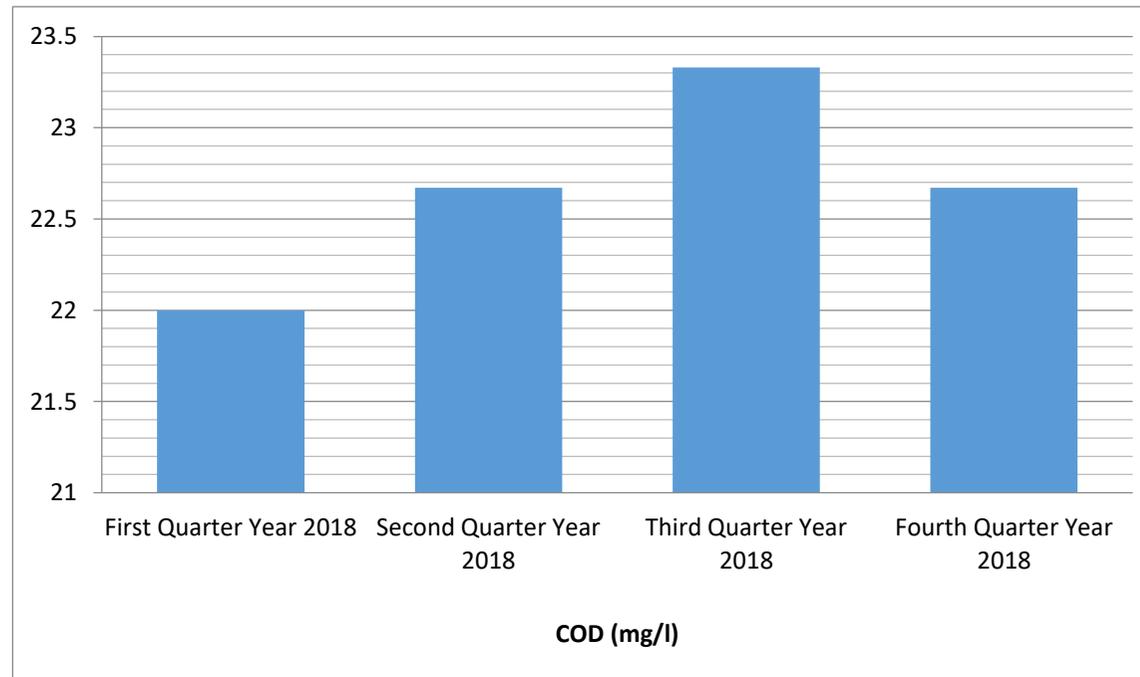
## Comprative Chart of Bio-Chemical Oxygen Demand in Ghaghra River after meeting with Rapti River at kaparawarGhat, Deoria on Quarterly Basis in 2018



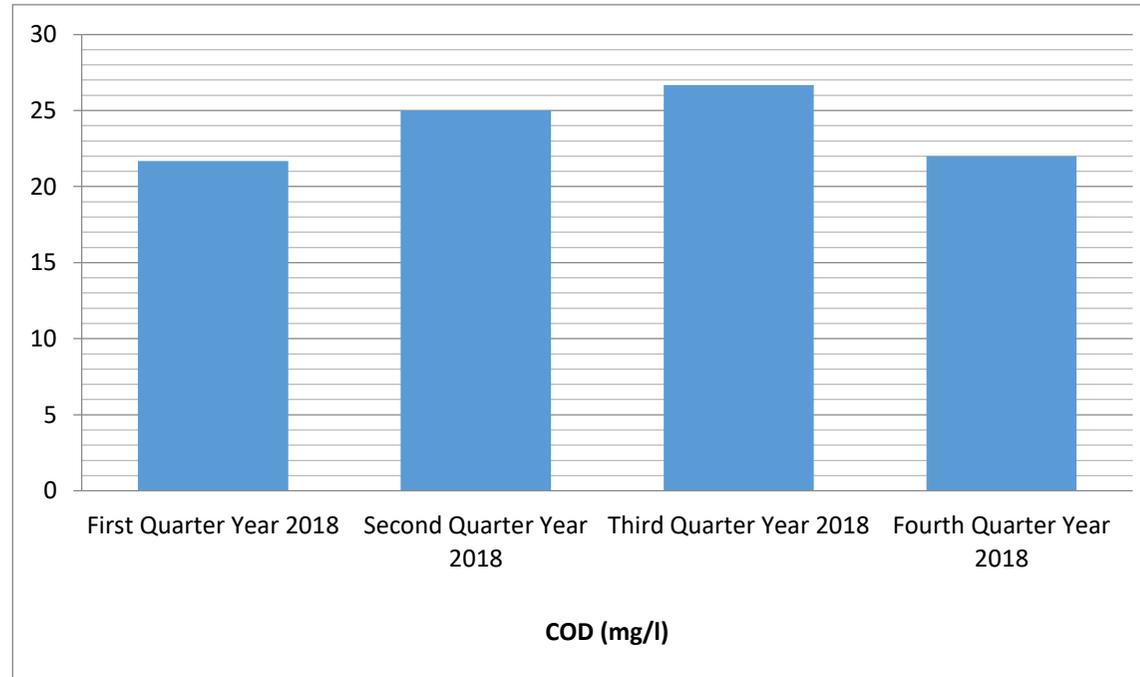
## Comprative Chart of Chemical Oxygen Demand in Ghaghra River up stream of Barahalganj, Gorakhpur on Quarterly Basis in 2018



## Comprative Chart of Chemical Oxygen Demand in Ghaghra River Near Roadbridge Bhagalpur, Deoria on Quarterly Basis in 2018



## Comprative Chart of Chemical Oxygen Demand in Ghaghra River after meeting with Rapti River at kaparawarGhat, Deoria on Quarterly Basis in 2018



## Appendix-07

### MSW improvement action plan time-line for the ULBs of Department of Urban Development, UP

S.N.	Key Activities	Timeline (In Months)								
		1	2	3	4	5	6	7	8	9
1	Policy Framework adoption (During the period the ULBs are required to adopt various rules /regulation in terms of bylaws for effective implementation of SWM rules)									
2	With adoption action plan the ULBs along the river will formulate IEC campaign (Specifically designing of promotional materials related to not only just for better waste management in the area but also making common people/institutions aware and sensitise about river pollution and its control measure for making an effective behaviour change. The first 2 months will be needed for preparing the material and widely spreading the message and then it's going to be a continuous effort for a sustained drive to make perceptible change among stakeholders.)									

