

**ENVIRONMENT AND FORESTS
DEPARTMENT**

POLICY NOTE

DEMAND No. 15

ENVIRONMENT

2020-2021

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Tamil Nadu Pollution Control Board

1.0 Introduction

The Government of Tamil Nadu constituted the Tamil Nadu Prevention and Control of Water Pollution Board, vide G.O.No.340, Health and Family Welfare Department dated 19.02.1982, under Section 4 (1) of the Water (Prevention and Control of Pollution) Act, 1974 (Central Act 6). The notification was issued in the Tamil Nadu Government Gazette on 27th February 1982 and the Board came into existence on the same day. Subsequently after framing of the Tamilnadu Water (Prevention and Control of Pollution) Rules, 1983, the Board was renamed as Tamil Nadu Pollution Control Board (TNPCB).

The TNPCB functions under the overall administrative control of Environment and Forests Department. The Board comprises of Chairman, Member Secretary, five officials to represent the State Government, five persons to represent the local authorities, three non-officials to represent

the interests of agriculture, fishery or industry or trade and two persons to represent the companies or corporations owned by the State Government.

2.0 Acts and Rules

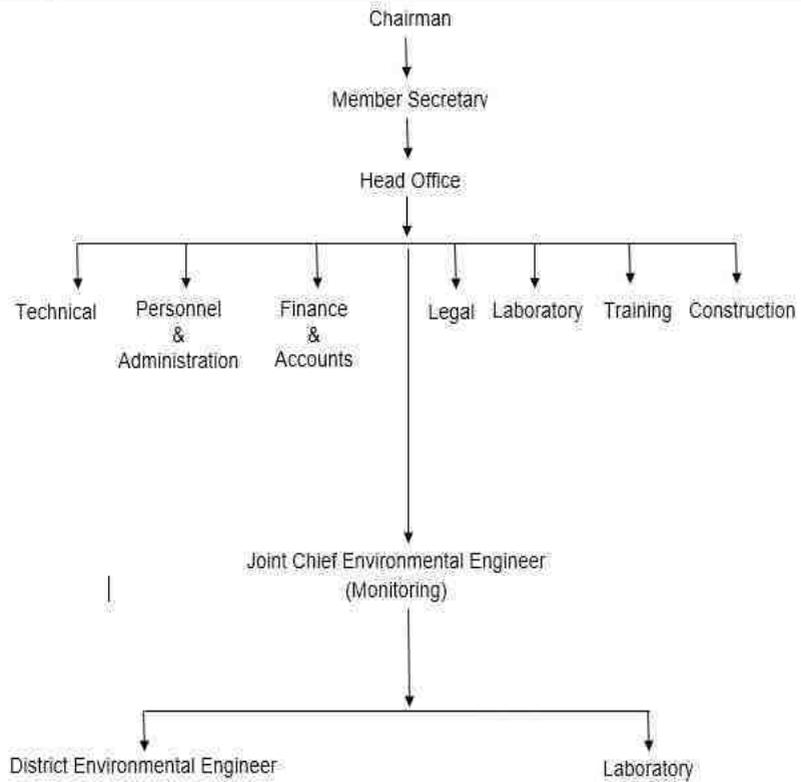
The TNPCB is a regulatory body which enforces the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986, besides the following Rules and Notifications made there under.

- The Tamil Nadu Water (Prevention and Control of Pollution) Rules, 1983
- The Tamil Nadu Air (Prevention and Control of Pollution) Rules, 1983
- The Environment (Protection) Rules, 1986
- The Fly Ash Utilization Notification ,1999
- The Noise Pollution (Regulation and Control) Rules, 2000
- The Batteries (Management and Handling) Rules, 2001

- The Environment Impact Assessment Notification, 2006
- Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
- The Bio-Medical Waste Management Rules, 2016
- The Solid Waste Management Rules, 2016
- The Plastic Waste Management Rules, 2016
- The E-Waste Management Rules, 2016
- The Construction and Demolition Waste Management Rules, 2016
- The Coastal Regulation Zone Notification, 2019

The Water (Prevention and Control of Pollution) Cess Act, 1977 which was earlier enforced by Tamil Nadu Pollution Control Board has been repealed following the implementation of Goods and Services Tax, since 01.07.2017.

3.0 Organisational Setup



The organizational structure of the TNPCB is three-tier-system, consisting of Head Office, Seven Zonal Offices and 38 District Offices with a sanctioned strength of 998 staff. The Head Office is located at Chennai. The Seven Zonal Offices are headed by the Joint Chief Environmental Engineers (Monitoring) and the 38 District Offices are headed by the District Environmental Engineers. Apart from this, there are two flying squads headed by Environmental Engineers each one functioning at Erode and Tiruppur. The Tamil Nadu Pollution Control Board has also established 16 Laboratories (8 Advanced Environmental Laboratories and 8 District Environmental Laboratories) for monitoring the industries, water bodies and the ambient air quality of the State.

4.0 Functions

The TNPCB implements the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of

Pollution) Act, 1981. The main functions of the TNPCB as per Section 17 of the above Acts are as follows:

- To plan a comprehensive programme for the prevention, control and abatement of pollution of streams and wells besides air pollution in the State and to secure the execution thereof ;
- To advise the State Government on any matter concerning the prevention, control or abatement of water and air pollution;
- To inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review plants specifications or other data relating to plants set up for the treatment and the system for the disposal of sewage or trade effluents;
- To inspect air pollution control areas at such intervals as it may think necessary, assess

the quality of air therein and take steps for the prevention, control or abatement of air pollution in such areas;

- To collaborate with the Central Pollution Control Board (CPCB) in organizing the training of personnels engaged or to be engaged in programmes relating to prevention, control or abatement of water and air pollution and to organize mass education programme relating thereto;
- To encourage, conduct and participate in investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution;
- To establish or recognize laboratories to enable the Board to perform its functions efficiently, including the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents and emission of air pollutants;

- To perform such other functions as may be prescribed or as may, from time to time entrusted to it by the Central Pollution Control Board or the State Government.

