

ANNUAL REPORTS & ANNUAL ACCOUNTS 2014 - 2015



தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம்
TAMILNADU POLLUTION CONTROL BOARD

ANNUAL REPORT

2014 - 2015



TAMILNADU POLLUTION CONTROL BOARD

76, Mount Salai, Guindy, Chennai - 32

YOUNG MEN'S CHRISTIAN ASSOCIATION

1115 - 11th St.

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1.1 INTRODUCTION

The Tamilnadu Prevention and Control of Water Pollution Board was constituted by the Government of Tamilnadu on twenty seventh day of February, Nineteen eighty two (27-2-1982) in pursuance of the Water (Prevention and Control of Pollution) Act, 1974 (Central Act 6 of 1974). The Board was later renamed as Tamilnadu Pollution Control Board (TNPCB) in the year 1983. It enforces the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Water (Prevention and Control of Pollution) Cess Act, 1977, the Air (Prevention and Control of Pollution) Act, 1981, and the rules made under the Environment (Protection) Act, 1986 which includes

- ❖ The Environment (Protection) Rules, 1986
- ❖ The Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008
- ❖ The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended in 1994 and 2000
- ❖ The Biomedical Waste (Management and Handling) Rules, 1998 as amended in 2000 and 2003
- ❖ The Plastics Waste (Management & Handling) Rules, 2011
- ❖ The Noise Pollution (Regulation and Control) Rules, 2000
- ❖ The Municipal Solid Wastes (Management and Handling) Rules, 2000
- ❖ The Battery (Management and Handling) Rules, 2001
- ❖ The e-Waste (Management and Handling) Rules, 2011

1.2 FUNCTIONS

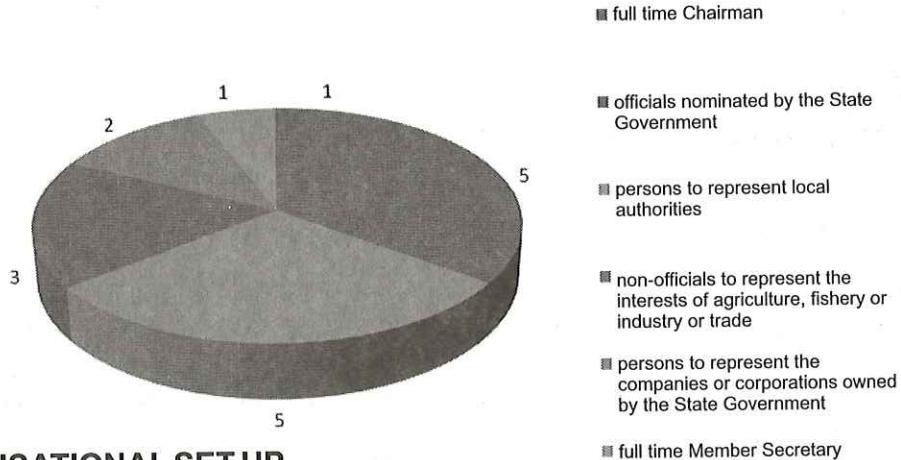
The main functions of the TNPCB under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 are as follows:

- ❖ To plan a comprehensive programme for the prevention, control and abatement of water and air pollution.
- ❖ 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 and trade effluent treatment plants for their effectiveness and review plans, specifications for corrective measures.
- ❖ To inspect industrial plants or manufacturing process, any control equipment and to give directions to take steps for the prevention, control or abatement of air pollution.
- ❖ To inspect air pollution control areas for the purpose of assessment of quality of air therein and to 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 emission of air pollutants into the atmosphere from industrial plants and automobiles or for the discharge of any air pollutant into the atmosphere from any other source.
- ❖ To evolve best economically viable treatment technology for sewage and trade effluents.
- ❖ To collect samples of sewage and trade effluents and emissions of air pollutants and to analyze the same for specific parameters.
- ❖ 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 organise mass education programme relating thereto.
- ❖ To perform such other functions as may be prescribed by the State Government or Central Pollution Control Board.

2.1 CONSTITUTION OF TNPCB

The TNPCB is constituted by the State Government. It comprises of a full time Chairman, 5 officials nominated by the State Government, 5 persons to represent local authorities, 3 non-officials to represent the interests of agriculture, fishery or industry or trade, 2 persons to represent the companies or corporations owned by the State Government and a full time Member Secretary. The list of Board Members from 1st April 2014 to 31st March 2015 is given in Annexure – I.

CONSTITUTION OF TNPCB



2.2 ORGANISATIONAL SET UP

The organization structure of TNPCB is a three-tier system consisting of an Head-office at Chennai, Regional offices and District offices with a total staff strength of 748. Besides, which a separate wing of laboratories are linked to the offices at three levels. The Board has 5 Regional Offices headed by Joint Chief Environmental Engineers. Further there are 34 district offices, 32 headed by District Environmental Engineers and 2 by Assistant Environmental Engineers. Two flying squads are also functioning at Erode and Tiruppur. To assist the Board in monitoring the industries, 5 Advanced Environmental Laboratories, 10 District Environmental Laboratories are functioning. These laboratories carry out analysis of samples of sewage, trade effluent, emission and hazardous waste. The locations of district offices and laboratories are given in Annexure – II.

In order to dispose off, the applications made by industries for the issue of Consent / Authorizations / Registration expeditiously, Board has revised the delegation of Powers in respect of issue of consent orders under the Water (P&CP) Act, 1974, as amended, the Air (P&CP) Act, 1981, as amended, issue of authorization etc as detailed below.

The organization chart of the Board, staff details, year wise staff strength of the Board, yearwise industries come under the purview of the Board, district wise number of industries are given in Annexure - III, IVA, IVB, VA, VB, respectively.

**Power Delegation For The Issue of Consent Orders,
Renewal of Consent Orders, Issue of Authorization and Registration**

Sl. No.	Particulars	17 - Category	Red - Large	Red - Medium	Red - Small	Orange - Large	Orange - Medium	Orange - Small & All Green
1	Consent to Establish, Extension & Expansion	TSC	TSC	CCC	ZLCCC	ZLCCC	ZLCCC	DLCCC
2	Consent to Operate & Expansion	CCC	CCC	CCC	ZLCCC	ZLCCC	ZLCCC	DLCCC
3	EIA & CRZ attracted Projects, CTE, Extension & Expansion	TSC	TSC	CCC	CCC	TSC	CCC	CCC
4	EIA & CRZ attracted Projects CTO & Expansion	CCC	CCC	CCC	CCC	CCC	CCC	CCC
5	CRZ alone attracting Projects CTE, Extension & Expansion	TSC	TSC	CCC	ZLCCC	ZLCCC	ZLCCC	DLCCC
6	CRZ alone attracting Projects CTO & Expansion	CCC	CCC	CCC	ZLCCC	ZLCCC	ZLCCC	DO
7	Consent Renewal	Chairman	Chairman	M.S	DO	DO	DO	DO
8	Hazardous / BMW/ MSW Authorization	M.S	M.S	M.S	JCEE (M)	JCEE (M)	JCEE (M)	DO
9	Plastic Registration, E-Waste Authorization / Registration of recyclers	M.S	M.S	M.S	M.S	M.S	M.S	M.S
10	Issue of Amendments (Name change, change in stack details etc.,)	Chairman	Chairman	M.S	ZLCCC	ZLCCC	ZLCCC	DO
11	For any expansion projects of highly polluting industries those are attracting the G.Os 213 & 127, the Issue of Consent will be considered by placing it in TSC in the case of RL, CCC in the Case of RM and ZLCCC in the case of RS followed by recommending the project in Board meeting for obtaining G.O relaxation from Government. After getting the G. O relaxation, CTE will be issued by Chairman in the case of RL, MS in the Case of RM and JCEE (M) of Zonal office in the case of RS.							

Note :

TSC : Technical Sub-Committee

CCC : Consent Clearance Committee

ZLCCC : Zonal Level Consent Clearance Committee

DLCCC : District Level Consent Clearance Committee

MS : Member Secretary

JCEE (M) : Joint Chief Environment Engineer (Monitoring)

DO : District Officer

3.1 ENVIRONMENTAL LEGISLATIONS

The various environmental legislations concerning TNPCB are given below.

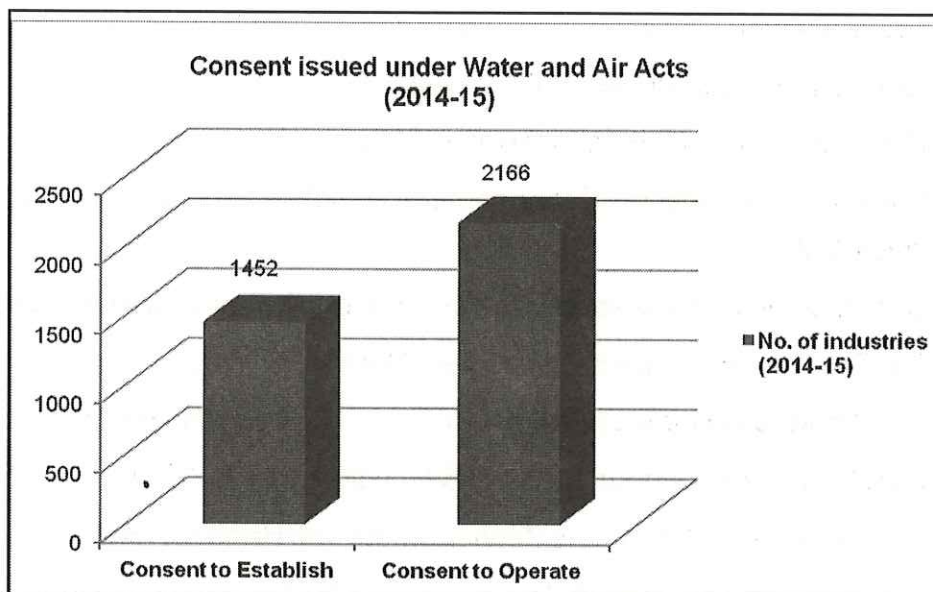
1. The Water (Prevention and Control of Pollution) Act, 1974
2. The Tamilnadu Water (Prevention and Control of Pollution) Rules, 1983
3. The Water (Prevention and Control of Pollution) Cess Act, 1977
4. The Water (Prevention and Control of Pollution) Cess Rules, 1978
5. The Air (Prevention and Control of Pollution) Act, 1981
6. The Tamilnadu Air (Prevention and Control of Pollution) Rules, 1983
7. The Environment (Protection) Act, 1986
8. The Environment (Protection) Rules, 1986
9. The Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008
10. Manufacture, Storage and Import of Hazardous Chemical Rules, 1989
11. The Environment Impact Assessment Notification, 2006
12. The Bio-Medical Waste (Management and Handling) Rules, 1998
13. The Plastics Waste (Management & Handling) Rules, 2011
14. The Municipal Solid Wastes (Management and Handling) Rules, 2000
15. The Batteries (Management and Handling) Rules, 2001
16. The e-Waste (Management and Handling) Rules, 2011

3.2 MONITORING OF INDUSTRIES

With increasing pace of industrialization in Tamilnadu, the need for continuous monitoring of pollution due to industrial sources has become mandatory. Industries need to provide pollution control measures to meet the standards prescribed by the Board. The field officers of the Board inspect the industries under their jurisdiction periodically to assess the adequacy of pollution control measures provided by the industries to treat sewage, trade effluent and emissions and to monitor their performance. They also investigate complaints of environmental pollution received from the public, organizations and the Government. For effective monitoring, industries are categorized as Red, Orange, and Green according to their pollution potential. The industries have also been classified in scale of size with Gross Fixed Assets (GFA) more than Rs. 10 crores as Large, GFA more than Rs. 5 crores upto Rs. 10 crores as Medium and GFA less than Rs. 5 crore as Small scale

3.3 PROCEDURE FOR ISSUE OF CONSENT

Industries have to obtain consent for discharge of sewage / trade effluent into any stream or well or into sewer or land under the Water (Prevention and Control of Pollution) Act, 1974 and to operate them in air pollution control area of entire State of Tamilnadu under the Air (Prevention and Control of Pollution) Act, 1981. The consent is issued to the industries in two stages. 'Consent to Establish' is issued depending upon the suitability of the site before the industry takes up the construction activity. 'Consent to Operate' is issued before commissioning the industrial unit after the compliance of conditions of 'Consent to Establish' issued. The Board has issued 1452 CTEs ('Consent to Establish' orders) and 2166 CTOs ('Consent to Operate' orders) under both the Acts during the year 2014-2015.



3.4 ONLINE CONSENT MANAGEMENT AND MONITORING SYSTEM (OCMMS)

TNPCB has provided the facility of Online Consent Management and Monitoring System (OCMMS) from 19.01.2015. OCMMS is a web based generic application software package for automating the workflow associated with consent management and monitoring which is one of the basic functions of the Board. This system allows the industries for online submission of application for Consent to Establish / Consent to Operate / Renewal of Consent, uploading of documents, online payment of consent fees, online submission of clarification and for knowing the status of application. This system allows to carry out the consent management processes such as application scrutiny, raise inspection, raise clarification, submit inspection report, prepare consent order and forward consent order through online. It helps for online monitoring of the processing of application. From 20.1.2015 onwards, the applications are accepted only through OCMMS. In order to facilitate the industries to apply online through OCMMS, CARE CENTRE has been established in all the 34 district offices. Web portal for online consent application is tnocmms.nic.in

3.5 WATER POLLUTION CONTROL

The Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 is enacted to prevent and control water pollution and to preserve or maintain or restore the wholesomeness of water quality. As per the provisions of this Act, the local bodies and industries, which discharge sewage / trade effluent, are required to apply and obtain the consent from the Board. The industries generating trade effluent are required to provide effluent treatment plant to treat their trade effluent to satisfy the standards prescribed by the Board. Industries are constantly monitored regarding the functioning of their effluent treatment plants and samples of treated sewage/trade effluent are collected regularly to assess the quality of effluent discharged and also to assess the efficiency of the effluent treatment plants installed. During the year 2014-15, 25993 samples of water, sewage and trade effluents were collected and analysed.