3	Detail Gap Analysis of existing resources in terms of human resource/equipment/vehicles that are presently deployed and further required for full compliance of SWM rules. During the period each ULB shall prepare a detail micro plan (ward -wise) in sync with the action plan for effective implementation.	Yellow	Yellow	White	White	White	White	White	White	White
4	Procurement of Required Material / Services after Gap Analysis	White	White	Red	Red	Red	White	White	White	White
5	Capacity Building. All the key stakeholders from senior officials to the level of safaikarmi is required to be sensitize and trained for the effective compliance of SWM rules and during the period intensive capacity building programmes shall be conducted.	Red	Red	Red	White	White	White	White	White	White
6	Identification of Land/ Building for waste processing shall be completed for all ULBs within 2 months (decentralised composting/MRF).	Purple	Purple	White	White	White	White	White	White	White
7	Construction /Setting up of decentralised processing facility (composting for wet waste and MRF for dry waste) in all ULBs.	Blue	Blue	Blue	Blue	Blue	Blue	White	White	White
8	Bulk waste Generators Identification and consultation/capacity building foronsite Waste Management.	Yellow	Yellow	Yellow	Yellow	White	White	White	White	White

<b>9</b>	Identification and integration of Informal Rag Pickers								
<b>10</b>	Segregation/ collection / transport / processing (10 percent) (by 4th month of Action Plan adoption)								
<b>11</b>	Segregation/ collection / transport / processing (20 percent)								
<b>12</b>	Segregation/ collection / transport / processing (35 percent)								
<b>15</b>	Segregation/ collection / transport / processing (50 percent)								
<b>16</b>	Segregation/ collection / transport / processing (65 percent)								
<b>17</b>	Segregation/ collection / transport / processing (80 percent)								
<b>18</b>	Segregation/ collection / transport / processing (100) percent) Within 12 months.								

**CLASS OF WATER AS PER IS:2296**

<b>Classification</b>	<b>TYPE OF USE</b>
ClassA	Drinking watersourcewithoutconventionaltreatmentbutafterdisinfection
ClassB	Outdoorbathing
ClassC	Drinking watersourcewith conventional treatment followed bydisinfection.
ClassD	Fish culture and wild life propagation
ClassE	Irrigation,industrial cooling orcontrolled waste disposal

## TOLERANCE LIMITS

**TABLE-1: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – A**

S. No. (1)	Characteristic (2)	Tolerance (3)
(i)	pH	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l,	6.0
(iii)	Bio-chemical Oxygen Demand	2.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	50
(v)	Colour, Hazen units, Max	10
(vi)	Odour	unobjectionable
(vii)	Taste	Agreeable taste
(viii)	Total Dissolved Solids, mg/l, Max	500
(ix)	Total Hardness (as CaCO <sub>3</sub> ), mg/l, Max	300
(x)	Calcium Hardness (as CaCO <sub>3</sub> ), mg/l, Max	200
(xi)	Magnesium (as CaCO <sub>3</sub> ), mg/l, Max	100
(xii)	Copper (as Cu), mg/l, Max	1.5
(xiii)	Iron (as Fe), mg/l, Max	0.3
(xiv)	Manganese (as Mn), mg/l, Max	0.5
(xv)	Chlorides (as Cl), mg/l, Max	250
(xvi)	Sulphate (as SO <sub>4</sub> ), mg/l, Max	400
(xvii)	Nitrates (as NO <sub>2</sub> ), mg/l, Max	20
(xviii)	Fluorides (as F), mg/l, Max	1.5
(xix)	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max	0.002
(xx)	Mercury (as Hg), mg/l, Max	0.001
(xxi)	Cadmium (as Cd), mg/l, Max	0.01
(xxii)	Selenium (as Se), mg/l, Max	0.01
(xxiii)	Arsenic (as As), mg/l, Max	0.05
(xxiv)	Cyanides (as CN), mg/l, Max	0.05
(xxv)	Lead (as Pb), mg/l, Max	0.1
(xxvi)	Zinc (as Zn), mg/l, Max	15
(xxvii)	Chromium (as Cr <sup>2+</sup> ), mg/l, Max	0.05
(xxviii)	Anionic detergents, (as MBAS), mg/l, Max	0.2
(xxix)	Poly-nuclear aromatic hydrocarbons (PAH),	0.2
(xxx)	Mineral oil, mg/l, Max	0.01
(xxxi)	Barium (as Ba), mg/l, Max	1.0
(xxxii)	Silver (as Ag), mg/l, Max	0.05
(xxxiii)	Pesticides	Absent
(xxxiv)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>
(xxxv)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 2: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – B**

S. (1)	Characteristic (2)	Tolerance Limit (3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l, Max	5.0
(iii)	Biochemical Oxygen Demand (5 days at 20 °C),	3.0
(iv)	Total Coliform Organisms, MPN/100 ml, Max	500
(v)	Fluorides (as F)-mg/l, Max	1.5
(vi)	Colour, Hazen units, Max	300
(vii)	Cyanides (as CN), mg/l, Max	0.05
(viii)	Arsenic (as As), mg/l, Max	0.2
(ix)	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH) mg/l, Max	0.005
(x)	Chromium (as Cr <sup>2+</sup> ), mg/l, Max	1.0
(xi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xii)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>

