



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

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B-190188/CETP-Site-II, Unnao/PIAS/WQM-II/CPCB/2019-20

Date : 08/05/2019

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To,

The Chairman

Uttar Pradesh Pollution Control Board,

Building No. TC-12V, Vibhuthi Khand,

Gomti Nagar,

LUCKNOW - 226010

DIRECTIONS UNDER SECTION 18 (1) (b) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 - TANNERY UNITS IN UPSIDC INDUSTRIAL AREA SITE-II, UNNAO - reg.

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 on 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; 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, 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 and Pollution Control Committees and 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, 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) and Sewage Treatment Plants (STP) under the Environment (Protection) Act,1986 and the rules framed there under; and

WHEREAS, CETP at Unnao needed upgradation as the CETP was not able to comply with all parameter of the stipulated norms; and

WHEREAS, despite lapse of considerable time, the state of non-compliance of standards by the CETP at Unnao is continued unabated, no firm action has been taken for upgradation of CETP by either occupier of CETP or member units and it has become necessary to take action against the CETP member industries; and

WHEREAS, in view of the upgradation requirement of the three CETPs of tannery clusters at Jajmau, Kanpur, UPSIDC Industrial Area Site-II, Unnao and UPSIDC Leather Technology Park, Banthar, Unnao and general problem of non-compliance of primary effluent treatment plant standards by tanneries, CPCB issued directions under section 18 (1) (b) of Water Act 1974 on 28/10/2014 to U. P. Pollution Control Board (UPPCB) as below:

1. *To direct tanneries and CETPs to submit a time bound action plan within 3 months for-*
 - a) *upgradation and proper operation of CETPs within one year to attain compliance of surface water disposal norms in final effluent, including TDS, and*
 - b) *upgradation and proper operation of PETPs within 6 months to attain compliance of primary standards*
2. *To direct closure of tanneries if satisfactory compliance of above not observed within 3 month*
3. *To develop a mechanism to keep under close watch all tanneries for ensuring regular compliance of i) prescribed primary treatment standards / CETPs' design inlet parameters and ii) wastewater generation standards / permitted wastewater capacity.*

AND WHEREAS, UPPCB issued directions under section 33 (A) of Water Act 1974 to occupier of three CETPs - Direction dated 25/11/2014 to the CETP at Jajmau, Kanpur, and Directions dated 01/01/2015 to the two CETPs at UPSIDC Industrial Area Site-II, Unnao and UPSIDC Leather Technology Park, Banthar, Unnao, as below:

1. *To submit a time bound action plan within 3 months to attain compliance of primary standards and upgradation and proper operation of CETP within 1 year to attain compliance of surface water disposal norms in final effluent, including TDS*
2. *To submit a time bound proposal for installation of Online Monitoring System within 3 month*
3. *To submit a time bound proposal for up gradating and achieving Zero Liquid Discharge (ZLD) from CETP within three months.*

AND WHEREAS, CPCB issued Show Cause Notice under section 5 of Environment Protection Act, 1986 dated 31.03.2016 to all member units of CETP, Unnao through its occupier/operator directing them to show cause within 15 days as to why Directions be not issued to close their manufacturing operations and disconnecting their electricity supply till the CETP is upgraded so as to comply with standards, including those relating to primary treatment; and

WHEREAS, CPCB issued directions under section 5 of Environment Protection Act, 1986 on 14/07/2016 to all member units of CETP, Unnao through its occupier/operator to comply with following directions:

- a) *To submit undertaking to participate in the proposed improvement of the CETP.*
- b) *To submit firm time schedule, not exceeding beyond December 2016, for completing the proposed improvement in full.*
- c) *To submit additional proposal for improving the CETP to address compliance of FDS parameter at the outlet of CETP, along with firm time schedule, not exceeding beyond June 2017 for completing the same.*

AND WHEREAS, Hon'ble Supreme Court in the writ petition (c) no. 375 of 2012 pronounced judgement dated 22/02/2017 and issued direction as under:

1. *The setting up of 'common effluent treatment plants' should be taken up as an urgent mission. CETPs which are already under implementation should be completed within the lines already postulated. CETPs which are yet to be set up, concerned State*

Governments/ Union Territories were directed to complete the same within three years from today (i.e. 22/02/2017).

