



B-190188/CETP-Jajmau/PIAS/WQM-II/CPCB/2019-20/4000

23.7.2021

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 133<sup>rd</sup> Board meeting item no. 3.12 dated 24<sup>th</sup> 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**, CPCB issued directions dated 08.05.2019 under Section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to the Uttar Pradesh Pollution Control Board (UPPCB) for restoration of water quality of River Ganga in Kanpur and Unnao region and to comply with following directions:

- i. To ensure that no industry disposes untreated effluent and any effluent not meeting prescribed standards into any drain so that river Ganga does not receive any colored/ untreated effluent.
- ii. To regularly monitor compliance of industrial units and grant consent-to-operate to industries having requisite effluent treatment facilities and complying with prescribed standards and ensure that no industrial unit operates without valid consent-to-operate and industries operating without valid consent should be closed down forthwith.
- iii. To setup surveillance squads for tanneries and ensure that no illegal tanning activities are being carried out.
- iv. To impose Environmental Compensation on illegal tanning activities and submit weekly surveillance and action taken reports to CPCB.

**AND WHEREAS**, joint teams of CPCB and UPPCB officials carried out inspections of CETP, Jajmau on weekly basis during 19.03.2019-16.04.2019 and based on monitoring reports, the following observations were made:

1. Tannery effluent received is measured as 11 MLD- 19 MLD at CETP inlet which is more than the designed capacity of 9 MLD tannery effluent. 1:3 ratio of tannery effluent to sewage effluent is not being maintained causing enhanced toxic shock load on biological reactor resulting in reduced performance. It results in poor treatability of effluent.
2. High concentration of total Cr- in range of 2.38mg/l to 19.3mg/l, sulphides in range of 91.3mg/l to 165mg/l, TSS in the range of 74mg/l to 463 mg/l, in influent to CETP were observed, which cause hindrance to UASB operations resulting in poor performance. More than stipulated concentration of total Chromium and Sulphide in tannery effluent even after primary treatment and chrome recovery indicates improper functioning or non-performance of PETPs and Chrome recovery units of participating industries which results in to toxic shock to microbial species of biological reactor resulting into reduced efficiency.

3. More than allowed quantity of effluent generation indicates that participating tanneries are not adhering to UPCCB direction of operating on lower capacity.

**AND WHEREAS**, CPCB issued directions dated 13.05.2019 under Section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to the Uttar Pradesh Pollution Control Board (UPCCB) to comply with the following directions:

- i. All member tanneries connected to CETP Jajmau, Kanpur shall follow the PETP norms for discharge of primary treated effluent into the CETP.
- ii. CETP shall meet the desired effluent discharge standards at the outlet.
- iii. If CETP does not meet the prescribed effluent discharge standards at outlet, allowed production capacity of member tanneries shall be reduced to ensure that CETP outlet meets the prescribed discharge standards.
- iv. Member tanneries which do not meet PETP norms or follow directions regarding operations at reduced capacity shall be closed forthwith.

**AND WHEREAS**, CPCB vide letter dated 24.06.2019 asked UPCCB to submit the action taken report (ATR) with regard to the CPCB directions dated 13.05.2019; and

**WHEREAS**, CPCB issued directions dated 27.06.2019 under Section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to the Uttar Pradesh Pollution Control Board (UPCCB) to comply with following directions:

- i. To direct concerned authority to stop overflow of effluent in tapped drains and especially overflow from Wazidpur pumping station into Wazidpur drain.
- ii. UPCCB shall setup surveillance squads for tanneries and illegal industrial units and ensure that no illegal industrial activities are being carried out and submit weekly surveillance and action taken reports to CPCB.
- iii. UPCCB along with District Administration and Municipal Corporations shall conduct surveys to identify pollution sources and to close industrial units operating without valid consent and adequate effluent treatment system in Kanpur and Unnao regions.