5.0 Consent Management

Tamil Nadu is highly industrialized State and second highest in the registered small and medium scale industries. To monitor the industries in respect of air and water pollution, mechanism of Consent to Establish and Consent to Operate the industries is being followed by TNPCB.

The consents are issued to the industries in two stages. In the first stage, 'Consent to Establish' (CTE) is issued to the industries, after assessing the suitability of the site before the industries take up their construction activities and in the second stage, 'Consent to Operate' (CTO) is issued to the established industrial units after

ensuring the unit's compliance of conditions stipulated in the Consent to Establish.

For efficient and effective implementation of the Acts and Rules and for efficient monitoring, the TNPCB has constituted various committees at Head, Zonal and District office levels. These committees conduct meetings at their levels and decide on the issues of consents, renewal of consents and authorisation for waste management.

5.1 Classification of Industries

The Central Pollution Control Board has issued direction vide its letter dated 07.03.2016 to all State Pollution Control Boards (SPCBs) to maintain uniformity in categorizing the industries as Red, Orange, Green and White for grant of consent, inventorisation and other related activities. Based on that, TNPCB has classified the industries into a matrix of different categories by combining the pollution potential of an industry

and the value of its Gross Fixed Assets (GFA) for the purpose of monitoring. Thus, the industries are grouped as Red, Orange, Green or White and as Large, Medium or Small. As per CPCB direction, there shall be no necessity of obtaining consent for White category industries and only intimation to the concerned State Pollution Control Board shall suffice.

| Category based on GFA | GFA (in crore) | Category based on polluting potential | | | |
|-----------------------|----------------|---------------------------------------|------------------|----------------|---------------|
| | | Red | Orange | Green | White |
| Large | > 10 Cr. | Highly Polluting | Medium Polluting | Less Polluting | Non Polluting |
| Medium | 5-10 Cr. | | | | |
| Small | < 5 Cr. | | | | |

In addition, certain highly polluting industries have been brought under '17 category industries' based on the classification prescribed by the Central Pollution Control Board.

5.2 Online Consent Management

The Board grants consent for establishment and operation of industries and processes based on the proposals submitted by the proponents. As a part of e-governance initiative of the Government of Tamil Nadu and with a view to provide a healthy and proactive interface between the regulatory authority and the industries, the TNPCB has introduced the facility of Online Consent Management and Monitoring System (OCMMS) from 19.01.2015 onwards.

The web based generic software package used in OCMMS has automated the work flow associated with consent management and monitoring which is one of the basic functions of the TNPCB. This system brings transparency and promptness in consent management, facilitating the industries for online submission of applications for Consent to Establish / Consent to Operate / Renewal of Consent, uploading of documents,

online payment of consent fees, online submission of clarifications, besides knowing the status of applications. In order to help the project proponents on filing of application through OCMMS, TNPCB operates Care Centre in all the district offices.

The TNPCB grants Consent to Establish (CTE) to industries with 7 years validity in cases of Environmental Impact Assessment (EIA) projects and 5 years in case of non-EIA projects. The Consent to Operate (CTO) is issued for eligible cases with a validity period of 5 years, 10 years and 14 years for Red, Orange and Green category industries respectively. The Tamil Nadu Pollution Control Board is also issuing auto renewal of consent to the units with respect to Red-Small, all sizes of Orange and Green category industries without inspections after getting and by getting specific undertakings from the units on compliance of previous consent order conditions.

Details of consent issued by TNPCB during 2019-2020

| Year | Consents issued for | | |
|---------------------------------|---------------------|-----------|---------|
| | Establishment | Operation | Renewal |
| From April 2019 to January 2020 | 656 | 4975 | 7575 |

5.3 Inspection Periodicity and Sample Collection

Inspections and sample collections are carried out by the Board for various categories of industries as per the periodicity furnished below.

| Type of Industry | Category | Inspection | Sample Collection |
|------------------|----------|------------------|-------------------|
| Large | Red | Once in 3 months | Once in a month |
| | Orange | Once in 6 months | Once in 4 months |
| | Green | Once in 2 years | ----- |

| Type of Industry | Category | Inspection | Sample Collection |
|-------------------------|-----------------|-------------------|--------------------------|
| Medium | Red | Once in 4 months | Once in 3 months |
| | Orange | Once in 6 months | Once in 6 months |
| | Green | Once in 2 years | ----- |
| Small | Red | Once in a year | Once in 3-6 months |
| | Orange | Once in 2 years | Once in 6 months |
| | Green | Once in 2 years | ----- |
| 17 Category of Industry | | Once in a month | Once in a month |

5.4 Public Hearing

As per the Environmental Impact Assessment Notification, 2006, industrial projects falling under "A" category require prior Environmental Clearance from the Ministry of Environment, Forest and Climate Change

(MoEF&CC), Government of India and projects falling under “B” category from the State Environmental Impact Assessment Authority (SEIAA). As per the notification, the TNPCB conducts public hearings under the Chairmanship of the District Collectors and the proceedings of the meeting are forwarded to the MoEF&CC, GoI or SEIAA as the case may be. From April 2019 to January 2020, TNPCB has conducted public hearing for 23 projects.

6.0 Grievance Redressal System

Due to increased awareness on environment related issues, several complaints are being received from various public, Organizations, NGOs etc., The TNPCB has introduced online grievance petition redressal system from 1st March 2016 onwards. During the period from April 2019 to January 2020, 11798 complaint petitions were investigated and disposed.

6.1 CM Cell Petitions

The TNPCB has established a separate section in Head Office to take immediate action to clear CM Cell petitions within 15 days. From April 2019 to January 2020, 183 petitions were disposed.

6.2 Amma Call Centre Petitions

The TNPCB has established a separate section in Head Office to take immediate action on Amma Call Centre petitions and to dispose the petitions within 7 days. From April 2019 to January 2020, 287 petitions were disposed.

6.3 Grievance Redressal Centre

The TNPCB has established a Grievance Redressal Centre during February 2018 at the Head Office with an objective of guiding Entrepreneurs and Project Proponents for submitting the consent applications, on the latest and cleaner technologies in pollution prevention

and control and also to answer the general public on environmental related issues.