- 2. While acquiring lands for setting up of 'common effluent treatment plants' concerned State Governments will acquire such additional land as may be required for setting up "zero liquid discharge plants" as and when required in future.*
- 3. Government (or the Union Territories), shall cater to the financial requirement, of running the CETPs, which are presently dis-functional, from their own financial resources.*
- 4. For setting up CETPs, the concerned State Governments (or the Union Territories) will prioritize such cities, towns and villages, which discharge industrial pollutants and sewage, directly into rivers and water bodies.*
- 5. The directions pertaining to continuation of industrial activity only when there is in place a functional primary ETP, and the setting up of functional CETPs, within the time lines, shall be of the Member Secretaries of the concerned Pollution Control Boards. The Secretary of the Department of Environment, of the concerned State Government (and the concerned Union Territory), shall be answerable in case of default. The concerned Secretaries to the Government shall be responsible of monitoring the progress, and issuing necessary directions to the concerned Pollution Control Board, as may be required, for the implementation of the above directions.*
- 6. Some of the CETPs are dis-functional, because of lack of finances. Onus to operate the existing CETPs, rests on concerned Municipalities (and / or Local Bodies), cannot be permitted to shy away, from discharging this onerous duty.*
- 7. The norms for generating funds, for setting up and / or operating the CETP shall be finalized, on or before 31.3.2017, so as to be implemented w.e.f. the next financial year.*

AND WHEREAS, monitoring of CETP, Unnao was carried on 08.08.2017 by officials of CPCB (under NGT) and following observation is made:

1. The treated effluent is discharge to Lagoon (overflow goes to seasonal water stream).
2. CETP was found non-complying w.r.t. stipulated discharge standards of TSS, BOD and COD

3. The sample analysis results are mentioned below:

Sr. No.	Parameters	CETP Inlet		CETP Outlet	
		Inlet	Standards	Outlet	Standards
1.	pH	7.68	5.5-9.0	7.16	5.5-9.0
2.	TSS	372	-	173	100
3.	BOD	912	-	80	30
4.	COD	1439	-	429	250

Note: All values are expressed in mg/l except pH.

AND WHEREAS, monitoring of CETP, Unnao was carried on 08.05.2018 by officials of CPCB reported flow of 1.008 – 1.224 MLD and following observations are made:

1. The wastewater quality at CETP inlet indicates that PETPs installed by the member units are not adequate enough to achieve the prescribed standards.
2. Variation in OCEMS and CETP outlet analysis data was observed. Also, OCEMS at inlet of CETP was found non-functional during inspection.
3. MLVSS/MLSS ratio is much less than 0.8 at aeration tank is indicating about high percentage of dead bacteria being recycled in the treatment system.
4. Reduction of parameters like TDS, Sulphate and Chloride is very poor.

The sample analysis results are mentioned below:

Sl. no.	Parameters	CETP Inlet		CETP Outlet	
		Inlet	Standards	Outlet	Standards
1.	pH	7.98	5.5-9.0	11.62	5.5-9.0
2.	TSS	1471	-	34.6	100
3.	TDS	10430	-	14973	2100
4.	BOD	1475	-	32.4	30
5.	COD	3731	-	264	250
6.	Sulphide as S	135	-	4.96	2.0
7.	Sulphate as SO ₄ ²⁻	1415	-	3765	1000
8.	Oil & Grease	147	20	7.83	10
9.	Chloride as Cl-	3268	-	5286	2
10.	Ammo. Nitrogen	36.8	50	96.9	50
11.	Total Cr	34.6	2	BDL	2
12.	Iron as Fe	2.5	-	0.6	3

Note: All values are expressed in mg/l except pH.