The Water (Prevention and Control of Pollution) Cess Act, 1977, provides for the levy and collection of Cess on water consumed by any industry and by local authorities with a view to augment the resources of State Board and for the prevention and control of water pollution. The Board collects Cess from the specified industries and local bodies every month and remits to the Ministry of Environment, Forest and Climate Change, Government of India, New Delhi.

3.6 AIR POLLUTION CONTROL

The Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 is enacted to prevent and control air pollution and to preserve the air quality. As per the provisions of this Act, the entire State of Tamilnadu has been declared as an 'Air Pollution Control Area'. Industries, which let out process emissions, are regularly monitored through inspections of the air pollution control measures provided by the units. Ambient air quality survey / stack emission survey are conducted in and around the industries regularly to assess the quality of the emissions let out and on the basis of the report of analysis, the industries are instructed to carry out necessary corrective measures.

3.7 INSPECTIONS OF INDUSTRIAL UNITS AND SAMPLE COLLECTION PERIODICITY

The engineers in the District Office inspect the large scale red category units once in three months. The medium scale red category units are inspected once in four months and the small scale red category units once in a year. Similarly the large and medium scale orange category units are inspected once in six months and the small scale orange category units once in two years. The less polluting green category units are inspected once in two years.

Sewage/Trade effluent samples are collected once in a month in red-large industries, once in three months in red-medium industries, once in four months in orange-large industries, once in six months in red-small, orange-medium and and orange-small industries.

3.8 COMMON EFFLUENT TREATMENT PLANTS STATUS

The TNPCB plays an important role in the establishment of Common Effluent Treatment Plants (CETPs) for clusters of small-scale industries in various parts of the State. Small-scale industries often express financial difficulties, lack of space and other reasons, which prevent them from putting up required individual effluent treatment plant (ETP). As a large number of small-scale units are in clusters, the Board has launched a massive programme of motivating these industries to set up common effluent treatment plants.

3.8.1 STATUS OF COMMON EFFLUENT TREATMENT PLANTS

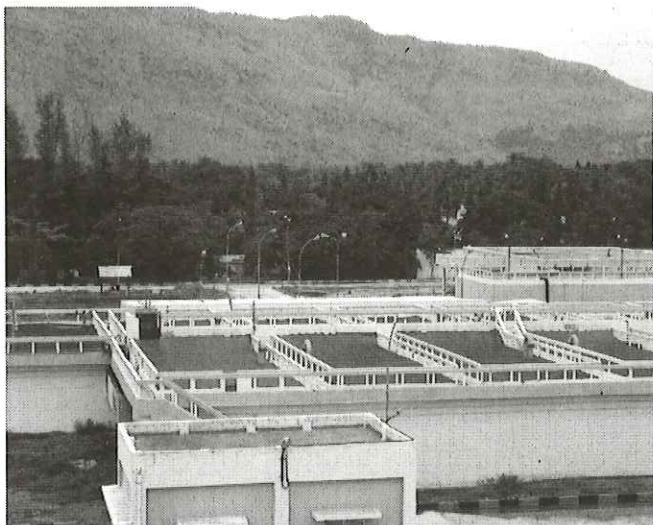
Common effluent treatment plants are formulated in the following sectors:

Tanneries	13 Schemes
Textile Bleaching & Dyeing Units	30 Schemes
Hotels & Lodges	1 Scheme

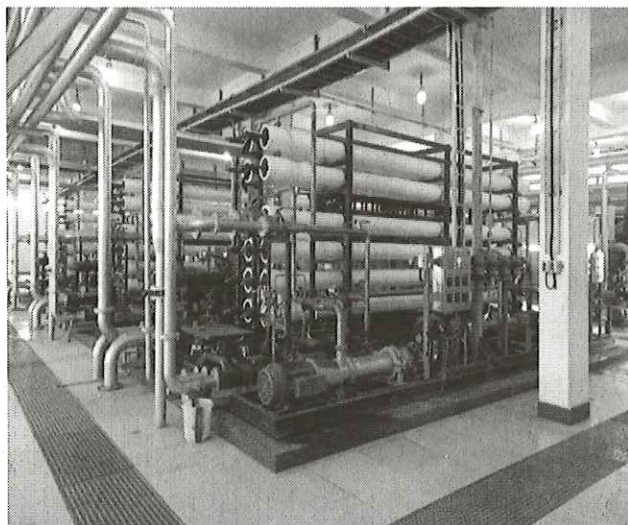
Out of 13 CETP schemes established for tanneries, 11 CETPS are under operation with ZLD system. The remaining two CETPs for tanneries have opted for dilution of tannery effluent with treated sewage to achieve the standards prescribed by the Board.

ZLD STATUS OF TANNERIES

Sector	Total No. of CETPs	Location	ZLD Status			
			Implemented	Nearing Completion	Under Progress	Works to be commended
Tannery	13	Vellore	8	-	-	-
		Erode	1	-	-	-
		Pallavaram	1	-	-	-
		Dindigul	-	-	1	-
		Trichy	1	-	-	-
		Madhavaram	-	-	-	1
		Total (13)	11	-	1	1



Tannery CETP



Zero Liquid Discharge (ZLD In Tannery CETP)

ZLD STATUS OF TEXTILE DYEING INDUSTRIES

Sector	Total No. of CETPs	Location	ZLD Status			
			Implemented	Nearing Completion	Under Progress	Works to be commended
Textiles	30	Tiruppur	18	-	-	2
		Karur	-	-	-	8
		Perundurai	1	-	-	-
		Ayyampettai	-	-	1	-
		Total	19	-	1	10

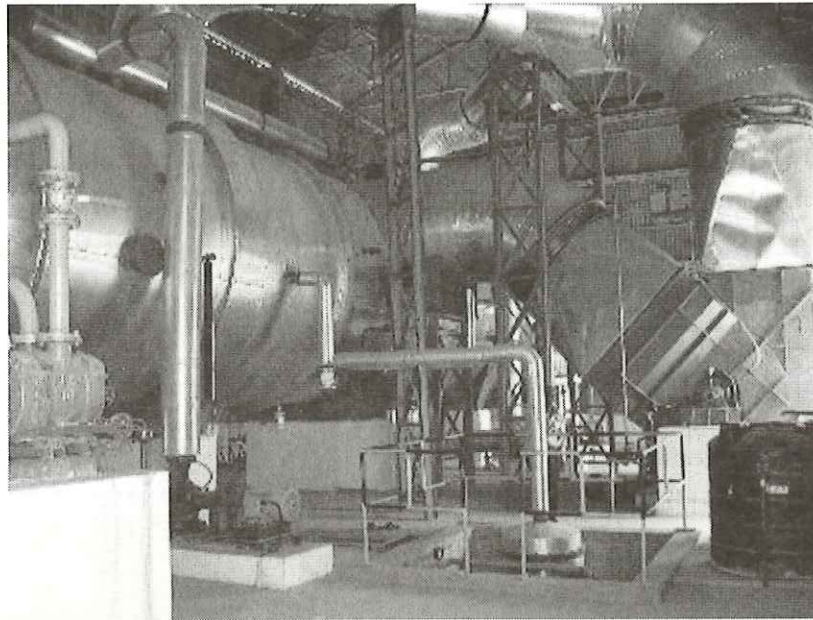
Tiruppur Murugampalyam CETP Biological Tanks



Textile Processing Unit's CETP

Out of 30 CETPs established for textile dyeing processing units, 19 CETPs have implemented ZLD system. The remaining 11 CETPs, has provided only ETP without ZLD system and now all 11 are under closure. For the 18 CETP schemes for textile dyeing processing units in Tiruppur, the State Government has sanctioned Rs. 179.34 crores, out of Rs. 200 crores interest free loan announced by the State Government for modernization / improvement of ZLD system. The sanctioned amounts were released to the respective 18 CETPs by the Director of Handlooms and Textiles.

One CETP scheme for hotels and lodges are under operation in Kodaikanal, Dindigul District.



Zero Liquid Discharge (ZLD) in Textile Processing Unit's CETP

3.9 MANAGEMENT OF MUNICIPAL SOLID WASTE

With increasing urbanisation and rising level of municipal solid waste generation, there is an urgent need to evolve scientific approaches for the management of municipal solid waste, as the enforcing authority for Metropolitan cities are the Commissioner of Municipal Administration and implementing authorities are Municipal Commissioners. Similarly at the District level, the enforcing authorities are the District Collectors and implementing authorities are Municipal Commissioners. Pollution Control Boards have powers to issue authorisation to municipal authorities, for collection, segregation, transportation, treatment and disposal of municipal solid waste, to monitor the compliance of the standards regarding ground water, ambient air, leachate quality and the compost quality including incineration standards for

waste processing and disposal facilities. The Board has issued authorisations to 5 Corporations, 48 Municipalities and 73 Town Panchayats for composting of municipal solid waste and setting up of waste processing facility. The Board is advocating the concept of segregation of wastes at source, reduction, recycle and reuse of wastes to avoid any environmental issues during handling. Tamil Nadu Pollution Control Board has imposed conditions to big shopping malls, fish markets, restaurants, residential townships who has obtained consent, to provide decentralized facility to produce compost from food waste. Training programmes on source segregation and energy from mixed solid waste were conducted on various occasions all over Tamil Nadu.

3.10 MANAGEMENT OF PLASTIC WASTE

The Ministry of Environment, Forests and Climate Change, Government of India vide Notification dated 4.2.2011 notified "The Plastic Waste (Management and Handling) Rules, 2011". As per this notification, no person shall manufacture, stock, distribute or sell any carry bag made of virgin or recycled or compostable plastic, which is less than 40 microns in thickness. Plastic carry bags, multilayered plastic pouch (or) sachet manufacturing units (or) recycling of plastic waste units shall obtain registration certificate from Pollution control Board. Tamilnadu Pollution Control Board is independently carrying out the inspections and enforcement to comply proper authorization, manufacturing, recycling and disposal as an authority through inventory, consent mechanism and registration, etc.

Tamilnadu Pollution Control Board is taking many initiatives to deal with the plastic wastes. Many awareness programmes were conducted by TNPC Board towards general public and Government bodies on the ill effects of plastics and the need to use alternatives to the "use and throw plastic" items. The Board is conducting plastic waste awareness programme in all districts periodically and meetings with local bodies, Plastic Manufacturer's Association to establish plastic waste collection centres. Chennai Corporation, Madurai Corporation and Dindigul municipalities have established plastic waste collection centres with shredders and these wastes are used for making plastic roads in Corporation maintained roads and local body roads.

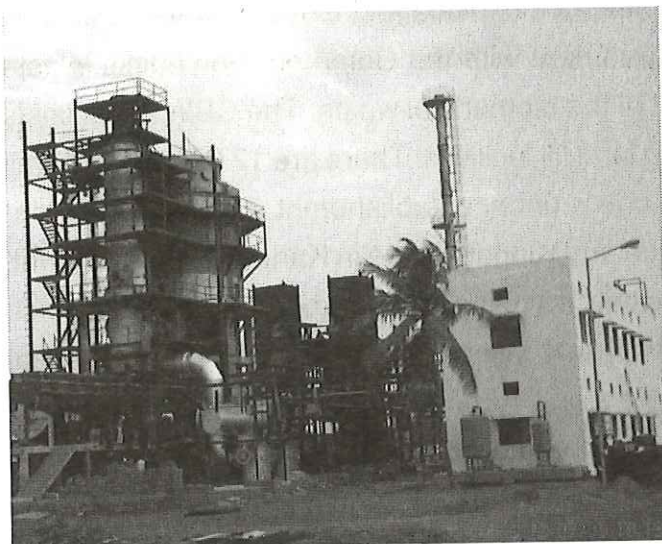
Tamil Nadu Pollution Control Board encourages the units that come up with proposal to establish energy oriented units converting plastic waste to oils. The plastic waste collected are being utilised in cement kilns for co-processing, as energy resource. The Board has instructed to obtain Registration under Plastic Waste (Management and Handling) Rules, 2011 for the units manufacturing plastic carry bags, multilayered pouch (or) sachet, recycling of plastic waste. So far the Board has issued registration to 141 plastic carry bags manufacturing units and recycle plastic products units under the said Rules, 2011.

Mass Enforcement Program on the implementation of Plastic Waste (Management and Handling) Rules, 2011 was carried out on 24.09.2014 in all districts of Tamil Nadu under the Chairmanship of respective District Collectors along with the co-ordination of TNPCB officials and local bodies. TNPCB has addressed all the District Collectors to carry out the mass enforcement program fortnightly every month for better enforcement on Plastic Waste (Management and Handling) Rules, 2011.

3.11 MANAGEMENT OF HAZARDOUS WASTE

The TNPCB is taking effective steps in handling and managing hazardous wastes and its treatment and disposal in an environmentally safe manner. TNPCB has identified 3,427 units generating hazardous wastes under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 as on 31.03.2015. In Tamil Nadu about 6.18 lakhs tonnes of hazardous waste is annually generated in which 2.65 lakhs of tonnes is land-fillable, 3.16 tonnes is recyclable and 0.37 tonnes is incinerable.

A common hazardous waste treatment storage and disposal facility (TSDF) is under operation at SIPCOT Industrial Complex, Gummidipoondi. This facility is having incineration and secured land fill. The federation of common effluent treatment plants, Tiruppur has identified a site at Karupagoundarpalayam, Nallur village, Tiruppur taluk, Tiruppur District and the federation of CETPs & ETPs in Karur have identified a site at Mathagiri Village, Krishnarayapuram Taluk, Karur District to establish a secure landfill facility for disposal of sludge generated from treatment of textile dyeing effluents. Consent to establish has been issued by the Board to these two facilities. Similarly Consent to establish has been issued to one more TSDF at Unduorumikidakulam village, Virudhunagar District.



