



# **Environment and Forests Department**

## **POLICY NOTE DEMAND No. 15**

**ENVIRONMENT  
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**K.C. KARUPPANAN**  
**Minister for Environment**



**Government of Tamil Nadu  
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## **POLICY NOTE 2018-19**

### **DEPARTMENT OF ENVIRONMENT**

Environment is a dynamic system, with many interacting components. Our knowledge of these components, of their interactions and the relationship between people, resources, environment and development has undergone profound evolution over the years. All human actions in this modern world have the potential to directly influence the ecosystem as a whole.

Environmental deterioration can be attributed to industrialization and urbanization, excessive use of fossil fuels and other raw materials, as well as excessive population growth leading to the disruption of natural ecological balances. Due to industrial and other pollutants, negative genetic consequences are being faced by the human society. Several initiatives have been taken up by the

Government of Tamil Nadu for pollution abatement in rivers and lakes, eco-restoration of water bodies, besides promoting environmental consciousness among the general public. It is the endeavour of the State government to provide a sustainable environment for all round development of the State.

While Tamil Nadu focuses on fostering industrial development Tamil Nadu 2023 Vision document stresses the need to preserve the environment. Theme 8 in Vision Tamil Nadu 2023 document emphasises on environmental preservation encompassing the entire ecological footprint of human activity and would include increasing forest cover, protection of wetlands, conserving groundwater and rivers and other water bodies, protection of the coastal zones and fragile ecosystems, conservation of the zoological and botanical diversity of the State, protection of soil and other natural formations

from abuse on account of human activity, efficient recycling of solid waste ensuring minimal impact on the environment, minimising atmospheric pollution and in general maintaining the ecological balance across the entire State.

## **2. Directorate of Environment**

Created in 1995 the Directorate of Environment is entrusted with co-ordination of major projects like pollution abatement in Cauvery, Vaigai and Tamiraparani rivers and in the waterways of Chennai City. Besides the National Lake Conservation Programme, Management of Coastal Zone and all other significant environment protection efforts except those dealt with by the Tamil Nadu Pollution Control Board are the responsibility of this Directorate.

The Directorate is headed by a Director in the rank of Additional Principal Chief Conservator

of Forests who is assisted by an Additional Director in the rank of Chief Conservator of Forests. The sanctioned strength of the Directorate is 34 which includes three Deputy Directors, Assistant Conservator of Forests, Assistant Environmental Engineer, Accounts Officer, Sociologist, Forest Ranger, two Assistant Engineers and 22 ministerial staff.

## **2.1 Functions of the Department**

- Climate Change Adaptation and Mitigation initiatives
- Coastal Regulation Zone Management
- Preparation of Environmental Management Plans for towns
- Creating Environment awareness in schools and colleges through Non-Government Organizations (NGOs), Eco-clubs and National Green Corp (NGC)

- Synergy with Universities/Research Institutes to build capacity for research and training

### **3. Tamil Nadu State Action Plan on Climate Change (TNSAPCC)**

India's first National Action Plan on Climate Change (NAPCC) integrating existing and future policies and programmes addressing climate mitigation and adaptation was released on 30.06.2008. The plan identifies eight core "National Missions" and these National Missions form the core of the NAPCC, which represents a multi-pronged, long-term and integrated approach for achieving key goals in the context of climate change. The Tamil Nadu State Action Plan on Climate Change (TNSAPCC) was endorsed by the Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India (GoI) on 31.03.2015.

TNSAPCC has identified seven vulnerable sectors listed below:

- 1) Sustainable Agriculture
- 2) Water Resources
- 3) Coastal Area Management
- 4) Forest and Biodiversity
- 5) Sustainable Habitat
- 6) Energy Efficiency, Renewable Energy and Solar Mission
- 7) Knowledge Management

All the concerned line departments are referring to TNSAPCC as base document for their future plan formulations. The Department of Environment, Nodal Agency for implementing TNSAPCC has submitted proposals under the National Adaptation Fund for Climate Change (NAFCC) and the Green Climate Fund (GCF) in

consultation with the National Bank for Agriculture and Rural Development (NABARD), which is the National Implementing Entity for NAFCC and GCF. Similarly, concerned line departments are in the process of submitting proposals for consideration under NAFCC and GCF.

#### **4. National Adaptation Fund for Climate Change (NAFCC)**

The Department of Environment, Nodal Agency for implementing the TNSAPCC has submitted project proposal on “Management and rehabilitation of coastal habitats and biodiversity for Climate Change Adaptation and Sustainable Livelihood in Gulf of Mannar, Tamil Nadu” which is approved by the MoEF&CC, GoI, under the Grants-in-Aid component of the NAFCC with an administrative approval of Rs. 24.74 crore.

The above project involves carrying out a baseline study to assess vulnerability to climate



change of both coastal ecosystems (including biodiversity and fishery) and coastal communities in the Gulf of Mannar, restoration of Habitats (Coral reef and sea grass rehabilitation) in Kariyachalli and Vilanguchalli Islands. The project is under progress.

## **5. Green Climate Fund (GCF)**

The Green Climate Fund (GCF) was adopted as a financial mechanism under UN Framework Convention on Climate Change (UNFCCC) to assist developing countries in adaptation and mitigation practices to counter adverse effects of climate change.

The Department of Environment, Nodal Agency for implementing the TNSAPCC in Tamil Nadu is coordinating with the concerned line Departments in submitting proposals under Green Climate Fund (GCF) in consultation with

the National Bank for Agriculture and Rural Development (NABARD).

Number of projects submitted by various departments are under the active consideration of Government of India for funding under Green Climate Fund for both adaptation and mitigation options.

## **6. Integrated Coastal Zone Management Project (ICZMP) Phase-II**

Sustainable management of coastal and marine resources are essential to the State's economic growth. The Integrated Coastal Zone Management Project (ICZMP) for the State was prepared with the objective of better co-ordination among implementing agencies for development along the coastal stretch of Tamil Nadu, targeted at socio-economic improvement of the people while keeping natural resources and the environment healthy and capable of sustaining future generation.

Based on the ICZMP, a concept note, base document and Preliminary Project Report was sent to MoEF&CC, GoI., for consideration under the implementation of the ICZMP under Phase-II.

As per the instructions of MoEF &CC, GoI, the proposals for the ICZMP Phase-II for Tamil Nadu is under revision with the assistance of NCSCM(National Centre for Sustainable Coastal Management),Chennai for a sum of Rs. 300 Crore for implementation of several projects in the coastal areas of Tamil Nadu.

As requested by the MoEF&CC, GoI, the Government of Tamil Nadu has conveyed its commitment amounting to Rs.60 Crore as State Component for Implementation of ICZMP Phase-II.

## **7. Preparation of Coastal Zone Management Plan**

The Ministry of Environment, Forests and Climate Change(MoEF&CC), GoI has requested to finalize the Coastal Zone Management Plan (CZMP) for the State of Tamil Nadu so as to enable the Government of India to notify the same. The National Centre for Sustainable Coastal Management (NCSCM) has been entrusted with the preparation of CZMP at an expenditure of Rs. 2.29 Crore. The Coastal Zone Management Plan for Tamil Nadu is under preparation as per the guidelines and procedures prescribed in the CRZ Notification 2011 and EIA Notification 2006 and the preparation of the said Plan will be completed by June 2018.

## **8. Eco- clubs**

Tamil Nadu is a forerunner in environmental awareness movement. Eco-clubs were formed as early as 1998. Eco-clubs have been formed in all

the Government and Government aided High Schools and Higher Secondary Schools in the State. The students of Eco-clubs are engaged in various environmental awareness programmes like organizing rallies, marches, human chains, seminars, debates, tree planting, campus cleaning, rainwater harvesting, solid waste management including vermi-composting, etc., A sum of Rs.2500/- is being provided to each school for organizing different activities. As on date, 11,469 eco-clubs are functioning in Tamil Nadu. Around, 4,50,000 school children participate in the awareness movement under this programme.

## **9. National Green Corps (NGC)**

The Department of Environment is the Nodal Agency for implementing the National Green Corps (NGC) in Tamil Nadu and is being implemented since 2002-2003 in Tamil Nadu.

There are 8000 NGC Eco clubs functioning in 32 districts @ 250 per district. The Government of India has approved a grant of Rs. 5000/- per school during 2017-18 for the activities of NGC. Training is given to the Master Trainers and teacher co-ordinators in each district of the State for NGC activities. Around, 3,20,000 children participate in the awareness programmes under this scheme.