**TABLE - 3: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – C**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH Value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l Minimum	4.0
(iii)	Biochemical Oxygen Demand	3.0
(iv)	Total coliform organisms, MPN/100 ml, Max	5000
(v)	Colour, Hazen units, Max	300
(vi)	Fluorides (as F), mg/l, Max	1.5
(vii)	Cadmium (as Cd), mg/l, Max	0.01
(viii)	Chlorides (as Cl), mg/l, Max	600
(ix)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	0.05
(x)	Cyanides (as CN), mg/l, Max	0.05
(xi)	Total Dissolved Solids, mg/l, Max	1500
(xii)	Selenium (as Se), mg/l, Max	0.05
(xiii)	Sulphates (as SO <sub>4</sub> ), mg/l, Max	400
(xiv)	Lead (as Pb), mg/l, Max	0.1
(xv)	Copper (as Cu), mg/l, Max	1.5
(xvi)	Arsenic (as As), mg/l, Max	0.2
(xvii)	Iron (as Fe), mg/l, Max	50
(xviii)	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max	0.005
(xix)	Zinc (as Zn), mg/l, Max	15
(xx)	Insecticides, mg/l, Max	Absent
(xxi)	Anionic detergents (as MBAS), mg/l, Max	1.0
(xxii)	Oils and grease, mg/l, Max	0.1
(xxiii)	Nitrates (as NO <sub>3</sub> ), mg/l, Max	50
(xxiv)	Alpha emitters, µc/mg, Max	10 <sup>-9</sup>
(xxv)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 4: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – D**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.5 to 8.5
(ii)	Dissolved Oxygen, mg/l, Min.	4.0
(iii)	Free Ammonia (as N), mg/l, Max.	1.2
(iv)	Electrical Conductance at 25 °C, µS, Max	1000
(v)	Free Carbon Dioxide (as CO <sub>2</sub> ), mg/l, Max	6.0
(vi)	Oils and Grease, mg/l, Max	0.1
(vii)	Alpha emitters, µc/ml, Max	10 <sup>-8</sup>
(viii)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>

**TABLE- 5: TOLERANCE LIMITS FOR INLAND SURFACE WATERS, CLASS – E**

S.No.	Characteristic	Tolerance Limit
(1)	(2)	(3)
(i)	pH value	6.0 to 8.5
(ii)	Electrical Conductance at 25°C, µS, Max	2250
(iii)	Sodium Adsorption Ratio, Max	26
(iv)	Boron (as B), mg/l, Max	2.0
(v)	Total Dissolved Solids, (inorganic), mg/l, Max	2100
(vi)	Sulphates (as SO <sub>4</sub> ), mg/l, Max	1000
(vii)	Chlorides (as Cl), mg/l, Max	600
(viii)	Sodium Percentage, Max	60
(ix)	Alpha emitters, µc/ml, Max	10 <sup>-8</sup>
(x)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>



उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड  
UTTAR PRADESH POLLUTION CONTROL BOARD

Ref. No ..... / सी-6/ जल/269/बस्ती/2021

Dated 19/3/21

मा0 एन0जी0टी0 प्रकरण ई-मेल द्वारा

सेवा में,  
क्षेत्रीय अधिकारी,  
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,  
बस्ती।

**विषय:** नगर पंचायत मगहर, जनपद-सन्तकबीर नगर के विरुद्ध पर्यावरणीय क्षतिपूर्ति के सम्बन्ध में कारण बताओ नोटिस का उत्तर/स्पष्टीकरण के संबंध में।

महोदय,

उपरोक्त विषयक अपने पत्रांक-1140/न0प0प0-05/सन्तकबीर नगर/2021 दिनांक 18.03.2021 का संदर्भ ग्रहण करें, जिसके द्वारा स्थानीय निकाय के विरुद्ध प्रेषित कारण बताओ नोटिस पत्रांक-एच. 57002/सी0-6/सहमति जल/269/बस्ती/21 दिनांक 07.01.2021 को निक्षेप किये जाने हेतु विचारार्थ प्रेषित किया गया है। आप द्वारा प्रेषित आख्या में यह उल्लेख है कि स्थानीय निकाय से जनित मल-जल के शुद्धिकरण हेतु दिनांक 04.11.2020 से बायोरेमिडेशन का कार्य प्रारम्भ कराया जा रहा है, परन्तु स्थानीय निकाय द्वारा पूर्व में किये गये उल्लंघन हेतु पर्यावरणीय क्षतिपूर्ति का आंकलन नहीं किया गया है। जबकि मा0 एन0जी0टी0 द्वारा ओ0ए0 संख्या 116/2014 मीरा शुक्ला बनाम म्यूनिशिपल कारपोरेशन गोरखपुर एवं अन्य विचाराधीन है। माननीय अधिकरण द्वारा उक्त ओ0ए0 संख्या में दिनांक 16.06.2020 को पारित आदेश के सुसंगत अश निम्नवत् है:-

“.....No interim measures for the treatment of the wastewater in drains and sewages have been made yet. has mandated that bioremediation and/or phyto-remediation or any other remediation measures may start as an interim measure positively from 01.4.2020, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB.....”

अतः मा0 एन0जी0टी0 के आदेशानुसार दिनांक 01.04.2020 से डिफाल्ट होने की अवधि तक स्थानीय निकाय के विरुद्ध उल्लंघनकारी दिवसों के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित करने हेतु पर्यावरणीय क्षतिपूर्ति का आंकलन कर आख्या एवं संस्तुति प्रेषित करना सुनिश्चित करें, जिससे स्थानीय निकाय के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित की जा सके एवं मा0 एन0जी0टी0 द्वारा पारित आदेश का अनुपालन सुनिश्चित हो सके।

भवदीय,

मुख्य पर्यावरण अधिकारी  
(वृत्त-6)

प्रतिलिपि :-

1. श्री एल0एन0 सोनी, पी0पी0एस0 मा0 ओवर साइट कमेटी, पर्यावरण निदेशालय, विनीत खण्ड-1, गोमती नगर, लखनऊ को सूचनार्थ प्रेषित।

