BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

Principal Bench, New Delhi

In

Original Application No. 985 of 2019

Re: Water Pollution by Tanneries at Jajmau, Kanpur, Uttar Pradesh

WITH

Original Application No. 986 of 2019

Re: Water Pollution at Rania, Kanpur Dehat & Rakhi Mandi, Kanpur Nagar, Uttar Pradesh

WITH

Original Application No. 528/2023

News report published in Dainik Jagran dated 14.08.2023 "highlights a growing concern regarding industrial pollution in the Godhrauli village"

Index

Filed by Adv. Raj Kumar
(On behalf of Central Pollution Control Board)

Dated: 21.01.2025
Place: Delhi

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REPLY AFFIDAVIT ON BEHALF OF THE CENTRAL POLLUTION CONTROL BOARD (CPCB)

I, V.P. Yadav, working as Scientist 'F' in Central Pollution Control Board, office at Parivesh Bhawan, East Arjun Nagar, Vishwas Nagar, Near Karkardooma, Delhi-110032, do hereby solemnly affirm and declare as under:

1. That being conversant with the facts of the case on the basis of records maintained in the ordinary course of business at CPCB, I am competent and authorized to depose and swear the present affidavit in my official capacity.

2. That, Hon'ble NGT vide order dated 03.09.2024 has sought the Response of CPCB in the instant matter. Thereby, the response is made in succeeding paragraphs.

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3. That, CPCB is a statutory Board constituted under The Water (Prevention and control of pollution) Act, 1974. It performs the functions under The Water (Prevention and control of pollution) Act, 1974, The Air (Prevention and control of pollution) Act, 1981 and The Environment (Protection) Act, 1986.

1. **Action taken by CPCB regarding industrial pollution in STPs of Kanpur:**

I. **Status of STPs in Jajmau, Kanpur April-July 2024**

Sewage treatment plants (STPs) in Ganga front towns are monitored tri-annually by Central Pollution Control Board (CPCB). During the last monitoring round from December, 2023 to March 2024, the operational status, compliance and performance of 06 STPs in Kanpur, Uttar Pradesh were assessed. The data revealed that 1 STP was non-operational, while 05 STPs were operational. All the 05 operational STPs failed the discharge norms.

In this regard, a DO letter dated 30.07.2024 was issued to the Principal Secretary, Urban Development Department, Lucknow, State of U.P. to direct the concerned agencies/officers to promptly address issues of non-compliance and non-operation of the STPs. **(Annexure-I)**

Table 1: Status of STPs in Kanpur

Name of STPs/CETPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Date of Monitoring	Operational/Non-Operational Status	Compliance w.r.t. Hon'ble NGT recommended standards	Compliance w.r.t. MoEF&CC standards

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130 MLD Jajmau STP Kanpur	Kanpur	ASP	130	09.01.2024	Operational	**Non-complying BOD, TN, FC**	**Non-complying FC**
Jajmau (43 MLD) Kanpur	Kanpur	ASP	43	09.01.2024	Operational	**Non-complying BOD, COD, TSS, T.N, FC**	**Non-complying BOD, FC**
Jajmau (5 MLD) Kanpur	Kanpur	UASB	5	14.02.2024	Non-operational	-	-
Bingawan (210 MLD) STP, Kanpur	Kanpur	UASB	210	28.02.2024	Operational	**Non-complying BOD, COD, TSS, T.N, FC**	**Non-complying BOD, FC**
30 MLD STP at Pankha	Kanpur	SBR	30	14.03.2024	Operational	**Non-complying BOD, COD, T.N**	**Non-complying BOD**
Sajari STP, Kanpur	Kanpur	ASP	42	27.02.2024	Operational	**Non-complying T.N.**	**Complying**

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2. **Action taken by CPCB regarding industrial pollution in drains of Kanpur:**

I. That CPCB issued letter dated 17.09.2024 to UPPCB regarding pollution in drains discharging into rivers Ganga & Pandu in Kanpur-Unnao region. In the said letter, it was mentioned that the UPPCB shall carry out pollution source mapping in order to identify the sources of pollution in the identified drains and direct the concerned authorities to ensure the repairing of broken/damaged/temporary tapping provisions of the drains as well as take immediate action to prevent pollution in river Ganga in the stretch from Bithoor to Fatehpur. Copy of the letter dated 17.09.2024 from CPCB to UPPCB is annexed herewith as **Annexure-II**.

II. That CPCB had earlier issued direction dated 22.02.2022 to Uttar Pradesh Jal Nigam (Rural and Urban) under Section 5 of the Environment Protection Act 1986 for adequate tapping of drains, functioning of STPs and pumping stations with a copy to UPPCB wherein, it was mentioned to carry out the mapping of the origin, confluence, catchment area, flow and water quality of tributaries/rivulets and drains. Vide the said direction, UPPCB was also directed to identify the potential source of pollution, to prepare an action plan for the management of wastewater discharged from drains, rivulets etc. Copy of the direction dated 22.02.2022 issued by CPCB to the UP Jal Nigam is annexed herewith as **Annexure-III**.

III. That CPCB also issued DO letter dated 22.08.2022 to the District Magistrate, Kanpur to deliberate upon the issues related with sewage management and industrial pollution with the concerned state agencies. Copy of the DO letter dated 22.08.2022 is annexed herewith as **Annexure-IV**.

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IV. That CPCB issued directions dated 02.07.2024 to UPPCB under Section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 regarding discharge of industrial effluent in drains of Kanpur wherein it was mentioned to effectively control all polluting sources, to ensure immediate repair of broken/damaged/temporary tapping provisions at drains and sewage pumping stations, set up surveillance squad and to take coercive action, as deemed fit, including levying of environmental compensation against the industries discharging untreated effluent. Copy of direction dated 02.07.2024 from CPCB to UPPCB is annexed herewith as **Annexure-V**.

V. That CPCB issued directions dated 19.12.2024 to Uttar Pradesh Pollution Control Board under Section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 regarding control of industrial discharge in jajmau, Kanpur during Maha Kumbh, 2025 at Prayagraj wherein UPPCB shall ensure that all tannery Units in Jajmau immediately complete individual connections, via metered pipelines, to the conveyance system of newly commissioned 20 MLD CETP Jajmau by December 20, 2024. Tannery Units failing to comply shall be directed to close down their manufacturing operations till their connection to the conveyance system is established & verified to prevent the discharge of untreated/partially treated effluent into river Ganga or drains. Proper operation of newly constructed 700 KLD Common Chrome Recovery Unit in Jajmau shall also be ensured failing which member tannery Units shall be directed to close down their manufacturing operations till completion of Maha Kumbh 2025. UPPCB, along with the District Administration, shall set-up surveillance squads for physical verification of connectivity of member tannery Units, via metered pipelines, with the conveyance system of new 20 MLD CETP by December 20, 2024. UPPCB shall identify and take necessary action, including levying of environmental compensation, against the member tannery Units which

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discharges effluent without meeting the CETP inlet norms prescribed by UPPCB. UPPCB, along with the District Administration, shall carry out physical verification to ensure that the 81 Units, out of 346, reported as non-operational are closed and their water & electricity connections are disconnected. UPPCB shall direct the concerned authorities to ensure immediate repair of broken/damaged/temporary tapping provisions at drains and sewage pumping stations shall be operated regularly so that no wastewater is discharged through tapped drains. **(Annexure-VI)**

VI. CPCB issued DO letter dated 19.12.2024 to the Chief Secretary, Government of Uttar Pradesh, Lucknow to maintain the water quality of River Ganga at Praygraj during Maha Kumbh 2025 to control industrial discharge into River Ganga in Kanpur as well as to ensure completion of individual connections from the tannery units in Jajmau to the conveyance system of new 20 MLD CETP via metered pipelines, operationalization of newly constructed 900 KLD CCRU and compliance to CETP with discharge norms at the earliest. Furthermore, tannery units located in Jajmau failing to comply with these directives may be closed down so that no untreated/partially treated effluent is discharged into River Ganga or drains. **(Annexure-VII)**

3. Status on scientific disposal of chromium waste lying at Rania, Kanpur Dehat, UP and execution of remediation of contaminated soil and groundwater

It is submitted that the Detailed Project Report (DPR) for remediation of chromium contaminated sites at Rania and surrounding areas, Kanpur Dehat, UP under National Clean Energy Fund (NCEF) was prepared by CPCB and forwarded the same to State of UP and UPPCB vide CPCB letter dated 31.08.2018 for its implementation. A copy of the letter is annexed as **Annexure-VIII**.

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Scientific disposal of chromium waste lying at Rania, Kanpur Dehat, UP

In compliance with the Hon'ble NGT order dated 16.11.2021 (uploaded dated 23.11.2021) in OA No. 985/2019; Re: Water Pollution by Tanneries at Jajmau, Kanpur, Uttar Pradesh and OA No. 986/2019; Re: Water Pollution at Rania, Kanpur Dehat & Rakhi Mandi, Kanpur Nagar, Uttar Pradesh, regarding scientific disposal of chromium waste lying at Rania, Kanpur Dehat, UP through secured landfill, the following is submitted:

- As on April, 2024, the wastes lifted from the dump site and disposed of through TSDFs are summarized as below:

S. No.	Name of the TSDFs	Quantity of the waste lifted from waste dump site and disposed through TSDFs (MT)
1.	M/s UP Waste Management Project (A Division of Re-Sustainability)	89525
2.	M/s Bharat Oil and Waste Management Limited	5528.07
	Total	**95053.07**

- Further, the joint team of CPCB (HO, Delhi) and UPPCB (RO, Kanpur Dehat) visited the site on 16th April, 2024 for pre-monsoon monitoring and to verify the lifting & disposal of chromium contaminated waste through TSDFs as well as the present status of the contaminated soil. During the joint visit, groundwater samples were collected around the contaminated site, which includes villages namely Gharampur, Shivnathpurva, and Khanchandpur. Also, soil and waste samples were collected from the excavated site. A copy of the said joint visit report containing observations, findings and recommendations

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forwarded to UPPCB vide CPCB letter dated 24.05.2024 is annexed as **Annexure-IX**.

With regard to the scientific disposal of chromium waste lying at Rania, Kanpur Dehat, UP and execution of remediation of contaminated soil and groundwater, following activities are required to be undertaken as communicated to UPPCB vide the said letter dated 24/5/2024:

i. The remaining quantity about 5000 MT to 6000 MT of chromium waste lying at the dumpsite, Rania, Kanpur Dehat, be expedited for lifting and scientific disposal through TSDF.

ii. After complete removal of the waste from the dump site, the contaminated soil should be sampled and analysed for Cr(VI) to ascertain the present level of soil contamination. Accordingly, soil remediation activities be undertaken by engaging reputed Institute/Consultant.

iii. Remediation of contaminated groundwater be undertaken by engaging reputed Institute/Consultant.

VERIFICATION

21 JAN 2025

Verified at Delhi on this ..... day of 2025 that the contents of the above reply affidavit are correct and true on the basis of the record of the case as maintained in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

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ATTESTED
NOTARY
DELHI (INDIA)
21 JAN 2025

DEPONENT
विजय प्रकाश यादव / Vijay Prakash Yadav
निदेशक/ Director
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
(M/o Environment, Forest & Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली–110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

Annexure-I

तन्मय कुमार, भा.प्र.से.
अध्यक्ष
Tanmay Kumar, I. A. S.
Chairman

3051

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

DO. No. F.3-14012(12)/7/2021-WQM-II-HO-CPCB-HO
30th July, 2024

Sewage treatment plants (STPs) in Ganga front towns are monitored tri-annually by Central Pollution Control Board (CPCB). During the last monitoring round from December, 2023 to March 2024, the operational status, compliance, and performance of 40 STPs in Uttar Pradesh were assessed. The data revealed that 3 STPs were non-operational, while 37 were operational. Among the operational STPs, only 17 complied with the notified norms, while 20 failed the norms.

Additionally, the Biochemical Oxygen Demand (BOD) of untreated sewage at the inlet of these STPs was below 100 mg/litre at 13 STPs, with 2 receiving an inlet BOD of less than 40 mg/litre. Moreover, 16 operational STPs were functioning at less than 75 percent of their designated treatment capacity, while 13 were operating above their design flow specifications.

It is worth noting that 26 STPs in the state were constructed using advanced technologies such as Sequential Batch Reactor (SBR), Activated Sludge Process (ASP), FCR (Food Chain Reactor) and Moving Bed Biofilm Reactor (MBBR) to achieve a BOD removal efficiency of 90 percent or higher. However, only 17 STPs attained an efficiency greater than 90 percent, 5 operated at an efficiency between 70-90 percent, and 4 fell short of 70 percent efficiency. A detailed status report of the monitored STPs is enclosed as Annexure-I for your reference.

I request your intervention to direct the concerned agencies/officers to promptly address issues of non-compliance, non-operation, under-capacity utilization, poor BOD removal efficiency, weak sewage at the inlet, and optimization of disinfection systems in the STPs. An action taken report on these matters may be submitted within 30 days, detailing the measures taken.

Yours sincerely,

(Tanmay Kumar)

Shri Amrit Abhijat
Principal Secretary
Urban Development Department
601, Bapu Bhawan
Lucknow 226001 (U.P.)

Encl.: As above

Copy to:

1. Shri Rajeev Kumar Mital,
   Director General
   National Mission for Clean Ganga (NMCG)
   1st Floor, Major Dhyan Chand National Stadium
   India Gate,
   New Delhi - 110002
   : For kind information, please.

2. Shri Sanjeev Kumar Singh
   Member Secretary
   Uttar Pradesh Pollution Control Board
   Building.No. TC-12V
   Vibhuti Khand, Gomti Nagar
   Lucknow-226 010
   : For necessary action, please.

(Tanmay Kumar)

Annexure I

Status of Sewage Treatment Plants in Uttar Pradesh (December 2023 to March, 2024)

- Commissioned STPs – 40 (14 towns) with designed capacity – 1303.0 MLD
- Operational STPs – 37 (Operational capacity –1297.9 MLD) with Utilized capacity – 1105.2 MLD (~84.8% of operational capacity)
- Compliance Status of operational STPs

	Compliance w.r.t. Hon'ble NGT vide order 30.04.2019	Compliance Status w.r.t MoEF&CC norms dated 13.10.2017
Complying	5	17
Non-complying	32	20

- Non-operational STPs – 03 (Designed capacity – 5.1 MLD)
- STPs complying for Faecal Coliform norms (<230 MPN/100ml) – 15
- STPs non-complying for Faecal Coliform norms (>230 MPN/100ml) – 22
- STPs having disinfection system – 32 (All operational)
- BOD removal efficiency range: ≤50% - 4 STPs; 50-70% - 3 STPs; 70-90%-11 STPs and ≥90% - 18 STPs
- STPs operating under-capacity (75% of designed capacity) - 16 STPs
- STPs operating over-capacity - 13 STP

Operational and Compliance status of Sewage Treatment Plants in Uttar Pradesh

S.No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Date of Monitoring	Operational/Non-Operational Status	Compliance Status w.r.t Hon'ble NGT norms dated 30.4.2019	Compliance w.r.t. MoEF norms dtd 13.10.2017
1	24 MLD STP Bijnor	Bijnor	UASB	24	28.03.2024	Operational	Non-complying BOD,COD,TSS, TN	Non-complying BOD,TSS
2	Brajghat (03 MLD) STP	Garhmuktesh war	UASB	3	13.03.2024	Operational	Non-complying COD,BOD,FC	Non-complying FC
3	Garhmuktesh war STP	Garhmuktesh war	UASB	6	13.03.2024	Operational	Non-complying BOD,COD,FC	Non-complying FC
4	Narora NAPS Township STP	Narora	ASP	2.25	29.01.2024	Operational	Non-complying BOD,COD,FC	Non-complying FC
5	Narora Town (4.0 MLD)	Narora	SBR	4	29.01.2024	Operational	Non-complying BOD,COD,FC,TN	Non-complying FC
6	Anupsahar 1.5 MLD STP, Zone A	Anupshahr	MBBR	1.5	27.02.2024	Operational	Non-complying BOD,COD,TSS, TN	Non-complying BOD
7	Anupsahar 0.81 MLD STP, Zone A	Anupshahr	WSP	0.81	27.02.2024	Operational	Non-complying BOD,COD,TSS, TN	Non-complying BOD
8	Anupsahar 1.75 MLD STP, Zone B	Anupshahr	WSP	1.75	27.02.2024	Operational	Non-complying BOD,COD,TSS, TN	Non-complying BOD

S.No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Date of Monitoring	Operational/Non-Operational Status	Compliance Status w.r.t Hon'ble NGT norms dated 30.4.2019	Compliance w.r.t. MoEF norms dtd 13.10.2017
9	Anupsahar 1.0 MLD STP, Zone B	Anupshahr	MBBR	1	27.02.2024	Operational	Non-complying BOD,COD,TSS, TN,FC	Non-complying BOD,FC
10	2.7 MLD Fatehgarh	Farrukhabad	OP	2.7	24.01.2024	Operational	Non-complying BOD, COD, T.N, FC	Non-complying FC
11	Jalalpur Amara (13 MLD) STP	Kannauj	SBR	13	23.01.2024	Operational	Non-complying BOD, T.N	Complying
12	130 MLD Jajmau STP Kanpur	Kanpur	ASP	130	09.01.2024	Operational	Non-complying BOD, TN, FC	Non-complying FC
13	Jajmau (43 MLD) Kanpur	Kanpur	ASP	43	09.01.2024	Operational	Non-complying BOD, COD, TSS, T.N, FC	Non-complying BOD, FC
14	Jajmau (5 MLD) Kanpur	Kanpur	UASB	5	14.02.2024	Non-operational	-	-
15	Bingawan (210 MLD) STP, Kanpur	Kanpur	UASB	210	28.02.2024	Operational	Non-complying BOD, COD, TSS, T.N, FC	Non-complying BOD, FC
16	30 MLD STP at Pankha	Kanpur	SBR	30	14.03.2024	Operational	Non-complying BOD, COD, T.N	Non-complying BOD
17	Sajari STP, Kanpur	Kanpur	ASP	42	27.02.2024	Operational	Non-complying T.N	Complying
18	Bithoor (80 KLD) STP	Bithoor	Constructed wetland	0.08	11.01.2024	Operational	Non-complying BOD, T.N, FC	Non-complying FC
19	32 KLD FSTP, Nandauli Village	Unnao	FSTP	0.032	23.01.2024	Non-operational	-	-
20	29 MLD STP , Salori, Prayagraj	Prayagraj	FAB reactor	29	12.03.2024	Operational	Non-complying FC	Complying
21	Salori (Bakshi Bandh) 14 MLD Prayagraj	Prayagraj	SBR	14	12.03.2024	Operational	Complying	Complying
22	60 MLD STP, Rajapur, Prayagraj	Prayagraj	UASB	60	11.03.2024	Operational	Non-complying FC	Complying
23	10 MLD STP , Ponghat, Prayagraj	Prayagraj	BTT followed by ASP	10	12.03.2024	Operational	Non-complying FC	Complying
24	25 MLD STP , Kodra, Prayagraj	Prayagraj	BTT followed by ASP	25	12.03.2024	Operational	Non-complying FC	Complying

S.No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Date of Monitoring	Operational/Non-Operational Status	Compliance Status w.r.t Hon'ble NGT norms dated 30.4.2019	Compliance w.r.t. MoEF norms dtd 13.10.2017
25	80 MLD STP , Nani, Prayagraj	Prayagraj	ASP	80	12.03.2024	Operational	Complying	Complying
26	42 MLD STP, Naini 2	Prayagraj	FCR	42	12.03.2024	Operational	Non-complying FC	Complying
27	50 MLD STP , Numayadhai, Prayagraj	Prayagraj	BTT followed by ASP	50	11.03.2024	Operational	Complying	Complying
28	14 MLD STP Phaphamau Prayagraj	Prayagraj	FCR	14	11.03.2024	Operational	Non-complying FC	Complying
29	16 MLD STP, Jhunsi	Prayagraj	FCR	16	13.03.2024	Operational	Complying	Complying
30	14 MLD STP Mirzapur (Pakka Pokhra)	Mirzapur	UASB	14	14.02.2024	Operational	Non-complying BOD, COD, T.N, FC	Complying
31	7 MLD, STP, Vindhyachal,	Mirzapur	SBR	7	14.02.2024	Operational	Non-complying FC	Non-complying FC
32	10 KLD FSTP Chunar, Mirzapur	Chunar	FSTP	0.01	13.02.2024	Operational	Non-complying FC, BOD, COD, TSS, T.N	Non-complying BOD
33	80 MLD STP at Dinapur	Varanasi	TF & ASP	80	20.02.2024	Operational	Non-complying BOD, COD, TSS, T.N,	Complying
34	50 MLD STP, Ramanna	Varanasi	SBR	50	19.03.2024	Operational	Non-complying T.N	Complying -
35	32 KLD FSTP, Near Bairoghat Temple Farrukhabad	Farrukhabad	ABR	0.032	24.01.2024	Non-operational	-	-
36	140 MLD STP at Dinapur	Varanasi	ASP	140	20.02.2024	Operational	Non-complying T.N, FC	Non-complying FC
37	10 MLD STP, Ramnagar	Ramnagar, Varanasi	A2O	10	19.03.2024	Operational	Non-complying FC	Non-complying FC
38	Bhagwanpur, Varanasi	Varanasi	ASP	9.8	18.03.2024	Operational	Complying	Complying
39	120 MLD STP at Goithaha	Varanasi	SBR	120	21.02.2024	Operational	Non-complying T.N, FC	Non-complying FC
40	12 MLD BLW	Varanasi	ASP	12	18.03.2024	Operational	Non-complying T.N, COD	Complying