7.0 Common Effluent Treatment Plants

In the State of Tamil Nadu, tanneries and textile sectors contribute considerable export earnings and also provide huge employment opportunities. These industries are small scale in nature and operate in clusters in various parts of the State mostly in Ranipet, Tirupathur, Erode, Dindigul and Tiruppur Districts, thereby necessitating the operation of Common Effluent Treatment Plants (CETPs) to treat the trade effluent generated from their operations to ensure sustainable operation of these industries.

The TNPCB plays a supportive role towards the establishment of CETPs for cluster of small scale industries and also offers technical scrutiny of the proposals submitted by them, through IIT Madras and Anna University. The CETPs are established with the subsidy from State and

Central Government and contribution by the member industries. In Tamil Nadu, 36 CETPs are functioning, out of which 20 are in textiles, 13 are in tanneries, two are in electroplating and one is in Hotel and Lodges sectors. Apart from the above existing CETPs, 10 new CETPs are proposed to treat the trade effluent generated from the textile bleaching and dyeing industries located as cluster in Erode and Namakkal Districts. The TNPCB has issued Consent for Establishment to five CETPs.

To protect and conserve the critical water sources, the system of Zero Liquid Discharge (ZLD) was pioneered by TNPCB. The system provides for the recovery and reuse of water from the trade effluent, without allowing for discharge of effluent into any land or water sources. Out of 13 CETPs operated for tanneries, 11 CETPs are achieving ZLD. The remaining two CETPs located at Madavaram and Pallavaram have provided primary and secondary treatment system and

have opted for dilution of treated effluents with treated municipal sewage to meet the standards prescribed by the Board.

Out of 20 CETPs functioning for the textiles, 19 CETPs (18 CETPs in Tiruppur and one CETP in Perundurai) have achieved ZLD. For modernization / improvement of ZLD system in 18 CETPs in Tiruppur, the Government of Tamil Nadu have announced Rs.203.29 Crores as interest free loan, out of which Rs.199.15 Crore has been sanctioned and released to the respective CETPs through the Director of Handlooms and Textiles. The remaining one CETP at Ayyampet-Muthyalpet in Kancheepuram district has proposed to provide ZLD plant after getting the grant from the Central and State Governments.

7.1 Scientific Study Through Expert Institutions

(i) In order to find a solution for disposal of salt generated from ZLD System of Tannery CETPs,

the All India Skin and Hide Manufacturers Association (AISHTMA) has engaged Central Salt & Marine Chemical Research Institute, Bhavnagar, Gujarat. They have demonstrated a technology and conducted studies for segregation of Sodium Chloride (NaCl) and Sodium Sulphate (Na₂SO₄) from the mixed salt so as to reuse the same. Utilization of these salts in Chlor Alkali units, Soda Ash, Pulp and Paper manufacturing industries is under trial.

(ii) In order to identify the contaminated area, source of contamination and subsequent remedial measures to restore the Odai Kattur Eri, Perundurai, Erode District, a detailed hydro-geological study is under progress in and around the SIPCOT Industrial Complex, Perundurai by National Geophysical Research Institute (NGRI), Hyderabad.

8.0 Plastic Waste Management

The Ministry of Environment, Forest and Climate Change, Government of India have

notified the Plastic Waste Management Rules, 2016. As per the annual report for the year 2018-19, the estimated plastic waste generated from 664 Urban Local Bodies of Tamil Nadu is around 1098 tons/day, out of which 90% is collected and segregated by the respective urban bodies in which the recyclable plastic waste are sold to the recyclers, low value / low calorific plastic waste are utilized for road laying and the non-recyclable, high calorific plastic waste are sent for co-incineration in cement plants.

As per Rule 13 of Plastic Waste Management Rules, 2016, the TNPCB has issued Registration to 91 plastic manufacturing units, 98 plastic recycling units and 8 multilayer plastic units. The TNPCB submits annual report in Form-VI of the Rule to the Central Pollution Control Board.

8.1 Use and Throwing Plastic Ban Notification

The Hon'ble Chief Minister of Tamil Nadu made an announcement under Rule 110 on 05.06.2018 imposing ban on manufacture, storage, supply, sale and use of certain 'use and throwaway plastics' with effect from 01.01.2019.

The Government of Tamil Nadu, in exercise of the powers conferred under Section 5 of the Environment (Protection) Act, 1986 notified ban on manufacture, storage, supply, transport, sale or distribution and use of 1) Plastic sheet / cling film used for food wrapping 2) Plastic sheet used for spreading on dining table 3) Plastic Thermocol plate 4) Plastic coated paper plates 5) Plastic coated paper cups 6) Plastic tea cups 7) Plastic tumbler 8) Thermocol cups 9) Plastic carry bags of all size & thickness 10) Plastic coated carry bags 11) Non-woven Polypropylene carry bags 12) Water packets/pouches 13) Plastic straw and 14) Plastic flags.

8.2 Government Orders for effective implementation of the Ban

For effective implementation of the ban, the following Government orders were issued

| S. No. | Purpose | Government Order |
|---------------|---|---|
| 1. | Formation of Steering Committee | G.O.(Ms)No.92,E&F(EC.2) Department, dated 05.07.2018 |
| 2. | Appointment of Regional Coordinators | G.O.(Ms).No.82,E&F(EC.2) Department, dated 15.06.2018 |
| 3. | Sanction of Rs.54 lakhs for conducting Regional Workshops | G.O.(2D)No.30,E&F(EC.2) Department, dated 05.07.2018 |
| 4. | Implementation of ban on use and throwaway plastics at all Government Departments | G.O.(D).No.265,E&F(EC.2) Department, dated 20.09.2018 |
| 5. | Appointment of TNPCB Officials for assisting Regional Coordinators | G.O.(D).No.319,E&F(EC.2) Department, dated 10.11.2018 |

8.3 Awareness initiatives for successful implementation of Plastic Ban

The TNPCB has carried out the following initiatives for awareness creation among the concerned stakeholders and the public and for effective implementation of ban.