**AND WHEREAS**, CPCB vide DO dated 08.08.2019 requested Chief Secretary, Government of Uttar Pradesh to ensure effective action against polluting activities and to advise concerned agencies including UPCCB to take effective action against polluting activities; and

**WHEREAS**, CPCB vide letter dated 30.08.2019 asked UPCCB to provide operational status of tanneries connected with CETP, Jajmau; and

**WHEREAS**, CPCB vide letter dated 20.09.2019 asked UPCCB that "Since, CETP is unable to function properly as sewage is not available as per the design requirements, the only course of action available is to close down CETP, Jajmau operations and the member



tanneries should be directed to set up their own full-fledged ETP or to close down their manufacturing operations, immediately.”; and

**WHEREAS**, in the meeting held on 04.11.2019 with the officials of NMCG and UPPCB, it was decided that compliance of treated effluent of CETPs (upcoming 20 MLD and existing 36 MLD) at Jajmau, shall be verified w.r.t. effluent discharge norms at CETP outlet for all parameters except for TDS (or FDS). The compliance of TDS (or FDS) shall be verified after dilution with treated sewage from STPs existing at Jajmau CETP complex before discharge; and

**WHEREAS**, CETP, Jajmau, Kanpur was inspected by a team of CPCB officials on 10.12.2019 and found non-complying w.r.t. to norms prescribed by UPPCB for inlet and outlet of CETP; and

**WHEREAS**, CPCB vide letter dated 17.02.2020 asked UPPCB to provide operational status of the tanneries connected to CETP, Jajmau; and

**WHEREAS**, CPCB issued directions dated 21.02.2020 under Section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to the Uttar Pradesh Pollution Control Board (UPPCB), to ensure implementation of pollution control measures, to stop excess discharge into drains and to ensure that untreated effluent should not be discharged into River Ganga; and

**WHEREAS**, the CETP, Jajmau, Kanpur was inspected by a team of CPCB officials on 24.02.2020 and found non-complying w.r.t. to norms prescribed by UPPCB for inlet and outlet of CETP and the Common Chrome Recovery Plant (CCRP), Jajmau being operated by Kanpur Nagar Nigam was found non-operational; and

**WHEREAS**, CPCB issued directions dated 19.03.2020 under Section 18 (1) (b) of Water (Prevention and Control of Pollution) Act, 1974 to the Uttar Pradesh Pollution Control Board (UPPCB), to comply with the following directions and to submit Action taken report:

- i. UPPCB shall arrange physical verification, closure, sealing and direct concerned authority for power disconnection of tannery units which are discharging untreated and more than permitted effluent into CETP inlet/ drains namely Sheetla Bazar drain, Wazidpur drain and Budhiya Ghat drain in Jajmau area.
- ii. UPPCB shall ensure that no industry discharges untreated effluent without meeting prescribed standards into any drain and untreated effluent should not reach river Ganga.
- iii. UPPCB shall expedite surveillance for tanneries and illegal industrial units to ensure that no illegal industrial activities are being carried out and submit weekly surveillance report.

**AND WHEARAS**, CETP and CCRP were inspected by a team of officials from CPCB on 10.11.2020 for compliance verification and performance evaluation. The following observations are made:

- i. CETP was found operational during inspection and operating at a utilized capacity of 33 MLD.
- ii. Flow meter at outlet was found defunct and V-notch was installed at inlet.
- iii. Treated effluent is mixed with treated domestic wastewater from 130 MLD STP & sent to irrigation channel which is used in irrigation & excess goes to river Ganga.
- iv. Treated effluent at outlet of CETP was found non-complying w.r.t. treated effluent discharge standards notified by MoEF&CC vide notification dated 01/01/2016 under E (P) Act, 1986 for **BOD (288 mg/l against norm-30 mg/l)**, **COD (632 mg/l against norm-250 mg/l)**, **TSS (262 mg/l against norm-100 mg/l)**, **Oil & Grease (20.4 mg/l against norm-10 mg/l)**, **Ammoniacal nitrogen (109 mg/l against norm-50 mg/l)**, **chloride (2759 mg/l against norm-1000 mg/l)**, **sulphide (222.6 against norm-2 mg/l)** and **total chromium (6.4 mg/l against norm-2.0 mg/l)**.
- v. PETP treated tannery effluent received at the inlet of tannery channel was not meeting the standards for CETP inlet (tannery channel) prescribed by UPPCB for **TSS (9290 mg/l against norm-600 mg/l)** and **total chromium (190 mg/l against norm-10 mg/l)**.
- vi. OCEMS was not installed at the outlet of the CETP however a defunct OCEMS was found at the Treated Effluent Pump House (TEPH) of the plant.
- vii. CETP has not provided details on status of Consent to Operate (CTO) obtained from UPPCB under Water Act.
- viii. The 70 KLD Common Chrome Recovery Plant (CCRP) Jajmau, operated by Kanpur Nagar Nigam was found non-operational.