- **STPs complying to BOD Norms (<10mg/l) in Uttar Pradesh (December 2023 to March, 2024) *w.r.t.* NGT and MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity	BOD (<10 mg/l)
1	Sajari STP, Kanpur	Kanpur	42	9.7
2	29 MLD STP , Salori, Prayagraj	Prayagraj	29	8.92
3	Salori (Bakshi Bandh) 14 MLD Prayagraj	Prayagraj	14	5
4	60 MLD STP, Rajapur, Prayagraj	Prayagraj	60	8.88
5	10 MLD STP , Ponghat, Prayagraj	Prayagraj	10	8.17
6	25 MLD STP , Kodra, Prayagraj	Prayagraj	25	8.65
7	80 MLD STP , Nani, Prayagraj	Prayagraj	80	9.2
8	42 MLD STP, Naini 2	Prayagraj	42	7.4
9	50 MLD STP , Numayadhai, Prayagraj	Prayagraj	50	5
10	14 MLD STP Phaphamau Prayagraj	Prayagraj	14	9.35
11	16 MLD STP, Jhunsi	Prayagraj	16	8.8
12	7 MLD, STP, Vindhyachal,	Mirzapur	7	5
13	50 MLD STP, Ramanna	Varanasi	50	7.8
14	140 MLD STP at Dinapur	Varanasi	140	8.8
15	10 MLD STP, Ramnagar	Ramnagar, Varanasi	10	6.8
16	Bhagwanpur, Varanasi	Varanasi	9.8	7.2
17	120 MLD STP at Goithaha	Varanasi	120	5
18	12 MLD BLW (former known as DLW)	Varanasi	12	8

- **STPs complying to BOD Norms (11-30mg/l) in Uttar Pradesh (December 2023 to March, 2024) *w.r.t.*MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity	BOD (11 mg/l to 30 mg/l)
1	Brajghat (03 MLD) STP	Garhmukteshwar	3	15
2	Garhmukteshwar STP	Garhmukteshwar	6	13
3	Narora NAPS Township STP	Narora	2.25	24
4	Narora Town (4.0 MLD)	Narora	4	20
5	2.7 MLD Fatehgarh	Farrukhabad	2.7	27.5
6	Jalalpur Amara (13 MLD) STP	Kannauj	13	15
7	130 MLD Jajmau STP Kanpur	Kanpur	130	12.1
8	Bithoor (80 KLD) STP	Bithoor	0.08	12.3
9	14 MLD STP Mirzapur (Pakka Pokhra)	Mirzapur	14	14.9
10	80 MLD STP at Dinapur	Varanasi	80	24.2

- **STPs non-complying to BOD Norms (BOD > 30 mg/l) in Uttar Pradesh (December 2023 to March, 2024*) w.r.t.* NGT and MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity	BOD (> 30 mg/l)
1	24 MLD STP Bijnor, Near Hemraj Colony	Bijnor	24	34
2	Anupsahar 1.5 MLD STP, Zone A	Anupshahr	1.5	72
3	Anupsahar 0.81 MLD STP, Zone A	Anupshahr	0.81	62
4	Anupsahar 1.75 MLD STP, Zone B	Anupshahr	1.75	42
5	Anupsahar 1.0 MLD STP, Zone B	Anupshahr	1	67
6	Jajmau (43 MLD) Kanpur	Kanpur	43	42.3
7	Bingawan (210 MLD) STP, Kanpur	Kanpur	210	39.5
8	30 MLD STP at Pankha	Kanpur	30	40.6
9	10 KLD FSTP Chunar, Mirzapur	Chunar	0.01	35.3

- **STPs complying to COD (≤50 mg/l) in Uttar Pradesh (December 2023 to March, 2024) w.r.t. NGT Norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	COD (≤50 mg/l)
1	Jalalpur Amara (13 MLD) STP	Kannauj	13	49.4
2	130 MLD Jajmau STP Kanpur	Kanpur	130	24.5

3	Sajari STP, Kanpur	Kanpur	42	35.4
4	Bithoor (80 KLD) STP	Bithoor	0.08	27
5	29 MLD STP , Salori, Prayagraj	Prayagraj	29	43.9
6	Salori (Bakshi Bandh) 14 MLD Prayagraj	Prayagraj	14	8.05
7	60 MLD STP, Rajapur, Prayagraj	Prayagraj	60	47.9
8	10 MLD STP , Ponghat, Prayagraj	Prayagraj	10	42.8
9	25 MLD STP , Kodra, Prayagraj	Prayagraj	25	48.3
10	80 MLD STP , Nani, Prayagraj	Prayagraj	80	49.8
11	42 MLD STP, Naini 2	Prayagraj	42	30.4
12	50 MLD STP , Numayadhai, Prayagraj	Prayagraj	50	28.2
13	14 MLD STP Phaphamau Prayagraj	Prayagraj	14	47.9
14	16 MLD STP, Jhunsi	Prayagraj	16	43.6
15	7 MLD, STP, Vindhyachal,	Mirzapur	7	12.7
16	50 MLD STP, Ramanna	Varanasi	50	35.5
17	140 MLD STP at Dinapur	Varanasi	140	27.1
18	10 MLD STP, Ramnagar	Ramnagar, Varanasi	10	17.2
19	Bhagwanpur, Varanasi	Varanasi	9.8	28.8
20	120 MLD STP at Goithaha	Varanasi	120	6.84

- **STPs non-complying to COD (≥ 50 mg/l) in Uttar Pradesh (December 2023 to March, 2024) *w.r.t.* NGT norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	COD (≥50 mg/l)
1	24 MLD STP Bijnor, Near Hemraj Colony	Bijnor	24	112
2	Brajghat (03 MLD) STP	Garhmukteshwar	3	84
3	Garhmukteshwar STP	Garhmukteshwar	6	83
4	Narora NAPS Township STP	Narora	2.25	104
5	Narora Town (4.0 MLD)	Narora	4	76
6	Anupsahar 1.5 MLD STP, Zone A	Anupshahr	1.5	131
7	Anupsahar 0.81 MLD STP, Zone A	Anupshahr	0.81	131
8	Anupsahar 1.75 MLD STP, Zone B	Anupshahr	1.75	122
9	Anupsahar 1.0 MLD STP, Zone B	Anupshahr	1	158
10	2.7 MLD Fatehgarh	Farrukhabad	2.7	97.4
11	Jajmau (43 MLD) Kanpur	Kanpur	43	111
12	Bingawan (210 MLD) STP, Kanpur	Kanpur	210	107
13	30 MLD STP at Pankha	Kanpur	30	120
14	14 MLD STP Mirzapur (Pakka Pokhra)	Mirzapur	14	59.8
15	10 KLD FSTP Chunar, Mirzapur	Chunar	0.01	101
16	80 MLD STP at Dinapur	Varanasi	80	60.4
17	12 MLD BLW (former known as DLW)	Varanasi	12	53.8

- **STPs complying to TSS (≤20 mg/l) in Uttar Pradesh (December 2023 to March, 2024) *w.r.t.* NGT and MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	TSS (≤20 mg/l)
1	Brajghat (03 MLD) STP	Garhmukteshwar	3	BDL
2	Garhmukteshwar STP	Garhmukteshwar	6	10
3	Narora NAPS Township STP	Narora	2.25	20
4	Narora Town (4.0 MLD)	Narora	4	BDL
5	2.7 MLD Fatehgarh	Farrukhabad	2.7	10
6	Jalalpur Amara (13 MLD) STP	Kannauj	13	10
7	130 MLD Jajmau STP Kanpur	Kanpur	130	7.24
8	30 MLD STP at Pankha	Kanpur	30	7.62
9	Sajari STP, Kanpur	Kanpur	42	8.48
10	Bithoor (80 KLD) STP	Bithoor	0.08	2.8
11	29 MLD STP , Salori, Prayagraj	Prayagraj	29	12.8
12	Salori (Bakshi Bandh) 14 MLD Prayagraj	Prayagraj	14	3.4
13	60 MLD STP, Rajapur, Prayagraj	Prayagraj	60	13
14	10 MLD STP , Ponghat, Prayagraj	Prayagraj	10	18.1

15	25 MLD STP , Kodra, Prayagraj	Prayagraj	25	8.04
16	80 MLD STP , Nani, Prayagraj	Prayagraj	80	8.89
17	42 MLD STP, Naini 2	Prayagraj	42	7.29
18	50 MLD STP , Numayadhai, Prayagraj	Prayagraj	50	12.8
19	14 MLD STP Phaphamau Prayagraj	Prayagraj	14	8.2
20	16 MLD STP, Jhunsi	Prayagraj	16	2.6
21	14 MLD STP Mirzapur (Pakka Pokhra)	Mirzapur	14	9.6
22	7 MLD, STP, Vindhyachal,	Mirzapur	7	BDL
23	50 MLD STP, Ramanna	Varanasi	50	4
24	140 MLD STP at Dinapur	Varanasi	140	3.73
25	10 MLD STP, Ramnagar	Ramnagar, Varanasi	10	8.35
26	Bhagwanpur, Varanasi	Varanasi	9.8	2.7
27	120 MLD STP at Goithaha	Varanasi	120	<2.5
28	12 MLD BLW (former known as DLW)	Varanasi	12	11.6

- **STPs complying to TSS (20 mg/l - 100 mg/l) in Uttar Pradesh (December 2023 to March, 2024) *w.r.t.*MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	TSS (20 mg/l - 100 mg/l)
1	Anupsahar 1.5 MLD STP, Zone A	Anupshahr	1.5	63
2	Anupsahar 0.81 MLD STP, Zone A	Anupshahr	0.81	21
3	Anupsahar 1.75 MLD STP, Zone B	Anupshahr	1.75	43
4	Anupsahar 1.0 MLD STP, Zone B	Anupshahr	1	42
5	Jajmau (43 MLD) Kanpur	Kanpur	43	94.8
6	Bingawan (210 MLD) STP, Kanpur	Kanpur	210	25.1
7	10 KLD FSTP Chunar, Mirzapur	Chunar	0.01	27.4
8	80 MLD STP at Dinapur	Varanasi	80	32.9

- **STPs non-complying to TSS (≥ 100 mg/l) in Uttar Pradesh (December 2023 to March, 2024) *w.r.t.*MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	TSS (≥ 100 mg/l)
1	24 MLD STP Bijnor	Bijnor	24	214

- **STPs complying to FC (≤230 MPN/100 ml) in Uttar Pradesh (December 2023 to March, 2024*) w.r.t.* NGT and MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity	FC (≤230 MPN/100 ml)
1.	24 MLD STP Bijnor, Near Hemraj Colony	Bijnor	24	5.5
2.	Anupsahar 0.81 MLD STP, Zone A	Anupshahr	0.81	45
3.	Jalalpur Amara (13 MLD) STP	Kannauj	13	<1.8
4.	30 MLD STP at Pankha	Kanpur	30	<1.8
5.	Sajari STP, Kanpur	Kanpur	42	<1.8
6.	Salori (Bakshi Bandh) 14 MLD Prayagraj	Prayagraj	14	<1.8
7.	80 MLD STP , Nani, Prayagraj	Prayagraj	80	200
8.	50 MLD STP , Numayadhai, Prayagraj	Prayagraj	50	200
9.	16 MLD STP, Jhunsi	Prayagraj	16	<1.8
10.	80 MLD STP at Dinapur	Varanasi	80	<1.8
11.	50 MLD STP, Ramanna	Varanasi	50	200
12.	Bhagwanpur, Varanasi	Varanasi	9.8	<1.8
13.	12 MLD BLW (former known as DLW)	Varanasi	12	200

- **STPs complying to FC (230-1000 MPN/100 ml) in West Bengal (December 2023 to March, 2024) *w.r.t.* MoEF norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	FC (230 - 1000 MPN/100 ml)
1	29 MLD STP , Salori, Prayagraj	Prayagraj	29	450
2	60 MLD STP, Rajapur, Prayagraj	Prayagraj	60	780
3	10 MLD STP , Ponghat, Prayagraj	Prayagraj	10	450
4	25 MLD STP , Kodra, Prayagraj	Prayagraj	25	400
5	42 MLD STP, Naini 2	Prayagraj	42	400
6	14 MLD STP Phaphamau Prayagraj	Prayagraj	14	780
7	14 MLD STP Mirzapur (Pakka Pokhra)	Mirzapur	14	780
8	10 KLD FSTP Chunar, Mirzapur	Chunar	0.01	450

- **STPs non-complying to FC (≥ 1000 MPN/100 ml) in Uttar Pradesh (December 2023 to March, 2024) *w.r.t.* MoEF&CC norms**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	FC (≥ 1000 MPN/100 ml)
1	Brajghat (03 MLD) STP	Garhmukteshwar	3	23×10^2
2	Garhmukteshwar STP	Garhmukteshwar	6	18×10^2
3	Narora NAPS Township STP	Narora	2.25	21×10^4
4	Narora Town (4.0 MLD)	Narora	4	12×10^4
5	Anupsahar 1.0 MLD STP, Zone B	Anupshahr	1	24×10^6
6	2.7 MLD Fatehgarh	Farrukhabad	2.7	2×10^3
7	130 MLD Jajmau STP Kanpur	Kanpur	130	1.7×10^5
8	Jajmau (43 MLD) Kanpur	Kanpur	43	1.3×10^5
9	Bingawan (210 MLD) STP, Kanpur	Kanpur	210	13×10^5
10	Bithoor (80 KLD) STP	Bithoor	0.08	79×10^3
11	7 MLD, STP, Vindhyachal,	Mirzapur	7	1300
12	140 MLD STP at Dinapur	Varanasi	140	13×10^3
13	10 MLD STP, Ramnagar	Ramnagar, Varanasi	10	13×10^4
14	120 MLD STP at Goithaha	Varanasi	120	4500

- **STPs having disinfection system**

S. No.	Name of STPs/CETPs	Ganga Front Town	Designed Capacity (MLD)	Disinfection Technology
1	24 MLD STP Bijnor, Near Hemraj Colony	Bijnor	24	Chlorination
2	Brajghat (03 MLD) STP	Garhmukteshwar	3	Chlorination
3	Garhmukteshwar STP	Garhmukteshwar	6	Chlorination
4	Narora NAPS Township STP	Narora	2.25	Chlorination
5	Narora Town (4.0 MLD)	Narora	4	Chlorination
6	Anupsahar 1.5 MLD STP, Zone A	Anupshahr	1.5	Chlorination
7	Anupsahar 0.81 MLD STP, Zone A	Anupshahr	0.81	Chlorination
8	Anupsahar 1.75 MLD STP, Zone B	Anupshahr	1.75	Chorination
9	Anupsahar 1.0 MLD STP, Zone B	Anupshahr	1	Chlorination
10	Jalalpur Amara (13 MLD) STP	Kannauj	13	Chlorination
11	Bingawan (210 MLD) STP, Kanpur	Kanpur	210	Chlorination

12	30 MLD STP at Pankha	Kanpur	30	Chlorination
13	Sajari STP, Kanpur	Kanpur	42	Chlorination
14	29 MLD STP , Salori, Prayagraj	Prayagraj	29	Chlorination
15	Salori (Bakshi Bandh) 14 MLD Prayagraj	Prayagraj	14	Chlorination
16	60 MLD STP, Rajapur, Prayagraj	Prayagraj	60	Chlorination
17	10 MLD STP , Ponghat, Prayagraj	Prayagraj	10	Chlorination
18	25 MLD STP , Kodra, Prayagraj	Prayagraj	25	Chlorination
19	80 MLD STP , Nani, Prayagraj	Prayagraj	80	Chlorination
20	42 MLD STP, Naini 2	Prayagraj	42	Chlorination
21	50 MLD STP , Numayadhai, Prayagraj	Prayagraj	50	Chlorination
22	14 MLD STP Phaphamau Prayagraj	Prayagraj	14	chlorination
23	16 MLD STP, Jhunsi	Prayagraj	16	Chlorination
24	14 MLD STP Mirzapur (Pakka Pokhra)	Mirzapur	14	Chlorination
25	7 MLD, STP, Vindhyachal,	Mirzapur	7	Chlorination
26	10 KLD FSTP Chunar, Mirzapur	Chunar	0.01	UV
27	80 MLD STP at Dinapur	Varanasi	80	Chlorination
28	50 MLD STP, Ramanna	Varanasi	50	Chlorination
29	140 MLD STP at Dinapur	Varanasi	140	Chlorination
30	10 MLD STP, Ramnagar	Ramnagar, Varanasi	10	Chlorination
31	Bhagwanpur, Varanasi	Varanasi	9.8	Chlorination
32	120 MLD STP at Goithaha	Varanasi	120	UV Treatment System

- **Performance assessment of STPs of Uttar Pradesh**

	Technology (No.)	**Range of BOD removal efficiency (%age)**				**Total**	**Overall complying**		**Overall non-complying**		**Non-complying Parameters either BOD,COD,TSS/FC**		**Non-operational**
		<50	**50-70**	**70-90**	**>90**		**Hon'ble NGT norms**	**MoEF &CC norms**	**Hon'ble NGT norms**	**MoEF &CC norm**	**Hon'ble NGT norms**	**MoEF& CC norms**	
1	SBR (7)	1	1	1	4	7	1	3	6	4	3 / 2	1 /3	-
2	ASP (8)	-	-	2	6	8	2	4	6	4	4 / 4	1 /4	-
3	UASB (7)	2		3	1	6	0	2	6	4	5 / 5	2/ 3	1

4	MBBR/FAB (3)	1	1		1	3	0	1	3	2	2 / 2	2/ 1	-
5	ASPand BTT/ TF (4)	-	-	1	3	4	1	4	3	0	1 / 2	0/ 0	-
6	WSP/OP (3)	-	1	2		3	0	0	3	3	3 / 1	2/ 1	-
7	FSTP (3)*	-	-	-		0	0	0	1	1	1 / 1	1/1	2
8	A2O (1)	-	-	-	1	1	0	0	1	1	0 / 1	0/ 1	-
9	FCR (3)	-	-	1	2	3	1	3	2	0	0 / 2	0/0	-
10	CWS (1)	-	-	1		1	0	0	1	1	1 / 1	0 /1	-
	Total (40)	**4**	**3**	**11**	**18**	**36**	**5**	**17**	**32**	**20**	**20/20**	**9/15**	**3**

*No inlet sample at 1 FSTP - 10 KLD Chunar, hence BOD removal efficiency couldn't be calculated.