Treatment, Storage And Disposal Facility (TSDF)
Gummidipoondi - Incinerator



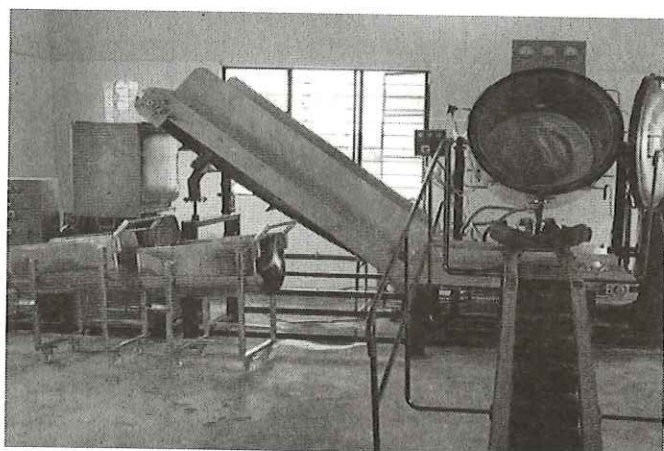
Treatment, Storage and Disposal Facility (TSDF)
Gummidipoondi - Landfill

To adopt recycling and reuse principles, cement industries are encouraged to utilize the hazardous sludge from various industries like Textile, Engineering, chemical, petroleum etc as co-processing. Various cement industries are using these hazardous wastes as raw materials/fuel. The hazardous waste generated from the textile processing units' ETP/CETP is being used in co-processing of Cement factory, an alternate method of disposal. Prior to it, a detailed study and evaluation was done at a Cement Factory in the presence of CPCB, and established the compatability of textile hazardous waste, to be used in co-processing of Cement Factory. Similarly, such trials are being taken-up for using hazardous waste generated from tannery units' ETP/CETPs in co-processing of the cement factories.

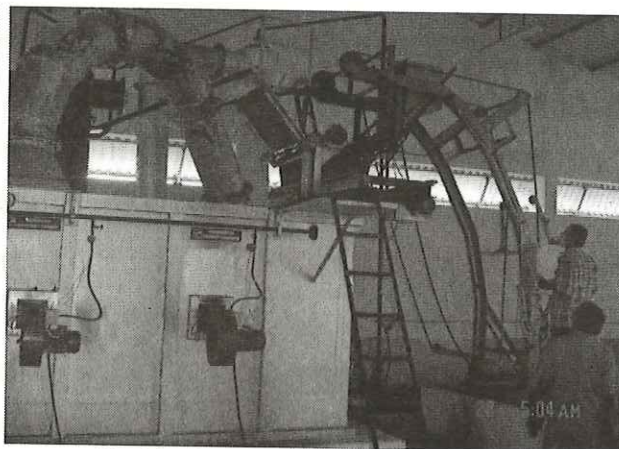
3.12 MANAGEMENT OF BIOMEDICAL WASTE

The Biomedical Waste (Management & Handling) Rules, 1998 applies to every occupier of an institution generating, collecting, receiving, storing, transporting, treating, disposing and / or any other form of handling of bio-medical waste. As per the Rule, authorization of SPCB is required for handling of bio-medical waste. It is the duty of the occupier of an institution generating biomedical waste to take all steps to ensure that the biomedical waste is handled without any adverse effect to human health and environment. Biomedical waste shall be treated and disposed in accordance with schedule I and in compliance with the standards prescribed in schedule II of the said rules.

The Board has so far inventoried 6246 private hospitals and Government hospitals in the State. All these hospitals have made agreement with the Common Biomedical Waste Treatment Facilities (CBWTF) for the disposal of the biomedical waste. The CBWTF consists of autoclave, shredder, incinerator and secured land fill facilities. There are 12 CBWTF in Tamil Nadu out of which 11 are under operation and one is under establishment. The facilities under operation are located at Thenmelpakkam village and Kinnar village in Kancheepuram district, Kandipedu village in Vellore district, two facilities at Orattukuppai village in Coimbatore district, Sengipatti village in Thanjavur district, Muthuvayal village in Ramanathapuram district, Coonoor in the Nilgiris district, Pappankulam village in Tirunelveli district, Thangayur village in Salem district, Undurumikidakulam village in Virudhunagar district. The facility proposed at Uthukottai in Tiruvallur District is being established. All the 11 common treatment facilities have been issued with authorisation by the Board and so far 5679 health care facilities are issued with authorisation. About 38.93 Tonnes per day of Bio Medical Waste is been handled by the CBWTF facilities.



Bio Medical Waste (BMW) Autoclave



Bio Medical Waste (BMW) Incinerator

3.13 MANAGEMENT OF E-WASTE

Electronic waste or e-waste comprises of old, end of life electrical and electronic appliances such as computers, laptops, TVs, DVD players, refrigerators, freezers, mobile phones, MP3 players, etc., which have been disposed of by their users. E-waste contains many hazardous constituents that may negatively impact the environment and affect human health. E-Waste (Management & Handling) Rules, 2011 was published by MOEF, GOI in Notification dated 12.05.2011 and is effective from 1.5.2012 in Tamil Nadu. As per the Rules, State Pollution Control Board has to issue authorisation for the producer of electrical and electronic equipments, e-waste recyclers, e-waste dismantlers and e-waste collection centres. The Board has issued registration to 18 units (dismantlers 12 & recyclers 6) and authorization for 28 units (producers 2, collection centres 8, dismantlers 12, recyclers 6) under the e-Waste (Management & Handling) Rules, 2011.

4.0 MONITORING NETWORK FOR QUALITY OF AMBIANT AIR AND WATER

4.1 AIR QUALITY MONITORING

With the increased industrial and commercial activities in the vicinity of major cities, the quality of the ambient air is being affected by emissions from the industries and from the ever increasing vehicular population. As per the provision of Air (Prevention and Control of Pollution) Act, 1981, the entire state of Tamil Nadu has been declared as an air pollution control area.

4.1.1 Ambient Air Quality Monitoring Programme at Chennai

Tamil Nadu Pollution Control Board is operating eight ambient air quality monitoring stations in Chennai under National Air Quality Monitoring Programme (NAMP).

The eight ambient air quality monitoring stations in Chennai are:-

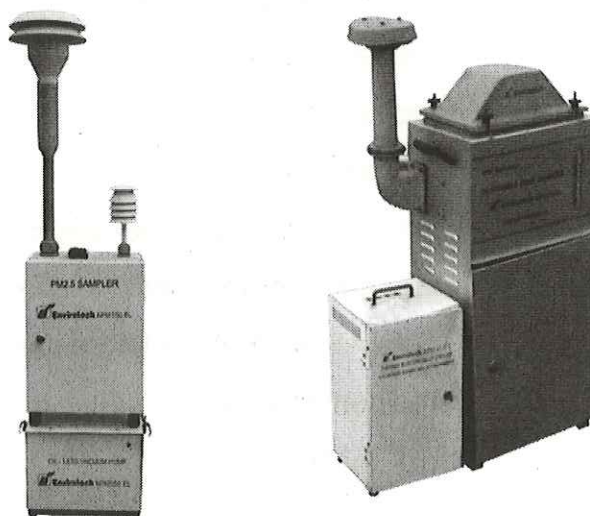
- | | | |
|--------|-------------------|--------------------------------------|
| (i) | Kathivakkam | - industrial area |
| (ii) | Manali | - industrial area |
| (iii) | Thiruvottiyur | - industrial area |
| (iv) | Kilpauk | - commercial (traffic inter-section) |
| (v) | Thiyagaraya Nagar | - commercial (traffic inter-section) |
| (vi) | Vallalar Nagar | - commercial (traffic inter-section) |
| (vii) | Anna Nagar | - residential area |
| (viii) | Adyar | - residential area |

All the above stations, function on a 24 hour basis, twice a week. The samples collected from NAMP stations are analysed for the Respirable Suspended Particulate Matter (RSPM is particulate matter less than 10 microns) and gaseous pollutants such as Sulphur di oxide (SO₂) and Nitrogen di Oxide (NO₂).

The National Ambient Air Quality Standards prescribed is given below:

Area	Annual average concentration of pollutants in $\mu\text{g}/\text{m}^3$		
	SO ₂	NO ₂	RSPM
Industrial, Residential, Rural & other areas	50	40	60

The ambient air quality data collected from the above mentioned air quality monitoring stations (NAMP) indicate that the parameters such as sulphur dioxide, nitrogen dioxide are found to be well controlled in Chennai including the industrial area. The average value of the RSPM exceeded the prescribed standard level in Chennai at Kilpauk, Thiyagarayanagar and Anna Nagar Monitoring stations. The exceedence of the level of RSPM in Chennai city is mainly due to the Metro Rail work, dust contributed by pipe line, telephone/electrical cable laying activities on the road and also due to the re-suspension of traffic dust generated from automobile emissions and heavy vehicular traffic and pedestrian movement. The average values of pollutants recorded at the above monitoring stations under NAMP programme during the period 2014-2015 are in Annexure –VI.



Air Quality Monitoring Equipments (Partiulate Matter)

4.1.2 Ambient Air Quality Monitoring in Thoothukudi, Coimbatore, Salem, Madurai Trichy, Cuddalore and Mettur.

At Thoothukudi, ambient air quality stations have been functioning under NAMP from the year 1988 in the following locations.

- | | | | |
|-----|-----------------|---|-----------------|
| (a) | Raja Agencies | - | Industrial zone |
| (b) | SIPCOT | - | Industrial zone |
| (c) | A.V.M. Building | - | Mixed zone |

At Coimbatore, the ambient air quality stations have been functioning under NAMP from the year 1991 in the following locations.

- | | | | |
|-----|-----------------------------|---|------------------|
| (a) | District Collector's Office | - | Mixed zone |
| (b) | Ponniyarajapuram | - | Residential zone |
| (c) | SIDCO Building | - | Industrial zone |

At Salem, the ambient air quality station has been functioning under NAMP in the following location from 1996 onwards in the following station.

- | | | | |
|-----|--------------------|---|------------|
| (a) | Sowdeswari College | - | Mixed zone |
|-----|--------------------|---|------------|

At Madurai, the ambient air quality stations has been functioning under NAMP from 1996 in the following locations.

- | | | | |
|-----|-------------------------------------|---|------------------|
| (a) | Highways Project Building | - | Residential zone |
| (b) | M/s.Susee Cars and trucks Co., Ltd. | - | Industrial zone |
| (c) | Madurai Corporation Office (SZ) | - | Mixed zone |

At Trichy, the ambient air quality stations have been functioning under NAMP from 2012 in the following locations.

- | | | | |
|-----|----------------------|---|----------------------|
| (a) | Gandhi Market | - | Commercial zone |
| (b) | Main Guard Gate | - | Traffic intersection |
| (c) | Bishop Heber College | - | Mixed zone |
| (d) | Golden rock | - | Residential zone |
| (e) | Central bus stand | - | Traffic intersection |

At Cuddalore, the ambient air quality stations have been functioning under NAMP from 2013 in the following locations.

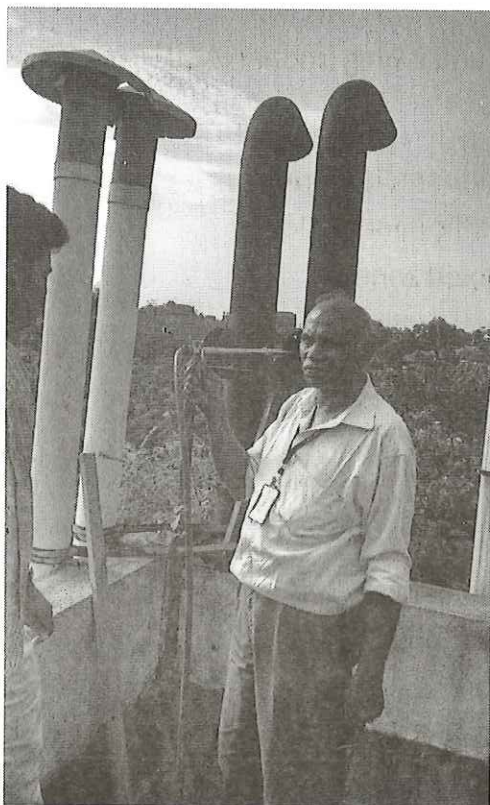
- | | | | |
|-----|-------------------|---|------------------|
| (a) | Echankadu Village | - | Residential Zone |
| (b) | DEE Office | - | Commercial Zone |
| (c) | SIPCOT | - | Industrial Zone |

At Mettur, the ambient air quality stations have been functioning under NAMP from 2013 in the following locations.

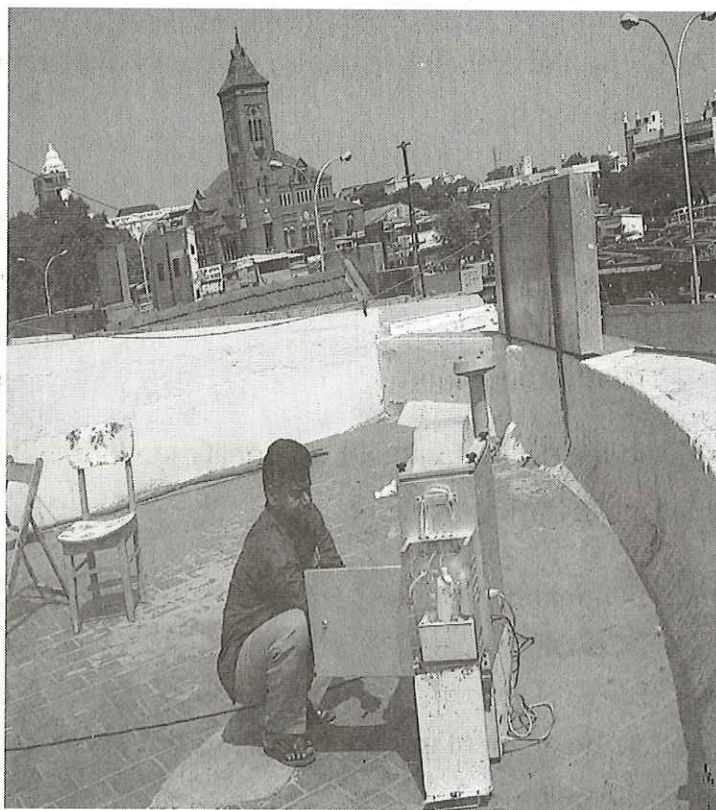
- (a) Raman Nagar - Residential Zone
- (b) SIDCO - Industrial Zone

All the above monitoring stations under NAMP, function on a 24 hour basis, twice a week. The samples collected from NAMP stations are analysed for the RSPM and gaseous pollutants such as SO₂ and NO₂. The ambient air quality data recorded during 2014-2015 indicate that the parameters such as sulphur dioxide, nitrogen dioxide are found to be well controlled at Thoothukudi, Madurai, Coimbatore, Salem, Trichy, Cuddalore and Mettur. The annual average values of RSPM were found to exceed the permissible limits at all monitoring stations in Thoothukudi, Sowdeswari college in Salem, SIDCO in Coimbatore, Gandhi Market, Main Guard Gate and at Central Bus Stand in Trichy and at Echankadu village in Cuddalore.