- Meetings conducted with the representatives of Shopping Malls, Hotels and Marriage Halls, TASMACH, Eco-Clubs, NGC Coordinators and District Coordinators of Tamil Nadu
- District Environmental Committee meetings and massive awareness rallies conducted under the Chairmanship of the District Collectors. Monitoring groups formed by the District Collector are carrying out enforcement of plastic ban notification.
- Workshops for alternative eco-products conducted at all districts
- An exhibit vehicle was inaugurated by the Hon'ble Chief Minister of Tamil Nadu and

created awareness at 75 locations all over Tamil Nadu.

- Regional Conferences to create awareness among various stake holders for Plastic Pollution Free Tamil Nadu were conducted.
- Awareness was created through various media such as hosting of website, social media platforms like Facebook, Twitter, etc. and screening of awareness videos and animation short movies in shopping malls, theatres, etc.
- Display boards showing banned items were placed at 45 toll plazas across NHAI.
- The TNPCB has directed all the large industries throughout the State to comply with the plastic ban order and to create awareness in areas adjoining the industries.
- The Hon'ble CM launched "Reverse Vending Buyback" Machine to Recycle the PET bottles and aluminium cans and the same was installed at different locations.

8.4 Action taken against manufacturers of banned plastic items

The TNPCB has issued closure directions and disconnection of power supply to 52 industries involved in the manufacture of banned plastic items

9.0 Hazardous Waste Management

As per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 the hazardous waste generators shall follow the steps namely prevention, minimization, reuse, recycling, recovery, utilization including co-processing and safe disposal of the hazardous wastes. The State Pollution Control Board shall grant authorization for handling the hazardous wastes.

In the State of Tamil Nadu, there are 3,492 units identified as hazardous wastes generating units and authorization has been issued to them through online consent management system. Of

the 18.06 lakh tons of hazardous wastes generated during 2019-20, 2.07 lakh tons are landfillable, 2.01 lakh tons are recyclable, 0.41 lakh tons are incinerable, 13.57 lakhs tons of wastes are utilizable.

The TNPCB is taking effective steps in handling and management of hazardous wastes, its treatment and disposal in an environmentally safe manner. Two common hazardous waste "Treatment, Storage and Disposal Facilities" (TSDF) have been established at Gummidipoondi and Virudhunagar and they are in operation. Further, the TNPCB has taken efforts to utilize the hazardous wastes generated from Common Effluent Treatment Plants (CETPs) of the textile processing units and tanneries as raw material for co-processing in the cement factories. So far, 2.11 lakh tons of ETP primary sludge has been disposed off to various cement industries for co-processing.

10.0 Solid Waste Management

The Ministry of Environment, Forest and Climate Change, Government of India have notified the Solid Waste Management Rules, 2016. The role of local bodies have been specified under Rule 15. As per Rule 16, the TNPCB enforces these Rules through local bodies.

In Tamil Nadu, there are 15 Corporations, 121 Municipalities and 528 Town Panchayats. During 2018-19 and the total quantity of solid waste generation was 13,968 tons/day, as reported by the local bodies, of which 12,850 tons/day of solid wastes was collected. From this collected quantity, 7,196 tons/day of solid waste was treated and 5,654 tons/day were land filled in the landfill sites.

The TNPCB has issued Authorisation to 219 Urban Local Bodies (ULBs) generating solid wastes greater than 5 tons/day. The TNPCB issues directions to ULBs based on complaints

received for improper solid waste management. The TNPCB monitors the water and air quality in and around the dumpsites of ULBs periodically. The TNPCB submits the annual report in Form-V to the CPCB.

11.0 Biomedical Waste Management

As per the Bio-Medical Waste Management Rules, 2016, the Bio-medical waste generators and the operators of the Common Bio-Medical Waste Treatment and Disposal facilities (CBMWTF) are responsible for safe handling and disposal of the bio-medical wastes. The TNPCB issues authorization to the health care facilities and the CBMWTFs through online and monitors the compliance of various provisions of the Rules. The Government have constituted the State Level Advisory Committee to oversee the implementation of the Rules.

In the State of Tamil Nadu, so far 18,372 Private and Government hospitals, including the bedded and non bedded clinics, Veterinary

Institutions, Pathological Labs, Blood Banks and Research Institutions have been issued with authorizations under BMWM Rules, 2016. All these hospitals have executed agreement with the CBMWTFs for the collection, transport, treatment and scientific disposal of the biomedical wastes. In Tamil Nadu, there are 11 CBMWTFs, out of which, eight facilities are in operation. The remaining three facilities were issued with closure directions by the TNPCB for non compliance of Bio Medical Waste Management Rules, 2016. On an average, 58 tons/day of bio-medical waste are handled by these facilities. Consent for Establishment has been issued for three more common facilities at Tiruvallur, Cuddalore and Tiruppur Districts.

12.0 E-Waste Management

As per the E-Waste Management Rules, 2016 the producer of the electrical and electronic equipments shall be responsible for collection and channelization of e-wastes generated from the

'end-of-life' of their products under Extended Producers Responsibility (EPR). The CPCB issues authorization to the producer of electrical or electronic equipments for channelization of e-wastes to ensure environmentally sound management of such waste. The TNPCB monitors the compliance of the conditions of the Extended Producer Responsibility (EPR) Authorisation. The TNPCB grants authorization to the manufacturers, dismantlers, recyclers and refurbishers and conducts random inspections. The Board has so far issued authorizations to 25 units, which includes 23 Dismantlers, one Recycler and one Refurbisher.

13.0 Construction and Demolition Waste Management

The Ministry of Environment, Forest and Climate Change, Government of India have notified the Construction and Demolition (C&D) Waste Management Rules, 2016 which is to be scrupulously implemented by the ULBs. The

TNPCB has issued necessary directions to all the local bodies to identify sites for collection and processing facilities for the C&D Wastes.