- **STPs with weak strength sewage (<40 mg/l)**

S. No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Inlet BOD (mg/l)
1	Brajghat	Garhmukteshwar	UASB	3	13
2	Jalalpur Amara	Kannauj	SBR	13	25

- **STP operating below capacity (<75% of designed capacity)**

S. No.	Name of STP	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Compliance Status w.r.t Hon'ble NGT norms dated 30.4.2019	Compliance w.r.t. MoEF norms dtd 13.10.2017
1	Brajghat (03 MLD) STP	Garhmukteshwar	UASB	3	0.012	Non-complying	Non-complying
2	Garhmukteshwar STP	Garhmukteshwar	UASB	6	0.041	Non-complying	Non-complying
3	Narora NAPS Township STP	Narora	ASP	2.25	1.046	Non-complying	Non-complying
4	Narora Town	Narora	SBR	4	1.64	Non-complying	Non-complying
5	Anupsahar 1.0 MLD STP, Zone B	Anupshahr	MBBR	1	0.7	Non-complying	Non-complying
6	2.7 MLD Fatehgarh	Farrukhabad	OP	2.7	2.947	Non-complying	Non-complying
7	Jalalpur Amara (13 MLD) STP	Kannauj	SBR	13	5.57	Non-complying	Complying
8	Jajmau (43 MLD) Kanpur	Kanpur	ASP	43	42.56	Non-complying	Non-complying
9	Bingawan (210 MLD) STP, Kanpur	Kanpur	UASB	210	124	Non-complying	Non-complying
10	Sajari STP, Kanpur	Kanpur	ASP	42	20	Non-complying	Complying
11	Bithoor (80 KLD) STP	Bithoor	Constructed wetland	0.08	0.056	Non-complying	Non-complying

12	14 MLD STP Mirzapur (Pakka Pokhra)	Mirzapur	UASB	14	13	Non-complying	Complying
13	7 MLD, STP, Vindhyachal,	Mirzapur	SBR	7	3.08	Non-complying	Non-complying
14	10 KLD FSTP Chunar, Mirzapur	Chunar	FSTP	0.01	0.003	Non-complying	Non-complying
15	120 MLD STP at Goithaha	Varanasi	SBR	120	40	Non-complying	Non-complying
16	12 MLD BLW (former known as DLW)	Varanasi	ASP	12	2.98	Non-complying	Complying

- **STP operating over capacity**

S. No.	Name of STP	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Compliance Status w.r.t Hon'ble NGT norms dated 30.4.2019	Compliance w.r.t. MoEF norms dtd 13.10.2017
1	Anupsahar 1.5 MLD STP, Zone A	Anupshahr	MBBR	1.5	1.7	Non-complying	Non-complying
2	2.7 MLD Fatehgarh	Farrukhabad	OP	2.7	2.947	Non-complying	Non-complying
3	29 MLD STP , Salori, Prayagraj	Prayagraj	FAB reactor	29	40.78	Non-complying	Complying
4	Salori (Bakshi Bandh)	Prayagraj	SBR	14	14.39	Complying	Complying
5	60 MLD STP, Rajapur,	Prayagraj	UASB	60	80.03	Non-complying	Complying
6	10 MLD STP, Ponghat	Prayagraj	BTT followed by ASP	10	12.13	Non-complying	Complying
7	25 MLD STP, Kodra	Prayagraj	BTT followed by ASP	25	28.55	Non-complying	Complying
8	80 MLD STP, Nani	Prayagraj	ASP	80	107.12	Complying	Complying
9	50 MLD STP , Numayadhai	Prayagraj	BTT followed by ASP	50	59.89	Complying	Complying
10	14 MLD STP Phaphamau	Prayagraj	FCR	14	15.14	Non-complying	Complying
11	80 MLD STP at Dinapur	Varanasi	TF & ASP	80	82.82	Non-complying	Complying
12	50 MLD STP, Ramanna	Varanasi	SBR	50	51	Non-complying	Complying
13	Bhagwanpur	Varanasi	ASP	9.8	11	Complying	Complying

NGT Standards: Compliance based on norms prescribed by Hon'ble NGT vide order dt 30.04.2019 in the matter of OA no. 1069/2018 (pH – 5.5-9.0, BOD <10mg/l, TSS< 20mg/l, COD< 50mg/l; Faecal Coliform – desirable <100MPN/100ml &permissible < 230 MPN/100 ml, Nitrogen-Total < 10 mg/l and Phosphorous-Total < 1.0 mg/l (TP compliance for discharge into ponds and lakes).

Compliance compared with MoEF&CC notification dt. 13.10.2017: Standard for treated sewage from STPs for cities other than metro cities, state capitals and union territories were notified as pH-6.5-9.0, BOD as 30mg/L, Total suspended solids (TSS) as less than 100mg/L and Faecal coliform as less than 1000MPN per 100mL.

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

Speed Post/E-mail

F. No. PJ-14014(12)/5/2021-WQM-II-HO-CPCB-HO **Date: 17/09/2024**

To,

The Member Secretary,
Uttar Pradesh Pollution Control Board,
Building No. TC-12 V, Vibhuti Khand,
Gomti Nagar, Lucknow - 226010,
Uttar Pradesh

Sub: Pollution in drains discharging into rivers Ganga & Pandu in Kanpur-Unnao region

Ref:

1. Letters dated 06/12/2021, 02/11/2022, 25/11/2022, 19/12/2022, 07/03/2023, 20/03/2023, 05/04/2023, 12/05/2023, 27/06/2023, 16/08/2023, 19/09/2023, 13/10/2023 and 01/01/2024 to Uttar Pradesh Pollution Control Board (UPPCB) regarding pollution in drains discharging into rivers Ganga & Pandu in Kanpur-Unnao region.

2. Direction dated 22/02/2022 to Uttar Pradesh Jal Nigam (Rural and Urban) u/s 5 of E (P) Act, 1986 for adequate tapping of drains, functioning of STPs and pumping stations with a copy to UPPCB.

3. DO letter dated 22/08/2022 to District Magistrate, Kanpur with a copy to UPPCB to deliberate upon the issues related with sewage management and industrial pollution with the concerned state agencies and to prepare a time-bound action plan.

4. Direction dated 02/07/2024 to UPPCB u/s 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 regarding discharge of industrial effluent in drains of Kanpur.

Sir,

Central Pollution Control Board (CPCB) along with Uttar Pradesh Pollution Control Board (UPPCB) carried out monitoring of rivers (Ganga-8 and Pandu-1) and 29 drains (Kanpur-27 and Unnao-02) in Kanpur-Unnao region on 15/05/2024, 27/05/2024, 24/06/2024, 15/07/2024 & 29/07/2024. Based on the monitoring data of rivers and drains (data attached as Annexure-I), following observations are made:

- Out of 29 drains monitored in Kanpur (27) and Unnao (2), 20 drains have gradient towards river Ganga (18 in Kanpur and 2 in Unnao) and 9 drains have gradient towards river Pandu.
- In Kanpur, out of 18 drains discharging wastewater into river Ganga, 11 drains were tapped. Out of 11 tapped drains, 6 drains were found dry or had backflow from the River Ganga and overflow was observed in 5 drains namely Budhiya Ghat drain, Parmath drain, Permiya drain, Bhagwat Das Ghat drain and Sisamau drain.
    - High colour (400 Hazen) was observed in Dabka drain on 15/05/2024.
    - In Budhiya Ghat drain, high colour (400 Hazen), BOD (920 mg/L) & COD (2888 mg/L) were observed on 24/06/2024 and low pH (5), high BOD (863 mg/L) & COD (1927 mg/L) were observed on 29/07/2024.

Contd.

- In Unnao, out of 2 drains discharging wastewater into river Ganga, significantly high colour (250 Hazen) and COD (683 mg/L) were observed in City Jail drain. The City Jail drain passes through the industrial areas of Magarwara and Banthar and also receives treated effluent from CETP Banthar.
- Out of 9 drains discharging into river Pandu in Kanpur, 6 drains were tapped. Out of 6 tapped drains, overflow was observed in all 6 drains namely COD drain, Ratanpur drain, Panki drain, ICI drain, Ganda drain and Halwakhanda drain.
    - In Shiv Nagar-Pipauri drain, high colour was observed on 15/05/2024 (800 Hazen) & 24/06/2024 (300 Hazen) and high BOD (288 mg/L) & COD (761 mg/L) were observed on 24/06/2024.
- Water quality of river Ganga, from Bithoor to Fatehpur, was meeting the primary criteria for bathing w.r.t. DO at all monitoring locations on all the occasions. In terms of BOD and fecal coliform, river was not meeting the primary criteria for bathing at all the monitoring locations. Moreover, water quality of River Ganga was not meeting the primary criteria for bathing w.r.t. pH at all monitoring locations except at Barrage d/s, Kanpur and Chandan Ghat, Jajmau. The pH exceeded the primary criteria for bathing on six out of forty numbers of monitoring (exceedance - ~15%; monitoring rounds - five) carried out at eight locations on river Ganga.

To control pollution in drains discharging into river Ganga & Pandu in Kanpur-Unnao region and to maintain the water quality of river Ganga at Kanpur, you are requested to take action against polluting activities in drains of Kanpur & Unnao. Following necessary actions are required to be taken immediately:

- UPPCB shall carry out pollution source mapping to identify the sources of pollution in the identified drains and take appropriate action against the polluting sources.
- UPPCB shall direct the concerned authorities to ensure that drains with broken/damaged/temporary tapping provisions are repaired immediately. Sewage pumping stations must be operated regularly so that no wastewater is discharged through tapped drains.
- UPPCB shall take immediate necessary action to effectively control all polluting sources responsible for pollution in river Ganga in the stretch from Bithoor to Fatehpur.

You are, therefore, requested to look into the matter and direct the concerned officials to ensure implementation of necessary measures. Action taken report may kindly be provided to CPCB within 15 days of issuance of this letter.

Yours faithfully,

17/09/24

(A. K. Vidyarthi)
Director & DH, WQM-II

Encl.: As above

Copy to:

1. **Executive Director (Technical)**,
   National Mission for Clean Ganga (MoWR, RD & GR),
   1st Floor, Major Dhyan Chand National Stadium,
   India Gate, New Delhi - 110002
   : For kind information and necessary action, please.

2. **Project Director**,
   State Mission for Clean Ganga – Uttar Pradesh,
   Plot No. 18, Sector 07, Gomti Nagar Extension,
   Lucknow - 226 010, Uttar Pradesh
   : For kind information and necessary action, please.

3. **Joint Managing Director (Ganga)**,
   Uttar Pradesh Jal Nigam,
   6, Rana Pratap Marg
   Lucknow – 226001, Uttar Pradesh
   : For kind information and necessary action, please.

4. **District Magistrate**,
   Collector Mansion Road, Kanpur Nagar,
   Kanpur, Uttar Pradesh 208001
   : For kind information and necessary action, please.

5. **Regional Director**,
   Regional Directorate (North),
   Central Pollution Control Board,
   PICUP Bhawan, Vibhuti Khand, Gomti Nagar,
   Lucknow - 226 010, Uttar Pradesh
   : For kind information and follow up, please.

6. **Regional Officer (Kanpur)**,
   Uttar Pradesh Pollution Control Board,
   5243, Avas Vikas, Phase-III, Sadbhavna Nagar,
   Kalyanpur, Kanpur – 208017, Uttar Pradesh
   : For kind information and necessary action, please.

17/09/24

(A. K. Vidyarthi)

3066

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

Speed Post / E-mail

F. No. PJ-14099/36/2021-WQM-II-HO-CPCB-HO (Magh Mela-2022) **Dated:** 22.02.2022

To,

1. **Managing Director,**
   Uttar Pradesh Jal Nigam (Urban),
   6, Rana Pratap Marg,
   Lucknow – 226001, Uttar Pradesh

2. **Managing Director,**
   Uttar Pradesh Jal Nigam (Rural),
   6, Rana Pratap Marg,
   Lucknow – 226001, Uttar Pradesh

DIRECTION UNDER SECTION 5 OF THE ENVIRONMENT (PROTECTION) ACT, 1986 REGARDING YELLOW COLOR IN RIVER GANGA

WHEREAS, the Ministry of Environment & Forests, Govt. of India, vide notification S.O.157 (E) of 27.02.1996 has delegated powers vested under Section 5 of the Environment (Protection) Act, 1986 (29 of 1986) to the Chairman, Central Pollution Control Board (CPCB), to issue direction to any industry, Municipal Corporation, Municipal Council, Cantonment Board or to any local or other Authority for the violation of emission and effluent standards notified under the Environment (Protection) Rules, 1986; and

WHEREAS, the Central Government has notified the standards for discharge of environmental pollutants from various categories of industries, Common Effluent Treatment Plants (CETPs) and Sewage Treatment Plants (STPs) under the Environment (Protection) Act,1986 and the rules framed there under; and

WHEREAS, amongst others, under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Boards (SPCBs)/Pollution Control Committees, constituted under the Water (Prevention and Control of Pollution) Act, 1974, is to plan a comprehensive programme for the prevention, control and abatement of pollution of stream and wells in the State/UT and to secure the execution thereof; and

WHEREAS, CPCB in consultation with state agencies namely Uttar Pradesh Pollution Control Board (UPPCB) and State Mission for Clean Ganga (SMCG) has inventoried 153 drains discharging into river Ganga in Kanpur to Varanasi stretch (Annexure-I). Out of 153 drains discharging into river Ganga in Kanpur-Varanasi stretch, 100 drains are untapped; and

WHEREAS, CPCB has inventoried 16 tributaries/rivulets discharging into river Ganga in upstream Kanpur to Varanasi stretch (Annexure-I); and

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली–110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032
दूरभाष/Tel : 43102030, 22305792, वेबसाईट/Website : www.cpcb.nic.in

WHEREAS, Central Pollution Control Board (CPCB) along with UPPCB carry out weekly monitoring of rivers at nine locations (Ganga-08 and Pandu-01) and 25 drains (Kanpur-23 and Unnao-02) in Kanpur-Fatehpur stretch from Oct 05, 2021. During weekly monitoring carried out on Jan 04th, 2022 and Jan 11th, 2022 (analysis data enclosed as Annexure-II) following observations were made:

1. Out of 25 drains monitored, 19 drains have gradient towards river Ganga (17 in Kanpur and 02 in Unnao) and 06 drains have gradient towards river Pandu (06 in Kanpur).
2. In Kanpur, 17 drains discharging wastewater into river Ganga out of which 13 drains were tapped and 04 were untapped. Out of 13 tapped drains, 08 drains were found dry and overflow was observed in 04 tapped drains namely Air Force drain, Dabka drain, Budhiya Ghat drain and Permiya drain. Wastewater discharged from Kanpur into river Ganga through drains was 47.1 MLD on Jan 04th, 2022 & 115.7 MLD on Jan 11th, 2022.
3. High levels of BOD, COD, Total Chromium and Color were observed in effluent in Sheetla Bazar drain (BOD-626 mg/l, COD-1394 mg/l, Colour-150 Hazen and Total Cr-13.93 mg/l), Budhiya Ghat drain (BOD-497 mg/l, COD-866 mg/l, Colour-300 Hazen, Total Cr-4.1 mg/l) and Rooma drain (BOD-562 mg/l, COD-2144 mg/l and Total Cr-3.42 mg/l) which indicate discharge of untreated wastewater from tannery and textile units located in Jajmau and Rooma industrial clusters of Kanpur.
4. Out of 06 drains having gradient towards river Pandu, 03 drains were tapped. Out of three tapped drains, overflow was observed in 02 drains namely Halwakhanda and COD. Wastewater discharged from Kanpur into river Pandu through drains was 143.2 MLD on Jan 04th, 2022 & 245.1 MLD on Jan 11th, 2022. In drains discharging effluent into river Pandu, BOD varied as 31.5-267 mg/l, COD as 71.5-412 mg/l, Color as 30-125 Hazen and Total Chromium as < 0.2 – 0.3 mg/l.
5. Discharge from tapped drains indicates that sewage pumping stations are not operating properly and also wastewater is discharged in these drains from some other sources including illegal industrial units which is beyond the capacity of pumping stations.
6. Water quality of river Ganga and Pandu was observed as under:
    a. Water quality of river Ganga was meeting the primary water quality criteria for bathing w.r.t. Dissolved Oxygen at all eight monitoring locations in the stretch from Bithoor to Fatehpur. However, in terms of pH, BOD & Faecal Coliform, the water quality of River Ganga was not meeting bathing water quality criteria at all monitoring locations.
    b. During river monitoring carried out on 04.01.2022, high BOD-31.5 mg/l and Color-30 Hazen were observed in river Ganga at Shuklaganj, downstream of Kanpur.

c. In river Ganga at Dhondiya Khera before confluence of river Pandu, pH ranged as 8.6-8.79, DO as 9-9.8 mg/l, BOD as 4.0-7.7 mg/l and Colour as 10-20 Hazen.
d. In river Ganga at Lahangi Village after confluence with river Pandu, pH ranged as 8.48-8.71, DO as 8.8-10.5 mg/l, BOD as 3.48-8.24 mg/l and Colour as 15-20 Hazen.
e. In river Pandu at Buxar Bridge before confluence to river Ganga, pH ranged as 7.81-8.06, DO as 4-4.4 mg/l, BOD as 4.9-8.4 mg/l and Colour as 20 Hazen.

AND WHEREAS, Magh Mela, an important yearly ritual held on the bank of river Ganga at Prayagraj which involves the holy dips (bathings) in to river Ganga which is held from Jan 14, 2022 and will continue till Mar 01, 2022; and

WHEREAS, appearance of slightly yellowish colored water in River Ganga at Nagwa Ghat, Varanasi in Uttar Pradesh was reported in various local newspapers on Feb 12th & 13th 2022; and

WHEREAS, Uttar Pradesh Pollution Control Board (UPPCB) carried out water quality monitoring of river Ganga in the stretch of Mirzapur to Varanasi on Feb 12th & 13th, 2022 and following observations were made:

a. In the stretch of river Ganga from Vindhyachal to Chhota Mirzapur in Mirzapur (Uttar Pradesh), DO in river Ganga ranged as 12.9-13.7 mg/l, pH as 8.77-8.92 and Colour as 15 Hazen.
b. In the stretch of river Ganga from Assi Ghat to Raj Ghat in Varanasi (Uttar Pradesh), DO in river Ganga ranged as 11.6-13.7 mg/l, pH as 8.55-8.92 and Colour as 15 Hazen.
c. All 07 STPs in Varanasi were found operational.
d. Drains (cis and trans) discharging into river Ganga were physically verified and out of cis-drains, Nagwa drain, Nakkha drain and Raj Ghat outfall were found partially tapped and other 19 drains were found completely tapped. Five trans-drains meeting river Ganga from Ramnagar were found completely tapped.
e. No smell was observed in river Ganga and higher colour was observed in river water in comparison to earlier days, which prevailed from U/s Mirzapur (Vindhyachal).

AND WHEREAS, field survey and water quality monitoring was also carried out by teams of CPCB authorized technical institutes, namely Motilal Nehru National Institute of Technology (MNNIT), Allahabad and Harcourt Butler Technical University (HBTU), Kanpur from Kanpur till Prayagraj and following observations were made:

River Ganga

a. Yellowish color was observed at Rosoolabad Ghat in Prayagraj and its upstream for about 40-50 km till Dalmau Ghat in Raebareli.
b. Water quality in terms of color improved/ was observed normal in upstream stretches from Dalmau Ghat in Raebareli.
c. Colour and DO at Rasoolabad Ghat, Prayagraj were found as 30 Hazen and 8.77 mg/l, respectively.
d. Colour and DO at Sandeepan Ghat, Kaushambi were found as 25 Hazen and 7.73 mg/l, respectively.
e. Colour and DO at Kada Dham Ghat, Kaushambi were found as 40 Hazen and 8.3 mg/l, respectively.
f. Colour and DO at Dalmau Ghat, Raebareli were found as 20 Hazen and 8.2 mg/l, respectively.
g. On Feb 14, 2022, the colour of samples collected from river confluence, upstream of river Pandu and Nawabganj (upstream Prayagraj) was found light yellowish and hazy in appearance.

River Pandu

a. At the entry of the Kanpur city, the colour of river Pandu was observed sandy with slow and low flow.
b. At Delhi Harwrah railway bridge, considerable flow and very light brown colour was observed in river Pandu with a smell of sewerage.
c. After confluence of COD Nala, black colour and highly foul smell was observed in river Pandu and overall flow appeared higher than the upstream point.

AND WHEREAS, CPCB carried out water quality monitoring of river Ganga in the stretch of Kanpur-Varanasi on Feb 13th & 14th, 2022 and following observations were made:

a. In river Ganga before confluence of river Pandu at Dhondiya Khera, Fatehpur, pH was 8.72, Temperature-17^0 C, DO-8.9 mg/l and Colour-10 Hazen.
b. In river Ganga after confluence with river Pandu at Lahangi Village, Fatehpur pH was 8.5, Temperature-17^0 C, DO-7.9 mg/l and Colour-15 Hazen.
c. Yellowish colour in river Ganga was observed at Kuresar Ghat, Prayagraj; Chunar downstream, Mirzapur; Ramnagar upstream Varanasi; Dashawamedh Ghat and Malviya Bridge, Varanasi and at these locations DO ranged 8.5-10.2 mg/l and pH ranged 7.5-8.82.

AND WHEREAS, such an incidence of color river water was also reported in the month of May'2021 and beginning of June'2021 in River Ganga in the stretch of Prayagraj to Varanasi-Ghazipur in Uttar Pradesh, which was gradually washed-out; and

WHEREAS, one of the probable causes of the appearance of colour river water (yellow/green), with high DO level could be due to episodic event of phytoplanktonic algal bloom belonging to family Chlorophyceae /xanthophyceae or diatoms. Algal blooms are generally caused by nutrient enrichment (particularly of phosphorus and nitrogen) that may happen when drains/lower order tributaries discharge their contents as well as when untreated or partially treated wastewaters from septic systems and sewage treatment plants find its way into the river system, thereby, adding the organic pollution load. This may result in eutrophication leading to excessive growth of phytoplankton that have high density of pigmented cells, thereby, imparting colors such as green, bright-green, yellowish-green. The organic matter becomes food for phytoplankton that decompose it using up the dissolved oxygen in the water. Algal blooms may generate foul tastes and odors in source and drinking waters and make bathing areas unappealing; and

It is evident that discharge of untreated sewage and wastewater from drains and tributaries/rivulets has potential to cause incident of colour in river water, which may be due to algal blooms.