The exceedance of the RSPM at the above monitoring stations is mainly due to the increase in number of vehicles and the surface dust generated by vehicular movement but also due to the digging and laying activities for pipe lines, electrical and telephone cables and due to heavy commercial and industrial activities. The annual average values of pollutants recorded at the above monitoring stations during the period 2014-2015 are given in Annexure –VI.

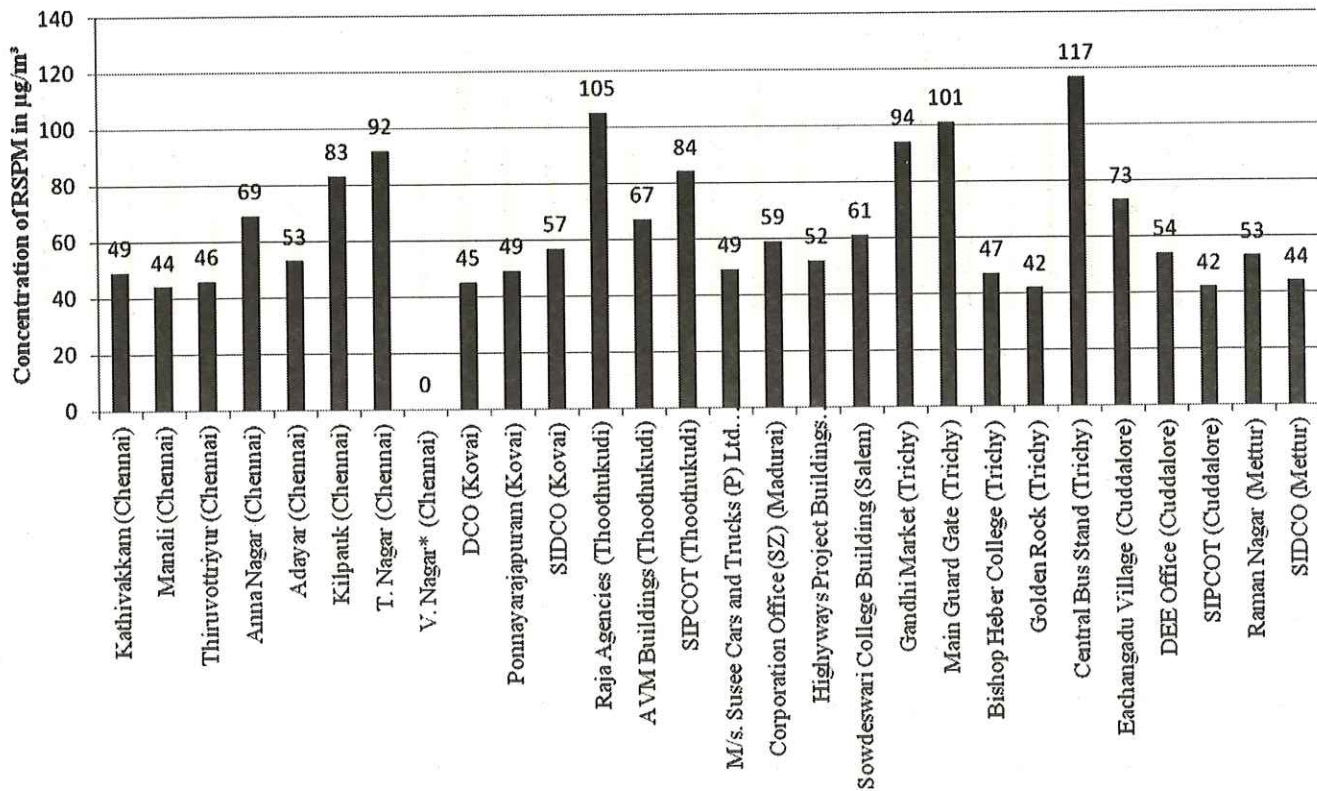


Stack Survey programme

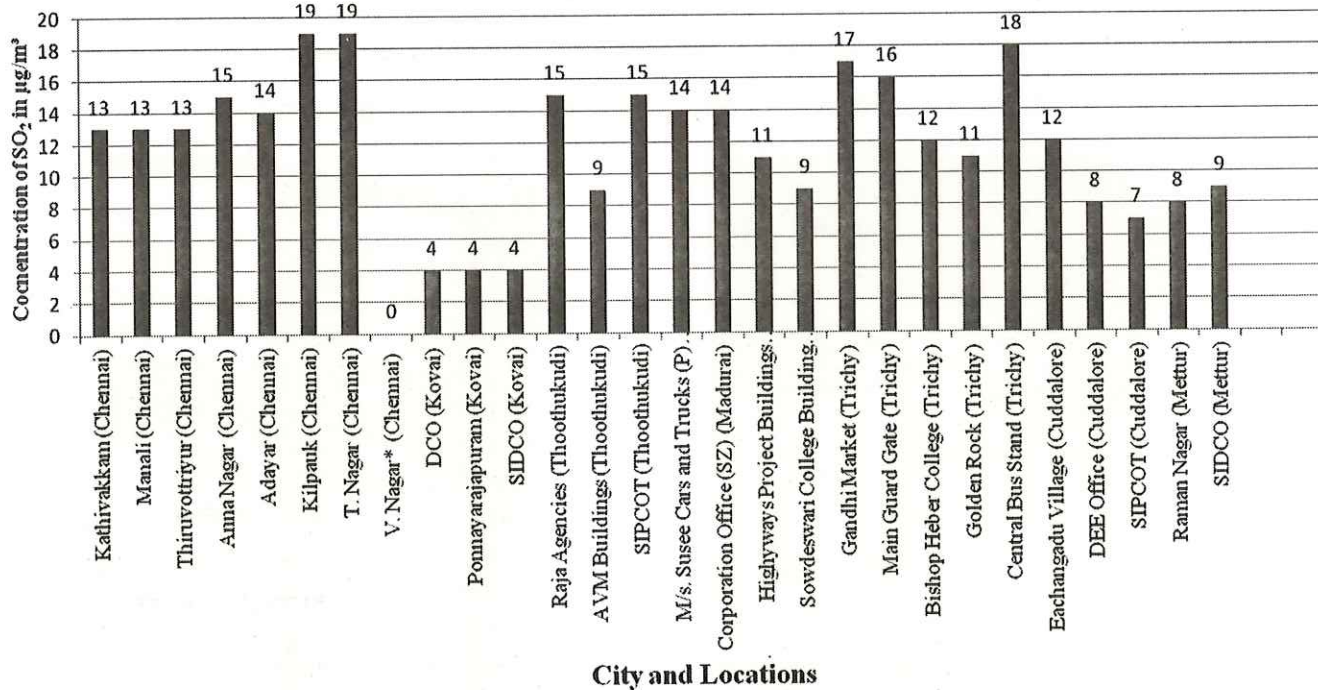


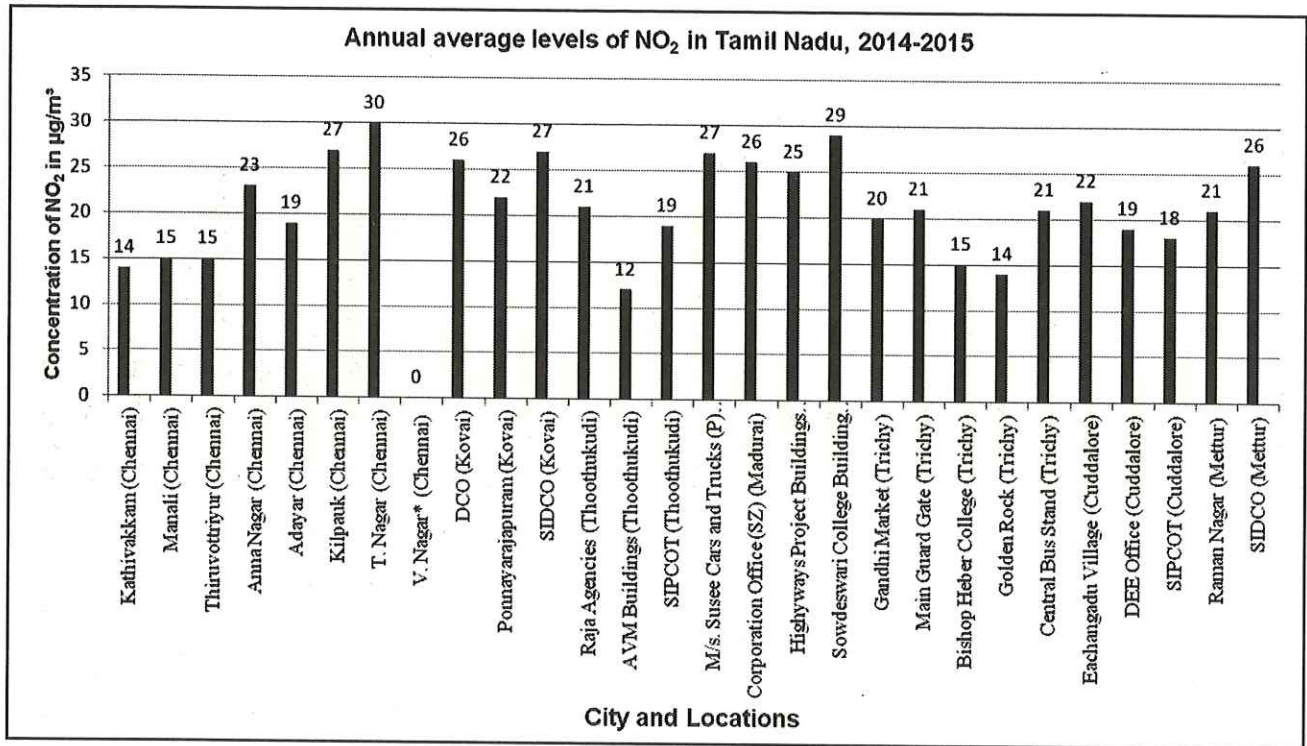
NAMP Ambient Air Survey

Annual average levels of RSPM in Tamil Nadu, 2014-2015



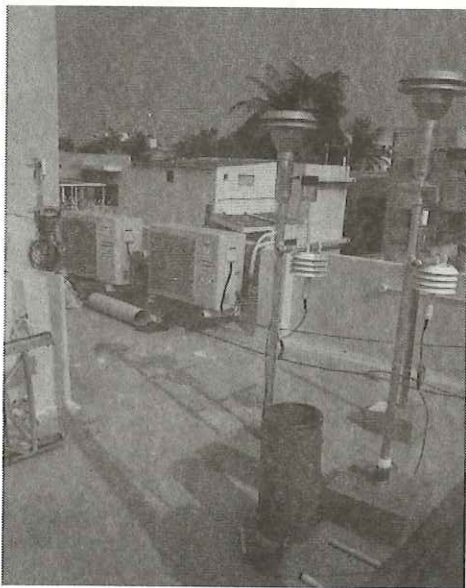
Annual average levels of SO₂ in Tamil Nadu, 2014-2015





4.2 CONTINUOUS AMBIENT AIR QUALITY MONITORING STATIONS

In order to monitor the ambient air quality on continuous basis, the Board installed six Continuous Ambient Air Quality Monitoring (CAAQM) stations. Four stations are installed at Chennai (viz) Koyambedu, Royapuram, Perungudi (Sai Nagar), Kodungaiyur, and one station at SIPCOT Gummidipoondi and one station at SIPCOT Thoothukudi. The CAAQM stations at Royapuram, Perungudi (Sai Nagar), Kodungaiyur and SIPCOT Thoothukudi monitors PM₁₀, PM_{2.5}, SO₂, NO₂, NH₃, O₃, CO and BTX, whereas the CAAQM stations at Koyambedu and SIPCOT Gummidipoondi monitors PM₁₀, PM_{2.5}, SO₂ and NO₂ on continuous basis.