The NGC students are engaged in various environmental awareness programmes like celebrating at least six Green Days in schools, school campus cleaning, tree planting, environmental awareness rallies, vermi-composting, enviro-expo, enviro-competitions, anti-plastic campaign, cultural programmes on environmental awareness, nature camps etc.,

## **10. Environment Protection and Renewable Energy Development Fund(EPRED)**

Tamil Nadu Government is implementing schemes for the protection of the environment and promotion of clean energy. For this purpose, an "Environment Protection and Renewable Energy Development Fund" has been created and a fund of Rs.365 Crore allotted.

The main purpose of this fund is to promote adoptive and mitigative measures to Combat Climate Change and it's effects, protection of environment, promotion of Renewable energy and various activities like Greening of Tamil Nadu by planting of trees outside forest. Further, the eco-restoration of water bodies are taken up under EPRED funds.

### **10.1 Eco-restoration of water bodies**

The restoration and conservation of the lakes aims at achieving the desired water quality

besides improving the biodiversity conservation through activities like de-silting, diversion of sewage entering into lakes, deepening of ponds, construction of retaining walls, tree planting etc.,

In order to restore the water bodies and wetlands in the State, the Department of Environment is preparing long-term perspective plan for restoration of water bodies in and around Chennai and rest of the areas of Tamil Nadu with the involvement of implementing agencies like Departments of Municipal Administration and Water Supply, Public Works, Fisheries and Local Bodies etc., The Department of Environment with concerned line departments have undertaken eco-restoration activities in the following water bodies: -

- A sport, fishing cum eco-park at Chetpet lake in Chennai has been developed at a cost of Rs.42.00 Crore



- During the year 2014-2015, a sum of Rs.20 Crore was released under Phase-I for rehabilitation and restoration of Madhavaram (Rettai Eri), Ambattur and Korattur wetland complex in Thiruvallur district and works were completed. Under Phase-II, a sum of Rs.26 Crore was allotted for 2015-16 and 2016-17 and works were completed. Further, under Phase-II, a sum of Rs.13.18 Crore is allotted for 2017-18 to continue the above eco-restoration activities
- During 2014-15, a sum of Rs.4.50 Crore has been released to Directorate of Town Panchayat for implementing eco-restoration works in Ayyarkulam, Kuyavankuttai and Sithampatti Kulam in Perundurai Town Panchayat and K.C.Palayam Town Panchayat in Erode district and works were completed

- During 2014-15, a sum of Rs.3.00 Crore has been released to District Collector, Erode for implementing eco-restoration works in Kuttaithayirpalayam in Perode Panchayat and Kambatheeswaran tank in Punchaikalamangalam in Erode district and works were completed
- During 2014-15, an amount of Rs.10.01 Crore has been provided for implementing bio-remediation and awareness activities in Arignar Anna Zoological Park Vandalur, Guindy National Park, Vedanthangal Bird Sanctuary, Karikilli Bird Sanctuary, Pullicat Bird Sanctuary and Amirthi Mini Zoological Park and works were completed
- During 2014-15, a sum of Rs.3.59 Crore has been provided to Forest Department for eco-restoration and rejuvenation of

19 water bodies in Bird Sanctuaries and works were completed

- During 2014-15, under Phase-I, a sum of Rs.4.00 Crore has been released to Public Works Department and during 2015-16, Rs.2.41 Crore has been released for eco-restoration of Sarkarperiyapalayam Tank in Avinashi Taluk in Tiruppur district and works were completed
- Eco-restoration of Paruthipattu Lake in Avadi in Thiruvallur district sanctioned during 2016-17 at a cost of Rs.28.16 Crore is under progress through Public Works Department
- During 2016-17, eco-restoration of Periyakulam Eri in Vadamugam Vellodu Village in Perundurai Taluk of Erode district at a cost of Rs.4.90 Crore and eco-restoration of Muthampalayam Eri in Erode

Corporation area of Erode district at a cost of Rs.2.75 Crore through the District Administration, Erode are under progress

- During 2016-17, eco-restoration of Ellapalayam Eri in Erode Corporation area of Erode district at a cost of Rs.11.00 Crore is under progress

## **11. Coastal Zone Management (CZM)**

The MoEF&CC, Government of India issued the Coastal Regulation Zone Notification in 2011 under Environment (Protection) Act, 1986, in supersession of CRZ Notification 1991 to protect the coastal environment and to regulate development activities along the coastal areas, to ensure livelihood security to the fishing communities, other local communities living in the coastal areas, to conserve and protect the coastal

stretches and to promote sustainable development in the coastal areas.

The coastal areas have been categorized as four zones as follows in the CRZ Notification 2011:

- CRZ-I (ecologically sensitive)
- CRZ-II (built-up area)
- CRZ-III (Rural area)
- CRZ-IV (water area which includes the water areas up to 12 Nautical miles (Nm) of the territorial waters and the tide influenced water bodies)

### **11.1. Coastal Zone Management Authorities**

The MoEF&CC, Government of India has constituted State Coastal Zone Management Authority (SCZMA) with the Principal Secretary, Environment and Forests Department,

Government of Tamil Nadu as a Chairman and the Director of Environment as its Member Secretary besides ten Members, who have been nominated from various Departments, Institutions and agencies. The SCZMA have so far convened 100 meetings and taken decisions on the several Coastal related projects and issues.

The District Coastal Zone Management Authorities under the Chairmanship of the respective Coastal District Collectors have been formed by the State Government during 1998. These authorities convene periodical meetings to take decisions pertaining to CRZ matters.

### **11.2. Coastal Disaster Risk Reduction Project (CDRRP)**

The following schemes were implemented by the Department of Environment with the financial assistance from World Bank under CDRRP.

### **11.2.1 Demarcation of High Tide Line (HTL) along the Coast of Tamil Nadu**

The Department of Environment has demarcated high tide line for the entire coastline of the State including tidal influenced water bodies and the high tide line reference points have been super imposed on the village cadastral maps on a scale of 1:5000. This work has been completed through the Institute of Remote Sensing, Anna University at a cost of Rs.2.20 crore and the said HTL maps are made available with the District Authorities.

### **11.2.2. Erection of Stone Pillars on High Tide Line (HTL) reference points**

To identify the HTL on ground, high tide line stone pillars have been erected along the coast at a distance of 250 m interval all along the coast of Tamil Nadu.

### **11.2.3 Preparation of Integrated Coastal Zone Management Plan (ICZMP)**

To take appropriate decision on any development to be undertaken along the coast, the Integrated Coastal Management Plan has been prepared for the coastline of Tamil Nadu. The different layers of information available through the Geographical Information System (GIS) platform can be used to assess the damage and to plan for mitigation at times of coastal hazard and the said plan is utilized as base document for formulating future plans.

## **12. Environmental Information System (ENVIS)**

The MoEF&CC,GoI has been implementing a Central Scheme titled Environment Information System (ENVIS) since 1982-83. ENVIS, by providing scientific technical and semi-technical information on various environment issues, has served in facilitating



policy formulization and environment management at all levels of Government as well as in decision making aimed at environment protection and its improvement for sustaining good quality of life for all living beings.

Environmental Information System Centre sponsored by the MoEF&CC, GoI is functioning in the Department of Environment since October 2002. This Centre provides information on various aspects about the State of Environment and related issues of Tamil Nadu. ENVIS centre is also engaged in collection, collation, storage, retrieval and dissemination of environmental information through a website *www.tnenvis.nic.in*. Publication of Newsletters, creation of web based database, answering environmental queries etc., are some of the activities covered under ENVIS.

During 2017-2018, the ENVIS scheme was revamped in line with the Sustainable

Development Goals (SDGs) in MoEF&CC,GoI. The Additional mandate of ENVIS scheme from 2017-2018 onwards are to implement the Green Skill Development Programme (GSDP), Grid Based Decision Support System (GRIDSS) and Facilitate Community Driven Environmentally Sustainable Village Programme (CESVP).

The MoEF&CC., GoI awarded the Tamil Nadu State ENVIS Centre with BEST ENVIS CENTRE AWARD (STATE) along with Rupees one lakh for the development of the Centre, for the Year 2015-16 at the National Evaluation Workshop held on 17.03.2017 at Gandhi Nagar, Gujarat.