मुख्य पर्यावरण अधिकारी  
(वृत्त-6)



उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड  
UTTAR PRADESH POLLUTION CONTROL BOARD

Appendix-11

Ref. No ..... /सी-6/जब/268/बस्ती/2021

Dated 19/3/21

मा0 एन0जी0टी0 प्रकरण ई-मेल द्वारा

सेवा में,  
क्षेत्रीय अधिकारी,  
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,  
बस्ती।

**विषय:** नगर पालिका परिषद, खलीलाबाद, जनपद-सन्तकबीर नगर के विरुद्ध पर्यावरणीय क्षतिपूर्ति के सम्बन्ध में कारण बताओ नोटिस का उत्तर/स्पष्टीकरण के संबंध में।

महोदय,

उपरोक्त विषयक अपने पत्रांक-1141/न0प0प0-06/सन्तकबीर नगर/2021 दिनांक 18.03.2021 का संदर्भ ग्रहण करें, जिसके द्वारा स्थानीय निकाय के विरुद्ध प्रेषित कारण बताओ नोटिस पत्रांक-एच. 57001/सी0-6/सहमति जल/268/बस्ती/21 दिनांक 07.01.2021 को निक्षेप किये जाने हेतु विचारार्थ प्रेषित किया गया है। आप द्वारा प्रेषित आख्या में यह उल्लेख है कि स्थानीय निकाय से जनित मल-जल के शुद्धिकरण हेतु दिनांक 04.11.2020 से बायोरेमिडेशन का कार्य प्रारम्भ कराया जा रहा है, परन्तु स्थानीय निकाय द्वारा पूर्व में किये गये उल्लंघन हेतु पर्यावरणीय क्षतिपूर्ति का आंकलन नहीं किया गया है। जबकि मा0 एन0जी0टी0 द्वारा ओ0ए0 संख्या 116/2014 मीरा शुक्ला बनाम म्यूनिशिपल कारपोरेशन गोरखपुर एवं अन्य विचाराधीन है। माननीय अधिकरण द्वारा उक्त ओ0ए0 संख्या में दिनांक 16.06.2020 को पारित आदेश के सुसंगत अश निम्नवत् है:-

“.....No interim measures for the treatment of the wastewater in drains and sewages have been made yet. has mandated that bioremediation and/or phyto-remediation or any other remediation measures may start as an interim measure positively from 01.4.2020, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB.....”

अतः मा0 एन0जी0टी0 के आदेशानुसार दिनांक 01.04.2020 से डिफाल्ट होने की अवधि तक स्थानीय निकाय के विरुद्ध उल्लंघनकारी दिवसों के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित करने हेतु पर्यावरणीय क्षतिपूर्ति का आंकलन कर आख्या एवं संस्तुति प्रेषित करना सुनिश्चित करें, जिससे स्थानीय निकाय के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित की जा सके एवं मा0 एन0जी0टी0 द्वारा पारित आदेश का अनुपालन सुनिश्चित हो सके।

भवदीय,

मुख्य पर्यावरण अधिकारी  
(वृत्त-6)

प्रतिलिपि :-

1. श्री एल0एन0 सोनी, पी0पी0एस0 मा0 ओवर साइट कमेटी, पर्यावरण निदेशालय, विनीत खण्ड-1, गोमती नगर, लखनऊ को सूचनार्थ प्रेषित।

मुख्य पर्यावरण अधिकारी  
(वृत्त-6)



उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड  
UTTAR PRADESH POLLUTION CONTROL BOARD

Ref. No ..... / सी-6/सा-277/प्रति 12-01

Dated 19-3-21

अनुस्मारक-3

मा0 एन0जी0टी0 प्रकरण ई-मेल द्वारा

सेवा में,

क्षेत्रीय अधिकारी,  
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,  
गोरखपुर।

**विषय:** मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 116/2014 मीरा शुक्ला बनाम म्यूनिसिपल कारपोरेशन, गोरखपुर व अन्य में पारित आदेश दिनांक 12.01.2021 के संबंध में।

महोदय,

उपरोक्त विषयक मुख्य कार्यपालक अधिकारी, गीडा, गोरखपुर के पत्रांक-4123/अभि0नि0-6/सी0ई0टी0पी0/2020-2021 दिनांक 19.03.2021का संदर्भ ग्रहण करने का कष्ट करें। जो कि अद्योहस्ताक्षरी को सम्बोधित तथा आपको पृष्ठांकित है। मुख्य कार्य पालक अधिकारी ने उक्त पत्र के माध्यम से गीडा, गोरखपुर में स्थापित होने वाले सी0ई0टी0पी0 के संबंध में अद्यतन स्थिति से अवगत कराया गया है।

अवगत हों कि मा0 एन0जी0टी0 नई दिल्ली द्वारा ओ0ए0 सं0-116/2014 मीरा शुक्ला बनाम म्यूनिसिपल कारपोरेशन गोरखपुर एवं अन्य में पारित आदेश दिनांक 16.06.2020 के अनुपालन में मुख्य कार्यपालक अधिकारी, गीडा, गोरखपुर के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने हेतु इस कार्यालय के पत्र दिनांक 04.07.2021 द्वारा कारण बताओ नोटिस प्रेषित किया गया है। इस संबंध में इस कार्यालय के पत्र दिनांक 05.03.2021 द्वारा अनुस्मारक-2 पत्र के माध्यम से आपको पुनः निर्देशित किया गया है कि गीडा गोरखपुर के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने हेतु स्पष्ट संस्तुति के साथ तत्काल आख्या प्रेषित करें। आप द्वारा प्रकरण पर अभी तक आख्या प्रेषित नहीं की गई है।

ज्ञातव्य है कि प्रकरण मा0 एन0जी0टी0 नई दिल्ली में सुनवाई हेतु दिनांक 17.05.2021 को नियत है। प्रकरण में मुख्य सचिव महोदय, उ0प्र0 शासन की ओर से अनुपालन आख्या मा0 एन0जी0टी0 में दायर की जानी है। उपरोक्त प्रकरण पर आपके द्वारा अनावश्यक विलम्ब किया जाना अत्यन्त खेदजनक है एवं माननीय एन0जी0टी0 के आदेश के अनुपालन में शिथिलता का घोटक है।