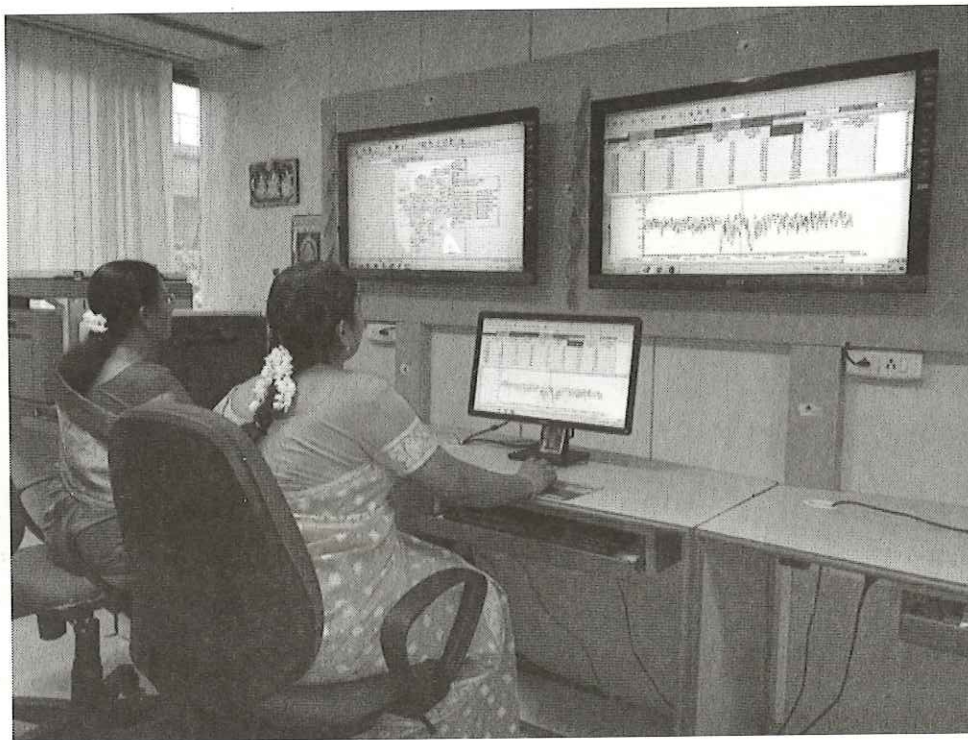
CAAQMS Sampling probe



CAAQMS Analyser and display system

4.3 CARE AIR CENTRE

In order to monitor both source emissions and ambient air quality on a real time basis from the industries located in the State, TNPCB has established Care Air Centre for Accessing Real Time Air (Quality) Information Report at the Head office, Guindy, Chennai. This is a continuous real time emission monitoring system of connected industries belonging to Red category, which is functioning on 24 X 7 basis. Online effluent quality monitors of the industries are also connected to this centre. This is the first of its kind in the whole country. When the emission levels, effluent quality exceed the norms, the inbuilt system will inform the concerned industry and the District Environmental Engineer/Member Secretary through automated SMS & E.Mail for remedial action immediately. So far, 280 industries are connected to Care Air Centre for online monitoring. Out of 280 industries, 228 industries are connected to Care Air Centre to monitor stack emission, 70 industries to monitor ambient air quality and 67 industries to monitor the quality of trade effluent.



Care Air Center at TNPCB

4.4 VEHICULAR EMISSION MONITORING

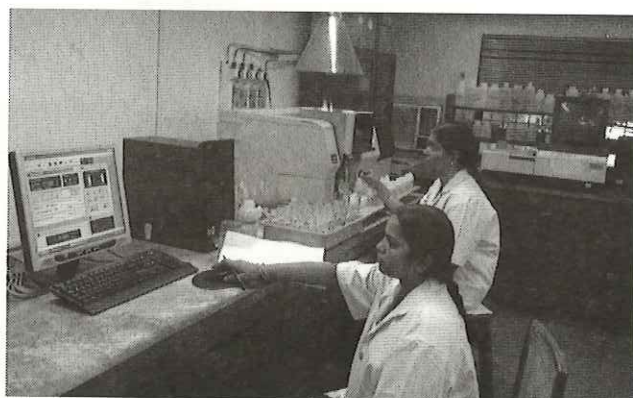
The private emission testing centres authorized by Transport Department under rule 116(B) of Tamil Nadu Motor vehicles Rules 1989 are testing and issuing Emission Under Control Certificate (EUCC) for all kind of vehicles in Tamil Nadu. TNPCB is not having any vehicle emission checking centres in Tamil Nadu w.e.f 01.11.2010. TNPCB is conducting training programme on the operation of emission checking instruments for the persons to be engaged in emission checking centers and TNPCB is also involved in the issue of working performance certificate for the new emission monitoring instruments purchased, to be utilized in the private emission testing centres.

4.5 LABORATORIES

To assist the Board in monitoring the industries, TNPCB has Established 5 Advanced Environmental Laboratories, 10 District Environmental Laboratories under section 17 (2) of the Water (Prevention and Control of Pollution) Act, 1974 amended in 1978 and 1988, so as to enable the Board to perform its functions efficiently and to cover the industries located in various districts. Samples of effluent are collected periodically and analysed. The details of samples analysed laboratory wise during the year 2014-2015 are shown at Annexure – VII.



Environmental Scientist at Work in Laboratory



Analysis Using Sophisticated Instruments

4.6 MONITORING OF INDIAN NATIONAL AQUATIC RESOURCES (MINARS) AND GLOBAL ENVIRONMENTAL MONITORING SYSTEM (GEMS)

TNPCB is monitoring the inland water quality under two major programmes namely Global Environmental Monitoring System (GEMS) from 1984 and Monitoring of Indian National Aquatic Resources (MINARS) from 1988 at 32 stations along the four major rivers i.e.

Cauvery, Tamiraparani, Palar and Vaigai and three lakes i.e. Ooty, Kodaikanal and Yercaud in Tamil Nadu. Subsequently, CPCB has sanctioned 23 additional Water Quality Monitoring stations under the 11th plan period during November 2010 and the Monitoring was started from December 2010. At present 55 (32 old stations+23 new stations) stations are being monitored by TNPCB. The programmes are funded by the Central Pollution Control Board, Delhi.

Under MINARS programme, the rivers Tamiraparani, Palar and Vaigai and the lakes Udthagamandalam, Kodaikanal, Yercaud, Veeranam, Porur, Poondi, Pulicat and Redhills are being monitored. Under GEMS and MINARS programmes the river Cauvery is being monitored.

4.6.1 River Cauvery and Its Tributaries

The Cauvery river is a major river in the State which drains more than one third of the State. This river has been identified as a major river for studying the impact of pollution caused by various activities of the domestic and industrial sectors. The quality of Cauvery river water is being monitored at thirty three (33) places along the river under GEMS (4 stations) and MINARS (29 stations). These places have been selected on the basis of the location of outlets for the discharge of industrial effluents, municipal and domestic wastes.

The physico-chemical and biological parameters are analysed for all the monitoring stations. Sampling is carried out based on the frequency prescribed by Central Pollution Control Board, Delhi and analysis is done at the Advanced Environmental Laboratory, Salem. The mean values of water quality at various sampling stations are given, in Annexure-VIII-A, VIII-B and VIII-C. The overall analysis of the data reveals contamination of surface water of the river due to the unhygienic anthropogenic activities and disposal of either untreated or partially treated municipal and domestic waste into the river systems directly or indirectly. In general, the water quality of the river is categorized under Class C, D, E and below E. The water quality of Madathukulam, Karuthatankudi, Kumbakonam Sirumugai and Bhavani Sagar falls under Class C, Musiri borewell, Musiri Ferrygate, Mettur and Pallipalayam are categorized under Class D. As per IS 2296-1982 Class C: Drinking water source after conventional treatment and disinfection, Class D: Propagation of Wild life and fisheries, Class E: Irrigation, Industrial Cooling, Controlled Waste Disposal. Below E refers to the quality of water is not meeting A, B, C, D and E Criteria.

4.6.2 River Tamiraparani

The water quality of the Tamiraparani river is being monitored on a frequency prescribed by Central Pollution Control Board, Delhi at 12 places. The physico-chemical parameters and biological parameters are analysed in the District Environmental Laboratory at Tirunelveli and the details are furnished in Annexure – IX. The water quality study conducted during the year 2014-2015 shows that the average level of pH values varied between 6.2 & 7.7 and the average values of the Bio-chemical oxygen demand (BOD) ranged between 2.0 & 5.0 mg/l as against the standards prescribed for pH (6.5 - 8.5) and BOD (3mg/L) respectively. The parameters analysed meet the standards prescribed for surface water quality under the class 'A' and 'B'.

4.6.3 River Palar

The water quality of river Palar is being monitored every month with one monitoring station at Vaniyambadi Municipal Head Works. The analysis of water samples is done in the Advanced Environmental Laboratory at Chennai, for physico-chemical and biological parameters. The mean values of water quality are furnished in Annexure – X. The analysed data reveals that the water quality of the river at the sampling point meets the standards prescribed for surface water quality under Class B - Outdoor Bathing (Organised).

4.6.4 River Vaigai

The water quality of the Vaigai river is being monitored by collecting the samples once in six months from the collection well of Thirubuvanam Head works and analysed in the Advanced Environmental Laboratory at Madurai for physico-chemical and bacteriological parameters. The water quality of the Vaigai river (collected from infiltration well) meets the standards prescribed for surface water quality under class 'B' and the details are furnished in the Annexure-X.

4.6.5 Lakes

Under MINARS programme, 8 important lakes of Tamil Nadu at Udhagamandalam, Kodaikanal, Yercaud, Veeranam, Porur, Poondi, Pulicat and Redhills have been identified and monitored by collecting samples on monthly basis. The mean values of water quality are furnished in Annexure – XI.

The Coliform values in Udthagamandalam lake are found to exceed the standards prescribed due to the surface run off and sullage discharge into lake either directly or indirectly. The water quality of the Udthagamandalam lake does not meet the water quality criteria (DBU Class) and the water quality is 'E'.

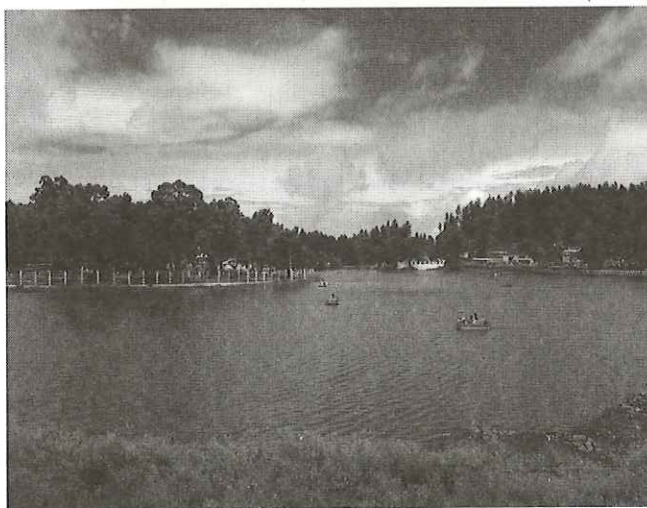
The water quality of the Pulicat lake also does not meet the water quality criteria (Designated Best Use Class) and this may be due to back water intrusion in that particular sampling point. The water quality of Kodaikanal Lake meets the standards prescribed for surface water quality under class 'D'. The water quality criteria of rest of the lakes are classified under Class'C' and Class'D'.



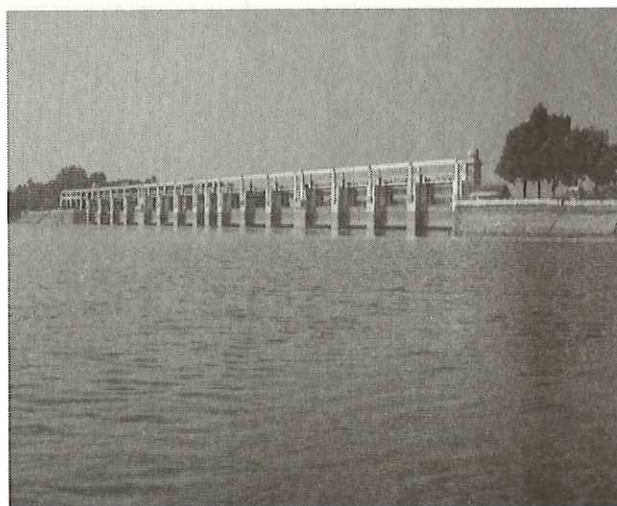
Ooty Lake



Kodaikanal Lake



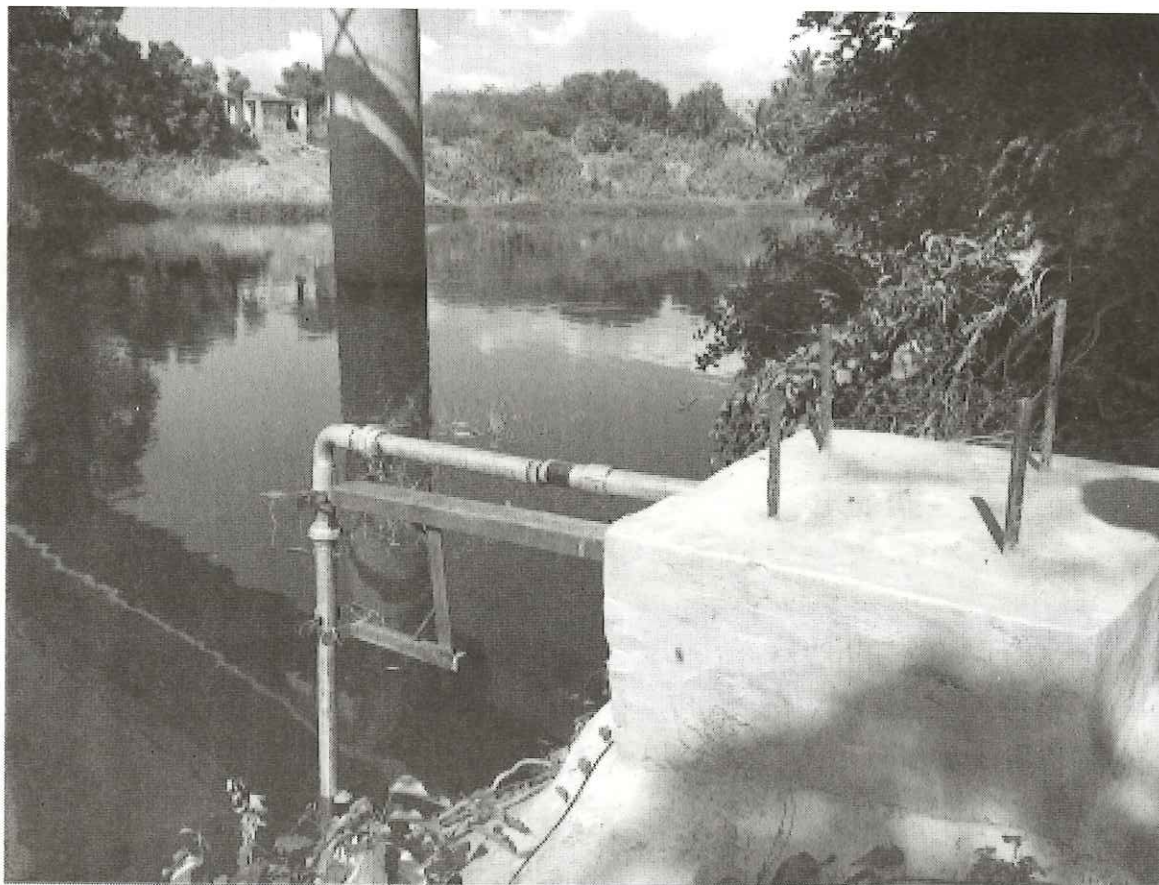
Yercaud Lake



Poondi Lake

4.7 Continuous Water Quality Monitoring Stations

In order to monitor the water quality of river Noyyal and Kalingarayan canal on continuous basis in the textile industrial belt, TNPCB installed online continuous water quality monitors at three locations each in Noyyal river and Kalingarayan canal. These stations monitors pH, total dissolved solids, dissolved oxygen on continuous basis. Similarly TNPCB installed three stations in river Thamirabarani. These stations are functioning from October, 2014.