And Whereas, UPPCB in June, 2018 directed tannery units connected with CETP, Unnao to operate at 50% of the consented capacity to make the generated effluent qualitatively & quantitatively compatible with existing CETP; and

Whereas, CPCB issued show cause notice dated 07/08/2018 to all operational member units of CETP for non-compliance of discharge norms; and

Whereas, 14 units replied to the show cause notice issued and informed that the Hon'ble NGT has granted two years of time to upgrade CETP Banthar, approval is granted to the submitted DPR for upgradation of CETP., facility of primary treatment is made in CETP Banthar for which member units are charged Rs. 10 per Kl as extra and adequacy assessment of PETP of member units has been done by IIT/CLRI/ NPC/NEERI; and

Whereas, a meeting was held on 25/09/2018 at CPCB, Delhi with officials of UPPCB, operator and member units of CETP, Unnao wherein it was agreed that there is a need to augment/upgrade PETPs, CRUs and to take necessary pollution control measures to ensure compliance of norms and finalized the action points for implementation by November 30, 2018; and

WHEREAS, CPCB issued direction dated 20.11.2018 to 14 operational member units of CETP, Unnao to comply with the following points:

- I. The Unit shall implement following pollution control measures by November 30, 2018.
 - i. All bore wells (water abstraction source) shall have electromagnetic flow meter with totalizer installed.
 - ii. To ensure independent/segregated conveyance system for chrome bearing effluent comprising of closed pipeline with appropriate covered facility for storage of recovered chrome and exhaust chrome liquor.
 - iii. To have only single discharge point for effluent having electro-magnetic flow meter and maintain log books.
 - iv. To adopt physical/mechanical de-salting of hides/skins to be adopted as a practice for cleaner technology. Salt shaker and drum shall be used to control TDS.
 - v. To maintain log Book for basic raw material i.e. hides/skins and chemicals consumed in the process.

- vi. To install bar screens of different openings (bars clear spacing) at the inlet of the PETP system to trap the solid waste and prevent them from going into the PETP system.
 - vii. Retention time of equalization tank shall be minimum 24 hours. The chemicals dosing shall be done in separate tanks for Lime and Alum, with proper mixing arrangement.
 - viii. Primary Settling tank (PST) shall have SOR of 1 m³/m²/hr (maximum), Retention time 4-5 hours and Flow rate to be controlled in accordance with the SOR. Tube settler or Lamella settler may be installed in addition to existing PST to improve settling area if required.
 - ix. To install mechanical sludge de-watering system such as Filter Press for speeding up the drying process and quick disposal of the solid waste.
 - x. To engage trained personnel for the operation & maintenance of PETP & CRU and submit the list of operator & workmen indicating the names & educational qualification to CPCB. The training of the operators may be carried out under some expert in this field.
 - xi. To introduce and adopt cleaner technologies in their unit.
2. Inventory of the functional units & electro-mechanical equipment forming part of the PETP of individual units shall be provided to the CPCB by October 31, 2018, as per the Format provided by CPCB.
 3. Self-certified Infrastructure details for mechanical desalting system, soaking pits/paddles and Drums to confirm that infrastructure installed is in accordance to the licensed/ installed capacity shall be submitted to CPCB.
 4. Unit shall engage technical institutes for obtaining capacity assessment report of the Drums installed at their premises, in respect of number, types, drum size, production capacity, operating time and number of hides can be processed and submit the report to CPCB by October 31, 2018.
 5. Adequacy report of PETP & CRU shall be carried out from technical institutes like CLRI, IITs etc. by October 31, 2018 and necessary improvement shall be implemented by November 30, 2018.
 6. The adequacy assessment of CETP Banthar shall be provided to CPCB by October 31, 2018.
 7. The adequacy assessment of PETP and CETP shall specially focus on assessment of Primary and secondary sludge generation and capacity of sludge dewatering/ drying.