अतः उपरोक्त को दृष्टिगत रखते हुए आपको पुनः निर्देशित किया जाता है कि गीडा गोरखपुर के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने के संबंध में तत्काल आख्या एवं संस्तुति प्रेषित करना सुनिश्चित करें, जिससे गीडा गोरखपुर के विरुद्ध पर्यावरणीय क्षतिपूर्ति अधिरोपित की जा सके एवं मा0 एन0जी0टी0 के आदेश दिनांक 16.06.2020 का अनुपालन सुनिश्चित हो सके। प्रकरण पर विलम्ब होने पर यदि मा0 एन0जी0टी0 द्वारा कोई प्रतिकूल आदेश पारित होता है तो इसका सम्पूर्ण उत्तरदायित्व आपका होगा।

भवदीय,

मुख्य पर्यावरण अधिकारी  
(वृत्त-6)

प्रतिलिपि :-

1. सदस्य सचिव, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ को सूचनार्थ प्रेषित।
2. श्री एल0एन0 सोनी, पी0पी0एस0 मा0 ओवर साइट कमेटी, पर्यावरण निदेशालय, विनीत खण्ड-1, गोमती नगर, लखनऊ को सूचनार्थ प्रेषित।

मुख्य पर्यावरण अधिकारी  
(वृत्त-6)



## उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड UTTAR PRADESH POLLUTION CONTROL BOARD

Ref. No H62352/सी-6/सा0-52/ओ0ए0 संख्या 116/2014/गोरखपुर/2021 Dated.15.06.2021.

मा0 एन0जी0टी0 प्रकरण

सेवा में,

उप सचिव,  
पर्यावरण वन एवं जलवायु परिवर्तन अनुभाग-7,  
उ0प्र0 शासन।

**विषय:** माननीय एन0जी0टी0, नई दिल्ली में विचाराधीन ओ0ए0 संख्या 116/2014 मीरा शुक्ला बनाम म्यूनिसिपल कारपोरेशन गोरखपुर एवं अन्य में पारित आदेश दिनांक 12.01.2021 के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक माननीय एन0जी0टी0, नई दिल्ली में विचाराधीन ओ0ए0 संख्या 116/2014 मीरा शुक्ला बनाम म्यूनिसिपल कारपोरेशन गोरखपुर एवं अन्य में पारित संलग्न आदेश दिनांक 12.01.2021 के सुसंगत अंश निम्नवत् हैं:-

".....The Oversight Committee may have meeting within one month from today with the River Rejuvenation Committee to be coordinated by UP PCB to take stock of situation on implementation of draft action plan. The Oversight Committee may give report before next hearing particularly on following issues:

- 1) Quantity of sewage being discharged into river Ami, Rapti and Ghagra through drains and time bound implementation for setting up of STPs and coercive action for delay.
- 2) Current water quality of Ami, Rapti and Ghagra and Ramgarh lake.
- 3) The reasons for delay in setting up of CETP and accountability for delay. In absence of CETP, why Member industries are permitted to operate without remedial action under the Water (Prevention and Control of Pollution) Act, 1974?
- 4) Regulatory plan to check encroachment of flood plain of Ami, Rapti and Ghagra.

22. We direct that the Chief Secretary, UP may in particular oversee the execution of river rejuvenation plans for Rivers Ami, Rapti, Rohani, Saryu and Ghagra wherein the timelines for rejuvenation of different components may be fixed with necessary budgetary support and designating the authorities/officers responsible for it. Such projects cannot be delayed on the pretext of funding by the NMCG in view of the fact that preventing discharge of pollutants in River Ganga or other water bodies a criminal offence under the Water Act and even authorities are liable to be prosecuted for such offences in the light of the judgement of the Hon'ble Supreme Court in Paryavaran Suraksha v. Union of India. Compliance of the said judgement is not dependent on funding by the NMCG....."

मा0 एन0जी0टी0, नई दिल्ली के आदेश दिनांक 12.01.2021 के अनुपालन में मा0 ओवर साइट कमेटी एवं रिवर रिज्यूविनेशन कमेटी की एक बैठक आयोजित कराई जानी थी, किन्तु कोविड-19 महामारी के कारण उक्त बैठक आयोजित कराया जाना संभव नहीं हो सका। इस संबंध में मा0 ओवर साइट कमेटी द्वारा उनके ई-मेल दिनांक 07.06.2021 द्वारा उक्त बैठक को आयोजित कराये जाने हेतु निर्देशित किया गया है।

अतः अनुरोध है कि मा0 एन0जी0टी0 नई दिल्ली द्वारा पारित आदेश दिनांक 12.01.2021 के अनुपालन में मा0 ओवर साइट कमेटी एवं रिवर रिज्यूविनेशन कमेटी की बैठक आहूत किये जाने हेतु अध्यक्ष रिज्यूविनेशन कमेटी द्वारा उनकी सुविधानुसार तिथि एवं समय निर्धारित कराने का कष्ट करें, जिससे कि तदनुसार अध्यक्ष मा0 ओवर साइट कमेटी को सूचित किया जा सके। मा0 अध्यक्ष महोदय, ओवरसाइट कमेटी द्वारा प्रश्नगत बैठक दिनांक 25.06.2021 के पश्चात कराये जाने पर सहमति प्रदान की गयी।

संलग्नक:-यथोपरि।

भवदीय,

(आशीष तिवारी)

सदस्य सचिव

प्रतिलिपि :-श्री एल0एन0 सोनी, पी0पी0एस0, अध्यक्ष मा0 ओवर साइट कमेटी, एन0जी0टी0, यू0पी0, लखनऊ को सूचनार्थ प्रेषित।