14.0 TNPCB Laboratories

The TNPCB has established well equipped laboratories for the analysis of water, waste water, sewage, soil samples and for monitoring the ambient air quality and stack monitoring of the industries at district level. At present, there are eight Advanced Environmental Laboratories (AELs) functioning at Chennai, Coimbatore, Cuddalore, Madurai, Salem, Tirunelveli, Trichy and Vellore. Eight District Environmental Laboratories (DELs) are functioning at Ambattur, Dindigul, Hosur, Manali, Maraimalai Nagar, Tiruppur, Tuticorin and Perundurai. All the TNPCB laboratories receive the samples collected by the District Environmental Engineers in their region and the samples are analysed for the major environmental parameters and the reports are

furnished to the District Environmental Engineer's within 15 days. The TNPCB laboratories also conduct air quality studies at industries at regular frequency to monitor the emission level and to comply with the standards.

The AELs at Chennai, Coimbatore, Cuddalore, Madurai and Salem has got the NABL accreditation. The AELs at Chennai, Salem and Cuddalore have obtained OSHAS 18001 Certification. 21,209 numbers of water / effluent samples were analyzed and stack monitoring and ambient air quality survey were conducted for 818 industries from April 2019 to January 2020.

14.1 Water Quality Monitoring

The TNPCB is monitoring the inland water quality under Global Environmental Monitoring System (GEMS) and Monitoring of Indian National Aquatic Resources System (MINARS) along the four major rivers of Cauvery, Tamirabarani, Palar and Vaigai and eight lakes located in Udthagamandalam, Kodaikanal, Yercaud,

Veeranam, Porur, Poondi, Pulicat and Redhills. At present, 79 stations are being monitored by the TNPCB with the financial assistance of the CPCB. Results are uploaded in the CPCB / TNPCB website.

14.2 Water Quality Watch Centre

The TNPCB has established a “Water Quality Watch Centre” at Corporate Office, Chennai for online monitoring of the parameters such as flow, TDS, pH, BOD, COD, TSS and other specific parameters of treated effluent at the outlet of the treatment plant on 24x7 continuous basis. As on January 2020, 343 units of 17 category highly polluting industries, Red Large industries and CETPs are monitored at the centre.

14.3 Continuous Water Quality Monitoring Stations

The TNPCB has installed online real time continuous water quality monitoring stations in River Cauvery, Noyyal, Bhavani, Tamirabarani and Kalingarayan canal to watch the quality of the

water. The parameters such as pH, Total (DO) Dissolved Solids (TDS) and Dissolved Oxygen levels are monitored.

14.4 Chennai City Waterways Monitoring Programme

The TNPCB is monitoring the water quality of four city waterways in Chennai city (i.e.) Adyar River, Buckingham Canal, Cooum River and Otteri Nallah in 30 locations to assess the pollution level.

14.5 Ambient Air Quality Monitoring

The TNPCB is operating 28 Ambient Air Quality Monitoring Stations (AAQMS) in Tamil Nadu under National Air Quality Monitoring Programme (NAMP) funded by the CPCB. These stations are located at Chennai, Coimbatore, Madurai, Salem, Tiruchirapalli, Thoothukudi, Mettur and Cuddalore. The parameters viz., Particulate Matter (PM_{10}), Particulate Matter ($PM_{2.5}$), Sulphur Dioxide (SO_2), Nitrogen Dioxide (NO_2) and Ammonia (NH_3) are monitored. All the above stations are functioning on 24 hours basis

twice a week. The survey results are displayed in the TNPCB website.

14.6 Continuous Ambient Air Quality Monitoring Stations

The TNPCB has installed Continuous Ambient Air Quality Monitoring (CAAQM) stations in Chennai at Koyambedu, Royapuram, Perungudi, Manali, Kodungaiyur and in the SIPCOT complex of Gummidipoondi, Thoothukudi, Perundurai and SIDCO complex of Coimbatore to monitor the parameters PM_{10} , $PM_{2.5}$, NO_x , SO_2 , CO, O_3 , Benzene and VOCs in the ambient air. The TNPCB monitors the air quality in hot spots and complaint prone area through mobile monitoring van. The TNPCB has also installed 25 CAAQM stations in urban and industrial areas of major districts of the State.

14.7 Care Air Centre

The TNPCB Care Air Centre is functioning at Corporate Office, Chennai for online monitoring of the parameters such as PM_{10} , $PM_{2.5}$, SO_2 , NO_x in

the ambient air and source emission of the industries on 24x7 continuous basis. As on January 2020, 615 industries are connected to this centre for source emission and ambient air quality monitoring. On exceedance of standards and connectivity failure during maintenance, SMS and e-mail alert is sent to the concerned industries and district field officers to take necessary action.

14.8 National Ambient Noise Monitoring Network Programme

The TNPCB in association with CPCB has established 10 Real Time Ambient Noise Monitoring Stations in Chennai City at Egmore, T.Nagar, Perambur, Guindy, Triplicane, Pallikaranai, Velachery, Washermanpet, Anna Nagar and Sowcarpet under National Ambient Noise Monitoring Network Programme. The datas are uploaded in the CPCB website.

15.0 Legal Actions

If any industry is found to violate and pollute the environment, the TNPCB issues show cause notice followed by personal hearing so as to give a chance to rectify their defects but if they still continue to violate and pollute, the TNPCB issues orders for closure and stoppage of power supply to the units under Section 33A of the Water (P&CP) Act, 1974 as amended and under Section 31 A of the Air (P&CP) Act, 1981 as amended. From April 2019 to January 2020, 17,851 industries were issued with show cause notices and 554 industries were issued with directions for closure and stoppage of power supply. Once the industries rectify the defects and approach for revocation, the Board after necessary inspections and verifications, issue orders for revocation of closure and restoration of power supply.

However, the industries if aggrieved of Board's closure directions or any other directions issued by the Board could make an Appeal before the Hon'ble Appellate Authority and Hon'ble National Green Tribunal.

15.1 Hon'ble Appellate Authority

Hon'ble Appellate Authority has been constituted and functioning under the Chairmanship of a Hon'ble Justice with two Technical Members. The Authority examines the appeals preferred by the industries against the orders of the TNPCB, issued under Section 25,26 and 27 of the Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988 and any orders issued under the Air (Prevention and Control of Pollution) Act,1981 as amended in 1987.

15.2 Hon'ble National Green Tribunal

The Southern Zone of the Hon'ble National Green Tribunal is functioning at Chennai. Any

person aggrieved by the orders of the Appellate Authority and by the orders passed by TNPCB / State Government, under Section 28, 29 and 33A of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 5 of the Environmental (Protection) Act, 1986 can prefer an appeal before the NGT within 30 days of the orders passed by the Board / State Government / Appellate Authority.

