

E-mail/Speed post

F. No. PJ-14013(12)/3/2021-WQM-II-HO-CPCB (CETP-Jajmau)

Dated: 08/12/2021

To,

Chairman,
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 NON-COMPLIANCE OF CETP, JAJMAU, KANPUR

WHEREAS, the Central Pollution Control Board, has delegated powers vested under Section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to the Chairman, Central Pollution Control Board vide its resolution made in 133rd Board meeting item no. 3.12 dated 24th March, 2005 to issue directions under Section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to the State Pollution Control 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 (CPCB), 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 to promote cleanliness of streams and wells in different areas of the States; 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 (SPCB), constituted under the Water (Prevention & Control of Pollution) Act, 1974 is to plan a comprehensive programme for 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 steps to establish any industry, operation, or process or any treatment or disposal system or an extension or addition thereto, which is likely to discharge sewage or trade effluent into a stream or well or sewer or on land; and

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

WHEREAS, CETP at Jajmau, Kanpur is based on UASB technology for treatment of 9 MLD tannery effluent after mixing with 27 MLD domestic sewage and thus having design capacity of 36 MLD. About 350 tanneries discharge their pre-treated effluent into the CETP, Jajmau through pumping stations located on three drains namely, Sheetla Bazaar, Wajidpur drain & Budhiya Ghat drain in Jajmau area; and

WHEREAS, the exhausted chrome tanned liquor collected from various tanneries is transported through tankers to the Common Chrome Recovery Plant (CCRP), and regenerated chrome is to be sold to tanneries for reuse. The CCRP is operated by Kanpur Nagar Nigam. Only 117 tanneries are member of CCRP; and

WHEREAS, it was decided in the meeting organized by CPCB on 04.11.2019, with the officials of NMCG and UPPCB, that "treated effluent of CETPs (upcoming 20 MLD and existing 36 MLD) at Jajmau should comply with effluent discharge norms as notified under Environment (Protection) Rules, 1986 or prescribed by UPPCB at CETP outlet, except for TDS (or FDS) of 2100 mg/l; which could be complied after dilution with treated sewage from existing STPs."; and

WHEREAS, CETP, Jajmau was inspected by the teams of officials from CPCB on 17.06.2021 for compliance verification and performance evaluation and was found non-complying w.r.t treated effluent discharge standards for CETP notified by MoEF&CC vide notification dated 01/01/2016 under E (P) Act, 1986 for **BOD-308 mg/l (against 30 mg/l)**, **COD-758 mg/l (against 250 mg/l)**, **TSS-248 mg/l (against 100 mg/l)**, **Chloride-2084 mg/l (against 1000 mg/l)**, **sulphide-204 mg/l (against 2 mg/l)**, **Oil & Grease-10.6 mg/l (against 10 mg/l)** and **Chromium-12.8 mg/l (against 2 mg/l)**. Raw tannery effluent received at the tannery channel inlet was also not meeting the standards for CETP prescribed by UPPCB for **TSS-4954 mg/l (against 600 mg/l)**; and

WHEREAS, CETP, Jajmau was inspected by the teams of officials from CPCB on 30.06.2021 for compliance verification and performance evaluation and was found non-complying w.r.t treated effluent discharge standards for **BOD (194 mg/l against norm of 30 mg/l)**, **COD (431 mg/l against norm of 250 mg/l)**, **TSS (146 mg/l against norm of 100 mg/l)**, **chloride (1990 mg/l against norm of 1000 mg/l)** and **sulphide (182 mg/l against norm of 2.0 mg/l)** and **Total Chromium (8.4 mg/l against norm of 2.0 mg/l)**. Raw tannery effluent received at the tannery channel inlet was also not meeting the standards for CETP prescribed by UPPCB for **TSS (7701 mg/l against norms of 600 mg/l)** and **total Chromium (132 mg/l against 10 mg/l)**. Total Chromium-3.6 mg/l has been detected in domestic sewage inlet at CETP; and

WHEREAS, CCRP, Jajmau was inspected on 17.06.2021 for compliance verification and performance evaluation and found operating intermittently depending upon the receipt of chrome liquor from the tannery units; and

WHEREAS, CPCB issued direction dated 23.07.2021 to UPPCB under section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 to take appropriate action against the CETP, Jajmau and its member units and CCRP, Jajmau which may include closure or levying Environmental Compensation as deemed fit following appropriate procedure; and

WHEREAS, UPPCB vide letter dated 27.09.2021 has submitted the action taken report with respect to CPCB directions dated 23.07.2021, which was examined and following observations are made:

1. UPPCB vide letter dated 15/09/2021 has imposed Environmental Compensation of Rs. 5,25,000 against Uttar Pradesh Jal Nigam regarding non-compliance of CETP Jajmau during the defaulting period (17/06/2021 – 30/06/2021);
2. UPPCB has not taken any action on CCRP, Jajmau;
3. UPPCB has not taken any action against member units of CETP Jajmau for discharging untreated wastewater in to CETP.
4. The status of Environmental Compensation deposition has not been provided by UPPCB. If not deposited, the status of further action taken by UPPCB may be provided.
5. The further course of action has not been submitted by UPPCB to ensure the compliance of CETP & CCRP at Jajmau, Kanpur and the member units of CETP.