सदस्य सचिव



# उत्तर प्रदेश जल निगम

प्रधान कार्यालय - 6-राणा प्रताप मार्ग, लखनऊ

पत्र संख्या - ५२९/०२२- 673-2018/2021

दिनांक- 16 .06.2021

सेवा में,

श्री ए०एन० बाजपेई,  
(पी०पी०एस०)

मा० अध्यक्ष, ओवर साइट कमेटी,  
एन०जी०टी०, यू०पी०  
लखनऊ -226010

विषय:-प्रदेश के नगरीय क्षेत्रों के घरेलू उत्प्राह के प्रबन्धन के सम्बन्ध में।

महोदय,

उपरोक्त विषयक आपसे दूरभाष पर हुई वार्तानुक्रम में उ०प्र० के नगरीय क्षेत्रों के घरेलू उत्प्राह के प्रबन्धन हेतु प्रदेश में स्थापित/निर्माणाधीन/स्वीकृत एस०टी०पी० एवं सीवेज शोधन हेतु आवश्यक अतिरिक्त एस०टी०पी० के निर्माण हेतु विरचित योजनाओं का विवरण दर्शाते हुए तैयार की गयी सूचना संलग्न कर प्रेषित है।

संलग्नक :- उपरोक्तानुसार।

भवदीय  
Duyomby  
16/6  
(पीयूष पंकज)  
मुख्य अभियन्ता (गंगा)

## Status and Action Plan for treatment of sewage generated in UP

Total 5500 MLD Sewage is being generated in 652 ULBs present in Uttar Pradesh. Presently, 106 STPs are installed in Uttar Pradesh, which have 3370.87 MLD sewage treatment capacity. In addition to above, 37 STPs having total capacity of 887.06 MLD are under construction and 25 STPs having total capacity of 564.10 MLD are under tendering process. Upon completion of these STPs, the total sewage treatment capacity shall become 4822.53 MLD. Gap of 677.47 MLD is still present.

The timeline for completion of ongoing projects of setting up of STPs in Uttar Pradesh is as follows:-

### Details of Under Construction STPs in the State-

S.No	Name of town/district	Nos.	Capacity (MLD)	Expected date of Commissioning	Present Progress (Upto May-2021)
1	Ramna	1	50	Mar-21	Under Trial and run
2	Ramnagar	1	10	Mar-21	Under Trial and run
3	Mathura	1	30	Oct-21	90.00%
4	Shuklaganj	1	5	Nov-22	2.00%
5	Unhao	1	15	Oct-21	41.00%
6	Kanpur	1	30	Oct-21	45.00%
7	Naini, Fafamau, Jhunsi	3	72	Dec-21	51.00%
8	Etawah	1	21	Oct-21	76.00%
9	Kasganj	1	15	Sept-21	74.50%
10	Sultanpur	3	17	Dec-21	30.00%
11	Jaunpur	1	30	March-22	26.00%
12	Chunar	1	0.01	Mar-21	Under Trial and run
13	Muzaffarnagar	2	54.5	Dec-22	14.50%
14	Budhana	1	10	Dec-22	14.50%
15	Baghpat	1	14	March-22	41.00%
16	Moradabad	1	25	-	Land issue matter is sub-Judice in Honble High Court
17	Lucknow	2	40	-	(LOA Issued on 17.09.2020 but matter is sub-Judice in Honble High Court regarding tendering)
18	Bulandshahar	1	40	Sept-21	90.00%
19	Hapur	1	30	Dec-21	60.00%
20	Mirzapur	1	7	Dec-21	75.00%
21	Bareilly	1	35	Oct-21	62.00%
22	Aligarh	1	45	Dec-21	73.00%
23	Rae Bareilly	1	18	Dec-21	90.00%
24	Etah	1	24	June-21	98.00%
25	Modinagar	1	20	Aug-21	92.00%
26	Shahjahanpur	1	40	Dec-23	3.00% (BEP vetted)

S.No	Name of town/district	Nos.	Capacity (MLD)	Expected date of Commissioning	Present Progress (Upto May-2021)
27	Lucknow	1	120	-	30 % (DPR for balance works has been prepared and submitted to State Mission Director, AMRUT vide letter no. 722/Nagar-2/035-0301/21 dated 27.03.2021. cabinet approved on 14 June 2021.
28	Ballia	1	19.6	-	DPR for balance works submitted to SMCG on 30.09.2020. Observations on the DPR were communicated by SMCG vide their office letter no. 243/0632/SMCG/01 dated 04.03.2021.
29	Pratapgarh	1	8.95	-	Revised DPR was submitted to NMCG vide SMCG letter no. 1220/063/SMCG-UP/04 dated 10.12.2020. Observations on the revised DPR for balance works were communicated by NMCG vide their office letter no. TE-12014/2020-TECH CONSTRUCTION NMCG dated 13.05.2021
30	Jhansi	1	26	Mar-21	Under stabilisation process
31	Kanpur	1	15	Dec-20	98.00%
	<b>Total</b>	<b>37</b>	<b>887.06</b>		

A. The status of sanctioned Projects which are under tendering stage is as follows:-

S.No	Name of district/town	Nos.	Capacity (MLD)	Expected date of Commissioning	Remarks
1	Fatehgarh	2	43	To be completed within 24 months after the issuance of Letter of Authorization.	Matter is referred to NMCG due to difference in legal opinion.
2	Ghazipur	1	21		LOA issued on 20.02.2021 to M/s EMS Infracon Pvt. Ltd. Ghaziabad JV M/s EMIT Group, New Delhi. Signing of Agreement is on 24 <sup>th</sup> June
3	Mirzapur	2	17		Technical Bids evaluation is in process. LOA may be issued in by June 2021.
4	Bareilly	4	63		NIT has been published on 17.05.2021.
5	Agra	13	177.60		Bid document is under preparation at NMCG Level.
6	Meerut	1	220		NIT has been published, Bids were invited on 26.05.2021. Total 9 bids have been received.
7	Kairana	1	15		Due to non-availability of Land free of cost, the DPR has been revised and sent to Mission Director, AMRUT on 19.10.2020.
8	Azamgarh	1	8		
	<b>Total</b>	<b>25</b>	<b>564.60</b>		

- A new Project of 33 MLD STP sanctioned in Ayoydya on 6<sup>th</sup> May, 2021.