NOW, THEREFORE, in view of above referred observation & resolution and in exercise of the power conferred under section 5 of the Environment (Protection) Act, 1986, you are here by directed to take appropriate measures for compliance of following measures in a time bound manner with immediate effect:

1. Uttar Pradesh Jal Nigam shall update inventory of tributaries/rivulets and drains discharging into river Ganga in Kanpur-Varanasi stretch and also carry out the mapping of the origin, confluence, catchment area, flow and water quality of these tributaries/rivulets and drains.
2. Uttar Pradesh Jal Nigam shall identify the potential polluting sources (such as villages, towns and industries) contributing to drains discharging into river Ganga in Kanpur-Varanasi stretch.
3. Uttar Pradesh Jal Nigam shall also prepare an action plan for management of wastewater discharged from drains/rivulets to control & abate pollution load discharged by drains/rivulets into river Ganga. The Action plan may not only include interception and diversion for treatment of sewage through sewage treatment plants but should also include a short term solution viz. low-cost, de-centralized wastewater treatment systems such as oxidation ponds, constructed wetlands or combination of both to be developed for in-situ treatment of drains/lower-order tributaries. Biodiversity parks could also be constructed in the floodplains as an intervention measure which may be commissioned in a duration of 06-12 months. The action plan of Varuna and Assi rivers approved by Hon'ble NGT in matter of Mr. Saurabh Tiwari Vs. Union of India & Ors. in O. A. No. 128/2021 may also be referred. The action plan shall be submitted to CPCB within 30 days.

4. Uttar Pradesh Jal Nigam shall ensure proper functioning of sewage pumping stations so that no wastewater is discharged through tapped drains.
5. Uttar Pradesh Jal Nigam along with concerned state agencies and district administration shall constitute a team and identify industrial units disposing coloured and untreated/ partially treated effluent into river Ganga through adjoining drains/rivulets/tributaries which affect the water quality of river Ganga in Kanpur-Varanasi stretch.

Uttar Pradesh Jal Nigam shall acknowledge the receipt of direction and submit reply to this office within 15 days from the date of this notice failing which suitable action as deemed fit under provision of the Environment (Protection) Act, 1986 shall be taken without any further notice.

22/2/22

(TANMAY KUMAR)
CHAIRMAN

Copy to:

1. **Director General,**
National Mission for Clean Ganga (MoWR, RD & GR),
1st Floor, Major Dhyan Chand National Stadium,
India Gate, New Delhi - 110002
: For kind information, please.

2. **Joint Secretary (CP Division),**
Ministry of Environment Forests & Climate Change,
Indira Paryavaran Bhawan, Jor Bagh Road,
New Delhi - 110003
: For kind information, please.

3. **Member Secretary,**
Uttar Pradesh Pollution Control Board,
Building No. TC-12V, Vibhuti Khand,
Gomti Nagar, Lucknow - 226 010
: For kind information and necessary action, please.

4. **Regional Director (North),**
Central Pollution Control Board
PICUP Bhawan, Ground Floor, Vibhuti Khand,
Gomti Nagar, Lucknow – 226010
: For kind information, please.

5. **In-charge, IT Division, CPCB**
: For uploading on CPCB website, please.

(PRASHANT GARGAVA)
MEMBER SECRETARY

Annexure-I: List of drains and tributaries discharging into river Ganga in Kanpur to Varanasi stretch

S. No	District	Drain discharging directly into river Ganga in Kanpur-Varanasi stretch	Status
1	Kanpur	Permiya Nala	Untapped
2	Kanpur	Ranighat drain	Untapped
3	Kanpur	Sisamau Nala	Tapped
4	Kanpur	TEFCO Nala	Tapped
5	Kanpur	Parmath drain	Tapped
6	Kanpur	Muir drain	Untapped
7	Kanpur	Police Line drain	Tapped
8	Kanpur	Jail drain	Tapped
9	Kanpur	Golaghat Nala	Untapped
10	Kanpur	Bhagwatdas Nala/Guptarghat Nala	Untapped
11	Kanpur	Satti Chaura	Untapped
12	Kanpur	Dabka Nalla-1	Tapped
13	Kanpur	Dabka Nalla-2	Tapped
14	Kanpur	Dabka Nalla-3	Tapped
15	Kanpur	Shetla Bazar	Untapped
16	Kanpur	Budhiyaghat Drain	Tapped
17	Kanpur	Wazidpur Nalla	Tapped
18	Kanpur	Airforce Nala	Untapped
19	Kanpur	Rooma drain	Untapped
20	Unnao	City Jail/Dakary Drain	Untapped
21	Unnao	Loni Drain	Untapped
22	Raebareli	Ahiyari/ NTPC drain	Untapped
23	Dalmau/Raebareli	Padva Nala/(Muraibagh) Shankar Nagar	Untapped
24	Dalmau/Raebareli	Bada Math - Chhota Math ke bich ka Nala/(Sherandajpur)	Untapped (dry)
25	Dalmau/Raebareli	Busda Ghat ka Nala/(Sherandajpur)	Untapped (dry)
26	Dalmau/Raebareli	Shukla Ghat ka Nala/(Sherandajpur)	Untapped (dry)
27	Dalmau/Raebareli	Pathvari Ghat ka Nala/(Tikaitganj)	Untapped
28	Dalmau/Raebareli	Soarakh Ghat Muroop Nala/(Tikaitganj)	Untapped
29	Dalmau/Raebareli	Muskatpal Nala	Untapped
30	Dalmau/Raebareli	Shivala Ghat Nala	Tapped
31	Dalmau/Raebareli	Raja Tiloi Ghat Nala/Mo. sherndajpur(Deen shah Gaora Ghat)	Untapped (dry)
32	Kunda/ Pratapgarh	Ganda Nala Raiyapur	Ganga/Canal
33	Kunda/ Pratapgarh	Taar Nala Babaganj	Untapped
34	Kunda/ Pratapgarh	Ganda Nala Baraipur	Ganga/Canal
35	Prayagraj	Rasulabad Drain-1	Untapped
36	Prayagraj	Rasulabad Drain-2	Tapped
37	Prayagraj	Rasulabad Drain-3	Tapped
38	Prayagraj	Rasulabad Drain-4	Untapped

39	Prayagraj	Sadananda Ashram Drain	Untapped
40	Prayagraj	Nehru Drain	Untapped
41	Prayagraj	Kodar Drain	Untapped
42	Prayagraj	Pongaghat Drain	Tapped
43	Prayagraj	Solari Drain	Untapped
44	Prayagraj	Mavaiya Drain	Untapped
45	Prayagraj	Chuhara Mandir Drain-1	Tapped
46	Prayagraj	Chuhara Mandir Drain-2	Untapped
47	Prayagraj	Mehndauri Drain	Untapped
48	Prayagraj	Jhusi Drain--	Untapped
49	Prayagraj	Chhatnag Drain -	Untapped
50	Prayagraj	Mannaiya/Muglaha Drain	Untapped
51	Prayagraj	Morigate Nala	Tapped
52	Prayagraj	Drains Of Daraganj Area	Tapped
53	Prayagraj	Jondhwal drain / chuhara mandir -1	Tapped
54	Prayagraj	Shankarghat Colony Drain (Near Phaphamau Bridge)	Untapped
55	Prayagraj	Unchwagarhi Drain No. 1	Untapped
56	Prayagraj	Beligaon Drain	Untapped
57	Prayagraj	Mumfordganj Drain	Tapped
58	Prayagraj	Shivkuti Drain No. 1	Untapped
59	Prayagraj	Shivkuti Drain No. 3	Untapped
60	Prayagraj	Shivkuti Drain No. 4	Untapped
61	Prayagraj	Shivkuti Drain No. 5	Untapped
62	Prayagraj	Chilla Drain	Untapped (dry)
63	Prayagraj	Allenganj Nala / Buxi Bund Nala	Tapped
64	Prayagraj	Nehru Park Nala	Untapped
65	Prayagraj	Rasulabad Puccaghat Drain	Tapped
66	Prayagraj	A.D.A. Colony Nala / Jwaladevi	Untapped
67	Prayagraj	Jondhwal Ghat Drain/Chhuhara Mandir	Untapped
68	Prayagraj	Rajapur Nala	Untapped
69	Prayagraj	Tv Tower Nala	Untapped
70	Prayagraj	Sadar Bazar Nala	Untapped
71	Prayagraj	Muirabad (Ganesh Nagar) Nala	Untapped
72	Prayagraj	Nayapurwa Drain	Untapped
73	Prayagraj	Co-Operative Nala	STP outlet
74	Prayagraj	Basna Nala and Shantipuram Nala	Untapped
75	Prayagraj	Indira Awas Nala / Jai Gurudev Ashram Nala	Untapped
76	Prayagraj	8 small drains at different locations in Jhushi area	Untapped
77	Prayagraj	Lotey Haren Nala /Chhatnag	Untapped
78	Prayagraj	Shastri Bridge Nala (03 small drains), Jhushi	Untapped
79	Manikpur	Pakka Nala	Untapped
80	Manikpur	Raja Hela Nala	Untapped
81	Manikpur	Prathmik Vidyalaya	Untapped (dry)
82	Manikpur	Mallahan Tola	Untapped

83	Manikpur	Post office Nala	Untapped (dry)
84	Mirzapur	Badali	Tapped
85	Chunar	Tekaur Basti South	Untapped
86	Chunar/ Mirzapur	Bharatpur Trimohani	Untapped
87	Mirzapur/Chunar	Patengra Drain	Untapped
88	Mirzapur/Chunar	Malhaiya Drain	Untapped
89	Mirzapur/Chunar	Parashuram ghat	Untapped
90	Mirzapur/Chunar	Gangeshwar Nishad Park	Untapped
91	Mirzapur/Chunar	Post Office South Drain	Untapped (dry)
92	Mirzapur/Chunar	Post Office North Drain	Untapped (dry)
93	Mirzapur/Chunar	Santoshi Mata Mandir	Untapped (dry)
94	Mirzapur/Chunar	Chunar Tekur North Drain	Untapped
95	Mirzapur/Chunar	Bhiaramganj West Drain	Untapped
96	Mirzapur/Chunar	Bhiaramganj East Drain	Untapped (dry)
97	Mirzapur/Chunar	Dargah Sharif Drain	Untapped
98	Mirzapur/Chunar	Tammalganj Drain	Untapped (dry)
99	Mirzapur/Chunar	Gundara Drain	Tapped
100	Mirzapur/Chunar	Balughat Pakka Drain	Tapped
101	Mirzapur/Chunar	Balughat Kaccha Drain	Untapped
102	Mirzapur/Chunar	Deewanghat Old Drain	Tapped
103	Mirzapur/Chunar	Baswariya Drain	Untapped
104	Mirzapur/Chunar	Narghat Drain	Tapped
105	Mirzapur/Chunar	Koniyaghat Drain	Tapped
106	Mirzapur/Chunar	Sundarghat Drain	Tapped
107	Mirzapur/Chunar	Oliyar Drain	Tapped
108	Mirzapur/Chunar	Kachahari Drain	Tapped
109	Mirzapur/Chunar	Morchaghar Draidewann	Untapped
110	Mirzapur/Chunar	Irrigation Colony Drain	Untapped
111	Mirzapur/Chunar	Barahimiliya Drain	Untapped
112	Mirzapur/Chunar	Public Club Drain	Untapped
113	Mirzapur/Chunar	Lift Canal Drain	Ganga/Canal
114	Mirzapur/Chunar	Hanuman Ghat Drain	Untapped
115	Mirzapur/Chunar	Balaji Temple Drain	Untapped
116	Mirzapur/Chunar	Bisunderpur Drain	Untapped
117	Mirzapur/Chunar	Kanshiram Awas Drain	Untapped
118	Mirzapur/Chunar	Chaura Mata Drain	Untapped (dry)
119	Mirzapur/Chunar	Balughat Drain, Chunar	Untapped
120	Mirzapur/Chunar	Belbeer Ghat Drain	Untapped
121	Mirzapur	Ghore Saheed Drain	Untapped
122	Mirzapur	Khandwa Drain	Untapped
123	Mirzapur	Chorwa Drain	Untapped
124	Chunar/Mirzapur	Chunar Tikaur Drain	Untapped

125	Varanasi	Nagwa/ Asi Drain	Untapped
126	Varanasi	Ramnagar Drain	Untapped
127	Varanasi	Varuna Drain	Untapped
128	Varanasi	Shivala Drain	Tapped
129	Varanasi	Khirkiya/ Rajghat Nala	Untapped
130	Varanasi/Ramnagar	Lalita Ghat	Tapped
131	Varanasi/Ramnagar	Jalasen Ghat	Tapped
132	Varanasi/Ramnagar	Manikarnika Ghat	Tapped
133	Varanasi/Ramnagar	Sankatha Ghat	Tapped
134	Varanasi/Ramnagar	Mehta Ghat	Tapped
135	Varanasi/Ramnagar	Ram Ghat	Tapped
136	Varanasi/Ramnagar	Panchganga	Tapped
137	Varanasi/Ramnagar	Brahma Ghat	Tapped
138	Varanasi/Ramnagar	Lal Ghat	Tapped
139	Varanasi/Ramnagar	Trilochan Ghat	Tapped
140	Varanasi/Ramnagar	Bhaisasur Drain	Tapped
141	Varanasi/Ramnagar	Baluaghat	Tapped
142	Varanasi/Ramnagar	Shakti Ghat	Tapped
143	Varanasi/Ramnagar	Salotri Ghat	Tapped
144	Varanasi/Ramnagar	Hanuman Ghat	Tapped
145	Varanasi/Ramnagar	Samne Ghat Drain	Untapped
146	Varanasi/Ramnagar	Nakhi Drain	Untapped
147	Varanasi/Ramnagar	Harishchandra Ghat	Tapped
148	Varanasi/Ramnagar	Mansarovar Ghat	Tapped
149	Varanasi/Ramnagar	Pandey Ghat	Tapped
150	Varanasi/Ramnagar	Dr. Rajender Prasad Ghat	Tapped
151	Varanasi/Ramnagar	Meer Ghat	Tapped
152	Varanasi	Teliya Drain	Untapped
153	Ramnagar/Varanasi	Rambhag Ghat Drain	Tapped

Sl. No.	Location before confluence	Tributary/ Rivulet	District	Lat.	Long.
1.	River Isan at Bilhaur, Kanpur upstream	River Isaan	Kanpur (u/s of town)	26.831553	80.104306
2.	River Noon at d/s of Bithoor u/s of Kanpur	River Noon	Kanpur u/s of town)	26.584272	80.263724
3.	River pandu on Baksar - Muradipur road b/f c/f with Ganga	Pandu	Fatehpur	26.125874	80.646522
4.	Loni Drain confluence with Ganga	Loni River	Rai Bareily	26.074746	80.986377
5.	Rivulet/Drain at Unchahar on Lucknow-Prayagraj road	Rivulet/Nallah	Rai Bareily	25.904947	81.29445
6.	River Duar before confluence with river Ganga on Prayagraj by pass near Samaspur	Duar river	Pratapgarh/ Prayagraj	25.59984	81.56573
7.	Rivulet at Purey Nanku (Uldi) Prayagraj bye pass [Mubarakpur Puran Kachar	Rivulet near Pure Nanku-Mubarakpur	Prayagraj	25.570377	81.702699
8.	Rivulet/Nallah at Mubarakpur Puran kachar Prayagraj	Rivulet/Nallah Musrekpur	Prayagraj	25.524575	81.725652
9.	Rivulet/Nallah at Mendara on Pryagraj Byepass	Rivulet/Nallah Mendara	Prayagraj	25.576427	81.682378
10.	River Tons (Tamsa) before confluence with river Ganga	Tamsa River (Tons)	Prayagraj	25.269037	82.045599
11.	Karnavati River on Naini - Mirzapur road near Akorhi, Lalapur near Birohee Railway station, Vindhyachal	Karnavati river	Mirzapur	25.177152	82.45167
12.	Ojhla River bridge on Mirzapur-Vindhyachal Road	Ojhla River	Mirzapur	25.151917	82.528022
13.	Rivulet at Chauhan Patti d/s of Mirzapur	Rivulet	Mirzapur	25.170599	82.694098
14.	Chatar river on Mirzapur-Chunar road near Dewahi B/F C/F with River Ganga	Chatar River	Mirzapur	25.116028	82.738307
15.	Kalkaliya River (a/c of Jargo before confluence with river Ganga u/s of Varanasi	River Kalkaliya (a/c of Jargo river)	Mirzapur	25.192423	82.97279
16.	Rivulet/Nallah at Chunar-Ramnagar Road, Hakanipur Kalan	Rivulet	Chandauli/Mirzapur	25.217781	83.030733

Annexure-II Weekly River and Drain Monitoring Data of Kanpur-Unnao Region (04/01/2022 to 11/01/2022)

S. No.	Location	Sampling date	DO (mg/l)	Temp (°C)	pH	Colour (Hazen)	BOD (mg/l)	COD (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	Total Cr (mg/l)
1.	River Ganga, Bithoor, Kanpur	04.01.2022	10.8	16	8.75	15	3.96	17.9	4.5×10^3	2.0×10^3	< 0.05
		11.01.2022	8.5	17.6	8.59	15	2.72	9.45	3.3×10^5	1.7×10^5	< 0.05
2.	River Ganga, Barrage d/s, Kanpur	04.01.2022	10.5	16	8.8	20	4.74	21.7	3.3×10^4	4.5×10^3	< 0.05
		11.01.2022	8.1	17.5	8.52	15	3.08	8.45	1.3×10^5	3.4×10^4	< 0.05
3.	River Ganga, Shuklaganj u/s, Kanpur	04.01.2022	10.4	16	8.81	15	6.6	19.3	4.5×10^3	< 1.8	< 0.05
		11.01.2022	8.3	17.5	8.64	10	1.83	7.36	2.3×10^5	3.3×10^4	< 0.05
4.	River Ganga, Shuklaganj d/s, Kanpur	04.01.2022	10.1	16	7.84	30	31.5	61.4	1.4×10^5	1.7×10^4	< 0.05
		11.01.2022	8.2	17.7	8.66	15	4.28	16.8	2.4×10^6	1.3×10^6	< 0.05
5.	River Ganga, Janey Village, Kanpur	04.01.2022	9.1	16	8.88	20	7.91	27.4	6.8×10^4	2.0×10^4	< 0.05
		11.01.2022	8.1	17.5	8.54	15	3.84	17.3	2.2×10^5	1.7×10^5	< 0.05
6.	River Ganga, Rajapur Village, Kanpur	04.01.2022	9.5	16	8.77	25	8.45	30.1	2.0×10^4	7.8×10^3	< 0.05
		11.01.2022	8.6	17.6	8.53	15	4.7	14.2	2.1×10^4	1.7×10^4	< 0.05
7.	River Ganga b/c with River Pandu, Dhondhiya Khera	04.01.2022	9.8	18.5	8.79	20	7.72	31.6	4.5×10^3	2.0×10^3	< 0.05
		11.01.2022	9	17	8.6	10	4.02	14.6	7.8×10^3	4.5×10^3	< 0.05
8.	River Pandu, Bakshar Bridge	04.01.2022	4.02	18	7.81	20	8.36	24.1	3.3×10^4	1.1×10^4	< 0.05
		11.01.2022	4.4	18	8.06	20	4.92	16.4	2.2×10^4	1.7×10^4	< 0.05
9.	River Ganga a/c with River Pandu, Lahangi Village	04.01.2022	10.5	18.5	8.71	20	8.24	29	2.0×10^3	< 1.8	< 0.05
		11.01.2022	8.8	17	8.48	15	3.48	15.1	1.1×10^4	7.8×10^3	< 0.05

S. No.	Name of drain	Date of inspection	Tapping status	Flow (MLD)	BOD (mg/l)	COD (mg/l)	Colour (Hazen)	Total Cr. (mg/l)
KANPUR DRAINS HAVING GRADIENT TOWARDS GANGA								
Tapped Drains: No/Meagre Flow								
1.	Sisamau Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
2.	Parmath Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
3.	Police Line Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
4.	Jail Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
5.	Wazidpur Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
6.	Muir Mill Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
7.	Bhagwat Das Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
8.	TAFCO Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
9.	Sati Chaura Drain, Kanpur	04.01.2022	Meagre flow	Sample not collected				
		11.01.2022	Tapped	Temporarily diverted to Air Force drain as sewerage network work was under progress				
Tapped Drains: Overflow								
10.	Air force Drain, Kanpur	04.01.2022	Untapped	0.36 MLD	88.2	188	75	< 0.2
		11.01.2022	Untapped	0.46 MLD	115	228	70	< 0.2
11.	Dabka-1, 2 & 3, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	11.52 MLD	111	233	100	0.35
12.	Budhiyaghat Drain, Kanpur	04.01.2022	Untapped	1.19 MLD	497	866	300	4.1
		11.01.2022	Tapped	-				
13.	Permiya Drain, Kanpur	04.01.2022	Tapped	Flow could not be measured due to inaccessible site conditions	13.3	25.8	75	< 0.2
		11.01.2022	Tapped	27.5 MLD	21.8	57.1	25	< 0.2
Untapped Drains								
14.	Golaghat Drain, Kanpur	04.01.2022	Untapped	1.45 MLD	270	419	100	< 0.2
		11.01.2022	Untapped	1.81 MLD	223	380	60	< 0.2
15.	Sheetla Bazar Drain, Kanpur	04.01.2022	Untapped	5.68 MLD	626	1394	150	13.93
		11.01.2022	Tapped	-				
16.	Rooma Drain, Kanpur	04.01.2022	Untapped	38.4 MLD	562	2144	125	3.42
		11.01.2022	Untapped	74.4 MLD	55.5	138	75	0.57
17.	Ranighat Drain, Kanpur	04.01.2022	Tapped	Flow could not be measured as wastewater was discharged into R. Ganga through a pipe	197	318	75	< 0.2
		11.01.2022	Tapped		210	313	75	< 0.2
KANPUR DRAINS HAVING GRADIENT TOWARDS RIVER PANDU								
Tapped Drains: Overflow								