### **13. Environment Management Agency of Tamil Nadu (EMAT)**

The Government of Tamil Nadu has created EMAT for monitoring the works carried out under National River Conservation Plan (NRCP) and National Lake Conservation Plan (NLCP) and it

started functioning from 22.01.2003. The Principal Secretary to Government, Environment and Forests Department is the Chairman and the Director of Environment is the Member Secretary of the Environment Management Agency of Tamil Nadu.

## **14. Other Activities of the Department**

### **14.1. Environment Awards**

Environment Awards for the best efforts and contributions in Environmental protection, environmental management and environmental awareness are given to selected NGOs, institutions, individuals and researchers every year. These awards which were constituted during the year 2000 are distributed on the World Environment Day celebrations on June 5<sup>th</sup> of every year. Ten environmental awards in various categories worth Rs.1.13 lakh per year are awarded by the Government. Applications

have been invited from the public for the awards for the year 2017.

## **14.2 Mass Awareness Campaign**

Department of Environment has undertaken mass awareness campaign through Eco clubs and National Green Cops all over the State. Besides Environmental Information Dissemination Centres (EIDCs) have been formed in 57 Educational Districts. The EIDCs have a library containing environment related books, display charts, boards, posters (both in English and Tamil) highlighting issues related to pollution hotspots, climate change, global warming, etc., along with audio-visual equipments in order to disseminate information to students and public. Frequent visits to these Centres by the students are encouraged to acquire first hand information on Environment related subjects. Five short films/advertisements have also been produced at a total cost of

Rs.15.00 lakh on Land Pollution, Water Pollution, Air Pollution, Industrial Pollution and importance of environment. Copies of the same have been uploaded in the Department website, ENVIS website for the benefit of the public and the students. Soft copies of the films are being sent to all the 8000 NGC Eco-clubs and 11469 Eco-clubs functioning in the State.

### **14.3 Creating environmental awareness and eco protection activities in 11 Pilgrim Centres of Tamil Nadu**

Srirangam, Rameshwaram, Tiruthani, Palani, Tiruchendur, Thanjavur, Marudhamalai, Madurai, Chidambaram, Samayapuram and Srivilliputhur are important Pilgrim Centres located in Tamil Nadu. To develop these Pilgrim Centres as environmentally clean and safe by creating awareness among the public with assistance from local bodies, Hindu Religious and Charitable and Endowment Department and Non-Governmental organizations, a sum of

Rs.55.00 lakh has been spent at the rate of Rs.5.00 lakh per Centre.

Under this programme various activities such as eco competition, rallies, formation of human chain etc., were conducted. Further, dustbins were provided to the temples, Information Boards erected in the temple premises and cloth bags distributed to the public involving students and Self-Help Groups.

#### **14.4 Formation of Environmental Information Dissemination Centres (EIDCs)**

To disseminate Environmental Information among the school children and the general public on pollution, climate change, global warming etc., and its impact on every man's life, Environmental Information Dissemination Centres (EIDCs) were formed in 12 Educational Districts, at a cost of Rs. 2.00 lakh per Centre during the year 2016-17. At present 69 EIDCs

are functioning in the State. These EIDCs have a library containing environmental related books, display charts, boards, blow ups (both in English and Tamil) highlighting issues related to polluted hotspots, climate change, global warming, etc., along with Audio visuals equipments. These Centres are centrally located and opened to students.

#### **14.5 E-learning**

E-learning, under this programme, all the 57 EIDCs (Environmental Information Dissemination Centre) have been linked to the Department of Environment Server at a cost of Rs.14.44 lakh during the year 2016-17, to facilitate the students to interact with the experts during the green days celebrations directly and the programmes are conducted regularly.

## **14.6 Supply of Crystal Display (LCD) Projectors**

To create better Environmental awareness, Liquid Crystal Display (LCD) Projectors have been installed at 69 Environment Information Dissemination Centres at a cost of Rs.27.60 lakh, during the year 2016-17.

## **15.1 Activities during 2017-18**

### **15.1.1. Tamil Nadu State Environment Policy, 2017**

Tamil Nadu has been growing rapidly in many spheres. The state has a rich diversity of natural resources with a long coastline. However, the State of Tamil Nadu did not have an Environment Policy suited to its natural resources and to the needs of the people. The Vision Document 2023 of Government of Tamil Nadu focuses on Environmental conservation of the State, as well as increasing the forest cover and maintaining the ecological balance. Taking



into consideration all these aspects, the Government have formulated the Tamil Nadu State Environment Policy, 2017. The policy was released by Hon'ble Chief Minister on 26.07.2017. The main objectives of the Tamil Nadu State Environment Policy, 2017 are:

1. Conserve, Nature and Renew Environmental Resources
2. Integrate environmental well – being into developmental programme
3. Enhance preparedness to deal with climate change impacts
4. Improve Environment Governance and Institutional capacity

#### **15.1.2. Tree planting programme in Schools through schools children in all over Tamil Nadu**

Under this scheme, to encourage the students, for fruitful involvement in Environmental

related activities and to keep the school premises green and clean, during 2017-18 the Government have sanctioned a sum of Rs.144.00 lakh for Tree Plantation and Maintenance in 960 Eco clubs and NGC at schools, at the rate of 30 schools per district, in all the 32 Districts of the State. A sum of Rs.5,000/- per school has been given. Further, Incentives and Certificates shall be issued to the students who have been involved in this programme. The Programme is proposed to be extended to another 960 schools in the State during 2018-19.

### **15.1.3 Conducting Eco-Competitions and Eco – Camps.**

Further, to disseminate the importance of environment to the students, eco-competitions among the NGC students in three disciplines of Quiz, Elocution and Drawing for two sections viz,, students upto 8<sup>th</sup> standard and above 8<sup>th</sup> standard in all the Revenue districts have been conducted.

Besides, prizes with certificates, eco-tours, separately for boys and girls, have also been conducted for the winners. The above programmes were completed at a cost of Rs.64.00 lakh, at the rate of Rs.2.00 lakh per district for 32 districts. The programme is proposed to be continued in view of its significance during 2018-19.

# **TAMILNADU POLLUTION CONTROL BOARD**

## **1. INTRODUCTION**

Government of Tamilnadu constituted the Tamilnadu Prevention and Control of Water Pollution Board on the 27<sup>th</sup> February 1982, under Section 4 of the Water (Prevention and Control of Pollution) Act, 1974. Later renamed as Tamil Nadu Pollution Control Board (TNPCB) in the year 1983, the Board has today grown into one of the best Pollution Control Board in the Country. Starting with only 17 employees, the Board has now an overall strength of 597 employees and functioning in all districts of Tamilnadu, with own office buildings and well equipped laboratories. The TNPCB primarily enforces the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981,

the Environment (Protection) Act, 1986 and Rules made under these Acts.

### **1.1 Mandate of the Board**

The mandate of the TNPCB is prevention and control of pollution in the State of Tamilnadu by implementation of various Acts and Rules under the umbrella Act of the Environment Protection Act, 1986 as amended. The main tools used for protection of the Environment include conducting inspections of Industrial establishments, collecting samples for analysis, collection of data, extending technical and scientific support involving reputed educational institutes, and coordination with State Government in implementation of the environmental rules and regulations as a Regulatory Authority. Following Acts and Rules are implemented by the Tamilnadu Pollution Control Board;

## **Acts**

- The Water (Prevention and Control of Pollution) Act, 1974
- The Air (Prevention and Control of Pollution) Act, 1981
- The Environment (Protection) Act, 1986

## **Rules**

- The Tamilnadu Water (Prevention and Control of Pollution) Rules, 1983
- The Tamilnadu Air (Prevention and Control of Pollution) Rules, 1983
- The Environment (Protection) Rules, 1986
- The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989
- Fly Ash Utilization Notification, 1999
- The Batteries (Management and Handling) Rules, 2001

- The Environment Impact Assessment Notification, 2006
- The Solid Waste Management Rules, 2016
- The Plastic Waste Management Rules, 2016
- The Construction and Demolition Waste Management Rules, 2016
- The E-Waste Management Rules, 2016
- The Bio-Medical Waste Management Rules, 2016
- The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

## **2. FUNCTIONS**

TNPCB is a statutory organization whose main function is to promote cleanliness of water bodies, streams and wells, control and abatement of water pollution and to prevent, control or abate air pollution, improve the quality of air and protect the environment as a whole.

The main frame and functional divisions of the head office consists of Planning and Development section, Technical section, Administration section, Finance and Accounts wing, Legal cell, Construction wing, Laboratory, Computer section, complaint redressal cell and online monitoring section. The field level offices cover activities related to inspections, survey, sample collection and analysis and co-ordination with District administration etc.