AND WHEREAS, CETP, Jajmau and CCRP, Jajmau were inspected by the teams of officials from CPCB on 06.09.2021 for compliance verification and performance evaluation and following observations are made:

CETP, Jajmau

- i. The CETP at Jajmau, Kanpur (Uttar Pradesh) was operational on the day of inspection. The utilized capacity of CETP was 34.91 MLD (August, 2021). The tannery effluent and domestic wastewater received at the inlet channel of CETP were 16.47 MLD and 23.77 MLD, respectively.
- ii. The CETP is based on Upflow Anaerobic Sludge Blanket (UASB) technology and its main components are: Screen & Grit Chamber for raw tannery effluent → Equalization Tank → IPS → Mixing Tank (Adding domestic wastewater from separate channel) → MPS → UASB Reactor – I & II → Collection Well → Pre-aeration Tank → Clariflocculator – I & II → Final outlet.
- iii. The CETP is connected with 400 member units.
- iv. Flow meters were not installed at the inlet and outlet of the CETP. However, V-notches were found at the receiving channels of tannery effluent and domestic wastewater.
- v. Online Continuous Emission Monitoring System (OCEMS) was not installed at the outlet of CETP.
- vi. The CETP has not provided information on valid Consent to Operate obtained from UPPCB.
- vii. Raw tannery effluent received at the tannery channel inlet was not meeting the standards for CETP prescribed by UPPCB for **TSS-16821 mg/l (against 600 mg/l) and Total Chromium-26.9 mg/l (against 10 mg/l)**.
- viii. Effluent (tannery effluent + domestic sewage) received at the inlet of the CETP was not meeting the inlet effluent quality standards prescribed by UPPCB for **TSS-942 mg/l (against 600 mg/l) and Total Chromium-27.2 mg/l (against 4 mg/l)**.

- ix. Treated effluent of CETP was found non-complying w.r.t. treated effluent quality standards for **BOD-176 mg/l (against 30 mg/l), COD-391 mg/l (against 250 mg/l), TSS-151 mg/l (against 100 mg/l), Chloride-1428 mg/l (against 1000 mg/l), Oil & Grease-28.2 mg/l (against 10 mg/l) and Total Chromium-4.72 mg/l (against 2 mg/l).**
- x. Treated effluent was being mixed with treated domestic wastewater from 130 MLD STP at Jajmau & sent to irrigation channel which is used for irrigation and the excess water goes to river Ganga.
- xi. After mixing of treated effluent of CETP with treated effluent of all three STPs (05 MLD, 130 MLD and 43 MLD), Fixed Dissolved Solids (FDS) were meeting CETP discharge standards notified by MoEF&CC vide notification dated 01/01/2016 under E (P) Act, 1986 (FDS-1429 mg/l against 2100 mg/l).
- xii. Biogas holder (clubbed with 130 MLD STP) at CETP was found defunct.
- xiii. CETP has one bore well not fitted with electromagnetic flow meters for ground water extraction. CETP has also not provided No Objection Certificate (NOC) from Central Ground Water Board.

CCRP, Jajmau

- i. CCRP was non-operational during inspection on 06/09/2021 as no chrome liquor was received at the CCRP for the treatment.
- ii. Only 117 tanneries are member of CCRP.
- iii. Only 1.6-10.3 KLD exhausted chrome liquor was collected from member tannery units during August 11-31, 2021 (as per logbook) indicates that member units are not giving liquor to CCRP for chrome recovery.
- iv. Samples from the equalization tank and the treated effluent from settling tank were collected to quantify the chromium concentration. Analysis report indicates pH-4.08, Chromium (VI)- BDL and Total Chromium-391 mg/l in raw effluent (CCRP inlet/Equalization tank) and pH-7.95, Chromium (VI)- BDL and Total Chromium-0.98 mg/l in treated effluent at CCRP outlet.
- v. The treated effluent, after chrome recovery, was sent to inlet of raw tannery effluent channel of 36 MLD CETP, Jajmau, Kanpur.
- vi. Flowmeter/V-notch has not been installed at inlet/outlet of the CCRP to measure the untreated/treated volume of effluent.
- vii. Centrifugal machines installed at the CCRP were not functional.
- viii. Logbooks for inlet & outlet flow, pump operations, electricity, maintenance/breakdown maintenance were not maintained properly.
- ix. CCRP was not having a valid consent from UPPCB under Water (Prevention and Control of Pollution) Act, 1974. Record of authorization for disposal of hazardous sludge was also not provided during inspection.