18.	Ganda Drain, Kanpur	04.01.2022	Tapped	64.32 MLD	72.8	131	50	< 0.2
		11.01.2022	Tapped	121.38 MLD	189	458	100	< 0.2
19.	Halwakhanda drain, Kanpur	04.01.2022	Tapped	26.56 MLD	126	239	100	< 0.2
		11.01.2022	Tapped	81.72 MLD	267	412	125	< 0.2
20.	COD Drain, Kanpur	04.01.2022	Tapped	-				
		11.01.2022	Tapped	-				
Untapped Drains								
21.	Ratanpur Drain, Kanpur	04.01.2022	Untapped	8.65 MLD	68.5	123	75	< 0.2
		11.01.2022	Untapped	16.47 MLD	65	118	50	< 0.2
22.	Panki Drain, Kanpur	04.01.2022	Untapped	31.66 MLD	93.7	190	100	< 0.2
		11.01.2022	Untapped	16.66 MLD	107	190	100	< 0.2
23.	ICI Drain, Kanpur	04.01.2022	Untapped	12 MLD	49.5	133	50	0.23
		11.01.2022	Untapped	8.89 MLD	59	144	30	0.3
UNNAO DRAINS HAVING GRADIENT TOWARDS RIVER GANGA (Untapped and Flow)								
24.	City Jail Drain, Unnao	04.01.2022	Untapped	20.73 MLD	90.3	284	125	1.03
		11.01.2022	Untapped	46.3 MLD	171	379	125	4.75
25.	Loni Drain, Unnao	04.01.2022	Untapped	279.93 MLD	5.44	16.7	25	< 0.2
		11.01.2022	Untapped	Flow could not be measured due to heavy and scattered flow	< 5.0	8.21	30	< 0.2

Annexure- IV

3080

तन्मय कुमार, भा.प्र.से.
अध्यक्ष
Tanmay Kumar, I. A. S.
Chairman

सत्यमेव जयते

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

DO. No. PJ-14099/31/2022-WQM-II-HO-CPCB-HO 3455
August 22, 2022

Dear Vivek,

A holistic and integrated water quality management approach is required for ensuring maintenance of water quality of rivers. Kanpur district lies in the River Ganga basin, wherein River Ganga and its tributaries flows through. In Kanpur, considerable amount of sewage is generated along-with wastewater from various Grossly Polluting Industries (GPIs) clusters and drains that find their way into the rivers, impacting the water quality. Central Pollution Control Board (CPCB) has prepared a report on "Environment status and Issues of Kanpur district (NMCG)" to identify gaps and other ambient environmental issues which require intervention. Also, suggestive way forward and measures to be undertaken have been listed in the report.

I am forwarding the report for your reference. You are requested to deliberate upon the report along-with the concerned agencies and prepare a time-bound action plan. CPCB would be willing to provide any technical assistance as may be required.

Best regards,

Yours sincerely,

22/8/22

(Tanmay Kumar)

Sh. Vivek G.
District Magistrate, Kanpur Nagar
DM Office, Collectorate, Civil Lines
Kanpur, Uttar Pradesh

Encl: As above

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निधि NSingh
दिनांक 24/8/2022

O/c - (PR-Sc'B')

'परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110 032, भारत
'Parivesh Bhawan, East Arjun Nagar, Delhi-110 032, India
Tel. +91-11-22307233, Tele Fax : +91-11-22304948, e-mail: ccb.cpcb@nic.in

तन्मय कुमार, भा.प्र.से.
अध्यक्ष
Tanmay Kumar, I. A. S.
Chairman

3081

सत्यमेव जयते

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

DO. No. PJ-14099/31/2022-WQM-II-HO-CPCB-HO
August 22, 2022

3456

A holistic and integrated water quality management approach is required for ensuring maintenance of water quality of rivers. Kanpur district lies in the River Ganga basin, wherein River Ganga and its tributaries flows through. In Kanpur, considerable amount of sewage is generated along-with wastewater from various Grossly Polluting Industries (GPIs) clusters and drains that find their way into the rivers, impacting the water quality. Central Pollution Control Board (CPCB) has prepared a report on "Environment status and Issues of Kanpur district (NMCG)" to identify gaps and other ambient environmental issues which require intervention. Also, suggestive way forward and measures to be undertaken have been listed in the report.

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Yours sincerely,

sd/-

(Tanmay Kumar)

Sh. Vivek G.
District Magistrate, Kanpur Nagar
DM Office, Collectorate, Civil Lines
Kanpur, Uttar Pradesh

Encl: As above

Copy to:

Shri G Asok Kumar,
Director General,
National Mission for Clean Ganga (NMCG),
1st Floor, Major Dhyan Chand National Stadium,
India Gate, New Delhi - 110002

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निर्गत NSingh
दिनांक 24/8/2022

24/8/22

(Tanmay Kumar)

O/C (PR-Sec')

'परिवेश भवन, पूर्वी अर्जून नगर, दिल्ली-110 032, भारत
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तन्मय कुमार, भा.प्र.से.
अध्यक्ष
Tanmay Kumar, I. A. S.
Chairman

3082

सत्यमेव जयते

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

DO. No. PJ-14099/31/2022-WQM-II-HO-CPCB-HO 3457
August 22, 2022

A holistic and integrated water quality management approach is required for ensuring maintenance of water quality of rivers. Kanpur district lies in the River Ganga basin, wherein River Ganga and its tributaries flows through. In Kanpur, considerable amount of sewage is generated along-with wastewater from various Grossly Polluting Industries (GPIs) clusters and drains that find their way into the rivers, impacting the water quality. Central Pollution Control Board (CPCB) has prepared a report on "Environment status and Issues of Kanpur district (NMCG)" to identify gaps and other ambient environmental issues which require intervention. Also, suggestive way forward and measures to be undertaken have been listed in the report.

I am forwarding the report for your reference. You are requested to deliberate upon the report along-with the concerned agencies and prepare a time-bound action plan. CPCB would be willing to provide any technical assistance as may be required.

Yours sincerely,

(Tanmay Kumar)

Sh. Vivek G.
District Magistrate, Kanpur Nagar
DM Office, Collectorate, Civil Lines
Kanpur, Uttar Pradesh

Encl: As above

Copy to:

Shri Manoj Singh
Chairman,
Uttar Pradesh Pollution Control Board (UPPCB)
TC-12V, Regency Rd, Vibhuti Khand,
Gomti Nagar, Lucknow,
Uttar Pradesh - 226010

(Tanmay Kumar)

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निर्गत ...
दिनांक 24/8/2022

O/C '(PR-Sc'B')

'परिवेश भवन, पूर्वी अर्जून नगर, दिल्ली-110 032, भारत
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3083

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

Speed Post/E-mail

File No. PJ-14014(12)/5/2021-WQM-II-HO-CPCB-HO **Date: July 02 , 2024**

To,

The Member Secretary,
Uttar Pradesh Pollution Control Board,
Building No. TC-12V, Vibhuti Khand,
Gomti Nagar, Lucknow-226 010

DIRECTIONS UNDER SECTION 18 (1) (b) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 REGARDING DISCHARGE OF INDUSTRIAL EFFLUENT IN DRAINS OF KANPUR

WHEREAS, the Central Board, has delegated powers vested under Section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to the Member Secretary, Central Pollution Control Board (CPCB) vide its resolution made in 196th Board meeting dated 29th March, 2022 to issue direction under Section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to State Board (s); and

WHEREAS, amongst others, under section 16 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the Central Pollution Control Board, constituted under the Water (Prevention and Control of Pollution) Act, 1974 is to coordinate activities of the State Pollution Control Boards & Pollution Control Committees to provide technical assistance and guidance to SPCBs/PCCs; and

WHEREAS, amongst others, under section 17 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Board, constituted under the Water (Prevention & Control of Pollution) Act, 1974 is to plan a comprehensive programme for the prevention, control or abatement of pollution of streams and wells located in the State and to secure the execution thereof; and

WHEREAS, under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974, no person shall, without the previous consent of the State Pollution Control Board establish or take any steps to establish any industry, operation or process or any treatment or disposal system or any extension or addition thereto, which is likely to discharge sewage or trade effluent into a stream or well or sewer or on land; and

Contd.

WHEREAS, the Central Government has notified standards for discharge of environmental pollutants from industries and common effluent treatment plants (CETPs), under the Environmental (Protection) Act, 1986 and rules framed there under, and

WHEREAS, the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) are empowered to stipulate standards for discharge of environmental pollutants for various categories of industries and common effluent treatment plants (CETPs) more stringent than those notified by the Central Government, under the Environmental (Protection) Act, 1986 and rules framed there under; and

WHEREAS, the Hon'ble Supreme Court of India in WP (375 of 2012) passed a judgement dated 22/02/2017 that

> *"the concerned SPCBs are mandated to carry out inspections, to verify, whether or not, each industrial unit regarding "consent to operate", has a functional primary effluent treatment plant. Such of the industrial units, which have not been able to make their primary effluent treatment plant fully operational, within the notice period, shall be restrained from any further industrial activity. This direction may be implemented by requiring the concerned electricity supply and distribution agency, to disconnect the electricity connection of the defaulting industry. We therefore hereby further direct, that in case the concerned SPCBs make a recommendation to the concerned electrical supply and distribution agency/company, to disconnect electrical supply to an industry, for the reason that its primary effluent treatment plant is not functional, it shall honor such recommendation, and shall disconnect the electricity supply to such defaulting industrial concern, forthwith,"*

AND WHEREAS, water quality of River Ganga and its tributaries has been threatened due to disposal of untreated sewage from drains and discharge of untreated/partially treated effluents from industries which are mixed with drain waste water and reaching to River Ganga directly or via its tributaries; and

WHEREAS, the monitoring of 29 drains identified in Kanpur (27) and Unnao (2) is being carried out on fortnighly (weekly till Oct, 2022) basis by joint teams comprising officials from CPCB & UPPCB (Uttar Pradesh Pollution Control Board); and

WHEREAS, based on weekly monitoring data of rivers and drains during 19/03/2019 to 16/04/2019, CPCB issued direction dated 08/05/2019 under section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to the UPPCB for restoration of water quality of River Ganga in Kanpur-Unnao region; and

WHEREAS, based on weekly monitoring data of rivers and drains during 19/03/2019 to 07/05/2019, CPCB issued direction dated 07/06/2019 under section 18 (1) (b) of Water

(Prevention and Control of Pollution) Act, 1974 to the UPPCB for restoration of water quality of River Ganga in Kanpur-Fatehpur region; and

WHEREAS, based on inventorization of pollution source of drains of Kanpur & Unnao carried out by officials of CPCB during 28/05/2019 to 11/06/2019, CPCB issued directions dated 02/07/2019 under section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to control pollution in drains discharging wastewater into Rivers Ganga and Pandu in Kanpur-Unnao region; and

WHEREAS, CPCB vide DO letter dated 06/08/2019 requested the Chief Secretary, Government of Uttar Pradesh to ensure effective action against polluting activities and to direct concerned agencies including UPPCB to take effective action against polluting activities; and

WHEREAS, based on weekly monitoring of drains from 31/12/2019 to 07/01/2020, CPCB issued directions dated 21/02/2020 under section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to the UPPCB to control discharge of industrial effluent in drains of Kanpur; and

WHEREAS, CPCB vide DO letter dated 03/03/2020 requested the Principal Secretary, Environment, Forest & Climate Change (EF&CC) Department, Government of Uttar Pradesh to direct concerned agencies including UPPCB to take effective action against polluting activities; and

WHEREAS, based on weekly monitoring data from March, 2019 to March, 2020, CPCB prepared a report on "Drain, sewage and tannery effluent management at Kanpur & Unnao". The report was forwarded to:

1. UPPCB, State Mission for Clean Ganga-Uttar Pradesh (SMCG-UP) and District Magistrate, Kanpur vide DO letter dated 28/09/2020 for taking necessary action; and
2. Chief Secretary, Government of Uttar Pradesh vide DO letter dated 16/10/2020 to direct concerned agencies including UPPCB to take effective action against polluting activities.

AND WHEREAS, based on weekly monitoring data from October, 2021 to June, 2022, CPCB prepared a report on "Environment status and Issues of Kanpur district" and forwarded the report vide DO letter dated 22/08/2022 to UPPCB and District Magistrate, Kanpur to deliberate upon the report along with the concerned agencies and prepare a time-bound action plan; and

WHEREAS, CPCB issued letters dated 06/12/2021, 02/11/2022, 25/11/2022, 19/12/2022, 07/03/2023, 20/03/2023, 05/04/2023, 12/05/2023, 27/06/2023, 16/08/2023, 19/09/2023, 13/10/2023 and 01/01/2024 to UPPCB to control the discharge of industrial effluent into drains and ensure no wastewater discharge from tapped drains into river Ganga; and

WHEREAS, no action taken report has been received so far from UPPCB and District Magistrate, Kanpur; and

WHEREAS, based on data of ten rounds of fortnightly monitoring carried out on 30/10/2023, 06/11/2023, 20/11/2023, 11/12/2023, 26/12/2023, 29/01/2024, 19/02/2024, 04/03/2024, 08/04/2024 and 22/04/2024, following observations are made:

1. In Kanpur, 27 drains discharge into Rivers Ganga and Pandu. Out of 27 drains, 18 drains have gradient towards River Ganga and 9 drains have gradient towards River Pandu. Out of 18 drains discharging wastewater into River Ganga, 11 drains are tapped. Out of 11 tapped drains, overflow was observed in 7 tapped drains namely Muir Mill (24.9 MLD), Bhagwatdas Ghat (8.6 MLD), Budhiya Ghat (1.5-2.1 MLD), Permiya (11.1-78.3 MLD), Sheetla Bazar (7.9-35.8 MLD), Parmath (5.5 MLD) and Sisamau drain.
2. Water quality of river Ganga, from Bithoor to Fatehpur, was meeting the primary criteria for bathing w.r.t. DO at all monitoring locations on all occasions. However, the water quality of river Ganga was not meeting primary criteria for bathing w.r.t. pH, BOD and FC on different occasions except river Ganga before confluence with river Pandu at Daundiya khera village, which was meeting the primary criteria for bathing w.r.t. pH. The river monitoring data is annexed.
3. Industrial pollution was observed in following drains in Kanpur:

River Ganga:

a. Ranighat drain

i. Ranighat drain carries wastewater from residential areas of Kohna and Ranibagcha.

ii. High BOD (394 mg/l) and COD (765 mg/l) were observed in Ranighat drain on 04/03/2024 indicating discharge from industrial/commercial activities.

b. Budhiya Ghat drain

i. Budhiya Ghat drain carries tannery wastewater from Jajmau industrial area along with sewage. The drain is tapped to PS-4 (Budhiya Ghat) however, overflow from the drain reaches to River Ganga.

ii. Industrial pollution in this drain was observed during multiple monitoring occasions:

- High colour was observed on 30/10/2023 (500 Hazen) and 20/11/2023 (300 Hazen).
- High BOD was observed on 30/10/2023 (1845 mg/l), 06/11/2023 (695 mg/l) and 20/11/2023 (448 mg/l).
- High COD was observed on 30/10/2023 (3139 mg/l), 06/11/2023 (986 mg/l) and 20/11/2023 (809 mg/l).

- High concentration of Total Chromium was observed on 30/10/2023 (26.6 mg/l), 06/11/2023 (33.2 mg/l) and 20/11/2023 (14.6 mg/l).

c. Sheetala Bazar drain

i. Sheetala Bazar drain carries sewage as well as tannery wastewater from Jajmau industrial area. A part of effluent generated from Jajmau industrial area is pumped to CETP Jajmau however the rest is discharged into River Ganga via this drain.

ii. Industrial pollution in this drain was observed during multiple monitoring occasions:

- High colour was observed on 20/11/2023 (200 Hazen) and 22/04/2024 (250 Hazen).
- High BOD was observed on 30/10/2023 (702 mg/l), 06/11/2023 (468 mg/l), 20/11/2023 (924 mg/l), 04/03/2024 (412 mg/l) and 22/04/2024 (572 mg/l).
- High COD was observed on 30/10/2023 (1314 mg/l), 06/11/2023 (935 mg/l), 20/11/2023 (1297 mg/l), 04/03/2024 (906 mg/l) and 22/04/2024 (1091 mg/l).
- High concentration of Total Chromium was observed on 30/10/2023 (7.6 mg/l), 06/11/2023 (23.8 mg/l), 20/11/2023 (34.6 mg/l) and 04/03/2024 (28.1 mg/l).

d. SPS Jajmau drain

i. The sewage from Sewage Pumping Station (SPS) located at Jajmau is transferred to Jajmau STPs however, due to fault in sewage line at the SPS, overflow reaches River Ganga via this drain.

ii. High BOD (326 mg/l), COD (961 mg/l) and Total Chromium (10.45 mg/l) were observed in SPS Jajmau drain on 20/11/2023 indicating that tanneries located at Jajmau tannery cluster are discharging untreated effluent into drains.

e. Rooma drain

i. Rooma drain is a channel of irrigation canal originated from Jajmau CETP & STP complex and later Rooma drain from 1.55 MLD CETP Rooma (member units-textiles) joins this channel. The drain ultimately meets River Ganga near Jamda village.

ii. Industrial pollution in Rooma drain was observed on different monitoring occasions:

- High colour (250 Hazen) was observed on 30/10/2023.
- High concentration of Total Chromium was observed on 29/01/2024 (2.83 mg/l) and 19/02/2024 (3.97 mg/l).

River Pandu:

Out of 9 drains having gradient towards River Pandu, 6 drains are tapped. Out of 6 tapped drains, overflow was observed in 4 drains namely Halwakhanda (18.3-108.7 MLD), Ganda (26.6-162.9 MLD), COD (47.4-145.2 MLD) and Panki drain (0.1-1 MLD). In Shiv Nagar-Pipauri drain, high colour on 06/11/2023 (500 Hazen), 19/02/2024 (300 Hazen) & 22/04/2024 (750 Hazen) and high COD (758 mg/l) on 19/02/2024 were observed. In Sagarpuri drain, high colour (200 Hazen) was observed on 19/02/2024. High values of colour and COD in these drains indicate industrial pollution.

4. In Unnao, 2 untapped drains discharge into River Ganga. Out of these 2 drains, industrial pollution in City Jail drain was observed. This drain carries industrial effluent from slaughter houses, and tannery, textile, chemical, steel industries from Magarwara, Akrampur and Leather Technology Park, Banthar. Industrial pollution in this drain was observed on multiple monitoring occasions:
   a. High colour (200 Hazen) was observed on 06/11/2023, 11/12/2023 and 22/04/2024.
   b. High BOD was observed on 30/10/2023 (302 mg/l), 26/12/2023 (297 mg/l), 19/02/2024 (281 mg/l), 04/03/2024 (407 mg/l) and 08/04/2024 (388 mg/l).
   c. High COD was observed on 11/12/2023 (601 mg/l), 26/12/2023 (740 mg/l), 29/01/2024 (514 mg/l), 19/02/2024 (741 mg/l), 04/03/2024 (688 mg/l) and 08/04/2024 (600 mg/l).
   d. High concentration of Total Chromium was observed on 11/12/2023 (2.5 mg/l), 19/02/2024 (12.6 mg/l) and 04/03/2024 (4.46 mg/l).

AND WHEREAS, it is evident that industrial units located in the catchment area of the identified drains of Kanpur and Unnao regions are not implementing effluent treatment measures properly and discharging partially treated/untreated industrial effluent containing high BOD, COD, colour and total Chromium into River Ganga and its tributary River Pandu via drains which is ultimately deteriorating the water quality of these rivers; and

NOW, THEREFORE, in view of above mentioned observations and in exercise of the power conferred under section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974, you are hereby directed to take appropriate measures including issuance of directions to ensure implementation of following pollution control measures in a time bound manner:

1. Uttar Pradesh Pollution Control Board (UPPCB) shall take immediate necessary action to effectively control all polluting sources contributing high BOD, COD, colour and total Chromium to the identified drains.
2. UPPCB shall direct the concerned authorities to ensure immediate repair of broken/damaged/temporary tapping provisions at drains and sewage pumping stations shall be operated regularly so that no wastewater is discharged through tapped drains.