## **2.1 Role and Functions under the Water and Air Acts**

The functions of TNPCB, as defined under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 17 of the Air (Prevention and Control of Pollution) Act, 1981 are as follows:

- To plan a comprehensive programme for prevention, control or abatement of pollution of streams and wells and 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 collect and disseminate information relating to water and air pollution and the prevention, control or abatement thereof;

- To inspect sewage or trade effluents, treatment works and plants and to review plans, 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, at all reasonable times, any control equipment, industrial plant or manufacturing process and to give, by order, such directions to such persons as it may consider necessary to take steps for the prevention, control or abatement of air pollution;
- 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 lay down, modify or annul effluent standards for the sewage and trade effluents and for the quality of receiving waters resulting from the discharge of effluents and to classify waters of the State;
- To lay down, in consultation with the Central Pollution Control Board (CPCB), standards for emission of air pollutants into the atmosphere from industrial plants and automobiles or for the discharge of any air pollution into the atmosphere from any other source;
- To evolve economical and reliable methods of treatment of sewage and trade effluents;
- To evolve methods of utilization of sewage and suitable trade effluent in agriculture;

- To evolve efficient methods of disposal of sewage and trade effluents on land;
- To collaborate with Central Pollution Control Board in organizing the training of persons engaged or to be engaged in programme relating to prevention, control or abatement of water and air pollution and to organize mass education programme relating thereto;
- To encourage, conduct and participate investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution;
- To advise the State Government with respect to the location of any industry which is likely to pollute a stream or well or cause air pollution;
- To establish or recognize Laboratory or

laboratories to enable the Board to perform its functions efficiently, including 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, be entrusted to it by the Central Pollution Control Board or the State Government.

### **3. ORGANISATION SETUP**

The Board, as per the provisions of the Acts, includes a Chairman, a Member Secretary and 15 other members nominated by the State Government. Out of the 15 members, 5 officials are nominated by the State Government, 5 persons represent local authorities, 3 non-officials represent the interests of agriculture,

fishery or industry or trade and 2 persons represent the companies or corporations owned by the State Government.

The TNPCB functions with a three-tier structure with the Corporate Office at the apex, followed by seven Zonal offices at intermediary level and 38 District offices at the base to form a pyramidal structure. The Board with its head office at Chennai has total staff strength of 597 employees as on 31<sup>st</sup> March 2018. The seven zonal offices headed by Joint Chief Environmental Engineers (Monitoring) are located at Chennai, Vellore, Trichy, Salem, Coimbatore, Madurai and Tirunelveli. The 38 District Offices located in almost every district of Tamilnadu are headed by District Environmental Engineers. The Board has formed two Flying Squads, considering the sensitivity of the area, each headed by an Environmental Engineer at Erode and Tiruppur districts. The Board is

supported with 16 Laboratories including 5 NABL accredited laboratories.

## **4. CONSENT MANAGEMENT**

### **4.1 Industries Classification**

As per the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and of the Air (Prevention and Control of Pollution) Act, 1981, it is mandatory for the industries generating effluent and discharging emissions to get consent of the Board to establish (CTE) any industrial or other activity, before commencing establishment. Consent to operate (CTO) is obtained after establishment of the unit but before commencing production. Industries or other establishments seeking consent are classified as Small, Medium and Large scale based on the value of Gross Fixed Assets (GFA). The units having GFA up to Rs.5 Crore fall under small scale, between

Rs. 5 to 10 Crore are medium scale units and those with more than Rs. 10 Crore fall under large scale. The Industries are also categorized as Red, Orange, Green and White based on the pollution index. The TNPCB has constituted various committees with appropriate delegation of powers to avoid delays in grant of CTE, CTO and Renewal of Consent etc. Industries are periodically inspected by the field officers to check the operation of pollution control measures and compliance of consent conditions.

#### **4.2 Consent Validity Period**

As a part of ease of doing business, TNPCB has extended consent validity period to the industries. Accordingly CTE is issued with validity of 7 years in case of Environmental Impact Assessment (EIA) projects and 5 years in case of non-EIA projects. CTO is issued for 5 years for Red Category, 10 years for Orange Category, and 14 years for Green category on payment of



necessary consent fees. For White Category industries, there is no mandatory necessity of obtaining consent of the Board to operate, merely intimation to TNPCB would suffice. TNPCB has also introduced 'Auto Renewal' for the Red-Small and all Orange & Green category industries. Using this facility, Renewal Consent orders are being issued to the industries without inspection but with specific undertaking given by the unit. Monitoring is carried out regularly for all units by field level officers.

#### **4.3 Online Consent Management and Monitoring System**

In line with the e-governance policy of the State Government, TNPCB has implemented Online Consent Management and Monitoring System (OCMMS) in January 2015, with an object of bringing transparency and promptness in consent management. This system facilitates the industries for online submission of

application for getting Consent to Establish (CTE) / Consent to Operate (CTO) / Renewal of Consent (RCO), Auto Renewal of CTE/CTO. Further, the status of application can also be ascertained online. The application received in OCMMS is processed and consent is issued through online. From 1<sup>st</sup> April 2017 to 31<sup>st</sup> March 2018, the Board had issued CTE to 1094 units and CTO to 4441 units.

## **5. COMMON EFFLUENT TREATMENT PLANTS**

The concept of common effluent treatment plant has largely been accepted as a solution for collecting, conveying, treating and disposing of industrial waste waters and domestic sewage. Considering the contribution made by the SSI units in the industrial development of the country and the constraints in complying with pollution control norms individually by these units, the Ministry of Environment, Forest and Climate Change, Government of India initiated

an innovative technical and financial support scheme. The scheme promotes common facilities for treatment of effluents from SSI units located in clusters through financial assistance. The present pattern of financial assistance is: 50 % of total project cost as Central subsidy, 25% of total project cost as State subsidy, 25% of total project cost as project proponent's share. With a view to ensure active participation of the proponent, at least 40% of the proponent contribution has to come from the proponent and balance 60% could be raised through loan from Banks/Financial Institutions.

TNPCB plays a facilitating role towards the establishment of Common Effluent Treatment Plants (CETPs). The Board assists in the technical scrutiny of the proposed plans for the CETPs. 33 CETPs are in operation, of which, 19 CETPs are for Textile bleaching and dyeing industries treating 102 MLD of effluent from 468

member units, 13 CETPs for Tanneries treating 28.741 MLD of effluent from 678 Member tanneries, and one CETP is for Hotels & Lodges operating in Kodaikanal. As per the Court directions, all the 19 CETPs of Textile bleaching & dyeing units have provided Zero Liquid Discharge (ZLD) plant and recycle the treated effluent. 11 CETPs of tannery sector have provided ZLD Plant. The remaining 2 CETPs have opted for dilution of treated effluent model.

## **6. ONLINE CONTINUOUS EMISSION AND EFFLUENT MONITORING SYSTEMS**

National Environment Policy 2006 envisages strengthening of testing infrastructure and network for monitoring ambient environmental quality and to progressively ensure real-time monitoring and online availability of the monitoring data. Based on the policy imperatives, TNPCB is moving forward towards achieving real time monitoring system in all

spheres of pollution prevention, control or abatement. For strengthening the monitoring and compliance through self-regulatory mechanism, online emission and effluent monitoring systems are installed and connected to the Central Server by the developers and industries.

### **6.1. Care Air Centre**

In order to have a centralized system to monitor the industries on 24x7 basis, TNPCB has established Care Air Centre at the Board's Head Office. Care Air Centre helps assess real time emissions online from factories and alert the management of the polluting industries whenever required. All the 17 category of highly polluting industries, red-large industries, common hazardous waste incinerator facilities, common bio-medical waste facilities have been directed to provide online continuous emission monitoring system and connect the same to this

Centre. As on 31st March 2018, 340 units have connected their stack / ambient air quality monitors to this centre. PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> and other industry specific parameters are monitored on continuous basis. Any excess above permissible limit is immediately intimated to the concerned industry for rectification. This online monitoring data is displayed in the TNPCB web site. [www.tnpcb.gov.in](http://www.tnpcb.gov.in)

## **6.2. Water Quality Watch Centre**

TNPCB has established a Water Quality Watch Centre at Head Office. 17 categories of highly polluting industries and Red-Large industries generating effluents and Common Effluent Treatment Plants are connected to this centre. It displays real-time water quality data collected remotely by sensors installed in rivers, lakes and other water bodies. The quality of effluent, discharged through outlet is monitored on a continuous basis. As on 31<sup>st</sup> March 2018,

210 units are connected to this centre, of which 112 units are connected for zero liquid discharge monitoring and 97 units for treated effluent discharge monitoring and one for river monitoring. Three online monitors installed in River Thamirabarani are connected to this centre and the parameters viz., pH, TDS, DO, and Flow are monitored.