15.3 Right to Information Act

The TNPCB is having a separate section to deal with Right To Information (RTI) Act applications. In pursuance to the directions of Government of Tamil Nadu, the TNPCB has designated Joint Chief Environmental Engineer (JCEE) in the Corporate Office, all the JCEEs (M) in the Regional Office, all DEEs in the District Office and Head of the laboratories as Public Information Officers (PIOs) to provide information to public under the RTI Act, 2005. Chief

Environmental Engineer (CEE) at Corporate Office has been designated as Appellate Authority. From April 2019 to January 2020, Board has furnished informations to 1446 applications.

16.0 Activities Based On Hon'ble NGT Directions

The following activities are being carried out by the TNPCB in compliance with the directions of the Hon'ble National Green Tribunal.

16.1 Comprehensive Environmental Pollution Index (CEPI)

The MoEF&CC has identified eight Polluted Industrial areas in Tamil Nadu namely Vellore, Cuddalore, Manali, Coimbatore, Tiruppur, Mettur, Erode and Tuticorin, based on the environmental quality monitoring conducted by CPCB all over the country. Based on CPCB's report, Hon'ble NGT in its order dated 14.11.2019 in the O.A. No. 1038/2018 directed all the SPCBs/PCCs to conduct environmental quality monitoring in its Polluted Industrial Areas (PIAs) and submit time

bound action plans on or before 31.01.2020 to CPCB. The NGT has also imposed moratorium for setting up of new and expansion of Red and Orange category industries in the PIAs.

Based on this, TNPCB conducted study, evaluated CEPI score and prepared time bound action plan and submitted to CPCB on 28.01.2020. The CPCB has also been addressed to lift the moratorium imposed in Polluted Industrial Areas.

16.2 Environmental Compensation

As per the direction of the Hon'ble National Green Tribunal in the matter of O.A No. 710 to 713 of 2017 and also in NGT (PB) O.A.No. 593/2017 (Earlier in Supreme Court of India W.P. (Civil) No. 375/2012) the CPCB has formulated the methodology to assess and recover compensation from Industries, Health Care Facilities (HCFs) and CBMWTFs for the damage caused to the environment and utilize

such amount for protection of the environment & restoration of damage and instructed all the SPCBs to impose Environmental Compensation to all the violating industries.

16.3 Action plan for utilization of treated sewage

Based on the orders of Hon'ble NGT Principal Bench, New Delhi, action plan for further utilization of treated sewage from ULBs sewage treatment plants by Industries and others in the State of Tamil Nadu was prepared by Municipal Administration and Water Supply Department, Government of Tamil Nadu. The same has been submitted to CPCB by TNPCB.

16.4 Polluted River Stretches

In Tamil Nadu, CPCB has identified six numbers of Polluted River Stretches based on the Bio-Chemical Oxygen Demand (BOD) values and categorized into five priorities (Priority I: BOD > 30mg/l, Priority II: BOD 20 to 30mg/l,

Priority III: BOD 10 to 20 mg/l, Priority IV: BOD 6 to 10 mg/l, Priority V: 3 to 6 mg/l).

1. River Sarabanga - Thathayampatti to T. Konagapadi Stretch -(15 Kms)-Priority-I.
2. River Thirumanimutharu - Salem to Papparapatti Stretch - (15Kms)-Priority-I
3. River Vasishta - Manivilundhan to Thiyaganur Stretch - (10Kms) - Priority-I.
4. River Cauvery - Mettur to Mayiladuthurai Stretch - (200 Kms) - Priority-I.
5. River Bhavani-Sirumugai to Kalingarayan Stretch - (60Kms) - Priority-IV.
6. River Thamirabarani-Pappankulam to Arumuganeri Stretch - (80Kms) - Priority-V.

The water quality of the polluted river stretches indicated that the main cause of pollution is due to discharge of untreated domestic sewage / sullage and dumping of

Municipal Solid Wastes from the urban local bodies. Based on the CPCB reports, the Hon'ble National Green Tribunal (NGT) Principal Bench took suo-moto cognizance and issued the following directions by its orders dated 20.09.2018 & 19.12.2018 in O.A. No.673/2018.

".....all the States and the Union Territories to prepare action plans for bringing all the polluted river stretches to be fit at least for bathing purpose."

Accordingly, TNPCC has prepared and submitted the action plans with time lines for all the six stretches in coordination with the various departments and the approved action plans are under implementation to prevent the discharge of sewage for the Restoration and Rejuvenation of rivers with the coordination of various Government Departments through Solid Waste Management.

16.5 Non Attainment Cities

The CPCB has identified 102 cities as non attainment cities in India including Thoothukudi in Tamil Nadu based on the monitoring data for the period 2011-2015. The Hon'ble NGT in its order dated 8.10.2018 in O.A No 681 of 2018 has directed the TNPCCB to prepare and finalize the action plan for the non attainment city – Thoothukudi in coordination with various Government Departments. Accordingly, action plan was prepared and the same was approved by the CPCB. The action plan for the Thoothukudi city is now under implementation in coordination with various stake holders. The Hon'ble NGT (PB), Delhi in its order dated 06.08.2019 has also identified Trichy as non attainment city for which action plan to improve the air quality was prepared and forwarded to the CPCB for approval.

17.0 Environmental Training Institute

The Environmental Training Institute (ETI) of TNPCB provides training to the staff of TNPCB, industrial representatives, Executives of Municipalities and Corporations, Line Departments and NGOs on pollution control and environmental protection.