3. UPPCB shall ensure that no industry disposes untreated/partially treated effluent not meeting prescribed standards into any drain so that River Ganga does not receive any coloured/untreated effluent.
4. UPPCB shall setup surveillance squads for tanneries and illegal industrial units and ensure that no illegal industrial activities are being carried out.
5. UPPCB shall take coercive action, as deemed fit, including levying of environmental compensation against the industries discharging partially treated/untreated industrial effluent and do not have adequate effluent treatment facilities to comply with the discharge norms and also on illegal industrial activities operating in the catchment of identified drains.

The action taken by UPPCB shall be intimated to CPCB within 30 days of receipt of this direction.

(Bharat Kumar Sharma)
MEMBER SECRETARY

Copy to:

1. **Director General,**
   National Mission for Clean Ganga,
   Ministry of Jal Shakti (Department of Water Resources,
   River Development & Ganga Rejuvenation),
   Government of India,
   1st Floor, Major Dhyan Chand National Stadium,
   India Gate, New Delhi - 110002
   : For kind information, please.

2. **Additional Secretary (CP Division),**
   Ministry of Environment, Forest & Climate Change,
   Indira Paryavaran Bhawan,
   Jorbagh Road, New Delhi - 110003
   : For kind information, please.

3. **Project Director,**
   State Mission for Clean Ganga-Uttar Pradesh,
   Plot No. 18, Sector 07, Gomti Nagar Rd, Sector 18,
   Gomti Nagar, Lucknow - 226010, Uttar Pradesh
   : For kind information & necessary action, please.

4. **District Magistrate-Kanpur Nagar,**
   District Magistrate Office,
   Collectorate, Civil Lines,
   Kanpur Nagar - 208001, Uttar Pradesh
   : For kind information & necessary action, please.

5. **Regional Officer (Kanpur),**
   5243, Avas Vikas, Phase-III,
   Sadbhavna Nagar, Kalyanpur,
   Kanpur-208017, Uttar Pradesh
   : For kind information & necessary action, please.

6. **Regional Director,**
   Regional Directorate,
   Central Pollution Control Board,
   PICUP Bhawan, Ground Floor, Vibhuti Khand,
   Gomti Nagar, Lucknow - 226010
   : For kind information & necessary action, please.

7. **In-charge,** IT Division, CPCB
   : For uploading the direction on CPCB website, please.

(Bharat Kumar Sharma)
MEMBER SECRETARY

Monitoring data of rivers Ganga & Pandu (30/10/2023 to 22/04/2024)

S. No.	Name of River & Locations	Date of monitoring	DO (mg/l)	Temp (°C)	pH	Colour (Hazen)	BOD (mg/l)	COD (mg/l)	Total Coliform (MPN/100 ml)	Fecal coliform (MPN/100 ml)	Total Cr (mg/l)	Cr (VI) (mg/l)	Cr (III) (mg/l)
1.	River Ganga at Bithoor, Kanpur	30.10.2023	8.7	27.0	8.03	10	2.5	8.2	7.8×10^3	2.0×10^3	<0.00056	NA	NA
		06.11.2023	8.6	25.0	6.62	5	2.2	10.3	2.0×10^3	<1.8	<0.00056	NA	NA
		20.11.2023	8.7	26	7.88	10	**3.2**	13.2	1.1×10^4	**4.0×10^3**	<0.00056	NA	NA
		11.12.2023	9	21	8.28	10	**3.2**	10.5	4.5×10^3	2.0×10^3	<0.00056	NA	NA
		26.12.2023	11.8	19.5	**8.63**	15	**6.2**	24.2	<1.8	<1.8	<0.00056	NA	NA
		29.01.2024	10.8	16	**8.75**	10	2.8	9.6	2.0×10^3	<1.8	<0.00056	NA	NA
		19.02.2024	8.1	20	8.2	15	**5.3**	19.7	7.8×10^2	2.0×10^2	<0.00056	NA	NA
		04.03.2024	8	20	7.86	15	**3.1**	11.5	<1.8	<1.8	0.002	NA	NA
		08.04.2024	7.8	26	8.07	10	1.5	5.6	<1.8	<1.8	RA	NA	RA
		22.04.2024	8.2	28	7.98	10	2.5	9.5	2.0×10^3	<1.8	RA	NA	RA
2.	River Ganga at Barrage d/s, Kanpur	30.10.2023	7.5	27.0	7.9	10	2.5	10.5	2.0×10^3	<1.8	<0.00056	NA	NA
		06.11.2023	8.4	25.0	7.2	5	1.5	7.7	7.8×10^3	2.0×10^3	<0.00056	NA	NA
		20.11.2023	8.5	26	7.97	5	2.6	11.2	1.3×10^4	**4.5×10^3**	<0.00056	NA	NA
		11.12.2023	8.8	21	8.45	10	2.9	14.3	1.3×10^4	**4.5×10^3**	<0.00056	NA	NA
		26.12.2023	10.7	20	**8.75**	20	**9**	36.1	<1.8	<1.8	<0.00056	NA	NA
		29.01.2024	10.8	17	**8.68**	15	**3.2**	10.9	2.3×10^4	**7.8×10^3**	<0.00056	NA	NA
		19.02.2024	7.8	21	8.35	15	**4.6**	17.5	3.3×10^3	**1.3×10^3**	<0.00056	NA	NA
		04.03.2024	6.9	20	7.81	15	**3.7**	15.1	<1.8	<1.8	0.003	NA	NA
		08.04.2024	8	26.1	8.18	10	1.8	8.3	<1.8	<1.8	RA	NA	RA
		22.04.2024	8	28	8.09	10	2.7	11.7	4.0×10^3	2.0×10^3	RA	NA	RA
3.	River Ganga at Shuklaganj u/s, Kanpur	30.10.2023	8	27	7.93	10	1	5.5	4.5×10^3	2.0×10^3	<0.00056	NA	NA
		06.11.2023	8.3	25	7.58	5	2.2	10.6	1.1×10^4	**4.0×10^3**	<0.00056	NA	NA
		20.11.2023	8.1	26	8.06	5	2.9	12.2	2.3×10^4	**4.5×10^3**	<0.00056	NA	NA
		11.12.2023	8.7	21	8.32	10	**3.2**	19.4	1.7×10^4	**6.8×10^3**	<0.00056	NA	NA
		26.12.2023	11.3	19.5	8.48	15	**7.1**	27.8	2.0×10^3	<1.8	<0.00056	NA	NA
		29.01.2024	6	16	**8.59**	10	**3.3**	10.8	7.8×10^3	**4.5×10^3**	<0.00056	NA	NA
		19.02.2024	7.3	20	7.87	15	**5.1**	19.2	7.8×10^2	4.5×10^2	<0.00056	NA	NA
		04.03.2024	7	20	7.77	15	**3.6**	12.9	<1.8	<1.8	0.01	NA	NA
		08.04.2024	7.7	26.3	7.98	15	2.2	7.3	4.5×10^3	2.0×10^3	RA	NA	RA
		22.04.2024	8.5	29	8.15	10	2.2	7.3	7.9×10^4	**4.9×10^4**	RA	NA	RA

S. No.	Name of River & Locations	Date of monitoring	DO (mg/l)	Temp (°C)	pH	Colour (Hazen)	BOD (mg/l)	COD (mg/l)	Total Coliform (MPN/100 ml)	Fecal coliform (MPN/100 ml)	Total Cr (mg/l)	Cr (VI) (mg/l)	Cr (III) (mg/l)
4.	River Ganga at Chandan ghat, Jajmau, Kanpur	30.10.2023	8.3	27	7.86	10	2.5	9.8	1.3×10^{4}	**4.5×10^{3}**	<0.00056	NA	NA
		06.11.2023	8	25	7.85	5	2.4	12.5	1.3×10^{4}	**4.5×10^{3}**	<0.00056	NA	NA
		20.11.2023	8.3	26	8.11	10	**3.3**	15.2	1.1×10^{4}	**7.8×10^{3}**	<0.00056	NA	NA
		11.12.2023	8.6	21	**8.54**	10	2.8	15.3	2.2×10^{4}	**9.3×10^{3}**	<0.00056	NA	NA
		26.12.2023	10.4	19.5	**8.52**	15	**3.4**	15.2	4.5×10^{3}	2.0×10^{3}	<0.00056	NA	NA
		29.01.2024	10.6	16	**8.73**	15	**3.3**	11.3	7.8×10^{3}	2.0×10^{3}	<0.00056	NA	NA
		19.02.2024	7.1	20	8.37	15	**5.5**	20.6	1.7×10^{4}	**4.9×10^{3}**	<0.00056	NA	NA
		04.03.2024	6.6	20	7.8	10	**6**	21.1	1.3×10^{5}	**2.3×10^{4}**	0.004	NA	NA
		08.04.2024	7.1	26	7.86	15	1.5	10.6	2.0×10^{3}	<1.8	RA	NA	RA
		22.04.2024	7	29	8.1	10	**4.6**	16.2	1.3×10^{5}	**2.3×10^{4}**	RA	NA	RA
5.	River Ganga at Janey Village, Kanpur	30.10.2023	7.3	27	7.92	10	**6**	22.2	7.9×10^{5}	**1.3×10^{5}**	0.05	<0.1	NA
		06.11.2023	7.8	25	7.98	5	2.4	10.9	2.2×10^{4}	**6.8×10^{3}**	<0.00056	<0.1	NA
		20.11.2023	8.1	26	8.04	10	**3.2**	16.2	3.3×10^{4}	**1.3×10^{4}**	<0.00056	<0.1	NA
		11.12.2023	8.5	21	8.39	10	**3.4**	15.1	2.7×10^{4}	**1.3×10^{4}**	0.02	<0.1	NA
		26.12.2023	11	20	8.21	20	**4**	19.3	7.8×10^{3}	**4.5×10^{3}**	0.04	<0.1	NA
		29.01.2024	10.6	16	**8.78**	15	**4.6**	14.2	1.3×10^{4}	**7.8×10^{3}**	<0.00056	<0.1	BDL
		19.02.2024	6.9	20	7.91	15	**5.6**	21.3	1.7×10^{4}	2.3×10^{3}	0.011	<0.1	0.011
		04.03.2024	5	20	7.69	15	3	10.5	2.3×10^{4}	**1.3×10^{4}**	0.016	<0.1	0.016
		08.04.2024	7.8	26.2	7.75	20	**4.2**	15.8	3.5×10^{5}	2.0×10^{4}	RA	<0.1	RA
		22.04.2024	6.4	29	7.72	15	**4.8**	17.2	7.9×10^{4}	**2.3×10^{4}**	RA	<0.1	RA
6.	River Ganga at Rajapur Village, Kanpur	30.10.2023	6.8	27	7.86	10	2.5	10.5	3.3×10^{5}	**7.9×10^{4}**	0.02	<0.1	NA
		06.11.2023	8.2	25	7.99	5	2.5	10.5	2.3×10^{4}	**7.8×10^{3}**	<0.00056	<0.1	NA
		20.11.2023	8.4	26	8.05	10	**4.2**	17.2	2.3×10^{4}	**7.8×10^{3}**	<0.00056	<0.1	NA
		11.12.2023	8.6	21	8.39	10	**5.1**	18	1.7×10^{4}	**1.1×10^{4}**	0.03	<0.1	NA
		26.12.2023	8.4	20	8.38	15	**3.3**	18.4	1.3×10^{5}	**2.3×10^{4}**	0.03	<0.1	NA
		29.01.2024	10.6	16	**8.75**	15	**5**	18.4	4.5×10^{3}	2.0×10^{3}	<0.00056	<0.1	BDL
		19.02.2024	7.5	20	8.06	15	**5.6**	19.8	2.3×10^{3}	1.3×10^{3}	0.08	<0.1	0.08
		04.03.2024	6.5	20	7.8	15	**3.1**	10.4	3.3×10^{5}	**1.3×10^{5}**	0.028	<0.1	0.028
		08.04.2024	8	26.1	7.51	20	**4.3**	18.8	3.3×10^{4}	**1.7×10^{4}**	RA	<0.1	RA
		22.04.2024	7.6	29	7.94	10	**5.4**	18.2	2.3×10^{4}	**4.5×10^{3}**	RA	<0.1	RA
7.		30.10.2023	8.9	26	7.3	10	2.5	9.5	1.1×10^{6}	**1.3×10^{5}**	<0.00056	NA	NA
		06.11.2023	8.4	24	7.9	5	2.5	15	3.3×10^{4}	**1.1×10^{4}**	<0.00056	NA	NA

S. No.	Name of River & Locations	Date of monitoring	DO (mg/l)	Temp (°C)	pH	Colour (Hazen)	BOD (mg/l)	COD (mg/l)	Total Coliform (MPN/100 ml)	Fecal coliform (MPN/100 ml)	Total Cr (mg/l)	Cr (VI) (mg/l)	Cr (III) (mg/l)
	River Ganga b/c with River Pandu at Daundiya Khera	20.11.2023	8.5	25	7.09	5	**3.6**	20.2	1.3×10^{5}	$\mathbf{1.1\times10^{4}}$	<0.00056	NA	NA
		11.12.2023	8.6	21	8.04	5	**5.3**	17.4	2.3×10^{4}	$\mathbf{7.8\times10^{3}}$	<0.00056	NA	NA
		26.12.2023	8.9	18	7.35	15	2.8	16.4	7.8×10^{3}	$\mathbf{4.5\times10^{3}}$	<0.00056	NA	NA
		29.01.2024	8.5	17	7.25	10	**4.8**	17.4	4.5×10^{3}	2.0×10^{3}	<0.00056	NA	NA
		19.02.2024	9.4	21	7.82	15	**5.8**	23.2	2.8×10^{5}	$\mathbf{1.3\times10^{4}}$	<0.00056	NA	NA
		04.03.2024	7	20	7.27	15	**4.6**	16.7	4.5×10^{3}	2.0×10^{3}	0.014	NA	NA
		08.04.2024	8.2	29	6.94	15	**3.6**	13	3.3×10^{4}	$\mathbf{1.1\times10^{4}}$	RA	NA	RA
		22.04.2024	8.9	31.5	8.24	5	**5.9**	20.2	7.9×10^{4}	$\mathbf{4.9\times10^{4}}$	RA	NA	RA
8.	River Pandu at Bakshar Bridge	30.10.2023	5	27	7.5	40	**17.6**	39.8	4.5×10^{3}	2.0×10^{3}	<0.00056	NA	NA
		06.11.2023	7.4	25	7.71	30	**15.5**	32.3	2.0×10^{3}	<1.8	<0.00056	NA	NA
		20.11.2023	6	26	7.33	20	**13.1**	23.1	4.5×10^{3}	2.0×10^{3}	<0.00056	NA	NA
		11.12.2023	**3**	21	7.52	10	**5.7**	18.7	2.0×10^{3}	<1.8	<0.00056	NA	NA
		26.12.2023	**2**	18	8.37	10	2.6	13.4	4.5×10^{3}	2.0×10^{3}	<0.00056	NA	NA
		29.01.2024	5.3	18.5	7.19	10	**5.3**	20.8	1.3×10^{4}	$\mathbf{7.8\times10^{3}}$	<0.00056	NA	NA
		19.02.2024	7.1	23	8.06	15	**13.7**	48.8	2.3×10^{3}	7.8×10^{2}	<0.00056	NA	NA
		04.03.2024	**2.8**	20	7.42	25	**8.6**	36.9	7.8×10^{3}	$\mathbf{4.5\times10^{3}}$	0.006	NA	NA
		08.04.2024	5.3	30	7.39	15	**9.8**	19	1.7×10^{4}	$\mathbf{7.8\times10^{3}}$	RA	NA	RA
		22.04.2024	7.1	32	7.46	20	**12.3**	25.1	7.9×10^{5}	$\mathbf{4.9\times10^{5}}$	RA	NA	RA
9.	River Ganga a/c with River Pandu at Lahangi Village	30.10.2023	8.5	26	7.71	10	2.6	10.1	3.3×10^{4}	$\mathbf{7.8\times10^{3}}$	<0.00056	NA	NA
		06.11.2023	7.9	24	7.98	5	2.5	15.6	6.8×10^{3}	2.0×10^{3}	<0.00056	NA	NA
		20.11.2023	8	25	7.81	5	2.6	14.1	2.3×10^{4}	$\mathbf{4.5\times10^{3}}$	<0.00056	NA	NA
		11.12.2023	9	21	8.01	10	**5.2**	17.5	7.8×10^{3}	$\mathbf{4.5\times10^{3}}$	<0.00056	NA	NA
		26.12.2023	8.8	18	**8.72**	15	**3.7**	16.7	2.0×10^{3}	<1.8	<0.00056	NA	NA
		29.01.2024	7.8	17	8.22	10	**4.7**	14.4	2.3×10^{4}	$\mathbf{1.3\times10^{4}}$	<0.00056	NA	NA
		19.02.2024	10.2	22	8.34	15	**6.2**	24.5	1.3×10^{5}	$\mathbf{3.3\times10^{4}}$	<0.00056	NA	NA
		04.03.2024	6.8	20	7.65	15	**6.3**	25.3	1.3×10^{4}	$\mathbf{7.8\times10^{3}}$	0.009	NA	NA
		08.04.2024	8	29	7.46	15	**5.3**	18	1.3×10^{4}	$\mathbf{4.5\times10^{3}}$	RA	NA	RA
		22.04.2024	8.5	31.5	8.01	10	**6.4**	24.3	7.9×10^{4}	$\mathbf{4.9\times10^{4}}$	RA	NA	RA

NA-Not analyzed; RA-Result awaited

3094

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

Speed Post/E-mail

F. No.: PJ-14013(12)/3/2024-WQM-II-HO-CPCB-HO **Date:** 19/12/2024

To,

The Member Secretary,
Uttar Pradesh Pollution Control Board,
Building. No. TC-12V, Vibhuti Khand,
Gomti Nagar, Lucknow-226 010,
Uttar Pradesh

DIRECTIONS UNDER SECTION 18 (1) (b) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 REGARDING CONTROL OF INDUSTRIAL DISCHARGE IN JAJMAU, KANPUR DURING MAHA KUMBH, 2025 AT PRAYAGRAJ

WHEREAS, the Central Board, has delegated powers vested under Section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to the Member Secretary, Central Pollution Control Board vide its resolution made in 196th Board meeting dated 29th March, 2022 to issue direction under Section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to State Board (s); and

WHEREAS, amongst others, under section 16 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the Central Pollution Control Board, constituted under the Water (Prevention and Control of Pollution) Act, 1974 is to coordinate activities of the State Pollution Control Boards & Pollution Control Committees to provide technical assistance and guidance to SPCBs/PCCs; and

WHEREAS, amongst others, under section 17 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Board, constituted under the Water (Prevention & Control of Pollution) Act, 1974 is to plan a comprehensive programme for the prevention, control or abatement of pollution of streams and wells located in the State and to secure the execution thereof; and

WHEREAS, under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974, no person shall, without the previous consent of the State Pollution Control Board establish or take any steps to establish any industry, operation or process or any treatment or disposal system or any extension or addition thereto, which is likely to discharge sewage or trade effluent into a stream or well or sewer or on land; and

Contd.

WHEREAS, the discharge of partially treated/untreated effluent from the industries and sewage impact the water quality of River Ganga; thereby making the water unfit for bathing on the holy occasions; and

WHEREAS, a 20 MLD Common Effluent Treatment Plant (CETP) located in Jajmau, Kanpur, Uttar Pradesh is commissioned in August 2024 and it is designed to treat effluent generating from 346 tannery Units located in Jajmau area. The CETP is operated by M/s VA TECH WABAG Ltd., Chennai; and

WHEREAS, a team of officials from CPCB carried out the compliance verification of newly commissioned 20 MLD CETP Jajmau along with the assessment of effluent management in Jajmau, Kanpur on 10/10/2024 and observed the following:

Effluent conveyance system:

i. The old 36 MLD CETP receives only sewage (approx. 24.5 MLD).

ii. The pre-treated tannery effluent from member tannery Units is conveyed to 20 MLD CETP through the conveyance channel of old 36 MLD CETP Jajmau via three newly constructed pumping stations located adjacent to pumping stations of conveyance system of old 36 MLD CETP at Chabilepurva, Sheetala Bazar & Budhiyaghat.

iii. From three new pumping stations, the effluent is pumped to the main Wazidpur pumping station (newly constructed), which transfers the effluent to the 20 MLD CETP for final treatment.

iv. Member Units still discharges their effluent into old pipeline network for sending effluent to new pumping stations which are located very close to old pumping stations of old CETP.

v. The individual connection of member tannery Units to the conveyance system of new 20 MLD CETP, via metered pipelines, is still pending.