## **7. WASTE MANAGEMENT**

In 2016, the Ministry of Environment, Forest and Climate Change, Government of India have notified six Waste Management Rules by replacing the earlier rules. The new rules are more comprehensive and define the responsibility of each stake holder, mode of collection, treatment and disposal of each category of waste and lay down the environmental standards which the waste processing facilities have to meet.

## **7.1 Solid Waste Management**

As per the Solid Waste Management Rules, 2016, collection, transportation, processing, recycling, treatment and disposal of the solid waste are the responsibilities of the local bodies. The role of SPCB is to issue authorization to the local bodies, monitor environmental standards and adherence to conditions as specified for waste processing and disposal sites.

All the Urban Local Bodies have framed bye-laws incorporating user charges for handling the solid waste and spot fines are in force. As on 15<sup>th</sup> March 2018, 160 applications for authorization have been received by the Board, out of which 121 authorization have been issued and 39 applications seeking authorization are under scrutiny. The daily total quantity of solid waste generation in Tamilnadu is 14,658 tonnes, out of which 14,417 tonnes of waste is being collected and managed by the Local bodies.



TNPCB has been taking several measures to address the solid waste management problems in the State.

## **7.2 Plastic Waste Management**

Plastic products have become an integral part in our daily life. Plastics are not degradable and are cause for increasing concern around the world. As per the Plastic Waste Management Rules, 2016, the local body shall be responsible for the development and setting up of infrastructure for segregation, collection, storage, transportation, processing and disposal of the plastic waste. Carry bags made of virgin or recycled plastic, shall not be less than 50 micron in thickness. Persons engaged in manufacture of carry bags, recycled plastic bags, multilayered packaging, recycling or processing shall obtain registration certificate from the State Pollution Control Board. The role of State Pollution Control Board is to enforce the

provisions of these rules relating to registration, manufacture and disposal of plastic wastes. For the purpose of effective monitoring of implementation of these rules, the Government has constituted a State Level Advisory Committee vide G.O. (Ms). No. 148 Municipal Administration and Water Supply (MA.IV) Department, dated 25.10.2016

So far, TNPCB has issued registration to 305 plastic product manufacturing units, 17 multilayered plastic packaging manufacturing units. TNPCB had also issued public notices in news papers on 16.02.2017 to all the manufacturers, importers, stockiest, distributors, sellers and users of plastic and compostable carrybags about the compliance of Rules.

### **7.3 Construction and Demolition Waste Management**

The Construction and Demolition Waste Management Rules, 2016 apply to individual,

organization and authority that generates wastes from construction and demolition of building. Construction and Demolition materials consist of the debris generated during the construction, renovation and demolition of building, roads and bridges. The waste generator shall be responsible for collection, segregation of concrete, soil and other wastes and storage of the same as directed by the concerned local body. The local bodies shall be responsible for transportation, processing and disposal of the waste. SPCB shall grant authorization for the waste processing facility and monitor the implementation of these rules. TNPCB has directed the local bodies to establish waste processing facilities.

#### **7.4 E- Waste Management**

As per the E-Waste Management Rules, 2016, the producer of the electrical and electronic equipment shall be responsible for

collection and channelization of the e-waste generated. The manufacturer of the electrical and electronic equipment, refurbisher, dismantler, recycler of e-waste shall get authorization from SPCB. SPCB shall monitor the compliance for environmentally sound management of e-waste. The CPCB has issued guidelines for implementation of the rules. The Government of Tamil Nadu has issued E-Waste Policy of Tamil Nadu 2010. TNPCB has issued authorization for 22 units (17 Dismantlers and 5 Recyclers) under the Rules.

## **7.5 Bio-Medical Waste Management**

The Bio-Medical Waste Management Rules, 2016 apply to all persons who generate and handle bio-medical waste in any form. It is the responsibility of the generator of the waste as well as the operator of the common bio-medical waste treatment and disposal facility (CBMWTF) to ensure safe handling and disposal of the bio-

medical waste. Biomedical waste must be properly managed and disposed of to protect the environment, general public and also healthcare and sanitation workers who are at risk of exposure to biomedical waste as an occupational hazard. The State Government in Health and Family Welfare Department shall ensure the implementation of the rules in all health care facilities. SPCB shall issue authorization to the health care facilities and CBMWTF. In order to oversee the implementation of the rules and to advice on improvements, the Government has constituted a State Level Advisory Committee and District Level Advisory Committees in all the districts.

TNPCB has so far issued authorization to 3,539 Hospitals. About 43.7 tonnes of bio-medical waste is generated daily in the State. All the 3,539 hospitals have made agreement with the CBMWTF. There are 11 Common Bio-Medical

facilities in operation in Tamilnadu. The common facility operator collects, transports, treats and scientifically disposes the biomedical waste. As part of ease of doing business, TNPCB launched an online module for making application for authorization in March 2016. The application is processed and authorization is issued online. As on 15<sup>th</sup> March 2018, 1,156 Hospitals were issued with authorization through online module.

## **7.6 Hazardous Waste Management**

As per the Hazardous and Other Waste (Management and Transboundary) Rules, 2016, the generator of hazardous waste is responsible for its treatment and disposal. SPCB shall grant authorization for handling the hazardous wastes.

TNPCB has identified 3,776 units in the State as hazardous wastes generating units and issued authorization for safe management of the waste. During 2016-17, a quantity of 6,40,732

tonnes of hazardous waste was generated from these units. Out of this, about 2,44,670 tonnes was land filled either in captive land fill or in common land fill facility. 28,546 tonnes of waste was incinerated in captive and common incinerators. 85,831 tonnes was co-processed in cement kiln, and 2,48,712 tonnes was sent for recycling. The remaining waste has been stored in the unit's premises which will be disposed in due course.

The Board is taking effective steps in handling and management of hazardous wastes, its treatment and disposal in an environmentally safe manner. Two common Treatment, Storage and Disposal Facilities (TSDF) are under operation, one at Gummidipoondi in Tiruvallur District and the other at Undurumikidakulam village, Tiruchuli Taluk, Virudhunagar District. In March 2016, as a part of ease of doing business, TNPCB launched an online portal for applying

and issuing authorization under Hazardous Waste Management rules. Now the industries apply online for authorization and it is processed and authorization is issued through online. As on 15<sup>th</sup> March 2018, the Board has granted authorization to 2,290 units through online.

## **8. WATER QUALITY MONITORING**

The basic objective of the Water (P&CP) Act, 1974 is to maintain and restore the wholesomeness of water. To achieve this objective, regular monitoring of water quality of water bodies is required. Hence, TNPCB is monitoring water quality of inland water bodies under two major programmes namely Global Environmental Monitoring System (GEMS) and Monitoring of Indian National Aquatic Resources (MINARS) with 70% financial assistance from CPCB. Water samples are collected on monthly basis and analyzed in TNPCB laboratories and water quality is assessed. The samples are



collected at 55 stations - Cauvery and its tributaries (33 stations), Palar (1 station), Vaigai (1 station), Tamirabarani (12 stations), Lakes (8 lakes - Udthagamandalam, Kodaikanal, Yercaud, Veeranam, Porur, Poondi, Pulicat and Red hills). The reports reveal that these water bodies are coming under Class B, C or D category which is suitable for drinking water source after conventional treatment and disinfection.

The source of pollution of these water bodies is mainly due to mixing of domestic sewage and dumping of solid waste from the towns and villages located near the banks. The Board has directed the local bodies to provide sewage treatment plants and solid waste management facilities on a priority basis.

### **8.1 Chennai City Water Ways Monitoring Programme**

There are four water ways in Chennai city i.e Adyar River, Buckingham Canal, Cooum River

and Otteri Nallah. TNPCB is monitoring the water quality of these waterways to assess the level of pollution by collecting water samples at 30 locations every month both in the water bodies and at industrial outfalls. The report of analysis reveals that the Biochemical Oxygen Demand, Total Dissolved Solids and Chlorides exceeded the standards when compared with the IS 2296-1982 Class A Standard prescribed for inland surface waters, subject to pollution. This is mainly due to mixing of sewage into the water bodies. As per the directions of Hon'ble National Green Tribunal (Southern Zone), action is being taken to restore river Cooum by the concerned Departments.

