



# TAMILNADU POLLUTION CONTROL BOARD



## ABSTRACT

TNPCB - Extending the time granted in B.P.No.31 dated 30.07.2018, B.P.No.01 dated: 22.01.2019 and B.P.No.13 dated 22.04.2019 to switch over to Mechanical Evaporator followed by Agitated Thin Film Dryer for disposal of final RO rejects on or before 31-03-2020 by all the IETPs/CETPs Textile Processing units (Bleaching, Dyeing and Printing) and Tannery units – Reg.

B.P.No. 63

Dated: 26.11.2019

- Ref:
1. B.P. No. 31 dated 30.07.2018
  2. B.P.No. 01 dated 22.01.2019
  3. B.P.No. 13 dated 22.04.2019
  4. Board Resolution vide Item No.279-1-12, dated: 18/11/2019

### ORDER

Based on various Court directions, the TNPCB has made mandatory that all the textile processing units and Tannery units operating in Tamil Nadu to install Zero Liquid Discharge (ZLD). Accordingly the textile processing units and Tannery units in Tamil Nadu have provided ZLD plant either by way of Individual Effluent Treatment Plant (IETP) or Common Effluent Treatment Plant (CETP).

Zero Liquid discharge (ZLD) system completely eliminates the liquid discharge from a system by reducing the volume of wastewater that requires further treatment and producing a clean stream suitable for reuse and the provision of ZLD results in the reduction in the pollution of land and water bodies. The trade effluent generated from industries after primary, secondary and tertiary treatment is sent to Reverse Osmosis, Nano-Filtration, Mechanical Vacuum Re-compressor Evaporator/Multiple Effect Evaporator, Agitated Thin Film Dryer / Solar Evaporation Pan so as to meet ZLD.

In the ZLD plant, the treatment of Reverse Osmosis (RO) plant rejects which is having high concentration of Total Dissolved Solids (TDS) is major concern. The CETPs and large scale IETP units have provided Mechanical Evaporators (ME) followed by Solar Evaporation / Agitated Thin Film Dryer (ATFD) and recover salt in crystal form. This ensures zero liquid discharge.

Whereas majority of small scale units and some of medium/large scale units who are having IETPs are directly discharging the final RO reject into solar evaporation. The solar evaporation pan occupies a huge land area. It requires a minimum of 2220 sq.m area of evaporation pan for the disposal of 10 KL of RO reject.

More over during the rainy season, the solar pan is getting overflow and the high TDS effluent pollute the ground water and the nearby water bodies. In some cases, it came to know that there are cracks in the solar pan/damages in HDPE liner which allowed for seepage of high TDS effluent into the ground. Once groundwater is polluted, its restoration will take long time.

Frequent complaints were received about the ground water pollution due to stagnation of high TDS effluent in solar pan. Stagnating high TDS effluent in the solar pan will be a threat to the water bodies and subsurface water.

The subject was discussed in the review meeting conducted by the Hon'ble Minister for Environment along with the all the JCEEs(M) and all the DEEs at Head Office. In the meeting, it was unanimously recommended for directing all the textile bleaching, dyeing and printing units to go for ME & ATFD to meet ZLD and avoid solar evaporation pan.

In this regard, the Board passed the resolutions followed by Board proceedings and are as follows:

(1) Based on the Board resolution No. 274-1-19 dated 26.07.2018, B.P. No. 31 dated 30.07.2018 was issued so that,

"All the existing IETPs of textile bleaching, dyeing and printing units generating effluent of more than 100 KLD who have now provided solar evaporation pan for disposal of final RO reject to switch over to mechanical evaporator followed by Agitated Thin Film Dyer within six months and to dismantle the existing Solar Evaporation Pan completely after commissioning of mechanical evaporator followed by Agitated Thin Film Dyer". (i.e) The timeline expired on 31.03.2019.





## TAMILNADU POLLUTION CONTROL BOARD



- (2) Based on the Board Circulation agenda No. BM/CA/02/2019, dated 22.01.2019, B.P.No. 01 dated 22.01.2019 was issued so that,

“All the existing IETP of Textile processing units (bleaching, dyeing and printing) and Tannery units who have now provided solar evaporation pan for disposal of final RO reject shall switch over to Mechanical Evaporator (ME) followed by Agitated Thin Film Dryer (ATFD) irrespective of quantity of trade effluent generation within three months. The existing solar evaporation pan shall be dismantled completely after commissioning of Mechanical Evaporator followed by Agitated Thin Film Dryer”. (i.e) The timeline expired on 21.04.2019.