20 MLD CETP Jajmau, Kanpur:

i. The 20 MLD CETP Jajmau is based on extended aeration system. Average flow of about 8.53 MLD was received at CETP Inlet.

ii. New 20 MLD CETP is operational since August, 2024 and stabilization & Reliability Test Run (RTR) of the CETP is expected to be completed before 7th December, 2024.

iii. There is a provision of mixing treated effluent of CETP with treated sewage of STPs located in Jajmau CETP-STP complex (installed capacities of 130, 43 & 5 MLD) and old 36 MLD CETP Jajmau. The mixed effluent (treated tannery effluent + treated sewage) is then discharged into the irrigation channel.

iv. Sample analysis results are given below:

Parameter	CETP Inlet (Tannery effluent)	Outlet of STPs before mixing tank	Outlet of CETP before mixing tank	Treated effluent of CETP after dilution with treated sewage	Treated effluent after dilution in Irrigation channel
pH	7.58	7.97	6.97	7.58	7.80
Colour	NA	50	NA	NA	NA
BOD (mg/l)	1350	32.9	131	30	58.8
COD (mg/l)	3922	108	431	93.9	189
TSS (mg/l)	2479	23.6	30.2	21.7	79.9
TDS (mg/l)	NA	NA	6517	1993	1963
FDS (mg/l)	13181	NA	6063	1340	1848
Chloride (mg/l)	168	NA	553	280	327
Sulphide (mg/l)	NA	NA	NA	BDL	< 1.0
Oil & Grease (mg/l)	NA	NA	NA	5.18	16.5

NA: Not analyzed; BDL-Below detection limit

v. The treated effluent of CETP before mixing with treated sewage was found non-complying w.r.t. discharge norms for BOD-131 mg/l (against norm of 30 mg/l) and COD-431 mg/l (against norm of 250 mg/l).

vi. Pre-treated tannery effluent received at CETP inlet was not meeting the standards prescribed by Uttar Pradesh Pollution Control Board (UPPCB) for TSS-2479 mg/l (against norm of 600 mg/l).

vii. Online Continuous Emission Monitoring System (OCEMS) at CETP Outlet was not functional.

viii. The newly constructed 900 KLD Common Chrome Recovery Unit (CCRU) was found non-operational.

ix. No record of generation/disposal of sludge was maintained.

AND WHEREAS, CPCB along with UPPCB carries out regular monitoring of river water quality (Ganga-8 and Pandu-1) and 29 drains (Kanpur-27 and Unnao-02) in Kanpur-Unnao region. Based on the data of monitoring of rivers and drains carried out on 08/10/2024 & 21/10/2024, following observations are made:

Drains:

i. Out of 29 drains monitored in Kanpur (27) and Unnao (2), 20 drains have gradient towards river Ganga (18 in Kanpur and 2 in Unnao) and 9 drains have gradient towards river Pandu.

ii. In Kanpur, out of 18 drains discharging wastewater into river Ganga, 10 drains were tapped. Out of 10 tapped drains, 5 drains were found dry and overflow was observed in 5 drains namely Bhagwat Das Ghat drain (46.1 MLD), Muir Mill drain (1 MLD), Wazidpur drain (0.3 MLD), Permiya drain and Budhiya Ghat drain.

iii. Significantly high values of colour, BOD & COD were observed in following drains of Kanpur:

   a. Dabka drain (Untapped, flow-1.7 MLD): Colour-125 Hazen on 08/10/2024.

   b. Sheetala Bazar drain (Untapped, flow-16.1 MLD): BOD-340 mg/l & COD-891 mg/l on 08/10/2024 and BOD-1537 mg/l & COD-2135 mg/l on 21/10/2024.

   c. Budhiya Ghat drain (Untapped): BOD-594 mg/l & COD-1150 mg/l on 21/10/2024.

   d. Wazidpur drain (Tapped, overflow-0.3 MLD): Colour-250 Hazen, BOD-987 mg/l & COD-1874 mg/l on 08/10/2024.

iv. Out of 9 drains discharging into river Pandu in Kanpur, 6 drains were tapped. Out of 6 tapped drains, overflow was observed in 5 drains namely Ratanpur drain (10.6 MLD), Panki drain (3.9 MLD), Ganda drain (36.5-223.7 MLD), Halwakhanda drain (23.4-24.7 MLD) and COD drain. Significantly high value of colour (125 Hazen) was observed in Shiv Nagar, Pipauri drain on 21/10/2024.

River water quality:

Water quality of river Ganga, from Bithoor to Fatehpur, was conforming to the primary outdoor bathing criteria (pH: 6.5-8.5, DO≥5 mg/l, BOD≤3 mg/l, fecal coliform≤2500 MPN/100 ml) w.r.t. pH & DO at all monitoring locations on all the occasions. In terms of BOD and fecal coliform, river was not conforming to the primary criteria for bathing at all the monitoring locations.

AND WHEREAS, CPCB issued letters dated 06/12/2021, 02/11/2022, 25/11/2022, 19/12/2022, 07/03/2023, 20/03/2023, 05/04/2023, 12/05/2023, 27/06/2023, 16/08/2023, 19/09/2023, 13/10/2023, 01/01/2024 and 17/09/2024 to UPPCB to control the discharge of industrial effluent into drains of Kanpur and ensure no wastewater discharge from tapped drains into river Ganga; and

WHEREAS, CPCB issued direction dated 02/07/2024 to UPPCB under section 18 (1) (b) of Water (Prevention and Control of Pollution Act, 1974 to take appropriate measures including issuance of directions to ensure implementation of following pollution control measures in a time bound manner:

i. UPPCB shall take immediate necessary action to effectively control all polluting sources contributing high BOD, COD, colour and total Chromium to the identified drains.

ii. UPPCB shall direct the concerned authorities to ensure immediate repair of broken/damaged/temporary tapping provisions at drains and sewage pumping stations shall be operated regularly so that no wastewater is discharged through tapped drains.

iii. UPPCB shall ensure that no industry disposes untreated/partially treated effluent not meeting prescribed standards into any drain so that River Ganga does not receive any coloured/untreated effluent.

iv. UPPCB shall setup surveillance squads for tanneries and illegal industrial Units and ensure that no illegal industrial activities are being carried out.

v. UPPCB shall take coercive action, as deemed fit, including levying of environmental compensation against the industries discharging partially treated/untreated industrial effluent and do not have adequate effluent treatment facilities to comply with the discharge norms and also on illegal industrial activities operating in the catchment of identified drains.

AND WHEREAS, no action taken report has been received so far from UPPCB; and

WHEREAS, Maha Kumbh, 2025, an important religious congregation, is scheduled to be held in Prayagraj from January 13 to February 26, 2025. This religious ritual involves a holy dip (bathing) in the Ganga River. Consequently, it is necessary to ensure the maintenance of water quality of River Ganga at Prayagraj and upstream locations; and

It is evident that 20 MLD CETP located at Jajmau, Kanpur is not operated and maintained properly to comply with the treated effluent discharge norms. The 700 KLD CCRU in Jajmau, Kanpur was found non-operational. Industrial effluent received at the inlet of the CETP is also not meeting the inlet effluent quality standards prescribed by UPPCB indicating that member Units are not complying with CETP inlet effluent quality standards. The individual connection of member tannery Units to the conveyance system of new 20 MLD CETP, via metered closed conduit pipelines, is pending. Significantly high values of colour, BOD and COD in drains of Kanpur indicated illegal discharge of partially/untreated effluent by industries into drains of Jajmau, Kanpur. Inadequate treatment of effluent by CETP, non-operation of CCRU, improper operation of PETP of individual tannery Units and illegal discharge of partially/untreated effluent by industries into drains has potential to cause deterioration of the water quality of River Ganga.

NOW, THEREFORE, in exercise of powers conferred under section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974, Uttar Pradesh Pollution Control Board (UPPCB) is hereby directed to take appropriate measures including issuance of directions to ensure implementation of following pollution control measures in a time bound manner:

1. UPPCB shall ensure that all tannery Units in Jajmau immediately complete individual connections, via metered pipelines, to the conveyance system of newly commissioned 20 MLD CETP Jajmau by December 20, 2024. Tannery Units failing to comply shall be directed to close down their manufacturing operations till their connection to the

conveyance system is established & verified to prevent the discharge of untreated/partially treated effluent into river Ganga or drains.

2. Proper operation of newly constructed 700 KLD Common Chrome Recovery Unit in Jajmau shall also be ensured failing which member tannery Units shall be directed to close down their manufacturing operations till completion of Maha Kumbh 2025.
3. UPPCB shall direct the CETP operating agency to ensure proper operation & maintenance of 20 MLD CETP Jajmau to comply with the treated effluent discharge norms.
4. UPPCB, along with the District Administration, shall set-up surveillance squads for physical verification of connectivity of member tannery Units, via metered pipelines, with the conveyance system of new 20 MLD CETP by December 20, 2024.
5. UPPCB shall identify and take necessary action, including levying of environmental compensation, against the member tannery Units which discharges effluent without meeting the CETP inlet norms prescribed by UPPCB.
6. UPPCB, along with the District Administration, shall carry out physical verification to ensure that the 81 Units, out of 346, reported as non-operational are closed and their water & electricity connections are disconnected.
7. UPPCB shall direct the concerned authorities to ensure immediate repair of broken/damaged/temporary tapping provisions at drains and sewage pumping stations shall be operated regularly so that no wastewater is discharged through tapped drains.

UPPCB shall acknowledge receipt of these directions immediately and submit the action taken report along with a time bound action plan to CPCB by within 30 days of receipt of this direction.

(Bharat Kumar Sharma)
MEMBER SECRETARY

Copy to:

1.	**Additional Secretary (CP Division),** Ministry of Environment, Forest & CC, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110 003	: For kind information, please.
2.	**Director General,** National Mission for Clean Ganga, (MoWR, RD & GR), 1st Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi - 110 002	: For kind information, please.
3.	**District Magistrate-Kanpur Nagar,** Collectorate, Civil Lines, Kanpur Nagar-208001, Uttar Pradesh	: For kind information and necessary action, please
4.	**Managing Director,** Uttar Pradesh Jal Nigam (Rural), 6, Rana Pratap Marg, Lucknow - 226 001, Uttar Pradesh	: To take necessary measures to ensure proper functioning of pumping stations so that no untreated wastewater is discharged into river Ganga in Kanpur.
5.	**Managing Director,** Uttar Pradesh Jal Nigam (Urban), 6, Rana Pratap Marg, Lucknow - 226 001, Uttar Pradesh	
6.	**Project Director,** State Mission for Clean Ganga - Uttar Pradesh, Plot No. 18, Sector 07, Gomti Nagar Extension, Lucknow - 226 010, Uttar Pradesh	
7.	**Regional Officer,** Regional Office (Kanpur), Uttar Pradesh Pollution Control Board, 5243, Avas Vikas, Phase-III, Sadbhavna Nagar, Kalyanpur, Kanpur-17, Uttar Pradesh	: For kind information and necessary action, please.
8.	**Regional Director,** Regional Directorate (North), Central Pollution Control Board, PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow 226010, Uttar Pradesh	: For kind information and follow-up, please.
9.	**In-charge**, IT Division, CPCB	: For uploading the direction on CPCB website, please.

(Bharat Kumar Sharma)
MEMBER SECRETARY

Annexure- VII Type text here

3101

तन्मय कुमार, भा.प्र.से.
अध्यक्ष
Tanmay Kumar, I. A. S.
Chairman

सत्यमेव जयते

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

DO No. PJ-14013(12)/3/2024-WQM-II-HO-CPCB-HO
Delhi, the December 19, 2024

A new 20 MLD Common Effluent Treatment Plant (CETP) was commissioned in August 2024 to serve 346 tannery units in Jajmau, Kanpur. Pre-treated tannery effluent from these units is conveyed to the new CETP through the conveyance system of the old 36 MLD CETP. The individual connections of member tannery units to the conveyance system of new 20 MLD CETP, via metered pipelines, are still pending.

During the monitoring of 20 MLD CETP conducted by Central Pollution Control Board (CPCB) on 10/10/2024, only about 8.53 MLD tannery effluent was observed at CETP inlet. Treated effluent at CETP Outlet was found non-complying w.r.t. discharge norms for BOD, COD and TDS. Pre-treated tannery effluent received at CETP inlet was not meeting the standards prescribed by Uttar Pradesh Pollution Control Board (UPPCB) for TSS. The newly constructed 900 KLD Common Chrome Recovery Unit (CCRU) was also found non-operational. During regular monitoring of Dabka drain, Sheetala Bazar drain, Budhiya Ghat drain & Wazidpur drain carried out by CPCB along with UPPCB, flow of 0.3-16.1 MLD and significantly high levels of colour (125-250 Hazen), BOD (340-1537 mg/l) & COD (891-2135 mg/l) were observed which indicate that the tannery units in Jajmau are discharging untreated/partially treated effluent into these drains.

This issue was also discussed in the meeting chaired by the Principal Secretary to the Prime Minister on 14.11.2024 and it was decided that all the industries present in Kanpur Industrial Area may be asked to get connection from newly constructed CETP before start of Maha Kumbh Mela.

Considering the importance and urgency of the matter and the need to maintain the water quality of river Ganga at Prayagraj during Maha Kumbh 2025, I solicit your kind attention and intervention to control industrial discharge into River Ganga in Kanpur. You are requested to direct the concerned authorities/agencies to ensure completion of individual connections from the tannery units in Jajmau to the conveyance system of new 20 MLD CETP via metered pipelines, operationalization of newly constructed 900 KLD CCRU and compliance of CETP with discharge norms at the earliest. Furthermore, tannery units located in Jajmau failing to comply with these directives may be closed down so that no untreated/partially treated effluent is discharged into river Ganga or drains.

Yours sincerely,

(Tanmay Kumar)

Sh. Manoj Kumar Singh,
Chief Secretary,
Government of Uttar Pradesh,
101, 'B' Block, Lok Bhawan, U.P. Secretariat,
Lucknow - 226 001 (Uttar Pradesh)

Copy to,

1. **Dr. Ravindra Pratap Singh,**
   Chairman,
   Uttar Pradesh Pollution Control Board,
   Building. No. TC-12V, Vibhuti Khand, Gomti Nagar,
   Lucknow-226 010, Uttar Pradesh

2. **Shri Rajeev Kumar Mital,**
   Director General,
   National Mission for Clean Ganga,
   1st Floor, Major Dhyan Chand National Stadium,
   India Gate, New Delhi - 110002

13/12

(Tanmay Kumar)

3103

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

F. No: B-29016/59(1)/WM-I/NCEF(4)/2018/ 10339

August 31, 2018

Sub: Detailed Project Report (DPR) for Remediation of Chromium contaminated area at Rania, Kanpur Dehat, UP under National Clean Energy Fund (NCEF) – regarding

Sir,

This has reference to the project "Preparation of DPR and providing consultancy services for Remediation of Chromium contaminated area at Rania, Kanpur Dehat, UP" under National Clean Energy Fund (NCEF). It is to inform that DPR for remediation of Rania contaminated area has been accepted by Project Steering Committee in its 9th meeting was held on 07/06/2018 at CPCB, Delhi.

In view of above, the aforesaid DPR is enclosed herewith at an estimated remediation cost of Rs. 136 crore + Operating cost for groundwater remediation of Rs. 2.5 crore per month. This DPR also contains interim remedial options for removal and transfer of waste and contaminated soil into secured cells at a cost of Rs. 23.44 crore.

Yours faithfully,

(B. Vinod Babu)
Additional Director & Nodal Officer,
Waste Management Division

Encl.: As above

To,

1. The Principal Secretary
   Environment Department, Govt. of Uttar Pradesh,
   601, Bapu Bhawan, Secretariat, Vidhan Sabha Marg,
   Lucknow – 226001, UP
   Ref: Your letter No. 4128/55-Env/11-185(Env)/11 dated 07/02/2012 (copy enclosed for reference)
   : For kind information, please
2. The Director
   Hazardous Substance Management Division,
   Ministry of Environment, Forest & Climate Change,
   Indira Paryavarna Bhawan, Jor Bagh,
   New Delhi - 110003
   : For kind information, please
3. The Member Secretary
   Uttar Pradesh Pollution Control Board,
   Building. No. TC-12V, Vibhuti Khand,
   Gomti Nagar, Lucknow - 226 010
   : For kind information, please

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

NGT Matter

CP-26/5/2021-WM-I-HO-CPCB-HO

May 24, 2024

To,

The Member Secretary
UP Pollution Control Board
Building.No. TC-12V,
VibhutiKhand, Gomti Nagar,
Lucknow, Uttar Pradesh-226010

Sub: Joint site visit report to verify the status of action taken in compliance of Hon'ble NGT matter in OA No. 985 & 986/2019 (PB) on Remediation of Chromium contaminated site at Rania, Kanpur Dehat, UP – reg

Sir,

This has reference to the lifting and disposal of hazardous waste from the contaminated site at Rania, Kanpur Dehat, UP through TSDFs, in compliance to Hon'ble NGT order dated 04.03.2024 in OA No. 985 & 986/2019 (PB). In this regard, please find enclosed herewith the report of joint site visit carried out by the officials of CPCB and UPPCB on 16th April, 2024 to verify said activity.

Yours faithfully,

(V. P. Yadav)
Director & Head
Waste Management Division-I

Encl.: As above

Copy to:

1. The Regional Director,
Regional Directorate-Lucknow
Central Pollution Control Board,
Ground Floor, PICUP Bhawan,
Vibhuti Khand, Gomti Nagar,
Lucknow – 226 010 : For information and with request to follow-up the matter, please

(V. P. Yadav)

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

NGT Matter

CP-26/5/2021-WM-I-HO-CPCB-HO

May 24, 2024

To,

The Member Secretary
UP Pollution Control Board
Building.No. TC-12V,
VibhutiKhand, Gomti Nagar,
Lucknow, Uttar Pradesh-226010

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Yours faithfully,

(V. P. Yadav)
Director & Head
Waste Management Division-I

Encl.: As above

Copy to:

1. The Regional Director,
Regional Directorate-Lucknow
Central Pollution Control Board,
Ground Floor, PICUP Bhawan,
Vibhuti Khand, Gomti Nagar,
Lucknow – 226 010 : For information and with request to follow-up the matter, please

(V. P. Yadav)

Central Pollution Control Board, Delhi
Waste Management Division - I

Final Report on Joint Visit to Rania, Kanpur Dehat, UP for verifying the completion of lifting & disposal of chromium-contaminated hazardous waste through TSDFs followed by stabilization and sampling of soil from excavated site and groundwater around the contaminated site

1. Background

The contaminated dump sites (subject site) is located north of National Highway-2 (NH-2) near Khan Chandpur village which is about 3 km west of the town of Rania, Kanpur Dehat, UP. Indiscriminate dumping of chrome sludge has resulted contamination of soil at various locations around the subject site. The quality of groundwater was also impacted due to leaching of hexavalent chromium from the waste dump sites, the contaminated plume has spread up to Khan Chandpur village towards south directions from the subject site up to distance of 1.5 km.

In this regard, Hon'ble NGT vide order dated 16.11.2021, in OA No. 985/2019 & 986/2019, regarding Remediation of Chromium dumps at Rania, Kanpur Dehat, UP, constituted a five-member expert Committee under the Chairmanship of Chief Secretary, U.P. with nominees of MoEF&CC, CPCB, NMCG, UPPCB and District Magistrates of Kanpur Dehat and Kanpur Nagar. In this regard, Hon'ble NGT directed to prepare road map for remedial action.

In compliance to the aforesaid order of the Hon'ble NGT, Expert Committee meeting was held under the Chairmanship of Chief Secretary, UP. Subsequently, Chief Secretary constituted, 04 member Sub-committee for disposal of accumulated waste at Rania through TSDFs. Members of Sub-committee are as below:

(i) Sh V. P. Yadav, Director, CPCB
(ii) Member Secretary, UPPCB
(iii) Dr. Pravin Kumar, Director (Technical), NMCG
(iv) ADM, Kanpur-Dehat, UP

The Sub-committee in its meeting held on 10.06.2022 decided that sampling and analysis of hazardous waste from the Cr(VI) contaminated sites at Rania, is to be carried out jointly by CPCB and UPPCB in presence of TSDF operators for assessment of actual chromium concentration in the waste.

Accordingly, officials of CPCB and UPPCB, along with team from M/s Bharat Oil Bharat Oil & Waste Management Ltd. (M/s BOWML), and M/s UP Waste Management Project (UPWMP) visited the subject site on 16.06.2022 to carry out sampling to ascertain the present concentration in the waste as well as estimate the quantity of Cr(VI) bearing Waste. Findings of the said visit are given below:

(i) 11 composite samples were collected from 55 excavated pits, the observed concentration of Cr (IV) in TCLP was ranging from 99 mg/L to 214 mg/L and Cr (Total) was in the range of 23,800 – 34,800 mg/kg.

(ii) Total area impacted with Cr(VI) was estimated as 43,180 m^2. Based on the depth in the range of 0.8 m to 2.4 m, volume of Cr(VI) containing waste was estimated to be about 51,520 m^3.

Based on the observations/findings, the sub-committee in its meeting apportioned the waste to M/s BOWML and M/s UPWMP in quantities of about 5,000 MT and 80,000 MT, respectively. Thereafter, it was observed through the joint visit held during 19-20th May, 2023 that remaining waste lying at the site is about 5,000 MT-7,000 MT.