## **8.2 Continuous Water Quality Monitoring Stations**

In order to monitor the water quality of river Noyyal and Kalaingarayan canal in the textile industrial belt of Tiruppur and Erode,

TNPCB has installed online continuous water quality monitors in three locations each in Noyyal river and Kalingarayan canal. Similarly three online monitors have been installed in river Thamirabarani and connected to Water Quality Watch Centre at Head office. These stations monitor pH, total dissolved solids and dissolved oxygen on a continuous basis. TNPCB is also in the process of installing three monitors each in river Cauvery and river Bhavani.

## **9. AMBIENT AIR QUALITY MONITORING**

Air is important for all living organisms on the earth. Quality of ambient air is getting affected due to natural means and pollution from anthropogenic activities like industrialization, transport sector, burning of solid waste, firing of crackers etc. In order to assess the ambient air quality, TNPCB is operating 28 ambient air quality monitoring stations in eight cities/towns of the state: Chennai (8), Coimbatore (3),

Madurai (3), Salem (1), Tiruchirapalli (5), Thoothukudi (3), Mettur (2), Cuddalore (3) under National Air Quality Monitoring Programme (NAMP) with 50% financial assistance of Central Pollution Control Board. Five air pollutants viz ., PM<sub>2.5</sub>, PM<sub>10</sub>, Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>2</sub>), and Ammonia (NH<sub>3</sub>), are monitored. SO<sub>2</sub>, NO<sub>2</sub>, NH<sub>3</sub> were found to be well within the prescribed standards in all the stations. PM<sub>10</sub> exceeded in few places which is mainly due to vehicular movement.

Based on the survey results CPCB has declared Thoothukudi in Tamilnadu as non-attainment city with reference to exceedance of PM<sub>10</sub> level in ambient air. Action plan for improvement of air quality of Thoothukudi has been prepared and action is being taken for implementation by the respective stake holder departments.

## **9.1 Continuous Ambient Air Quality Monitoring Stations**

TNPCB has installed seven Continuous Ambient Air Quality Monitoring Stations (CAAQMS) from its own fund. Four stations are in Chennai (viz) Koyambedu, Royapuram, Perungudi, Kodungaiyur, and one station each at SIPCOT Gummidipoondi, SIPCOT Thoothukudi and SIPCOT Perundurai. These stations monitor  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_2$ ,  $NH_3$ ,  $O_3$ , CO and Benzene on a continuous basis. In addition to the above, the Board with 50% funding from CPCB is operating one CAAQMS at Manali and establishing one station in Coimbatore. Further, the Board is in the process of procuring 25 CAAQMS from its own fund to establish the stations in major towns and industrial complexes to generate data base on the ambient air quality.

## **9.2 Mobile Continuous Ambient Air Quality Monitoring Station**

In order to monitor the air quality in different parts of Chennai city and create awareness among the public about the air quality, TNPCB commissioned one Mobile CAAQMS. This mobile monitoring station is used to carry out the air quality survey in complaint prone areas, traffic intersections etc as well as during Deepavali and Bhogi.

## **9.3 National Ambient Noise Monitoring Network Programme**

Rapid industrialization, urbanization, use of modern means of transport and increasing scale of human activities are some of the human-induced factors responsible for noise pollution. Noise pollution affects sleep, listening ability, physical and mental well being of human. In order to monitor the ambient noise level in Chennai City, TNPCB in association with CPCB has established 10 Real Time Ambient Noise

Monitoring Stations under National Ambient Noise Monitoring Network Programme. The locations are 1) Egmore 2) T.Nagar 3) Perambur 4) Guindy, 5) Triplicane, 6) Pallikaranai 7) Velachery 8) Washermanpet, 9) Anna Nagar 10) Sowcarpet. The monitoring data reveals that the ambient noise level in Chennai city is exceeding the prescribed standard, which may be attributed mainly due to vehicular traffic.

## **10 LEGAL MATTERS**

### **10.1 Appellate Authority**

Section 28 of the Water (Prevention and Control of Pollution) Act, 1974, and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981, provides an opportunity for appeal on the orders issued by the SPCB. Accordingly, any person aggrieved by the orders of TNPCB shall prefer an appeal within a period of 30 days to the Appellate Authority constituted by the

Government of Tamil Nadu under the Chairmanship of Hon'ble Justice (Retd), High Court of Madras with two technical members. As on 15<sup>th</sup> March 2018, 486 appeals have been filed. Out of these 434 appeals were disposed, and the remaining 52 are under trial. TNPCB provides administrative and financial support to the Authority.

## **10.2 National Green Tribunal**

National Green Tribunal Act, 2010, provides opportunity for filing application in National Green Tribunal (NGT) established under the Act against any order or decision of the SPCB and Appellate Authority issued under Section 28, 29 and 33A of the Water (Prevention and Control of Pollution) Act, 1974, under Section 31 of the Air (Prevention and Control of Pollution) Act, 1981 and under Section 5 of the Environmental (Protection) Act, 1986. Any aggrieved person may file an application to National Green



Tribunal within 30 days of the order issued by the Board / Appellate Authority. The Principal Bench of the NGT is functioning at New Delhi and NGT (Southern Zone) is functioning at Chennai. As on 15<sup>th</sup> March, 2018, 757 cases related to TNPCB have been filed. Out of these, 447 cases were disposed and 310 cases are under trial.

### **10.3 Action against Polluting Units**

The Board has been taking strict action against any industry not complying with the conditions imposed on them as per various Acts and Rules. Illegal units are also being dealt with prompt action like closure and demolition. As per the orders of the Hon'ble Supreme Court in W.P (C). No. 375 of 2012 dated 22.02.2017, TNPCB issued a Public Notice in News Papers on 10.5.2017 to all the Industrial units discharging effluent to make their ETP fully operational within three months so as to meet the

standards. The units not adhering the prescribed standards have been issued show cause notice and the units which continued to violate have been issued closure direction after giving personal hearing. During the period 1<sup>st</sup> April 2017 to 15<sup>th</sup> March 2018, 8,205 units were issued show cause notice and 351 units were issued with closure directions.

For effective monitoring of the industries and to check any unauthorized industrial discharge into the water bodies in Erode, Namakkal, Karur, Tiruppur and Coimbatore districts, the Board has formed two flying squads. They conduct surprise inspections including night time on regular basis. Based on inspection, action is taken against the illegal units in coordination with District Co-ordination Committees (DCC). During the period 1<sup>st</sup> April 2017 – 15<sup>th</sup> March 2018, 255 unauthorized units were evicted. By considering effective

functioning of DCC in these districts, the Government vide G.O. (Ms). No. 23 Environment and Forests (EC.1) Department dated 1.3.2018 has constituted DCC headed by the District Collector in all the Districts to take action against unauthorized units discharging untreated effluent into water bodies.

## **11. OTHER ACTIVITIES OF THE BOARD**

### **11.1 Grievance Redressal Centre**

With an object of guiding Entrepreneurs and Project Proponents for applying consent, about latest technology in pollution prevention and control and cleaner technologies, etc., besides answering queries of the general public on pollution related matters, TNPCB has established a Grievance Redressal Centre in the Head Office. It is functioning from 08.02.2018 onwards and can be contacted on phone No. 044-22353154.

## **11.2 Online Grievance Redressal System**

In March 2016, TNPCB introduced Online Grievance Redressal System which facilitates the public to file pollution related complaints online (<http://www.pcbolgprs.in>). The complaint is investigated and action taken is intimated to the complainant. From 1<sup>st</sup> April 2017 to 15<sup>th</sup> March 2018, 459 complaints were received online and redressed.

## **11.3 CM Cell and Amma Call Centre Petitions**

TNPCB established a separate Cell in Head Office to take immediate action on petitions received through CM Cell and Amma Call centre. CM Cell petitions are disposed off within 15 days and Amma Call centre petitions are disposed off within seven days. From 1<sup>st</sup> April 2017 to 15<sup>th</sup> March, 2018, 302 No. of CM Cell petitions and 183 nos. of Amma Call centre petitions were received and disposed. On 07.03.2018, the

Hon'ble Chief Minister has presented a shield to TNPCB as second prize among the Government Departments for speedy redressal of CM Cell petitions.

