



Speed Post

CP-30/29/2024-IPC-VII-HO-CPCB/CETP-M/s Arulpuram/ 5898

Date: 05.11.2024

To

The Member Secretary
Tamil Nadu Pollution Control Board
No. 76, Mount Salai, Guindy,
Chennai – 600032
(Tamil Nadu)

Subject: Directions under section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974, regarding non-compliance status of CETP- M/s. Arulpuram Common Effluent Treatment Company Pvt Ltd., Tirupur, Tamil Nadu.

WHEREAS, amongst others, under Section 17 of the Water (Prevention & Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Board (SPCB), (or Pollution Control Committee for Union Territories) is to plan a comprehensive programme for prevention, control or abatement of pollution of streams, wells and air pollution in the State/Union territory and to secure the execution therefore; and

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

WHEREAS, amongst others, under Section 16 of the Water (Prevention & Control of Pollution) Act, 1974, one of the functions of the Central Pollution Control Board (CPCB), is to promote cleanliness of streams and wells in different areas of the State; and

WHEREAS, the Central Government has notified the standards for discharge/emissions 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, there is a need to inculcate the habit of self-monitoring within the CETPs for complying with the prescribed standards and this can be achieved by installing Online Continuous Effluent Monitoring System (OCEMS); and

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WHEREAS, CETP- M/s. Arulpuram Common Effluent Treatment Company Pvt Ltd., S.F No. 158, Talinjikattu Thottam, Ganapathy Palayam (PO), Goundam Palayam Pudur, Tirupur, Tamil Nadu (herein after referred as CETP) was inspected by the team of CPCB, RD Chennai on 04.07.2024 and the following major observations were made:

- I. The CETP has obtained Consent to Operate (CTO) for collection, conveyance, treatment and disposal of total quantity 4950 KLD (90% of actual capacity) from TNPCB which is valid up to 31.03.2026. The CETP has also obtained Hazardous Waste authorization which is valid up to 31.03.2028.
- II. The CETP has a capacity of 5500 MLD for the treatment of effluent generated from 10 dyeing member units. As per the records, the average quantity of effluent received in CETP is around 3300 KLD. During the inspection, the CETP was found operational except Agitated Thin Film Dryer (ATFD). It was informed that the ATFD unit was under maintenance.
- III. Industrial effluent from member industries is brought through pipeline to the CETP. The CETP has ZLD scheme consisting of Bar screens, collection tank, neutralization tank, cooling tower, clarifier, aeration tanks, chlorine contact tank, Quartz filter 8nos., Ultrafilters, Reverse Osmosis (RO), Micro filtration plant, Multi Effect Evaporator (MEE), falling film evaporator, forced circulation evaporator, ATFD, Sludge thickener and Filter press.
- IV. The CETP has a six-stages RO plant, where 80% of the recovery is from the four stage RO, followed by 40% recovery from the 5th stage RO, and 45% recovery from the 6th stage RO system. The recovered water from the CETP is around 93.5%, which is sent back to member units for reuse in the process.
- V. The RO reject and falling film concentrate are mixed to make brine solution of concentration 150-170 GPL (grams per liter). This brine solution is sent to member units through pipelines for using in process. CETP has installed flow meters to quantify the reuse of brine solution by the member units. As per the flow meter records 3% of treated effluent is reused as brine solution. Portion of rejects are concentrate from forced circulation evaporator (FCE) is sent to centrifuge to recover anhydrous sodium sulphate salt and this recovered salt is sent to member units for reusing in dying process. The remaining FCE concentrate is pumped to Agitated Thin Film Drier (ATFD) and mixed salts are recovered. On the day of inspection, ATFD was not operational due to maintenance and mixed salts were not generated.
- VI. The CETP has installed electromagnetic flow meters in inlet (pumping station) & outlet (RO permeate tank) and is connected to CPCB and TNPCB servers. However, the flowmeters were not found calibrated. It was reported that CETP had calibrated flow meters at the time of installation but no subsequent calibrations have been conducted. Also, the CETP has not installed IoT (Internet of Things), at present data is being transferred to the service provider and then pushed to CPCB and TNPCB server.

- VII. During inspection, emission monitoring of boiler stack was carried out and effluent samples were collected from different operational stages of CETP. These samples were submitted and analysed at TNPCB laboratory. As per the analysis report, the treated effluent parameters and the boiler stack are meeting the respective prescribed norms.
- VIII. It was reported that from January 2024 to March 2024, the Forced Circulation Evaporator's (FCE) was not operational due to maintenance issues. During this period, the final mother liquor/ reject from MEE was stored in the four storage tanks of capacity 50KL each. During inspection, it was noted that the reject had filled the storage tanks (total 200 KL) and had not yet been concentrated in the FCE.
- IX. It was reported that the bio sludge and the chemical sludge is sent to cement industries for co-processing through M/s Cheenu Enviro Management, Coimbatore. During inspection, it was found that the CETP has stored about 766.190 tons of bio sludge, 6.530 tons of chemical sludge and 14,192.804 tons of mixed salt in storage shed.
- X. During inspection, it was observed that bio sludge and chemical sludge was also stored outside the designated area on the floor without lining for drying purpose.
- XI. The housekeeping was observed poor in terms of leakages along with stagnant waste water present on the floor of the RO plant.

AND, NOW, THEREFORE, in exercise of powers conferred under section 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974, Tamil Nadu Pollution Control Board (TNPCB) is hereby directed to take appropriate action including imposing environment compensation, against the reported observations and to ensure compliance of the following from the CETP:

- a. To treat the mother liquor/reject stored in the 04 storage tanks of 200KL capacity.
- b. To ensure that the sludge generated is disposed within 90 days as per the Hazardous Waste Rules, 2016.
- c. Immediately remove the sludge from the ground that is being dried without proper lining and ensure that all sludge is stored in a closed shed with concrete flooring to prevent contamination of groundwater and surface soil.
- d. The CETP shall address leaks in the RO system and ensure the floor of the RO plant are clean & dry.
- e. To carry out periodic calibration of flow meters properly as per the guidelines so as to generate real time accurate and reliable data.

Further, TNPCB is also directed to specify the required inlet norms for CETP in accordance to CETP notification dated 01.01.2016.

The action taken by TNPCB be intimated to CPCB within 15 days of receipt of these directions.


Bharat Kumar Sharma
Member Secretary

Copy to:

1. **The Chairman** : for information, please.
Tamil Nadu State Pollution Control
Board 76, Mount Salai, Guindy,
Chennai-600032 (Tamil Nadu)
2. **The Additional Secretary** : for information, please.
(CP Division)
Ministry of Environment, Forests &
Climate Change,
Prithvi Wing, 2nd Floor, Indira
Paryavaran Bhawan, Jor Bagh Road,
New Delhi-110 003.
3. **The Regional Director,** : for follow-up, please.
Central Pollution Control Board,
2nd Floor, 77-A South Avenue Road,
Ambattur Industrial Estate,
Ambattur Taluk, Thiruvallur
Chennai-600058 (Tamil Nadu)
4. **Divisional Head, IPC- VI,** : for information, please.
CPCB, Delhi
5. **Divisional Head, IT** : for uploading on CPCB
CPCB, Delhi website, please.


(Bharat Kumar Sharma)