2. Purpose of the Visit

In compliance to the Hon'ble NGT matters in OA No. 985/2019 & 986/2019, regarding "Remediation of Chromium dumps at Rania, Kanpur Dehat, UP", officials of CPCB-HO and UPPCB visited the site on 16th April, 2024 for Pre-monsoon monitoring and to verify the completion of lifting & disposal of chromium contaminated waste through TSDFs as well as the present status of the contaminated site (subject site).

During the joint visit, groundwater samples were collected around the subject site, which includes villages namely Gharampur, Shivnathpurva, and Khanchandpur. Also, soil and waste samples were collected from the excavated subject site. List of officials visited is given at **Annexure-I.**

3. Observations/Findings

(i) Hazardous waste from the contaminated site had been excavated. However, some quantity of hazardous waste (Approx. 5,000-6,000 MT) is still lying which includes vehicle tyre-washing unit constructed at the subject site, top layer of Cr (VI) waste (approx. to 10 cm depth) of the excavated site.

(ii) During the visit, yellowish-colored topsoil was observed in front of M/s Natraj Ltd., a plastic pipe-making unit, which is located just North-West to the subject site (apart from the subjected site area) which indicates contamination of chromium.

(iii) It is also suspected that the aforesaid unit i.e. M/s Natraj Ltd., had used the Cr (VI) contaminated material for back filling of the unit premises.

(iv) During the visit, Groundwater samples were carried out from 13 locations including 10 previous sampling locations of the surrounding villages namely; Gharampur, Shivnathpurva and Khanchandpur.

The corresponding groundwater sampling location map is given at **Figure-1 of Annexure-II.** The analysis result of groundwater is given at **Table-1 of Annexure-II.** Out of 13 samples, the concentration of Cr(VI) exceeded w.r.t., BIS-DW standard in **7 samples** in the range of **0.17 mg/L to 6.96 mg/L.** Year-wise Cr(VI) concentration trend in in groundwater is depicted at **Figure-3.**

(v) 09 soil samples were collected from the subject site to a depth of 0.3 m. Geo-coordinates of the sampling locations along with the analysis result are given at **Table-2 of Annexure-II.** The analysis results of the said samples reveal the contamination in the range of **227-1,863 mg/kg,** which exceeded concentration of **chromium (total) w.r.t., soil screening level** for **industrial land use (i.e. 87 mg/kg).**

(vi) Further, 2 waste samples were collected from 2 locations where yellowish patches were observed on the soil. The analysis result is given at **Table-3 of Annexure-II.** The leachability concentration for Cr(VI) is obtained as **725.88 and 1,153.67 mg/L,** which is compared w.r.t. **leachability concentration for Cr (VI) of waste (0.5 mg/L)** for secured landfilling as stipulated in CPCB guidelines for the upkeep of TSDFs. For both samples, the **leachability concentration for Cr(VI) exceeds w.r.t the leachability concentration for Cr (VI).**

(vii) Site visit photographs are depicted at **Annexure-III.**

4. Recommendations

i. The entire hazardous waste from the subject site and nearby places should be lifted and disposed of through TSDF as per Standard Operating Procedure (SOP) before monsoon.

ii. UPPCB may investigate in matter of using contaminated material for back filling by M/s Natraj Ltd. for development of their unit premises and initiate appropriate action as deemed fit.

iii. As per the DPR prepared by the CPCB, contaminated soil should be excavated and treated after lifting the entire waste from the subject site and nearby places.

iv. As per the directions passed by Hon'ble NGT, PB vide order dated 16.05.2023 regarding groundwater, pilot remediation project should be taken up at the earliest.

***

Annexure-I

CPCB-HO, Delhi

1. Sh. G. Rambabu, Scientist-E
2. Sh. Manoj Kumar, Scientist-B
3. Sh. Thorat Siddesh Sanjay, Senior Laboratory Assistant

UPPCB

4. Sh. Manoj Chaurasia, Regional Officer, Kanpur Dehat, UPPCB
5. Sh. Ashish Kumar, Monitoring Assistant, UPPCB
6. Sh. Anmol Rathore, JRF, UPPCB

Annexure-II

Figure-1a: Geo-location of Groundwater Sampling at Village-Gharampur (sample locations i.e. HP1, HPG1 & HP2)

Figure-1b: Geo-location of Groundwater Sampling at Village- Shivnathpurva (sample locations i.e. HP3 & HP4) and Near to M/s Natraj Ltd. (sample locations i.e. RBW1)

Figure-1c: Geo-location of Groundwater Sampling at Village- Khanchandpur.

Figure-2: Geo-location of Soil and waste Sampling

Table 1: The analysis result of Groundwater samples

S. No.	Sampling Point (Depth)	Geo-coordinates		Cr(VI) concentration (mg/L) as on		
				16.04.2024	19.05.2023	13.02.2023
Village: Gharampur						
1.	HP-01	26°24'55"N	80°02'00"E	BDL	BDL	BDL
2.	HP-02	26°24'48"N	80°02'08"E	BDL	BDL	BDL
3.	RHPG1	26°24'49"N	80°02'07"E	**5.57*** **	-	-
Village: Shivnathpurva						
4.	HP-03	26°24'30"N	80°02'28"E	BDL	**0.2**	**1.2**
5.	HP-04	26°24'30"N	80°02'29"E	BDL	BDL	BDL
Village: Khanchandpur						
6.	RPNGBW	26°23'35"N	80°03'31"E	**0.17*** **	-	-
7.	HP-05	26°23'34"N	80°03'34"E	*	**0.1**	**0.2**
8.	HP-06	26°23'35"N	80°03'25"E	BDL	BDL	BDL
9.	HP-07	26°23'43"N	80°03'02"E	BDL	**2.27**	**3.2**
10.	HP-08	26°23'43"N	80°03'02"E	**	**0.49**	**0.1**
11.	HP-08 (a)			**5.59**	**4.6**	-
11.	HP-09	26°23'40"N	80°02'57"E	**0.27**	BDL	BDL
12.	RBW-2	26°23'42"N	80°03'03"E	**4.83*** **	-	-
Near to M/s Natraj Ltd						
13.	RBW1	26°24'19"N	80°02'46"E	**0.23*** **	-	-

Note: *Drinking water BIS standard for chromium:* ***0.05 mg/L***

* *Bore-well motor was not working during sampling*

** *No power during the sampling*

*** *New sampling location points*

Table-2: The analysis result of soil samples from the subject site (after excavation of HW)

S. No.	Sampling Points	Geo-coordinates		Total Chromium concentration (in mg/kg)
1.	RS1	26°24'19"N	80°02'47"E	**297.1**
2.	C-1	26°24'15"N	80°02'51"E	**1863**
3.	C-2	26°24'14"N	80°02'52"E	**1201**
4.	C-3	26°24'13"N	80°02'52"E	**1454**
5.	C-4	26°24'12"N	80°02'52"E	**1253**
6.	C-5	26°24'08"N	80°02'53"E	**281.9**
7.	C-6	26°24'06"N	80°02'53"E	**405.9**

8.	C-7	26°24'09"N	80°02'50"E	**751.2**
9.	C-8	26°24'11"N	80°02'49"E	**227**
***Note:** *Soil screening level of **Total Chromium (87 mg/kg)** for industrial/commercial land use*				

Table-3: Analysis result of waste samples carried out from the subject site where yellowish patches were observed on the soil

S. No.	Sampling Points	Geo-coordinates		Hexavalent Chromium concentration (TCLP) (in mg/L)
1.	RW1	26°24'19"N	80°02'47"E	**1153.67**
2.	RW2	26°24'15"N	80°02'51"E	**725.88**
***Note:** ***Hexavalent Chromium (0.5 mg/L)** for secured landfilling as stipulated in CPCB guidelines*				

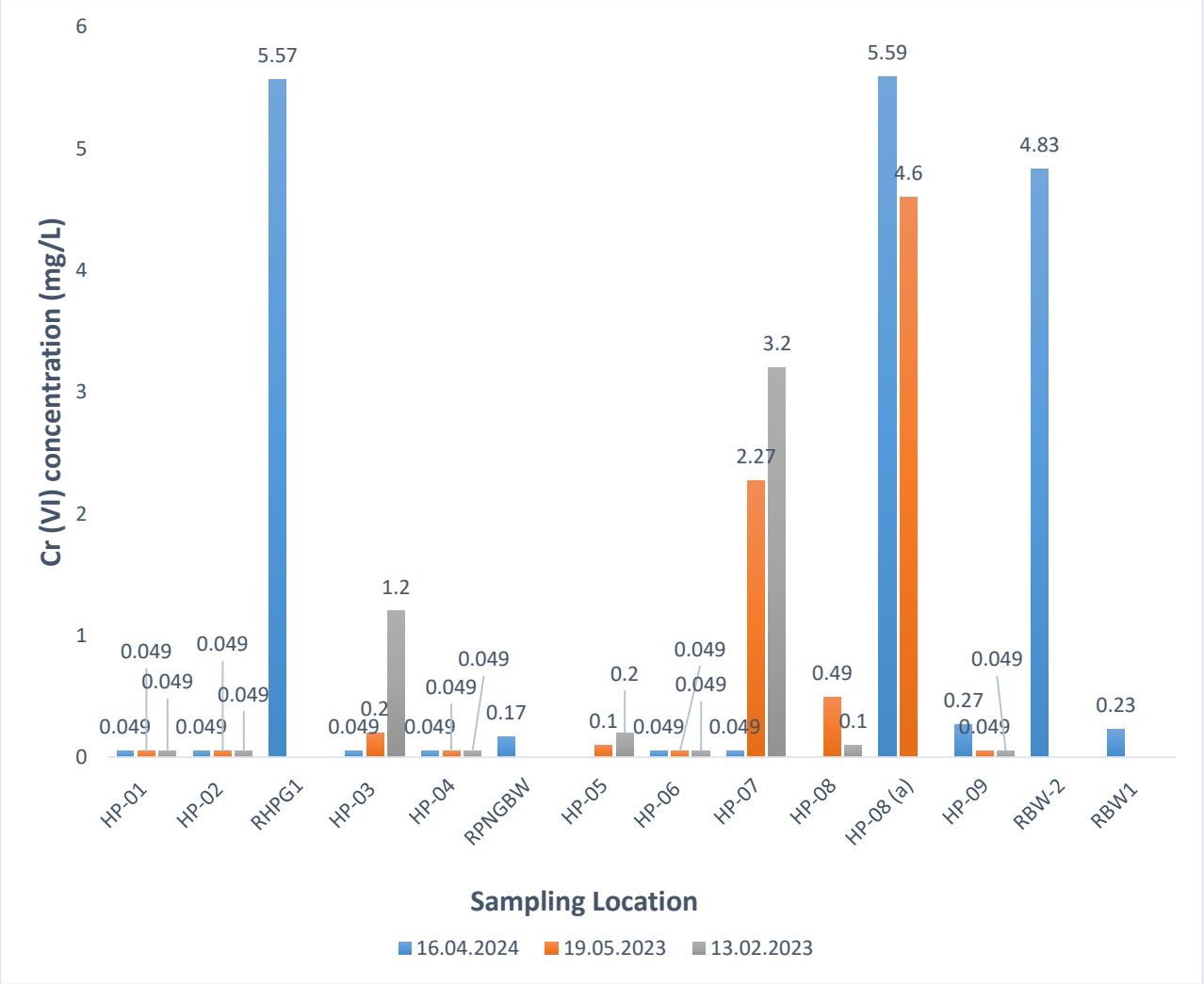

Figure-3: Year-wise Cr(VI) trend in GW at Rania, UP
(Note: BDL presents as 0.049 mg/L)

Annexure-III

Site Visit Photographs

Survey at Excavated Dumpsite

Remaining waste at dumpsite

GW-Sampling

Soil sampling

Annexure-X

Item Nos. 05 to 07 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 985/2019
(I.A. No.568/2024)

In Re : Water Pollution by Tanneries at Jajmau Kanpur Uttar Pradesh

With

Original Application No. 986/2019

In Re : Water Pollution at Rania Kanpur Dehat & Rakhi Mandi Kanpur Nagar Uttar Pradesh

With

Original Application No. 528/2023

News report published in Dainik Jagran dated 14.08.2023 "highlights a growing concern regarding industrial pollution in the Godhrauli village"

Date of hearing: 27.11.2024

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Amicus Curiea: Ms. Katyayni, Adv. (Amicus Curiae in OA Nos. 985 & 986 of 2019)

Respondents: Ms. Priyanka Swami & Ms. Simran Sehgal, Advs. for the State of UP
Mr. Raj Kumar, Adv. for CPCB
Mr. Pradeep Misra & Mr. Daleep Dhyani, Advs. for UPPCB (Through VC)
Mr. Gigi. C. George, Adv. for CGWA & NMCG

ORDER

1. In these matters, the Tribunal is considering the issue of failure to scientifically handle and dispose of chromium dumps at Rania, Kanpur Dehat, Kanpur Nagar and Rakhi Mandi and also the continuing water pollution by the tanneries discharging untreated and partially treated industrial effluents and industrial pollution caused in the Districts concerned and its effect on water sources.

2. Learned Amicus Curiae on 14.08.2024 had sought permission to visit the affected area, collect the information and submit her assessment before the Tribunal. Under the permission granted by the Tribunal, she visited Districts Kanpur Dehat, Kanpur Nagar, and Fatehpur. Learned Amicus Curiae has submitted the interim report dated 26.11.2024. In the said report, she has mentioned common environmental issues observed by her in 3 Districts:-

> ***"****Common environmental issues observed in the above noted 3 Districts:*
> *1. Municipal Solid Waste*
> *2. Plastic Waste*
> *3. Choked drains*
> *4. Surface water pollution (in Rivers)*
> *5. Ground water contamination*
> *6. Soil contamination (especially Kanpur Dehat & Fatehpur)*
> *7. Non- operational STP (Kanpur Nagar)*
> *8. Lack of STPs and sewer network (Kanpur Dehat & Fatehpur)*
> *9. Health concerns and need for better medical infrastructure*
> *10. Construction on chemical/ hazardously contaminated sites*
> *11. Clean Drinking water*
> *12. Foul odour from sewers, drains and river.****"***

3. Referring to the conditions noticed at Kanpur Nagar, she pointed out the status and extent of pollution in Atal Ghat Nawab Ganj, Kanpur. The lack of adequate basic facilities in JK Cancer Hospital. The status of Gola Ghat drain and the improper functioning of STP Bingawa. Learned Amicus Curiae submits that image 12 of the report reflects the choked sewage lines of Juhi Baburiya. The report also contains the details of the improper functioning of STP Jajmau. So far as the District Kanpur Dehat is concerned, learned Amicus Curiae has referred to the photographs in image 21 showing chromium deposits on the other side, that is, the left side of the excavated site and image 22 showing the deposits of chromium still lying in the area. Referring to image 23, she has pointed out that on the excavated site of chromium, the rainwater has filled up and a water body has been created but the said water body is on the

chromium dump. Image 24 reflects chromium contamination in the nearby area and referring to the said image, she has pointed out that this is the area between the two industrial units. She also referred to image 31 to show that though there is a warning in the hand pump about the contaminated water, the said water is being used for bathing purposes and drinking by the cattle. Referring to image 33 she has pointed out that ash has been dumped on the agricultural land by the industries and referring to image 35 she has pointed out that the ash is used for filling the lands for various purposes. She has submitted that during her visit, she, in fact, had to walk on chromium deposits. She has also submitted that during the interaction, she had found people/patients suffering from psychological, neurological disorders and behavioural changes and also patients with skin and asthmatic issues. She has stated that she has disclosed her observation about the lack of sufficient Doctors in the area and the lack of facilities with the Pollution Control Board to test the presence of chromium, mercury and other heavy metals. Even no proper testing facility for testing the heavy metals in the blood and serum of the affected persons is available.

4. Learned Amicus Curiae referred to image 36 and has submitted that Noon River is now converted into a tiny industrial discharge system, and it was even difficult for the representative of the CPCB to take the sample. She has also submitted that tributaries of River Yamna flowing from these three districts are highly contaminated and likely appear to have been carrying industrial as well as domestic waste to River Yamuna.

5. Referring to the status of Fatehpur she has pointed out that image No. 41 shows a chromium deposit outside M/s MLMP Food Pvt. Ltd. and referring to image 42, she has submitted that since the boundary wall of the unit M/s MLMP Food Pvt. Ltd. was turning green therefore she had

entered that unit which was lying closed and had found that chromium plume covered with the earth showing that the site was used as dumping yard. Image 46 shows ash and chromium deposited land near the water body, and image 48 is of a chromium plume lying on the Baniya Kheda Road. Similarly, images 49 and 50 reveal the chromium near the road at Baniya Kheda, and image 51 is the photograph of an ash dump on the village pathway located between Baniya Kheda Road and the railway crossing. Images 52 and 53 are pictures of Agricultural land near a railway crossing where the chromium is dumped in huge quantities. Referring to image 54 learned Amicus Curiae has submitted the construction of educational institutions is going on near the chromium dump.

6. The above interim report submitted by learned Amicus Curiae indicates a serious environmental pollution condition existing in the three districts namely Kanpur Dehat, Kanpur Nagar and Fatehpur.

7. Learned Amicus Curiae had made the following recommendations:-

"Recommendation

Urgent Action is required for safeguarding life and health of people in contaminated areas:

a. *Immediate medical camps for affected populations and blood/ serum sampling by CSIR- IITR, Lucknow.*

b. *Inquiry on non-operation of STPs in Kanpur Nagar due and immediate resolution of the same. In case, remediation will take long time then some temporary action plan must be pursued to stop pollution of Gangaji and Pandu River (keeping in mind the Maha Kumbh also).*

c. *Temporary remediation of sewage where the drains are yet to be tapped/ diverted to STPs.*

d. *Mapping and identification of heavy metal (chromium and ash) contaminated sites at Kanpur Dehat, Kanpur nagar and Fatehpur. The people of affected areas must be provided with adequate water for life sustenance (which must include other chore than just drinking water).*

e. *Sampling of soil, groundwater and surface water of contaminated areas in the 3 districts and formulation of a time bound Action Plan.*

f. *River water monitoring: Water Quality Monitoring Index must include all biological, chemical, physical parameter for assessment of river health like FC, TC, pH, turbidity, electrical conductivity (EC), total dissolved solids (TDS), total alkalinity (TA), total hardness (TH)and calcium hardness (CaH), chemical oxygen demand (COD), biochemical oxygen demand (BOD), Pathogens, algae, chlorophyl count, bacteria, phytoplankton, dissolved oxygen (D.O.), sulphate (as SO4 2-), nitrate (as NO3) and chloride (Cl-), fluoride, arsenic levels. Some heavy metals like Iron, Zinc, Cadmium, Mercury, Nickel, lead and Chromium. temperature, turbidity, light transmission, sechi disk transmission etc. Similarly, GWQI (i.e. Ground water quality Index) with detailed parameters must be undertaken.*

g. *No further construction be allowed on areas/ sites that have chromium deposition under the ground.***"**

8. Referring to the report, the submission of the learned Amicus Curiae is that the condition existing in these three districts is such that an environmental emergency should be declared in those districts.

9. Referring to the reports filed by the authorities containing the figures of the patients having issues such as skin problems, lung diseases, liver disease, anaemia, general illness, etc. She has submitted that the correct numbers have not been disclosed because all symptomatic treatments are done, and the testing facilities also do not exist. She has also submitted that she visited the cancer Hospital at Kanpur Nagar where she found the patients in very bad condition just waiting to die.

10. Learned counsel for the State of UP has submitted that the Authorities considered the issue once the final report comes and will take action. Having regard to the nature of the disclosure made in the interim report we require the Principal Secretary/ACS, Environment, State of UP to respond to the interim report supported by his affidavit and also to appear virtually on the next date of hearing.

11. Member Secretaries, CPCB and UPPCB are also directed to file their response affidavit disclosing the action taken by them on pollution control from tanneries, compliance of STPs and management of chromium including sludge by each of the tannery and other sites identified by Learned Amicus Curiae in her interim report at least one week before the next date of hearing.

12. Considering the disclosure made in the report, we implead the following as additional Respondents:-

1. Central Ground Water Authority through its Chairman
2. Member Secretary, Health, State of UP
3. NMCG through its Director General

13. We would like to know the status of the installation of river osmosis (RO/installation of nanofiltration (NF) as directed by the Tribunal by order dated 30.09.2022 and 16.05.2023.

14. Ms. Priyanka Swami, Advocate accepts notice on behalf of Member Secretary, Health, State of UP and Mr. Gigi. C. George, Advocate accepts Notice on behalf of CGWA and NMCG**.** Let reply by way of an affidavit be filed within four weeks by these respondents at least one week before the next date of hearing.

15. List on 22.01.2025.

Prakash Shrivastava, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

November 27, 2024
Original Application No. 985/2019
Original Application No. 986/2019
Original Application No. 528/2019
A..