During the period of April 2019 to January 2020, the TNPCB has conducted the following training programmes through ETI:

| S. No. | Training Programmes | Beneficiaries | No. of participants |
|--------|------------------------------------|---|---------------------|
| 1 | Ban on use and throw away plastics | HR&CE Department, Food & Safety Department, District Officials of TASMACH | 90 |
| 2 | E-Waste Management | Authorized Producers, Dismantlers, Manufacturers, Recyclers and Refurbisher | 123 |

| S. No. | Training Programmes | Beneficiaries | No. of participants |
|---------------|---|---|----------------------------|
| 3 | Biomedical Waste Management | Doctors / para medical staff of Apollo Hospitals, Chennai | 22 |
| 4 | Solid Waste Management - Biomining | Commissioners of Corporations, Municipality and Sanitary Inspectors and school students | 410 |
| 5 | Solid Waste Management and Plastic Waste Management | Executive Officers of Town Panchayat | 520 |
| 6 | Functioning of TNPCB | 11 IAS officers, 5 Deputy Collectors, 40 Section Officers of Secretariat and 16 Assistant Directors of Industrial Safety and Health | 72 |
| 7 | Vehicular emission monitoring | Operators of "Pollution Under Control" certificate issuing Centre | 226 |

18.0 Environmental Awareness

The TNPCB conducts various environmental awareness programmes during Bhogi, World Environment Day, Vinayagar Chathurthi, Deepavali and Tiruvannamalai - Karthigai Mahadeepam Festivals to create awareness among public and to take positive action to protect the environment through rallies, environmental quiz competitions, planting of tree saplings, campaign through auto rickshaws, pamphlets distribution to the public, displaying boards in public places, broadcasting in FM Radio and screening of short films through visual media.

18.1 Government Exhibitions

The TNPCB participates in Government Exhibitions conducted every year at Island Grounds, Chennai and exhibits models on Effluent Treatment Plants, Air Pollution Control Measures, Solid Waste Management and also provides information on environmental protection. The

TNPCB also participates in the Government Exhibitions conducted at the District Level.

18.2 Green Awards

The Hon'ble Chief Minister of Tamil Nadu presents Green Awards to the District Collectors, industries, educational institutions and residential welfare associations recognizing their contribution in environmental protection and awareness creation. Special awards presented to the District Coordinators for taking effective steps to implement the ban on use and throwaway plastics to a greater extent.

19.0 Funding For Pollution Abatement Projects and other projects

The TNPCB participates in various pollution abatement projects and awareness programs by providing financial assistance to the Government Departments to improve the quality of environment in the State of Tamil Nadu.

The TNPCB has released funds for the following pollution abatement projects

| S. No. | Details of project | Status |
|---------------|---|--|
| 19.1 | Funding for Massive tree plantation on the occasion of 71 st birthday of Hon'ble former Chief Minister. | The Government vide G.O.(2D).No.49 E&F (FR.6) dept dated 03.12.2019 has sanctioned Rs.13.40 Crores and the TNPCB has released Rs.6.7 Crores (Rupees Six Crores and Seventy Lakhs only) as first installment to the Principal Chief Conservator of Forests vide B.P.No.83 dated 30.12.2019. |
| 19.2 | Eco restoration of Chitlapakkam Eri in Chengalpattu District as per the 110 Announcement made in the Assembly by the Hon'ble Chief Minister during the year 2019-20 | The TNPCB released Rs.25 Crores to the Department of Environment (DoE) vide G.O.(D).No.283 E&F Department dated 25.10.2019. |

| S. No. | Details of project | Status |
|---------------|--|--|
| 19.3 | Eco Restoration of Odathurai Eri Bhavani Block in Erode District. | The TNPCB released Rs.3.20 Crores for eco restoration of Odathurai Eri, Bhavani Block in Erode District vide G.O. (Ms).No.294, E&F (EC-1) Dept. dated: 04.11.2019. |
| 19.4 | Creation of Urban Arboretum in Greater Chennai Corporation as per the Announcements of Hon'ble Minister for Environment in the Legislative Assembly session 2018-19. | The TNPCB has released Rs.139 lakhs on 11.12.2019 to the District Forest Officer (DFO), Chennai Forest Division vide B.P.No.69 dated 26.11.2019. |
| 19.5 | Conducting Eco Competitions and Eco-camps to NGC eco club students at a cost of Rs.2.00 Lakhs per district for 32 districts | The TNPCB released a fund of Rs.64 Lakhs for the year 2019-20 to the Department of Environment (DoE) vide G.O. (D).No.34 E&F Department dated 14.10.2019. |

| S. No. | Details of project | Status |
|---------------|---|--|
| 19.6 | Tamil Nadu State Climate Change Information Dissemination Services (TNS-CIDS) as per the Announcements made in the Assembly by the Hon'ble Minister for Environment during the year 2019-20 | The TNPCB released Rs.8 Lakhs to DoE vide G.O. (D).No.278 E&F Department dated 23.10.2019 |
| 19.7 | Funds released to the district offices to create awareness on E-Waste Management to the school teachers and other stake holders | Tamil Nadu Pollution Control Board has granted Rs.38 Lakhs @ Rs.1 lakh per District office for conducting awareness programmes to the School Teachers and other stake holders on E-Waste management vide BP.No. 76 dated 29.11.2019. |
| 19.8 | Study on assessment of microplastics in coastal area estuaries and lakes in Tamil Nadu by the DoE as per the announcement of the Hon'ble Minister for Environment | The TNPCB has sanctioned Rs.81.2 lakhs and released an amount of Rs.25.4 lakhs for the year 2019-2020 to the Member Secretary, EMAT as per B.P. No.15, dated 21.02.2020. |

| S. No. | Details of project | Status |
|---------------|---|---|
| 19.9 | Awareness campaign on the ill effects of plastics through "Message on Wheels" in all the Districts by the DoE as per the announcement of the Hon'ble Minister of Environment. | The TNPCB has released Rs.64 lakhs @ Rs.2 lakhs / district (32 districts) to the Member Secretary, EMAT as per B.P. No.75, dated 28.11.2019 |

20.0 Sustainable Development Goals

India is a signatory to the Sustainable Development Goals (SDGs) which is an intergovernmentally agreed set of goals relating to international development to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs cover 17 goals and 169 targets resolved in UN Summit held in September 2015.

The SDG set a target (6.3) by 2030, to improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally and percentage of industries complying with waste water treatment is set as an Indicator (6.3.2). The TNPCB emphasize all the highly polluting industries to achieve ZLD system for trade effluent with an aim to recycle and reuse treated waste water.