To address the present gap, Uttar Pradesh Septage Management Policy-2019 has been approved by the Government on 30.10.2019. FSTP Projects costing Rs. 160 Crores have been sanctioned for covering all the 58 AMRUT towns in State with population more than 1 lakh. The Faecal and Septage Treatment Plant Projects have been implemented in Jhansi and Unnao and are under construction in 54 cities namely, Loni, Lakhimpur, Raebareli, Modinagar, Aligarh, Shahjapur, Ayodhya, Shamli, Baraut, Hapur, Khurja, Hathras, Amroha, Badaun, Farukhabad, Hardoi, Sitapur, Bahraich, Gonda, Jhansi, Latitpur, Banda, Fatehpur, Basti, Deoria, Saharanpur, Mathura, Rampur, Mujaffarnagar, Lucknow, Kanpur, Agra, Meerut, Varanasi, Prayagraj, Ghaziabad, Gorakhpur, Etawah, Firozabad, Mainpuri, Sultanpur, Bulandsahar, Faizabad, Moradabad, Pilibhit, Chandausi, Orai, Akbarpur, Maunath Bhanjan, Mirzapur, Balia, Ghazipur, Chunar. The projects of septage management have been approved in Pt. Deen Dayal Upadhyay Nagar, Azamgarh, Sikohabad and Jaunpur and work will start after availability of land.

In order to ensure compliance of the orders of Hon'ble Tribunal, the Principal Secretary Urban Development has issued instructions vide Letter No: 142/Nine-9-2019- 89J/2001 Dated: 03.02.2020 to the concerned ULBs for taking up the interim measures for treatment of drains till permanent infrastructure for treatment of sewage is created.

For long term measures for reducing the gap of 677.47 MLD, 60 Projects for I&D of drains and construction of STPs have been prepared by U.P. Jal Nigam and submitted to

SMCG/NMCG for approval and allocation of funds. Of these 60 projects, 26 are Detailed Project Reports and 34 are Pre-Feasibility Reports. wherein I&D of 89 drains and construction of 16 STPs, having total capacity of 559 MLD (excluding capacities of 8.95 MLD at Pratapgarh and 19.6 MD STP at Ballia), are proposed. (Annexure-1)

**Details of PFR/DPR for I & D and STP works submitted for approval**

**Annexure - 1**

S.No.	Name of the Project	No. of drains to be tapped	Capacity (MLD)	Total Cost (cr.)	Work Cost (cr.)	O & M Cost (cr.)
1	2	3	4	5	6	7
<b>A. DPR for I &amp; D of Drains Discharging in Rivers</b>						
1	Construction of R.C.C covered drain inside Cantonment Area under Mathura Sewerage Scheme	-	-	3.04	3.04	
2	I&D & STP works at Kalpi Town at Distt. Jalaun	1	10	86.10	33.25	52.85
3	I&D & STP works at Banda Town	2	28	144.44	102.52	41.92
4	DPR for Pollution Abatement of River Gomti at Lucknow, Phase-II	9	102	557.74	321.88	235.86
5	I&D & STP works for Gulaothi town, Distt. Bulandshahar	1	10	64.24	31.39	32.85
6	I&D & STP works for Deoband town, Distt. Saharanpur	4	15	115.26	54.16	61.1
7	I&D & STP works at Tanda Town, Distt. Ambedkar Nagar	8	15	244.67	154.07	90.6
8	I & D of remaining 5 drains falling in river Ganga and sewerage network for saturation of Sewerage District - 1, Kanpur	5	-	48.48	27.213	21.274
9	I & D works at Distt. Pratapgarh	4	8.95	33.61	16.76	16.85
10	DPR for Pollution Abatement of River Gomti at Lucknow, Phase-III Bharwara	4	85	402.63	195.11	207.52
11	I&D & STP works at Khalilabad Town, Distt. Santkabimagar	2	8	46.32	19.7	26.62
12	I&D & STP works at Maghar Town, Distt. Santkabimagar	1	3	28.36	13.43	14.93
13	I&D & STP works for drains falling in River Rapti at Distt. Gorakhpur	8	44	432.17	271.84	160.33
14	Pollution abatement works for River Ramganga at Distt. Bareilly	4	-	306.26	170.53	135.73
15	Renovation and improvement of Sewage Collection System at Distt. Kanpur	-	-	243.33	82.19	161.14
16	Rehabilitation of old trunk sewer at Distt. Kanpur	-	-	165.70	163.65	2.06
17	I & D and STP works of Kathal Drain at Distt. Ballia	1	19.60	200.29	140.91	59.38
18	I & D of Rasulabad Ghat drains and augmentation of STPs at Distt. Prayagraj	11	133	601.33	263.64	337.69
19	I & D works of Hapur City Drain at Distt. Hapur	1	-	47.05	29.59	17.47
20	I & D and STP works at Distt. Bhadohi	3	22	127.35	83.92	43.43
21	Balance drains tapping & augmentation os SPS at Agra city	-	-	74.79	74.79	
22	I & D and STP works at Mughalsarai town, Distt. Chandauli	2	37	279.07	135.07	144