- (3) Based on the Board Circulation agenda No. BM/CA/11/2019, dated 11.04.2019, B.P.No. 13 dated 22.04.2019 was issued so that,

“Extending the time granted in B.P.No.31 dated 30.07.2018 & B.P.No.01 dated: 22.01.2019 for switching over to Mechanical Evaporator followed by Agitated Thin Film Dryer for disposal of final RO rejects for a further period of **Six months** to all the IETPs Textile Processing units (Bleaching, Dyeing and Printing) and Tannery units. The existing solar evaporation pan shall be dismantled completely after commissioning of Mechanical Evaporator followed by Agitated Thin Film Dryer” (i.e) The timeline expired on 21.10.2019.

Meanwhile, Representation received from Association of All Textile Processors, Erode. The Secretary, Association of All Textile Processors has stated that they are in the process of establishing 4 Common Effluent Treatment Plants (CETPs) and 1 Common Reject Management System (CRMS) and invested huge amount in purchasing land and conducting preliminary surveys and as they are not in situation to invest further amount for Evaporator & ATFD. Therefore, the Association has requested the Board either to relax installation of Evaporator & ATFD or atleast to extend time period for installation of Evaporator & ATFD.

Representation is received from Dyers Association of Tiruppur, Tiruppur. The President of the Association stated that they find it difficult to install ATFD by small Individual Effluent Treatment Plants (IETPs) within a short period of time due to the reasons (1) There are limited number of suppliers of ATFD in the market; (2) IETPs need time to get comparative quotations and confirm the quality of machinery and (3) Even if purchase order is placed by IETPs, suppliers of ATFD cannot supply the machinery within a short period to all the purchasers. Therefore, Association has requested the Board extend time limit to install ATFD in IETPs until March, 2020.

In view of the above representations of the Associations, the subject was placed before the Board on 18.11.2019 to consider the issue of following instructions to all the Textile Processing Units and Tannery Units who have implemented ZLD system.

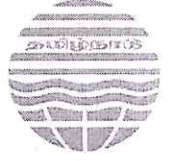
"Extending the time granted in B.P.No.31 dated 30.07.2018, B.P.No.01 dated: 22.01.2019 and B.P.No.13 dated 22.04.2019 to switch over to Mechanical Evaporator followed by Agitated Thin Film Dryer for disposal of final RO rejects on or before 31.03.2020 by all the IETPs/CETPs Textile Processing units (Bleaching, Dyeing and Printing) and Tannery units. The existing solar evaporation pan shall be dismantled completely after commissioning of the Mechanical Evaporator followed by Agitated Thin Film Dryer".

The Board vide Resolution No. 279-1-12 dated: 18.11.2019 has resolved to approve the proposal for extending the time granted in B.P.No.31 dated 30.07.2018, B.P.No.01 dated: 22.01.2019 and B.P.No.13 dated 22.04.2019 to switch over to Mechanical Evaporator followed by Agitated Thin Film Dryer for disposal of the final RO rejects on or before 31.03.2020 by all the IETPs/CETPs Textile Processing units (Bleaching, Dyeing and Printing) and Tannery units. The existing solar evaporation pans shall be dismantled completely after commissioning of the Mechanical Evaporator followed by Agitated Thin Film Dryer.





## TAMILNADU POLLUTION CONTROL BOARD



The Board has also resolved that no more further extension will be considered beyond 31.03.2020.

*S. Kumar*  
For Member Secretary

*Perf*  
*27/11/2019*

To

1. All Joint Chief Environmental Engineers (Monitoring),  
Tamil Nadu Pollution Control Board
2. All District Environmental Engineers,  
Environmental Engineers (Flying Squad),  
Tamil Nadu Pollution Control Board

Copy to

1. Chief Engineer & Additional Chief Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Chennai-32.
2. All Joint Chief Environmental Engineers,  
Tamil Nadu Pollution Control Board,  
Chennai-32.
3. All Environmental Engineers,  
Tamil Nadu Pollution Control Board,  
Chennai -32
4. BMS Section,  
Tamil Nadu Pollution Control Board,  
Chennai-32.
5. PS(T) to Chairman & PA to Member Secretary,  
Tamil Nadu Pollution Control Board,  
Chennai-32.
6. File