#### **11.4 Environmental Training Institute**

TNPCB's Environmental Training Institute (ETI) is functioning at Head Office. This institute provides training in association with Expert Institutions to the staff of the Pollution Control Board, Industries and non-governmental organizations on subjects related to environmental protection. During the year 2017-18, the ETI has conducted 36 training programmes, in which 345 participants have been trained.

#### **11.5 Technical Conferences**

In Year 2017, TNPCB has organized three technical workshops as detailed below.

- TNPCB has conducted one day workshop on 7.1.2017, to the industries on wastewater treatment plant operation and maintenance. There were 128 participants from various categories of industries.
- One day work shop was conducted on 30.1.2017, on Solid Waste Management Rules, 2016. There were 125 participants from the Corporations, Municipalities and Town Panchayats. They were trained on the salient features of Solid Waste Management Rules and their duties and responsibilities.
- One day workshop was conducted on 7.3.2017, on E-Waste Management Rules, 2016. There were 80 participants from the stake holders including local bodies, Electronic goods

manufacturers, bulk consumers of electronic goods, E-Waste refurbisher, dismantlers and recyclers. They were trained on the salient features of E-Waste Management Rules and their responsibilities.

### **11.6 Public Hearing**

The Environmental Impact Assessment Notification, 2006 issued by Ministry of Environment, Forest and Climate Change provides for public hearing to address the concerns of local affected persons on the proposed projects. Public hearing is one of the mandatory requirements for projects listed in the notification for getting environmental clearance. As per the notification, TNPCB conducts public hearing under the Chairmanship of the District Collector and forward the proceedings to the Ministry of Environment, Forest and Climate Change / State

Environmental Impact Assessment Authority as the case may be. During the period 1<sup>st</sup> April 2017 to 15<sup>th</sup> March 2018, the Board has conducted public hearings for 28 projects.

### **11.7 Clean Technologies**

Waste reduction and opportunities for waste recycling considerably reduce the cost and effort in handling industrial wastes besides helping to protect against adverse environmental impacts. Clean technologies minimize the generation of waste streams in the production processes and utilize waste in other production processes, rather than treating the waste after generation. In general, cleaner technologies are less intensive in use of raw materials and energy, than conventional technologies, which rely on pollution abatement after generation. With the active support and encouragement from TNPCB, many industrial units in Tamil Nadu have switched over to clean technologies such as;



- i. For cement production, the cement industries have adopted dry process instead of wet process to save energy and reduce air pollution.
- ii. Cement Industries utilize 25 to 30% of fly ash in Portland Pozzolana Cement manufacturing, which eliminates fly ash disposal problem in thermal power plants.
- iii. Sulphuric acid manufacturing units adopted double conversion and double absorption technology which reduces SO<sub>2</sub> emission.
- iv. Activated carbon manufacturing units have gone for waste heat recovery boiler and eliminated the dedicated boiler to produce steam for the activation purpose. This system eliminates the consumption of coal / wood as fuel for

the boiler and thus avoided emission of greenhouse gases.

- v. Pulp and paper industries are encouraged to go in for elemental chlorine free bleaching to reduce the formation of organo-chlorides including dioxins.
- vi. Engineering Industries have adopted gas carburizing instead of cyanide salt in heat treatment and cyanide free electroplating to avoid water pollution.
- vii. Chlor-alkali industries switched over to membrane cell process, replacing mercury cell process which eliminates water pollution.

## **11.8 Scientific Study through Expert Institutions**

- i. In order to assess the impact of oil spill by collision of two ships in Ennore Port area on 28<sup>th</sup> January 2017 on the marine environment, TNPCB conducted a study through IIT Madras. The report titled 'Assessment of the Effect of Oil Spill at Ennore Port on Marine Environment' has been received.
- ii. The people of Rasipalayam village, Suler Taluk, Coimbatore District have complained that ground water of their area is polluted due to the industrial activities. In order to know the possible source of pollution, the Board has entrusted a hydro-geological study to National Geophysical Research Institute, Hyderabad and the study has been completed.

- iii. In order to assess the carbon foot print for the operation of Zero Liquid Discharge Plant, TNPCB carried out a study through IIT Madras in November 2017, taking a Textile Processing CETP as the sample.
- iv. In order to assess Pollution Index Score for single boiled rice mill and parboiled rice mill, TNPCB carried a pollution assessment study through Technical Experts from IIT Madras and Sri Ramachandra University. Based on the study, the Board has categorized single boiled rice mills under green category.
- v. With a view to assess the environmental quality of Critically Polluted Areas of Manali, SIPCOT- Cuddalore, SIPCOT- Ranipet, Kurichi-Coimbatore, TNPCB has engaged a third party laboratory recognized under the Environment (Protection) Act, 1986 and carried out the

study in 1<sup>st</sup> April 2017 and 31<sup>st</sup> October 2017.

- vi. TNPCB has carried out a detailed study on Ready Mix Concrete Unit and issued guidelines in August 2017.
- vii. As per the orders of the Hon'ble National Green Tribunal Southern zone, TNPCB has carried out a detailed study through expert committee and issued guidelines for Hot Mix Plant in July 2016.
- viii. TNPCB has carried out a detailed study on Solid/Hollow block manufacturing units and issued guidelines in 2016.
- ix. In order to find solution for disposal of salt generated from ZLD system of Tannery CETPs, the All India Skin and Hide Manufactures Association (AISHTMA) has engaged Central Salt & Marine Chemical Research Institute, Bhavnagar, Gujarat.

They have demonstrated a technology for segregation of ordinary salt (NaCl) and industrial salt (Na<sub>2</sub>SO<sub>4</sub>) from the mixed salt so as to reuse the same. Based on that AISHTMA has proposed to set-up two salt recovery treatment plants in Vellore district.

### **11.9 Funding for Pollution Abatement Projects**

- i. TNPCB has provided fund of Rs. 25.81 Crore to the Director of Environment for eco restoration of lakes in Erode and Tiruvallur districts. The eco restoration involves activities like de-silting, diversion of sewage entering lake, deepening of ponds, construction of retaining walls, tree planting etc.,
- ii. TNPCB also provided fund of Rs. 3 Crore to IIT Madras for Establishment of Centre for Urbanization, Buildings and

Environment (CUBE). This centre will address the issues pertaining to water supply and sewerage systems, sustainable construction technologies, urbanization and its related problems.

### **11.10 Environmental Awareness and Public Participation**

Environmental Awareness is the sine qua non (absolutely necessary) for protection of Environment. It helps the people to understand the consequences of human activities on environment. TNPCB conducts various kinds of environmental awareness programmes every year on the following occasions.

#### **11.10.1 World Environment Day:**

World Environment Day is observed on 5<sup>th</sup> June of every year to raise awareness to take positive environmental action to protect nature and the planet earth. On June 5<sup>th</sup> 2017, TNPCB

conducted awareness programme to the school students, and the public. The industries observed the day by planting trees, conducting awareness programmes for the workers.

**11.10.2 Ozone Day:** 16<sup>th</sup> September of every year is observed as International Day for the preservation of the Ozone Layer. During the month of September, 2017, Ozone day was observed in Districts in association with Industries and Educational Institutions.

**11.10.3 Bhogi Festival:** Board conducts awareness programmes not to burn the waste materials such as waste tyres, tubes, plastic materials, clothes etc in open places through pamphlets, announcements through public systems etc. In Chennai city, Board conducts ambient air quality monitoring during pre-bhogi and bhogi festival days in 15 locations. The results are published in the TNPCB web site and dailies.



#### **11.10.4 Vinayagar Chaturthi Festival:**

Awareness programmes are conducted through the Collectors in all the district headquarters not to use Plaster of Paris and paints to make the Vinayagar idols. The Board also monitors water quality of the identified water bodies before and after immersion of idols in the specified locations.

#### **11.10.5 Deepavali Festival:**

Awareness programmes are conducted not to burst crackers from 10 P.M to 6 A.M and also not to burst crackers creating sounds of more than 125 decibel (average) during deepavali celebrations. The Board monitors ambient air quality and noise level in Chennai and other cities viz., Trichy, Coimbatore, Madurai, Tirunelveli, Vellore, Salem, Hosur, Tiruppur, Dindigul and Cuddalore during Pre-Deepavali and Deepavali days. The results are published in the TNPCB web site and dailies.