Continuous Water Quality Monitoring Stations in River Thamirabarani

5.1 Environmental Standards

One of the functions of the TNPCB is to lay down, modify or annul effluent standards with the approval of Government of Tamil Nadu, for the sewage and trade effluents and for the emissions of air pollutants into the atmosphere from the industrial plants or any other source. TNPCB adopts the standards notified by the Ministry of Environment, Forests and Climate Change under the Environment (Protection) Act, 1986. The Board has also prescribed standards for the discharge of treated sewage / trade effluents depending upon the mode of disposal either into inland surface water, sewer and marine coastal areas or on land. Treated effluent from the industries must satisfy the respective standards before its disposal. Ambient Air Quality Standards and Emission Standards have been fixed for polluting industries. The Board monitors the quality of effluent, stack emission and ambient air quality in the vicinity of industries and ensures that they adhere to the prescribed effluent / emission standards.

6.1 LEGAL ACTION

The TNPCB is taking legal action against the defaulting industries. During the year 2014-2015, 4586 show cause notices were issued and 541 industries were closed for non complying with the consent order conditions.

6.2 GREEN BENCH

The Hon'ble High Court has constituted a 'Green Bench' during the year 1996 as per the direction of Hon'ble Supreme Court of India dated 28.8.1996 in W.P.(C) No.914/1991. The Green Bench deals with cases pertaining to Environment related matters. The cases pending as on 31.3.2015 is 222, which are under trail.

6.3 APPELLATE AUTHORITY

Hon'ble Appellate Authority has been constituted under the Chairmanship of a Hon'ble Justice (Retd), High Court of Madras with two technical members as per the G.O.Ms.No.66, Environment and Forests Departments, dated 7.5.2013. It is functioning at No.51, Gangadeeswarar Koil Street, Purasaivakkam, Chennai-86. The Authority entertains and disposes of the appeals preferred by the industries against the order of the TNPCB issued under Section 25/26 and 27 of Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988 and any orders issued under Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987. During the year 2014-2015, 150 appeals have been filed, out of which 50 cases were disposed off and the remaining 100 cases are under trail.

6.4 NATIONAL GREEN TRIBUNAL

The National Green Tribunal (NGT) was established at New Delhi on 18.10.2010, for effective and expeditious disposal of cases relating to Environmental Protection and Forest Conservation. Any person aggrieved by an order or decision of the SPCB and Appellate Authority order issued under Section 28, 29 and 33A of the Water (Prevention and Control of Pollution) Act, 1974, under Section 13 of Water (Prevention and Control of Pollution) Cess Act, 1977, under Section 31 of the Air (Prevention and Control of Pollution) Act, 1981 and under Section 5 of the Environmental (Protection) Act, 1986 may apply to NGT within 30 days of the order issued by the Board / Appellate Authority .

National Green Tribunal (NGT) for Southern Zone was constituted and functioning at Chennai. TNPCB has facilitated for the establishment of NGT Southern Zone. The Board has also facilitated the establishment of the second bench of the NGT in the Southern Zone at Chennai. The second bench is functioning from 23.3.2015 onwards.

During the year 2014-2015, 350 number of cases were filed by aggrieved persons / units, out of which 48 cases were disposed off and the remaining 302 cases are under trial.

CHAPTER - 7

7.1 BOARD MEETINGS

The details of the board meetings held from April 2014 to March 2015 are detailed below

Sl. No.	Board Meeting Number	No. of Subject placed	Date of Meeting
1	253	24	28.5.2014
2	254	23	17.9.2014
3	255	21	12.11.2014
4	256	27	18.03.2015

Major Decisions taken by the Board

1. The Board resolved to approve the proposal for constructions of office building for District Environmental Engineer office and Laboratory at SIPCOT Industrial Growth Centre, Oragadam in Kancheepuram District at a cost of Rs. 131.30 Lakhs.
2. The Board resolved to approve the proposal for grant a sum of Rs.30 Crores to the Tamil Nadu Forests Department for Massive Tree Planting Programme – Planting of 66 lakhs seedlings in 32 districts of Tamil Nadu for three years from 2013 – 2014 to 2015 – 2016 as per G.O.(Ms).No.18 Environment and Forests (FR.6) Department dated 11.2.2014.
3. The Board resolved to approve the proposal for the purchase of 0.5 acre of land on lease and payment of Rs.19,41,227/- towards plot deposit and development charges to SIPCOT at Perundurai for the construction of District Environmental Office at Perundurai.
4. The Board resolved to purchase the alienated land in Old S.No.175/2 and new T.S.No.2/2 Block 27, Ward S to an extent of 0.12.0 hectare or 13133 sq.ft. of land, out of total extent of 15.16.0 hectare which is classified as “Government Karadu Poramboke-unassessed Waste” in 69 Sowthapuram Village, Salem Taluk and District for the construction of District Environmental Engineer Office and Advanced Environmental Laboratory at Salem District.
5. The Board resolved to approve the proposal for the establishment of one Stationary Real Time Continuous Ambient Air Quality Monitoring Station (SCAAQM) in the Perundurai Industrial Estate at a total cost of Rs.2.00 crores.

6. The Board resolved to approve the proposal of strengthening the analytical capability of TNPCB laboratories in air quality monitoring by purchasing instruments at a total cost of Rs.3.70 crores from Board funds.
7. The Board resolved to approve the proposal for construction of building for O/o. JCEE (Monitoring) Vellore over the existing DEE office building, Vellore through PWD at a total cost of Rs. 69.50 lakhs.
8. The Board resolved to approve the construction of office building for District Environmental Engineer office and Laboratory in the SIDCO complex at Erode through PWD at total cost of Rs. 243 Lakhs.
9. The Board resolved to adopt the G.O. (Ms) No.24 dated 23.2.2015 of Environment & Forest Department and approve the proposal for grant of Rs. 30 Crores (Rupees Thirty crores only) to the Tamilnadu Forests Department from Water cess in phased manner for massive tree planting programme of planting 67 Lakhs seedlings in 32 Districts of Tamil Nadu for 3 years from 2014-2015 to 2016-2017.
10. The Board resolved to approve the proposal to provide a funds of Rs. 50,000/- (Rupees Fifty Thousand only) to each District Collector of Tamilnadu to conduct awareness programme on avoidance of throwaway plastic on submission of specific proposal from the District Collectors through the District Environmental Engineer concerned.

8.1 ENVIRONMENTAL TRAINING INSTITUTE (ETI)

ETI is an organizational wing of TNPCB, which was established in 1994 with Danish assistance. It is functioning in the 3rd floor of TNPCB Corporate office. ETI is guided by a steering committee, chaired by Chairman, TNPCB and its Members are from Government, PCB and CEOs of Industry. An Advisory Council comprising of members from Industries, Non Governmental Organizations (NGOs), academic and government institutions, provide technical support to the ETI.

The main objective of the Training institute is to impart training to staffs of the Pollution Control Board, Industrial representatives, Executives of Municipalities and Corporations, Line agencies and NGOs on the following aspects.

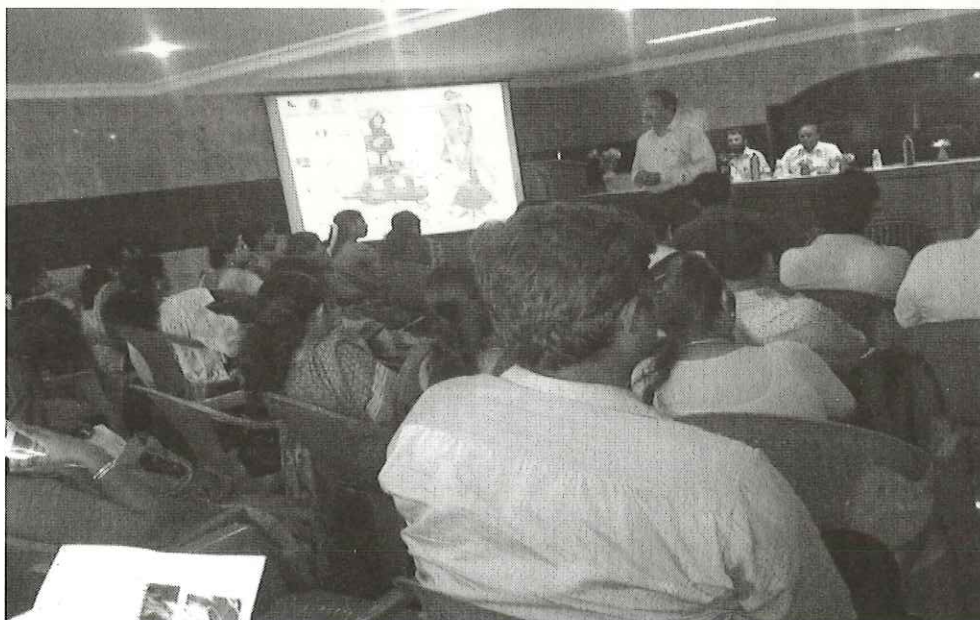
- (i) Improve awareness at all levels.
- (ii) Introduce the holistic approach to environment & sustainable development
- (iii) Introduce the basic theories, concepts and methodologies of integrated environmental planning and management aiming a sustainable development
- (iv) Promote public awareness and motivation to preserve and protect the environment through NGOs.
- (v) Create cross - media awareness in industries, urban sectors and among the public on environmental hazards and adverse impacts on the quality of life.
- (vi) Pollution Control at source by cleaner technology and improved processes of materials and products. This includes conservation of non-renewable resources, resource recovery, refuse recycling and disposal of minimum waste to the environment.
- (vii) Improve environment management capacity in the sector of industry and urban development.
- (viii) Develop the ability among professionals to communicate effectively.

During the year 2014-2015, this training institute has conducted 16 programmes and trained 1328 personnel in total. During the period, the highlights of the ETI Training Programme was to educate medical college students, industrial personnel's and Government Departments such as Corporation of Chennai, Municipalities, Fire Department, Local bodies and TNPC Board's officials.

1. 45 Participants have been trained on municipal solid waste dumpsite fires, environmentally monitoring, mitigation and control at ICSR Auditorium, IIT Madras. The training programme also covered landfill siting and design, landfill operations, leachate and landfill gas management, impact of landfill fires, surface and subsurface landfill fire, prevention and converting landfill gas to energy.

2. 228 stakeholders have been trained on environmental statement preparation and its importance. The key objective of this training programme is to know about environmental statement preparation and information about audit of consumption, pollution, hazardous solid waste disposal, and conservation of resources audit programme.

3. 104 Kilpauk Medical College Students and 55 Nursing students have been trained on bio-medical waste management at ETI, TNPCB. The main objective of this training is to make them aware on categories of bio-medical waste segregation of waste with colour coding, common bio-medical waste treatment facility



Environmental Training Institute – Training session

9.1 ENVIRONMENTAL AWARENESS AND PUBLIC PARTICIPATION

Environmental campaign has become an important tool to achieve effective compliance of various pollution control norms. Large scale public involvement can strengthen environment movements for the sake of implementation of environment-friendly rules and regulations by the government machinery in much better way to have the most desired results. Towards this end, the TNPCB has conducted various types of environmental awareness programmes every year on the following occasions.



Cycle rally to reate Environmental Awareness

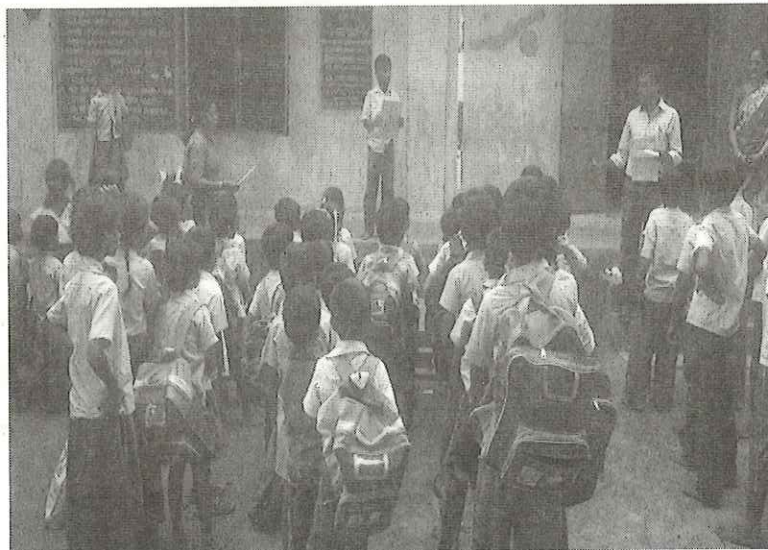
• **Vinayagar Chaturthi Festival:-** Awareness programmes are conducted through the Collectors in all the district headquarters and towns not to use plaster of paris and paints to make the Vinayagar idols. The Board also monitors water quality of the identified water bodies before and after immersion of idols in specified locations.

• **Deepavali Festival:-** Awareness programmes are conducted not to burst crackers from 10 PM to 6 AM and also not to burst crackers creating sound more than 125 decibel (average). The Board also monitors ambient air quality and noise level in Chennai (15 places) and other cities viz., Trichy, Coimbatore, Madurai, Tirunelveli, Vellore, Salem, Hosur, Tiruppur, Dindigul and Cuddalore. The results are given to press and media for public awareness.