S.No.	Name of the Project	No. of drains to be tapped	Capacity (MLD)	Total Cost (cr.)	Work Cost (cr.)	O & M Cost (cr.)
1	2	3	4	5	6	7
23	Interception, Diversion and Treatment Works for Abatement of Pollution of River Ganga at Manikpur, Distt. Pratapgarh	5	Wetland Tech. based STP	18.00	15.13	2.87
24	DPR for Prevention of overflow of Ganda Nala and Halwakhanda Nala at Distt. Kanpur	2	-	13.07	10.84	2.23
25	DPR for I & D and STP works at Distt. Moradabad	2	43	264.40	90.34	174.06
26	I & D & STP works at Dalmau, Distt. Raebareilly	9	4	51.94	33.62	18.32
	<b>Sub-Total (A)</b>	<b>89.00</b>	<b>587.55</b>	<b>4599.64</b>	<b>2538.58</b>	<b>2061.08</b>
<b>B. PFR for I &amp; D of Drains Discharging in Rivers</b>						
1	I & D of Chaitanya Vihar (Kosi drain 1/3), at Distt. Mathura	1	10	144.54	43.57	100.97
2	I & D and STP works at Distt. Moradabad	3	37	239.47	94.73	144.74
3	I & D and STP works of Aligarh Drain at Distt. Aligarh	1	106	577.57	251.38	326.19
4	I & D and STP works of Aligarh-Hathras Drain at Distt. Hathras	1	28	175.17	73.89	101.29
5	I & D works for zone - III (Koyla Alipur) at Distt. Mathura	3	10	319.49	149.91	169.58
6	I & D works for Kosi Kalan town at Distt. Mathura	1	10.50	76.28	37.05	39.23
7	I & D works for Chhata Nagar Panchayat at Distt. Mathura			97.56	50.39	47.17
8	I & D and STP works at Distt. Deoria	2	6	84.04	60.81	23.23
9	I & D and STP works at Saidpur Distt. Ghazipur	8	7	94.24	57.59	36.66
10	I & D and STP works at Zamania Distt. Ghazipur	3	5.5	80.71	45.91	34.81
11	I & D and STP works at Distt. Sitapur	1	30	306.81	186.04	120.77
12	I & D and STP works at Barhalganj NP, Distt. Gorakhpur	4	6	76.22	47.27	28.95
13	I & D and STP works at Distt. Mau	4	53	268.85	162.83	106.03
14	I & D and STP works at Distt. Azamgarh	10	16	157.33	92.13	65.21
15	I & D and STP works at Distt. Jaunpur	5	3.5	52.98	31.96	21.02
16	I & D and STP works at Jalalpur NP, Distt. Ambedkar nagar	5	5	80.48	45.21	35.27
17	I & D and STP works at Akbarpur NP, Distt. Ambedkar nagar	6	17	283.55	189.94	93.62
18	I & D and STP works at Itifatganj NP, Distt. Ambedkar nagar	3	3	19.05	13.65	5.4
19	I & D and STP works of Jamuriya drain at Distt. Barabanki	1	26	124.94	78.26	46.67
20	I & D and STP works at Gosaiganj NP, Distt. Ayodhya	1	2	58.42	26.62	31.8
21	I & D and STP works of Khurja Drain, Distt. Bulandshahar	1	26	82.96	37.80	45.16
22	I & D and STP works of Nizampur Drain, Distt. Bulandshahar	1	18	65.39	51.89	13.5
23	I & D and STP works of drains falling in Ghaghara at Distt. Mau	4	2.5	50.19	30.39	19.8

S.No.	Name of the Project	No. of drains to be tapped	Capacity (MLD)	Total Cost (cr.)	Work Cost (cr.)	O & M Cost (cr.)
1	2	3	4	5	6	7
24	I & D and STP works of drains falling in Hindon at Distt. Ghaziabad	5	180	2793.90	944.3	1849.6
25	I & D and STP works of Abu Nallah - 1 Drain falling in Kali at Distt. Meerut	1	14	351.62	266.1	85.52
26	I & D and STP works of Remaining 1 Drain out of 9 Drains Falling in River Rapti at Gorakhpur	1	10	188.72	84.96	103.76
27	I & D and STP works at Distt. Hamirpur	2	7.5	163.62	118.86	44.76
28	I & D works for Banat Town Drain at Distt. Shamli	3	4	17.25	14.72	2.53
29	I & D works for Shamli Town Drain at Distt. Shamli	1	35	106.51	90.88	15.63
30	I & D works for Thanabhawan Town Drain at Distt. Shamli	3	8	36.13	30.72	5.41
31	I & D works for Babri Village Drain at Distt. Shamli	1	4	21.62	18.6	3.02
32	I & D and STP works for Baikal Baba Drain, Falling in River Yamuna at Rajpur Nagar Panchayat, Distt. Chitrakoot	1		146.87	58.36	88.51
33	I & D works for Sardhana Drain Near (Hindon River) Meerut, Distt. Meerut	1	24	222.59	95.67	126.92
34	I & D and STP works for Rajghat Drain & Lohanipur Drain, Falling in River Sai at Nagar Palika Parishad Raibareilly, Distt. Raibareilly	2	12	102.33	56.13	46.2
	<b>Sub-Total (B)</b>	<b>90.00</b>	<b>726.50</b>	<b>7667.4</b>	<b>7667.4</b>	<b>4029</b>
	<b>Grand Total (A) + (B)</b>	<b>179.00</b>	<b>1314.05</b>	<b>12267</b>	<b>12267</b>	<b>6090</b>

The summary of above details is mentioned as follows:-

S. No.	Description	Capacity (MLD)
1	<b>Estimated Sewage Generation</b>	<b>5500.00</b>
2	Total installed capacity of 106 STPs	3370.87
3	Total capacity of 37 nos. STPs under construction	887.06
4	Total capacity of 25 nos. sanctioned STPs under tendering stage	564.60
5	Proposed capacity of 16 STPs in 26 DPRs submitted for approval	559.00
6	Proposed capacity of 31 STPs in 34 PFRs submitted for approval	726.50
	<b>Sub-Total (S. No. 2 - 6)</b>	<b>6108.03</b>
7	<b>Gap (5500 - 6108.03)</b>	<b>NIL</b>

Thus, there will be no Gap left between the sewage generation and the treated sewage after the approval and execution of above aforesaid projects.

  
 ( पीयूष पंकज )  
 मुख्य अभियन्ता (गंगा)  
 उ० प्र० जल निगम, लखनऊ