#### **11.10.6 Karthigai Mahadeepam Festival:**

Plastic Awareness campaign is conducted every year in Thiruvannamalai Town during the Karthigai Mahadeepam Festival. In order to encourage the people to avoid plastic carry bags and to use alternate like cloth bag, paper bags, jute bags, TNPCB conducts a programme by giving coupons to the people who bring cloth bag, jute bags and select the winners. Winners are given various prizes.

#### **11.10.7 Government Exhibitions:**

TNPCB actively participates in the Government Exhibitions conducted every year at Island Ground in Chennai and in the District Head Quarters by establishing stall and exhibits models on effluent treatment plant, air pollution control measures, solid waste management, and other information related to environmental protection. In 2017-18, TNPCB participated in the Government Exhibitions held in Chennai

(Island Ground) and in Tirunelveli, Nagercoil, Madurai, Coimbatore, Thanjavur, Salem, Namakkal, Cuddalore, Tiruvannamalai. Large number of students and people visited the stalls. TNPCB has been awarded third prize for its Pavilion exhibit in 43<sup>rd</sup> India Tourist and Industrial Fair 2017 held at Island Ground, Chennai.

**11.10.8 Green Awards:** In order to encourage the industries, TNPCB presents green award every year to the Industries who have adopted best practices in achieving environmental quality in emission, discharge of waste water, solid and hazardous waste management and green belt development. Similarly Green Awards are also presented every year to the District Collectors who played a proactive role in promoting sustainable development in their districts. From year 2017 onwards, TNPCB also presents Green Award to the Educational Institutions /

Universities / Centre of Excellence. The selection for the award is done by an Expert Committee and awards are presented by the Hon'ble Chief Minister / Hon'ble Minister for Environment.

## **12. HIGHLIGHTS OF PERFORMANCE IN 2017-2018**

- i. In order to disseminate the monitoring data on the quality of effluent discharge and stack emission let-out by the 17 category highly polluting industries and CETPs, TNPCB has connected the online continuous monitoring data to the Board website. Members of the Public can monitor the same anytime by accessing the website.
- ii. TNPCB established two new District Environmental Engineers office at Kumarapalayam and Gummidipoondi bifurcating the existing District Offices at Namakkal and Tiruvallur respectively for

effective monitoring of industries and for the benefits of entrepreneurs and public.

- iii. TNPCB established two new Zonal offices headed by Joint Chief Environmental Engineer (monitoring) at Salem and Tirunelveli respectively bifurcating the existing zonal offices at Coimbatore and Madurai for effective monitoring of industries and for enabling speedy delivery of service to entrepreneurs and public.
- iv. TNPCB created one post of Chief Environmental Engineer similar to other State Pollution Control Boards and State Government Engineering Departments for effective functioning.
- v. Powers have been delegated to the Field Officers for grant of Consent to certain category of industries for speedy disposal of consent applications.

- vi. TNPCB established video conference facility between Head Office and five zonal offices at a cost of Rs. 35 lakh for conducting review meetings.
- vii. TNPCB established a new District Environmental Laboratory at Perundurai at a cost of Rs. 215 lakh for effective monitoring of industries in SIPCOT Industrial Complex, Perundurai.
- viii. TNPCB upgraded three District Environmental Laboratories at Vellore, Trichy and Tirunelveli as Advanced Environmental Laboratories by providing sophisticated instruments for analysis of water and air samples at a cost of Rs. 150 lakh.
- ix. TNPCB constructed and inaugurated six new District Environmental Engineer's office buildings at Coimbatore (North),

Coimbatore (South), Vaniyambadi, Perundurai, Erode and Oragadam and one Joint Chief Environmental Engineer's (Monitoring) Office at Vellore at a total cost of Rs. 14.41 Crore. Two DEE's office buildings at Tiruvallur, Nagapattinam are under construction at a cost of Rs. 4 Crore.

- x. Green Awards were presented to District Collectors and Industries who excelled in environmental protection by the Hon'ble Chief Minister on 11.10.2017.
- xi. TNPCB has provided Rs. 25.81 Crore fund to the Director of Environment for eco-restoration of lakes in Erode, Tiruvallur districts.
- xii. TNPCB has provided Rs. 3 Crore fund to IIT Madras for Establishment of Centre for

Urbanization, Buildings and Environment  
(CUBE)

- xiii. TNPCB has been awarded SKOCH ORDER-OF-MERIT for implementation of Online Consent Management and Monitoring System (OCMMS) by SKOCH Group.
- xiv. TNPCB has been awarded second prize among all Government Department for clearing CM's Cell petitions by the Hon'ble Chief Minister on 7.3.2018.
- xv. TNPCB has been awarded third prize for its Pavilion exhibit in 43<sup>rd</sup> India Tourist and Industrial Fair 2017 held at Island Grounds, Chennai.
- xvi. To improve the health and physical fitness of the TNPCB personnel, a fitness center has been established at the Head Office with effect from 8.2.2018.

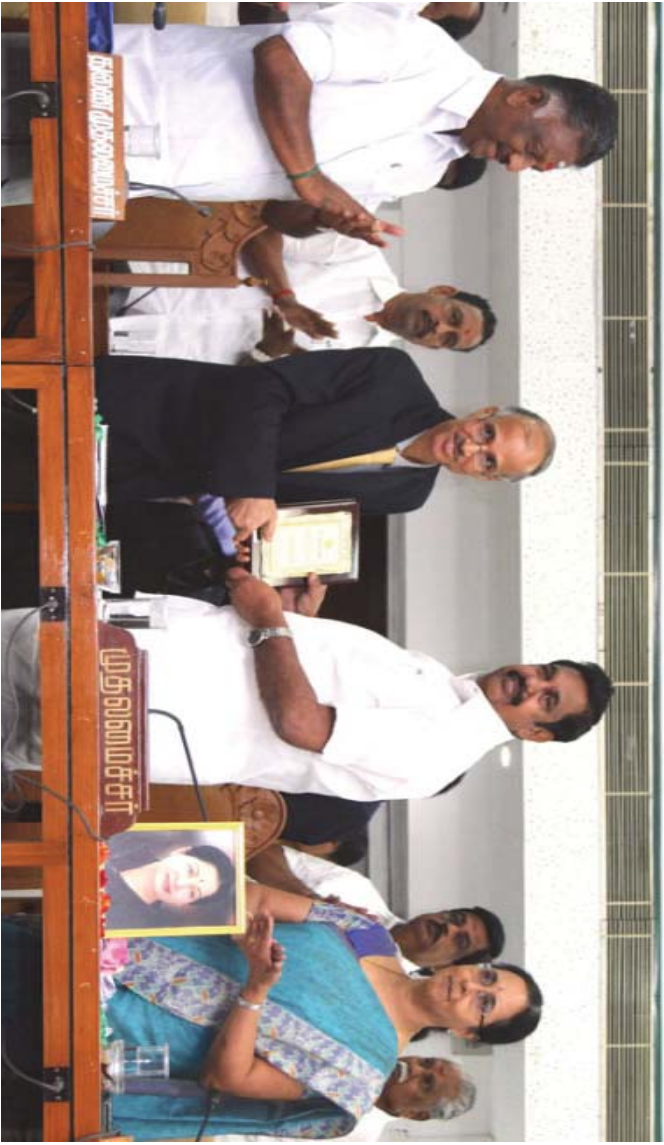


xvii. Grievance Redressal Centre was established at Head Office on 8.2.2018 to guide Project Proponents in proper compliance of various environmental laws as well as the general public in resolving pollution related grievances.

**K.C.KARUPPANAN**  
MINISTER FOR ENVIRONMENT



Green Award presentation to the District Collectors by the Hon'ble Chief Minister



Award presentation to TNPCB by the Hon'ble Chief Minister for best performance in redressing of CM Cell Petitions



Environmental Awards presentation to Educational Institutions  
by the Hon'ble Minister for Environment



Bhogi Festival 2018 - Awareness Programme Flag Off  
by the Hon'ble Minister for Environment





Inauguration of Grievance Redressal Centre at TNPCB Head Office  
by the Hon'ble Minister for Environment



Grievance Redressal Centre at TNPCB Head Office  
Inaugurated on 8.2.2018



Physical Fitness Centre at TNPCB Head Office inaugurated on 8.2.2018





Green Belt in Cement Grinding Unit in Kancheepuram District



Roof Top Solar Panels in a Coal based Power Plant in Tiruvallur District



On 22/05/2018, Beach Cleaning activity is conducted at Palavakkam  
in the presence of the Honorable Minister for Environment



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