**AND WHEARAS**, CPCB vide letter dated 14.01.2021 asked Kanpur Nagar Nigam to make CCRP, Jajmau operational to prevent direct discharge of chrome bearing effluent in to river Ganga; and

**WHEARAS**, CETP, Jajmau was inspected by the teams of officials from CPCB on 12.03.2021 for compliance verification and performance evaluation. The following observations are made:

- i. CETP was found operational during inspection and operating at a utilized capacity of 34.35 MLD.
- ii. CETP is operated by Uttar Pradesh Jal Nigam through an outsourced agency (M/s Ganga Infra Build Tech. Pvt. Ltd.).
- iii. CETP is connected 400-member tannery units.
- iv. V-notch was installed at inlet. Flow meter at outlet was found defunct.
- v. OCEMS was not installed at the outlet of the CETP.

- vi. Raw tannery effluent received at the tannery channel inlet was not meeting the standards for CETP prescribed by UPPCB for **TSS (3190 mg/l against norms of 600 mg/l)**.
- vii. Treated effluent at outlet of CETP was found non-complying w.r.t. treated effluent discharge standards notified by MoEF&CC vide notification dated 01/01/2016 under E (P) Act, 1986 and the Rules framed under for **BOD (160 mg/l against norm of 30 mg/l), COD (672 mg/l against norm of 250 mg/l), TSS (135 mg/l against norm of 100 mg/l) and sulphide (37.76 mg/l against norm of 2.0 mg/l)**.
- viii. Biogas holder at the plant was found defunct and the gas generated is flared.
- ix. The integrated premise has two bore-wells. One of the borewells is recently established and both the borewells neither have any metering system nor permission/NOCs from CGWA.
- x. No information regarding quantity of sludge generated and disposed could be derived from the logbooks. Possession of Hazardous Waste Authorization, if any, document could also not be verified.
- xi. The following observations are made to 70 KLD Common Chrome Recovery Plant (CCRP) Jajmau:
  - a. On the day of inspection, CCRP was not running during the visit hours.
  - b. It was informed that the chrome recovery system is operated intermittently depending on the receipt of chrome liquor from the tannery units.
  - c. CCRP was not having a valid consent from UPPCB under Water (Prevention and Control of Pollution) Act, 1974.
  - d. Record of authorization for disposal of hazardous sludge was also not provided during inspection.
  - e. The logbooks were maintained crudely.
  - f. No flowmeter/v-notch has been installed at inlet/outlet of the CCRP to measure the untreated/treated volume of effluent.

**AND WHEARAS**, Hon'ble NGT vide order dated 08.02.2021 in O.A. 985/2019 stated that *"The report discussed above, only relates to scientific disposal of chromium dumps at three locations. Nothing is mentioned about the second issue of continued pollution by tanneries as well as discharge of untreated sewage into the irrigation canals and drains at and around Jajmau. Requisite remedial action may now be taken expeditiously and a report furnished alongwith the further action taken report on remediation of dump sites with compliance status as on 30.06.2021, by 15.07.2021", and*

**WHEREAS**, CETP, Jajmau and CCRP, Jajmau were inspected by the teams of officials from CPCB on 30.06.2021 and 17.06.2021, respectively for compliance verification and performance evaluation and following observations are made:

### **CETP, Jajmau**

- i. CETP was found operational during inspection and operating at a utilized capacity of 39.21 MLD.
- ii. The CETP was operating without valid consent.
- iii. Flow meters installed at inlet of tannery channel, outlet of CETP and TEPH were found defunct.
- iv. Raw tannery effluent received at the tannery channel inlet was 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)**.
- v. Total Chromium-3.6 mg/l has been detected in domestic sewage inlet at CETP which indicated that illegal operations were being carried out in Jajmau, Kanpur and chrome bearing effluent and sludge was being discharged into the domestic drains by tannery units at Jajmau, Kanpur.
- vi. CETP inlet (tannery effluent + domestic sewage) was not meeting the standards prescribed by UPPCB for **TSS (1005 mg/l against norms of 600 mg/l) and total Chromium (16.8 mg/l against 4 mg/l)**.
- vii. Treated effluent at outlet of CETP was found non-complying w.r.t. treated effluent discharge standards notified by MoEF&CC vide notification dated 01/01/2016 under E (P) Act, 1986 and the Rules framed under 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)**.
- viii. 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-1602 mg/l against 2100 mg/l**).

### **CCRP, Jajmau**

- i. The CCRP is operated by Kanpur Nagar Nigam. The exhausted chrome tanned liquor collected from various tanneries is transported through tankers to the CCRP and regenerated chrome is to be sold to tanneries for reuse.
- ii. CCRP was operational during inspection.
- iii. It was informed that the chrome recovery system is operated intermittently depending on the receipt of chrome liquor from the tannery units and sufficient quantity of chrome liquor is ensured before running.
- iv. Only 117 tanneries are member of CCRP.
- v. Analysis report indicated pH-3.74, Chromium (VI)- BDL and Total Chromium-1680 mg/l in raw effluent (CCRP inlet/Equalization tank) and pH-7.86, Chromium (VI)- BDL and Total Chromium-0.32 mg/l in treated effluent (CCRP outlet).

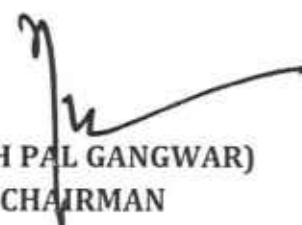


- vi. Only 1.5-7.5 MLD exhausted chrome liquor was collected from member tannery units during June 1-15, 2021 (as per logbook) indicates that member units are not giving liquor to CCRP for chrome recovery. The domestic sewage inlet channel was also receiving significant amount of Chromium therefore there is a possibility of discharge of chrome liquor/effluent into drains/river Ganga.
- vii. The treated effluent, after chrome recovery, was sent to Inlet of raw tannery effluent channel of 36 MLD CETP, Jajmau, Kanpur.
- viii. Flowmeter/v-notch has not been installed at inlet/outlet of the CCRP to measure the untreated/treated volume of effluent.
- ix. Poor record keeping was observed during inspection. Logbook for treatment of chrome liquor was not maintained.
- x. 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.

**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 to CETP indicates that excess wastewater generated from tanneries is also being discharged in to drains as untreated. CCRP is also functioning intermittently most of the time due to unavailability of Chrome liquor. It was observed that no flow meter installed at CCRP and no record of operations are maintained. CETP is also not operating properly and treated effluent of CETP is not meeting the desired discharge standards. Partially 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 as deemed fit following appropriate procedure.

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

  
(NARESH PAL GANGWAR)  
CHAIRMAN

*Signature*



**Copy to:**

1. **Director General,**  
National Mission for Clean Ganga (MoWR, RD & GR),  
1<sup>st</sup> Floor, Major Dhyan Chand National Stadium,  
India Gate, New Delhi - 110002 : For kind information  
and necessary action,  
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. **Municipal Commissioner,**  
Kanpur Municipal Corporation,  
(Kanpur Nagar Nigam),  
Moti Jheel, Kanpur - 208002 (U.P.) : For kind information  
and to ensure proper  
O&M of CCRP.
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. **Regional Director (North),**  
Central Pollution Control Board  
PICUP Bhawan, Ground Floor, Vibhuti Khand,  
Gomti Nagar, Lucknow - 226010 : For kind information,  
please.
6. **District Magistrate,**  
Collector Mansion Road, Kanpur Nagar,  
Kanpur, Uttar Pradesh - 208001 : For kind information  
and necessary action,  
please.
7. **In-charge, IT Division, CPCB** : For uploading on CPCB  
website, please.

  
(PRASHANT GARGAVA)  
MEMBER SECRETARY