8. Unit shall submit monthly returns of Hazardous waste disposal to the secure land fill facility to CPCB by 10th of every month.
9. Daily reading of the electromagnetic flow meter at discharge point of member units be collected by the CETP operator and thereafter a consolidated monthly data shall be sent to the CPCB by 10th of every month.
10. Environment Management Cell (EMC) should be constituted for Banthar cluster having at least two technical experts as member (eg. member from Technical institutes), one member from Uttar Pradesh Pollution Control Board, besides other members. The EMC may conduct meetings fortnightly to discuss on the environmental issues and minutes of EMC meetings shall to be forwarded to CPCB.
11. Basic testing facility for effluent quality norms shall be created at the CETP, which will be availed by the member units of the CETP. Daily analysis of PETP and CETP effluent quality shall be by carried out & log book shall also be maintained.
12. Quarterly cleaning of CETP conveyance system shall be ensured.
13. Individual action plan shall be developed and submitted by each Tannery by October 31, 2018 on the adoption of cleaner Technologies so as to meet all standards/ requirement of effluent discharge. Tanneries shall implement the plan by November 30, 2018. The action plan should be specific and clear covering process against the value chain, targeted effluent and possible intervention: (Indicative table)

Process	Targeted effluent	Intervention/ best practice
Before Soaking/ Salt Dusting		
After Soaking		
Liming Flashing		
Deliming		
Pickling		
Tanning		

AND WHEREAS, monitoring of CETP, Unnao was carried on 19.03.2019 by officials of UPPCB reported flow of 1.6 MLD and following observations are made:

1. CETP inlet standards was not complying, having high load of total Chromium (25.9 mg/l against 2 mg/l).
2. Treated effluent is **non-complying** w.r.t. stipulated environmental discharge standards.

The sample analysis results are mentioned below:

Sl. no.	Parameters	CETP Inlet	CETP Outlet	
			Outlet	Standards
1.	pH	8.36	4.48	5.5-9.0
2.	TSS	1118	24.3	100
3.	BOD	802	45.2	30
4.	COD	1497	294	250
5.	Oil & Grease	42	6.63	10
6.	Total Cr	25.9	0.35	2.0

Note: All values are expressed in mg/l except pH.

AND WHEREAS, monitoring of CETP, Unnao was carried on 26.03.2019 by officials of CPCB and following observations are made:

1. CETP inlet and outlet was found **non – complying** w.r.t. CETP inlet standards prescribed by UPPCB & Notified CETP outlet discharge standards.
2. CETP has not installed any flow measuring device at CETP inlet to measure the wastewater received from member units.
3. The sample analysis results are mentioned below:

Sl. no.	Parameters	CETP Inlet	CETP Outlet	
			Outlet	Standards
1.	pH	7.71	10.52	5.5-9.0
2.	TSS	980	300	100
3.	BOD	2348	412	30
4.	COD	5557	931	250
5.	Sulphide as S	110	BDL	2
6.	Total Cr	9.4	BDL	2.0

Note: All values are expressed in mg/l except pH.

AND WHEREAS, monitoring of CETP, Unnao was carried on 03.04.2019 by officials of CPCB and following observations are made:

1. CETP inlet and outlet are not complying with the prescribed standards.
2. Flow meter does not exist at CETP inlet to measure the effluent discharge by the member units.
3. The sample analysis results are mentioned below:

Sl. no.	Parameters	CETP Inlet		CETP Outlet	
		Inlet	Standards	Outlet	Standards
1.	pH	7.5	6.5-9.0	7.55	5.5-9.0
2.	TSS	3365	600	64	100
3.	BOD	2589	-	418	30
4.	COD	3772	-	735	250
5.	Total Cr	2.75	2.0	BDL	2.0

Note: All values are expressed in mg/l except pH.