• **Boghi Awareness Programme**

Bhogi Festival:- Board conducts awareness programmes not to burn the waste materials such waste tyres, tubes, plastic materials, cloths etc in open palces. In Chennai city Board conducts ambient air quality monitoring during pre-bhogi and bhogi festival days in 15 locations. The results are given to press and media for public awareness.



Deepavali Awareness Programme

10. OTHER IMPORTANT MATTERS DEALT IN THE BOARD

10.1. PUBLIC HEARING

As per the Environmental Impact Assessment Notification, 2006, certain categories of industrial projects require prior environmental clearance from the Ministry of Environment, Forests and Climate Change, (MoEF & CC) Government of India or State Environmental Impact Assessment Authority (SEIAA) which depends on the size of the project. As per the notification, TNPCB conducts public hearing headed by the District Collector. After conducting public hearing, inviting opinions from the public, the details of the minutes are sent to the MoEF & CC, Government of India or SEIAA. During the period April 2014 to March 2015, public hearings were conducted for 34 projects.

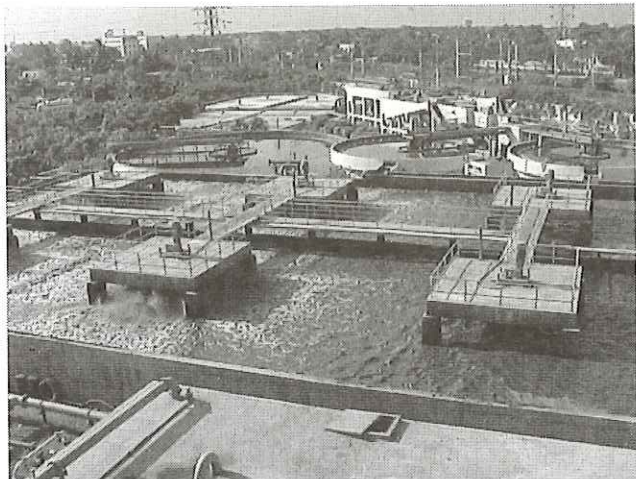


A view of Public Hearing

10.2 WATER CONSERVATION

As a water conservation measure, three major industries in Manali and Basin Bridge area are utilising about 25 MLD (million liters per day) of Chennai City sewage for cooling purposes in their plants after tertiary treatment. The dyeing units in the State including units at Tiruppur have provided reverse osmosis plants for recovering the process water from the effluent. The recovered water is reused in the process. In sugar industries, water condensate from evaporators is reused. As a condition for issue of consent, industries have been instructed

to provide rainwater harvesting arrangements. All the industries have set up rain water harvesting systems. Rainwater harvesting system has also been provided in the offices of the Tamilnadu Pollution Control Board.



STP in Power Plant to recycle treated Sewage



Rain Water Harvesting in Automobile Company, SIPCOT, Irungattugottai

10.3 CLEANER TECHNOLOGIES

TNPCB involves in promoting a holistic approach of environment protection by cleaner technology options more than mere end-of-pipe treatment. With active support and encouragement from the Board, the industrial units in Tamilnadu have switched over to cleaner technologies such as adoption of membrane cell instead of mercury cell in caustic soda manufacturing, adoption of dry process instead of wet process to reduce air pollution in cement factories, utilization of 25 to 30% of fly ash in Porzanno Portland Cement manufacturing, adoption of double conversion and double absorption technology in sulphuric acid manufacturing, gas carburizing instead of cyanide salt in heat treatment and cyanide free electroplating. Pulp and paper industries are encouraged to go in for elemental chlorine free bleaching to reduce the formation of organo-chlorides including dioxins. Industries consuming ozone-depleting substances are systematically changing to environment friendly compounds. TNPCB initiated for demonstrating best available technologies for Micro, Small and Medium Scale Enterprises (MSME) through Technology Demonstration Centre established at IIT Madras with the financial support of TNPCB at a cost of Rs. 5 crores.



Adoption of Membrane process in caustic soda instead of mercury process as directed by TNPCB

10.4 WASTE MINIMISATION

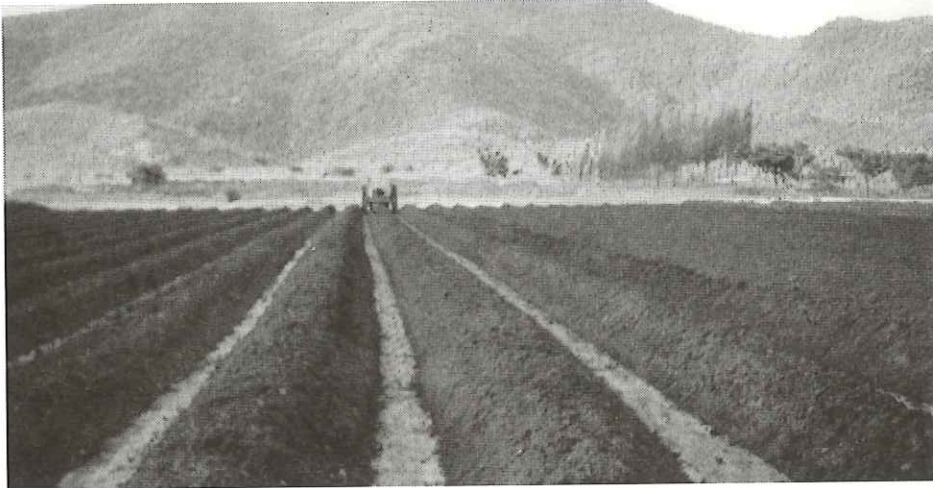
With the adoption of cleaner technologies there has been progress in waste recovery and waste minimization. Examples include recovery of materials such as chrome from tannery effluent and ammonia from fertilizers. Distilleries have been insisted to provide zero liquid discharge system and 7 distilleries have gone for bio-composting of their effluents with press mud of sugar factories for achieving zero liquid discharge of trade effluent and 5 distilleries have established concentration cum incineration system to dispose spent wash effluent and has achieved zero liquid discharge of trade effluent.



Spent wash Concentration cum Incineration in Distillery Unit

10.5 ENERGY CONSERVATION

As a measure for fuel conservation and recovery, all the distilleries are recovering methane gas from their spent wash through anaerobic digestion. Major sugar factories have installed co-generation power plants. The sago units recover methane gas from their trade effluent through anaerobic digestion. In activated carbon process, the waste heat is recovered and used at boiler section. Other industrial units are encouraged to use less energy and it is being audited through the environmental statements of the unit.



Bio-Composting in Distillery Unit

10.6 ENVIRONMENTAL STATEMENT

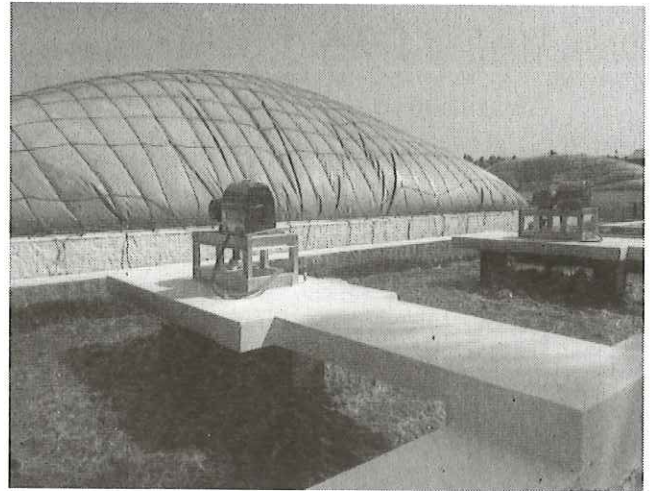
Under the rule 14 of the Environment (Protection) Rules 1986, submission of Environmental Statement is made compulsory for every industry covered under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981 or the Hazardous Waste (Management & Handling) Rules, 1989. Industries are required to submit Environmental Statement for the financial year ending 31st March every year in the prescribed Form-V before 30th September every year to the State Pollution Control Board. Environmental Statements have been obtained from all the 17 category of highly polluting industries in order to assess their water & energy consumption and their efforts in reducing the pollution levels.

10.7 ENVIRONMENTAL AUDIT

For self auditing of the environmental management systems, all major industrial units have been asked to get the ISO 14001 certifications which are awarded by an external agency after auditing the environmental management systems.



Anaerobic Bio-Reactor in Distillery



Anaerobic Digester in Sago unit

10.8 GREEN AWARDS

The Hon'ble Minister for Environment made an announcement in the Legislative Assembly during the Budeget Demand in year 2011-12 that Green Awards will be given to the industries who have adopted best practices in achieving best environmental quality in emission, discharge of waste water, solid and hazardous waste management and Green belt development and also green award to the District Collectors who have taken action for the betterment of environment of their districts.



Green Award to Disrict Collectors

10.8.1 Green Awards to District Collectors

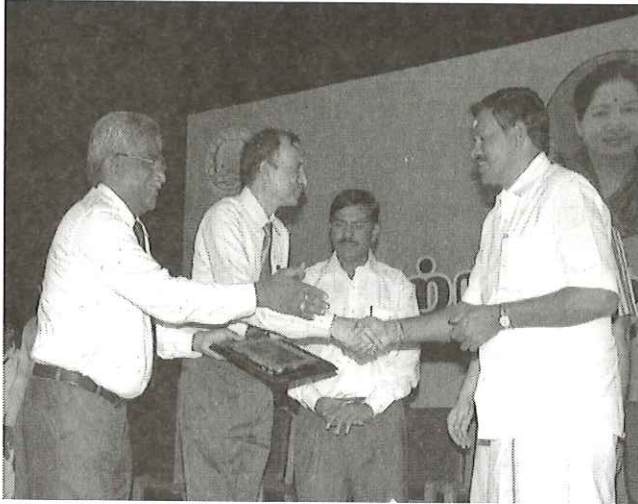
As per the announcement made in the Legislative Assembly, all the District Collectors were requested to prepare and furnish a detailed report with supporting documents such as photographs etc regarding the initiatives taken to improve the condition of the environment of their respective district during the year 2013-14 and related achievements therein. Nine proposals were received from the District Collectors. Expert Committee constituted for the purpose, has evaluated the proposals and selected the following District Collectors for Green Award 2014.

S.No.	Name of the District Collector and District	Place
1	Thiru K.Vivekanandan, I.A.S., District Collector, Dharmapuri District.	1 st Place
2	Dr. K.S. Palanisamy, I.A.S., District Collector, Theni District.	2 nd Place
3	Tmt. Archana Patnaik, I.A.S., District Collector, Coimbatore District.	3 rd Place

10.8.2 Green Awards to Industries

As per the announcement made by the Hon'ble Minister for Environment, TNPCB invited proposals from industries for Green Award for the year 2013-2014 along with supporting documents on the initiatives and achievements on environmental protection. Nineteen proposal were received and it was evaluated by the Expert Committee. The Committee has selected the following industries for Green Award 2014.

S.No.	Name and address of the Industry	Place
1	M/s. WABCO India Limited, Ambattur Industrial Estate, Tiruvallur District.	1 st Place
2	M/s. ITC Limited, Thekampatti Karamadai, Coimbatore District.	2 nd Place
3	M/s. Chennai Petroleum Corporation Limited, Panangudi, Nagapattinum District.	3 rd Place



Green Award to Industries



World Environmental Day Celebrations

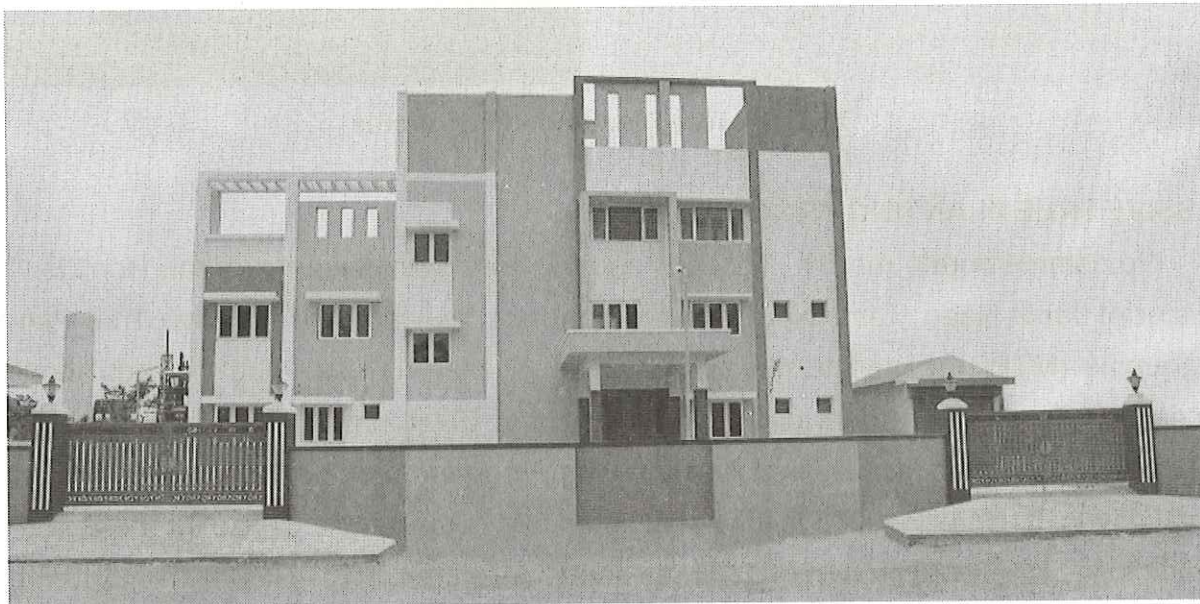
10.9 TECHNOLOGY DEMONSTRATION CENTRE

TNPCB on enforcement and its monitoring encourages cleaner Technology, Waste Minimization Technology, Hazardous substance elimination by alternate process, reuse, and recycle systems, zero liquid discharge and best available technology to promote industrial development within the sustainable development in the State of Tamilnadu. As the number of industries in Tamil Nadu is increasing at a rapid rate, crossing over 46000, the enforcement authorities and industries find it challenging to attain sustainable development and to derive suitable solution to address the environmental issues. In order to find a solution, TNPCB has made an MOU with IIT, Madras on 17.4.2013 and established a new technology demonstration centre in IIT Madras. The Board has allocated a sum of Rs. 5 crores for this Center.