AND WHEREAS, CPCB has carried out weekly monitoring (Oct 5th-12th, 2021) of drains discharging into river Ganga in Kanpur and found that wastewater (flow-13.8 MLD on 05.10.2021) from Sheetla Bazar drain was flowing into river Ganga with BOD as 688-1190 mg/l, COD as 1682-2403 mg/l, Color as 200-750 Hazen and total Chromium as 9.8-24 mg/l which indicates illegal discharge from tannery units into Sheetla Bazar drain; and

WHEREAS, it was observed that the total flow generated from tanneries cluster in Jajmau (Kanpur) far exceeds the hydraulic capacity of the CETP, 9 MLD, as well as the consented effluent quantity, about 12 MLD, and the average characteristics of tanneries effluent

received at Jajmau (Kanpur) CETP do not conform to its design inlet limits in respect of TSS and Total Chromium. Tanneries are also discharging excess wastewater generated in to domestic sewage channel as untreated. Flow meter and Online Continuous Emission Monitoring System has not been installed at the outlet of CETP; and

WHEREAS, CCRP is also functioning intermittently most of the time due to unavailability of exhausted chrome liquor. Only 117 units are member of CCRP while there are more tanneries which have not installed Chrome Recovery Unit (CRU) and also not the member of CCRP. It was observed that no flow meter installed at CCRP and no record of operations are being maintained; and

WHEREAS, despite lapse of considerable time, the state of non-compliance of standards by the CETP at Jajmau, Kanpur has continued unabated and it has become necessary to take action against the CETP member industries; and

WHEREAS, it is evident that Primary Effluent Treatment Plant (PETP) and Chrome segregation system installed by the member units are not adequate or not functioning properly to achieve desired PETP treated effluent quality norms or tanneries are discharging untreated effluent in to CETP, which effects the treatment efficiency of CETP. The presence of high concentration of Total Chromium in domestic sewage inlet channel to CETP also indicates that excess wastewater generated from tanneries is being discharged in to drains as untreated. The treated effluent discharged from CETP is not meeting the desired discharge standards. CCRP is also functioning intermittently most of the time due to unavailability of exhausted chrome liquor. High BOD and Chrome bearing treated effluent discharged from CETP and untreated wastewater discharged from tanneries in to drains posing potential threat to surface water/ground water quality.

AND NOW THEREFORE, in view of the above, and in exercise of powers delegated to the Chairman, Central Pollution Control Board under Section 18 (1) (b) of Water (Prevention & Control of Pollution) Act, 1974, you are hereby directed to take appropriate action against the **CETP, Jajmau and its member units and CCRP, Jajmau** which may include closure or levying Environmental Compensation on CETP, Jajmau and its member units and CCRP, Jajmau as deemed fit.

UPPCB shall acknowledge receipt of these directions immediately and the action taken report shall be submitted to CPCB within 30 days.

13th 8/12/21
(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. **Managing Director,**
Uttar Pradesh Jal Nigam,
6, Rana Pratap Marg,
Lucknow - 226001 (U.P.) : For kind information and to
ensure proper O&M of
CETP.
3. **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.
4. **Joint Secretary (CP Division),**
Ministry of Environment Forests & Climate Change,
Indira Paryavaran Bhawan, Jor Bagh Road,
New Delhi - 110003 : For kind information,
please.
5. **Municipal Commissioner,**
Kanpur Municipal Corporation
(Kanpur Nagar Nigam),
Moti Jheel, Kanpur - 208002 (U.P.) : For kind information and to
ensure proper collection of
exhausted chrome liquor
& O&M of CCRP.
6. **District Magistrate,**
Kanpur Nagar,
Collector Mansion Road,
Kanpur, Uttar Pradesh - 208001 : For kind information and
necessary action, please.
7. **Regional Director (North),**
Central Pollution Control Board
PICUP Bhawan, Ground Floor, Vibhuti Khand,
Gomti Nagar, Lucknow - 226 010 : For kind information,
please.
8. **In-charge, IT Division, CPCB** : For uploading on CPCB
website, please.


(PRASHANT GARGAVA)
MEMBER SECRETARY