The SDG set another target (12.4) to achieve environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment by 2030 and quality monitoring by

introduction of monitoring stations across the State is set as an Indicator (12.4.2). The TNPCB propose to increase the number of ambient air quality monitoring stations from 38 to 87 by adding 25 new CAAQMS and 24 manual monitoring stations in the year 2020-21, covering the entire State of Tamil Nadu. Under, water quality monitoring programme, TNPCB proposes to increase the number of water quality monitoring stations from 79 to 85 by adding 6 new stations in the year 2020-21, to monitor the water quality of water bodies in the State of Tamil Nadu.

The SDG under Target 13.3 aims to improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning and set an Indicator 13.3.1.2 for strengthening of systemic and individual capacity building to implement adaptation, mitigation and

technology transfer, and development actions in the State. Training programmes on environmental related topics and awareness programmes during the festival seasons are conducted by the TNPCB to achieve the target.

21.0 Ease of Doing Business

The Government of Tamil Nadu have established a single window facilitation mechanism under Tamilnadu Industrial Guidance and Export Promotion Bureau to accord in-principle composite approval for pre-project clearances at the State Government level. Guidance Bureau is the nodal agency for convening for Global Investors Meet (GIM) to attract investments. The TNPCB issued consent for 70 industries registered in GIM 2019 upto January 2020 and consent to 23 industries applied through Single window portal from April 2019 –January 2020.

22.0 Cauvery Delta Region – Prohibition of certain new industrial activities under the Environment (Protection) Act, 1986

The Government of Tamil Nadu have issued G.O. Ms. No. 21 E&F (EC.3) Dept dated 24.02.2020 to protect the ecologically fragile agricultural zone of the Cauvery delta region, considered as rice bowl of the State. In this regard, Tamil Nadu Government have issued Notification No.II(2)/EF/148(j)/2020 dated 24.02.2020 prohibiting certain new projects in the delta areas of Thanjavur, Tiruvarur and Nagapattinam Districts, Blocks of Kattumannarkoil, Melbhuvanagiri, Keerapalayam, Parangipettai and Kumaratchi of Cuddalore District, Blocks of Aranthangi, Avudaiyarkoil, Manamelkudi, Tiruvarangulam and Karambakudi of Pudukkottai District. The prohibited project activities include (i) Zinc Smelter (ii) Iron ore process plant, integrated steel plant and sponge iron plant (iii) Copper Smelter (iv) Aluminium Smelter (v) Bone meal, processing of animal

horn, hoofs and other body parts (vi) tannery (vii) Exploration, drilling and extraction of oil and natural gas including coal bed methane, shale gas and other similar hydrocarbons and (viii) ship breaking industry.

Highlights of performance during the year 2019-20

- i. As per the announcement of the Hon'ble Chief Minister of Tamil Nadu, the TNPCB issued B.P. No. 1, Dated: 13.01.2020 that the Green category industries can obtain "CTO-direct" if the industry is to be located in Industrial Use Zone / Industrial Estate as classified by the DTCP / CMDA / LPA.
- ii. The TNPCB in co-ordination with the Department of Environment has prepared State Environment Plan based on the District Environmental Plan obtained from District Collectors and submitted to the CPCB as per the Hon'ble NGT order dated 26.09.2019 in OA No. 360/2018.

- iii. The Hon'ble Chief Minister of Tamil Nadu inaugurated new building for District Environmental Engineer's office at Tiruvallur.
- iv. The TNPCB has relaxed the distance criteria for establishment of another Common Biomedical Waste Treatment Facility (CBMWTF) within a radial distance of 75 kms and also allowed the disposal of biomedical wastes from health care facilities located anywhere in Tamil Nadu to any CBMWTF within 48 hours.
- v. The TNPCB issued Bio Medical Waste authorization to a facilitator for handling body fluids from various health care facilities in Tamil Nadu for further beneficial use.
- vi. The TNPCB approved that NHAI shall open the road for traffic after obtaining Consent to Operate (CTO). Subsequently, Renewal

of Consent (RCO) shall be obtained by NHA I based on the toll plaza Gross Fixed Asset (GFA) value as per BP No.61, dated: 26.11.2019.

- vii. The TNPCB vide BP 63, dated: 26.11.2019 ordered Textiles and Tannery industries to switch over to Agitated Thin Film Dryer (ATFD) in place of Solar Evaporation pan which should be followed Mechanical Evaporator for diposal of final rejects on or before 31.03.2020.
- viii. The Government in G.O. Ms. No. 127, dated 08.05.1998 have imposed a ban on setting up of foundry industries within five kilometers radius from certain important water sources. Representations were received from the foundry industries association for exemption from the said G.O., as the modern foundries generate less quantity of effluent which is solar

evaporated to achieve ZLD. The TNPCB has considered the Industries representation and has recommended to the Government for exempting of the foundrics from the purview of the above Government order. Based on Board's recommendation, the Government vide E&F, Letter (MS). No. 93 / EC.3 / 2019, Dated: 17.09.2019 has issued an amendment by exempting the foundry industries from the purview of the G.O MS. No. 127, Environment and Forests Department, dated 08.05.1998.

- ix. The TNPCB has decided vide B.P.65 dated 27.11.2019 that once the construction project is completed and handed over to the Owners / Residents' Welfare Association, the Owners / Association of the residential apartments irrespective of area are required to apply to the Tamil Nadu Pollution Control Board for fresh consents to operate for the common utilities which includes the Sewage

Treatment Plants, DG sets, Organic Waste Converters etc., under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981. Such Consents to Operate will be issued for a period of five years on payment of single fee each under Water (P&CP) Act, 1974 and the Air (P&CP) Act, 1981 based on the Gross fixed Asset values of these amenities. Thereafter, they shall apply for the renewal of consents once in five years along with the consent fees.

- x. The TNPCB awarded the work of inventorisation of E-Waste in the State of Tamil Nadu to the National Productivity Council at a cost of Rs.47.08 Lakhs as per B.P. 28, dated: 06.08.2019.

K.C.KARUPPANAN
MINISTER FOR ENVIRONMENT