AND WHEREAS, monitoring of CETP, Unnao was carried on 09.04.2019 by officials of CPCB and reported flow of 1.10 MLD and following observations are made:

1. The level of Total Chromium at inlet of CETP indicates that the tannery units are not operating their PETP properly to achieve total chromium of 2.0 mg/l
2. Aeration tanks were not stabilized.
3. The sample analysis results are mentioned below:

Sl. no.	Parameters	CETP Inlet		CETP Outlet	
		Inlet	Standards	Outlet	Standards
1.	pH	7.73	6.5-9.0	8.87	5.5-9.0
2.	TSS	724	600	75.2	100
3.	BOD	1136	-	274	30
4.	COD	1890	-	612	250
5.	Total Cr	30.5	2.0	BDL	2.0

Note: All values are expressed in mg/l except pH.

AND WHEREAS, monitoring of CETP, Unnao was carried on 16.04.2019 by officials of CPCB and reported flow of 1.10 MLD and following observations are made:

1. The level of Total Chromium at inlet of CETP indicates that the tannery units are not operating their PETP properly to achieve total chromium of 2.0 mg/l
2. Aeration tanks were not stabilized.
3. The sample analysis results are mentioned below:

Sl. no.	Parameters	CETP Inlet		CETP Outlet	
		Inlet	Standards	Outlet	Standards
1.	pH	7.48	6.5-9.0	7.86	5.5-9.0
2.	TSS	3258	600	85.8	100
3.	BOD	2180	-	546	30
4.	COD	3940	-	991	250
5.	Total Cr	99.7	2.0	BDL	2.0

Note: All values are expressed in mg/l except pH.

And whereas, based on the above monitoring reports, following observations are made:

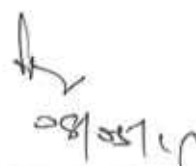
1. It is evident that Primary Effluent Treatment Plant (PETP) and Chrome segregation system installed by the member units are not adequate and not functioning properly to achieve desired PETP treated effluent quality norms or tanneries are discharging untreated effluent in CETP, which has potential to affect the treatment efficiency of CETP.
2. The treated effluent is regularly non-complying in terms of BOD, COD and TSS.
3. CETP is not adequate and not operated properly.

And whereas, non-compliance of standards by CETP amounts to collective non-compliance by CETP member industries, and therefore action has to be taken against CETP member industries; and

Now, Therefore, in view of the above observations, and in exercise powers vested to the Chairman, Central Pollution Control Board under Section 18 (1) (b) of the of Water (Prevention & Control of Pollution) Act, 1974 UPPCB is directed to issue directions to all member Tannery units and CETP operating agency to comply with the following:

1. All member tanneries connected to CETP, UPSIDC Industrial Area Site-II, Unnao to follow PETPs norms for discharge of effluent to CETP.
2. CETP shall meet the prescribed effluent discharge norms at outlet.
3. If CETP doesn't meet the prescribed effluent discharge norms at outlet the production capacity of the member tanneries connected to CETP shall be further reduced to ensure compliance with discharge standards at CETP outlet.
4. Member tanneries units which do not meet PETPs norms or do not follow order regarding operation at reduce capacity, shall be closed forthwith.

Receipt of these directions may be acknowledged and action taken report be sent to CPCB within 30 days from date of issue of direction.



(S. P. SINGH PARIHAR)
CHAIRMAN

Copy to:

1. **Director General,**
National Mission for Clean Ganga (MoWR, RD & GR)
1st Floor, Major Dhyan Chand National Stadium
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2. **Joint Secretary (CP-Division),**
Ministry of Environment Forests & CC
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3. **Regional Director**
Regional Directorate-North
Central Pollution Control Board, PICUP Bhawan,
Vibhuti Khand, Gomti Nagar, Lucknow (UP)
4. **District Magistrate**
Collectorate office Unnao,
District Unnao, UP
- ✓ 5. **In-charge, IT Division, CPCB**

For kind information
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website.


(PRASHANT GARGAVA)
MEMBER SECRETARY