The team of Technology Demonstration Centre has conducted treatability studies for rice mills, sago, small scale textile processing units. This centre has conducted awareness programme on Landfill fire management on 02.05.2014 among Municipal authorities, Fire Department and TNPCB officials. The centre has also conducted technical workshop for sago industries on 12.5.2014 and 13.5.2014 in order to enable them to understand the characteristics of sago waste water, anaerobic treatment, biogas generation and optimization of the process parameters to enhance the composition and quantity of biogas generated. In July 2013, there was an incident occurred in leakage of petroleum oil pipeline of an Oil Company in Tondiarpet, North Chennai. This Technology Demonstration Centre has carried out a detailed field study and made recommendations for groundwater and soil remediation. At present remediation work is in progress.

10.10 OFFICE BUILDING CONSTRUCTION

TNPCB head office at Guindy, Chennai is functioning in own building. There are 34 District offices, out of which 10 District offices are in own buildings and the remaining 24 District offices are functioning in rented buildings. TNPCB had initiated action for construction of new buildings for 12 District offices. Out of this, construction is completed for 7 buildings (i.e) at Sivagangai, Dindigul, Namakkal, Virudhunagar, Thanjavur, Villupuram and Pudukottai. In the remaining 5 places construction is in progress (ie) at Coimbatore (North), Coimbatore (South), Oragadam (Kancheepuram District), Erode, and Vaniyambadi.

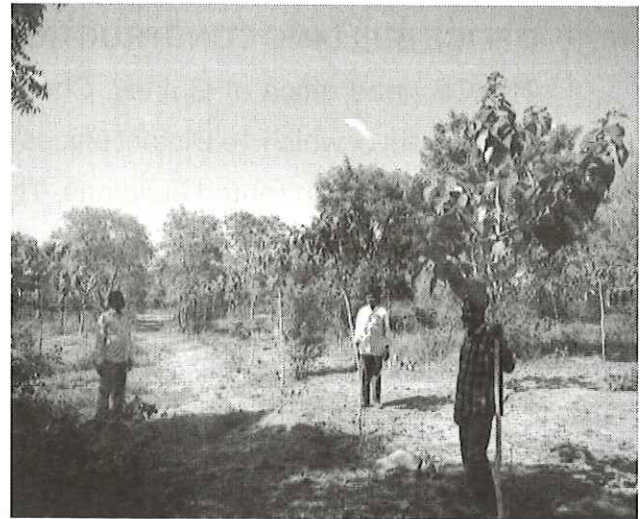


New Office Building of District Environmental Engineer's office & Laboratory, Cuddalore

10.11 GREEN COVER PROGRAMME

As a measure of pollution check, industries have been directed to utilize 25% of their land area for developing green belt with trees having a thick canopy cover. Accordingly, industries have taken action to plant adequate number of trees in and around the industrial premises.





Massive Tree Plantation Programme

MASSIVE TREE PLANTING PROGRAMME

To commemorate the 64th, 65th, 66th and 67th Birth Anniversaries of the Hon'ble Chief Minister of Tamil Nadu, Tamil Nadu Government has launched the Massive Tree Planting Programme (MTPP), aimed at planting 64 lakh, 65 lakh, 66 lakh and 67 lakh seedlings respectively. As per the orders of the Government in Environment & Forests Department, TNPCB has supported for Massive Tree Planting Programme of the Forests Department for planting 64 lakhs seedlings, 65 lakhs seedling and 66 lakhs seedlings. So for the Board has granted fund of Rs 28.84 crores, Rs. 20 crores and 17.99 crores for the plantation programme of 64 lakhs seedling, 65 lakhs seedling and 66 lakhs seedlings respectfully. For the 67 lakhs seedling plantation programme also, the Government had directed the Board to support the Forest Department.

10.12 APPLIED RESEARCH AND DEVELOPMENT

The Promotion of research and development activities are one of the functions of the Board as per Section 17 of the Water (Prevention and Control of Pollution Act), 1974. TNPCB resolved to support research projects relating to Environmental protection out of Cess Funds vide Board Proceedings Ms.No.1, dated 03.01.1996.

In 1996, the Board established an Applied Research and Development Wing and constituted an AR&D Evaluation Council, to assist the Board in R&D activities. The Board vide proceedings No.22, dated 04.07.2008 revised the Guidelines for finding of R&D Projects and the Terms and Conditions for the same. In 2010, the Board reconstituted the AR&D Council vide proceeding No.3043/AR&D/2008, dated 22.02.2010 with expert members from the

renowned State/Central Government Departments, Research Institutions, Reputed Universities and Industries. The Board also constituted a sub-committee to evaluate the research proposals and recommends to AR&D Council. The AR&D Council makes recommends to the Board for the sanction of financial assistance.

10.13 COMPLAINT CELL

Due to increased Environmental awareness and awareness on Pollution Control Legislation, several complaints are being received from various individuals / Organisation/ NGOs etc. regarding water, air and noise pollution. To take appropriate action against these complaints, an active 'Complaint Cell' is functioning in the head office, Chennai on all working days. For easy access of the Public and others, separate telephone number, 044-22353153, fax 044-22353153 and e-mail- tnpcbcomplaint@gmail.com is allotted for receiving complaints and guidance. The complaints are attended by calling reports along with the recommendations from the field officers of the Board. Action required based on the reports are taken then and there. The Board had received 1715 complaints during the year 2014-2015 and they have been subsequently disposed.

10.14 RIGHT TO INFORMATION ACT

In pursuance to the directions of Government of Tamil Nadu, TNPCB designated the Member Secretary as State Information Officer (Appellate Authority) and One Senior Officer in the Corporate Office and 34 District Officers are designated as Public Information Officers to provide information to the persons requesting information under the Right to Information Act, 2005. From 1st April 2014 to 31st March 2015, the Board has received 2619 applications seeking information and the Board has provided the information. In the same period 116 Nos. for first appeal petitions and 7 Nos. of second appeal petitions were disposed off.

10.15 TNPCB & YOU

To guide the new entrepreneurs in understanding the various Environmental Legislations and the procedure for obtaining consent of TNPCB, the Board has published a book on 'TNPCB & You' during the World Environment Day, 2013 function. The soft copy of the book is also available in Tamil Nadu Pollution Control Board website. www.tnpcb.gov.in

10.16 LIBRARY

The TNPCB Library was established in November 1989. At present the library has a collection of above 11,988 Books and Reports. The Collections are classified under Dewey

decimal classification. The collection comprises of documents related to the field of Environmental Protection, Air Pollution, Vehicular Pollution, Water Pollution, Noise Pollution, Wastewater Treatment, Municipal Waste Management, Hazardous Waste Management, Bio Medical Waste, Environmental Engineering, Industrial pollution, Chemical Technology, Disasters, Soil, Energy, Pesticides, Biotechnology, Environmental Health, Environmental Economics, Environmental Chemistry, Environmental Impact Assessment, Environmental Education, Sustainable Development, Women and Environment, Environmental Law and Forestry.

Library subscribes for 51 Journals, 9 Newspapers, 10 Magazines. Besides this, Annual Reports, Newsletters, Bulletins and Reports are received from different Institutions (Indian & foreign). Back volumes of the journals are bound and kept for reference in the Periodical Section. Library is administrated by the Library Committee and Library Purchase Committee chaired by the Member Secretary. The committee consists of the Senior Officers of the Board and experts from Anna University and IIT, Madras. Membership is opened to all those who involve in Environmental aspects. Readers are provided photocopying facilities.

Membership Fee:

Student:	Monthly	-	Rs. 30.00
	Annual	-	Rs. 75.00
Individual:	Annual	-	Rs. 100.00

School and College Students, Research Scholars, Lectures & Professors, Professionals, NGOs, Industrialists and other Government Department officials and people involved in environmental aspects used to refer the Library. Readers are not only from Chennai but also from all over Tamil Nadu and Pondicherry and from other States like Karnataka, Andhra Pradesh, Kerala, Maharashtra, Uttar Pradesh and West Bengal visit the library. From April 2014 to March 2015, 2644 no. of readers have utilized the library. Lib Sys software has been installed for TNPCB Library automation. Through OPAC (Open Access Catalogue) anyone can search the available books and reports and also articles published in the subscribed journals.

ANNEXURE-I**List of Board Members from 1.4.2014 to 31.3.2015**

S. No.	BOARD MEMBERS	Position	From	To
1	Dr D.Karthikeyan, I.A.S., Chairman, Tamilnadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai – 600 032.	Chairman	1.4.2014	1.6.2014
2	Thiru. K. SKANDAN, I.A.S., Additional Chief Secretary / Chairman, Tamilnadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai – 600 032.	Chairman	2.6.2014	31.3.2015
3	Thiru. C.V. SANKAR, I.A.S., Addl. Chief Secretary to Govt., Environment and Forests Department, Fort St. George, Secretariat, Chennai – 600 009.	Member	1.4.2014	6.6.2014
4	Thiru. HANS RAJ VERMA, I.A.S., Principal Secretary to Government, Environment and Forests Department, Fort St. George, Secretariat, Chennai – 600 009.	Member	6.6.2014	31.3.2015
5	V. ARUNROY, I.A.S., Joint Secretary to Government., Finance Department, Secretariat, Fort St. George, Chennai – 600 009.	Member	1.4.2014	31.3.2015
6	Thiru. R. VENKATESAN, I.A.S., Director of Town and Country Planning,i/c., Chengalvarayan Building, IV Floor, 807, Anna Salai, Chennai – 600 002.	Member	1.4.2014	9.6.2014

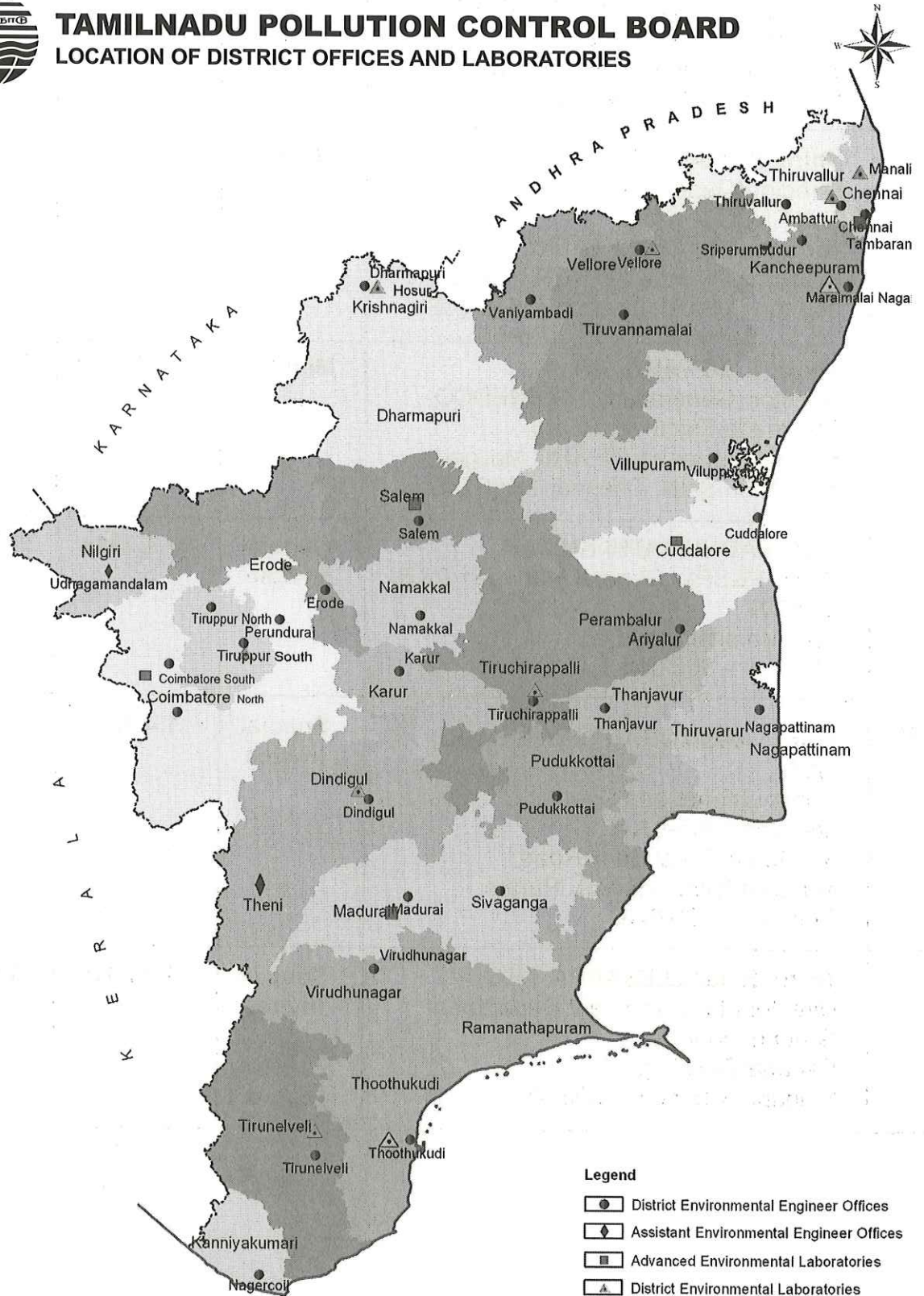
7	Thiru. R. VENKATESAN, I.A.S., Director of Town and Country Planning, Chengalvarayan Building, IV Floor, 807, Anna Salai, Chennai – 600 002.	Member	10.6.2014	10.12.2014
8	Thiru. A. KARTHIK, I.A.S., Commissioner of Town and Country Planning,i/c., Chengalvarayan Building, IV Floor, 807, Anna Salai, Chennai – 600 002.	Member	11.12.2014	28.12.2014
9	Thiru. R. KIRLOSH KUMAR, I.A.S., Director of Town and Country Planning, Chengalvarayan Building, IV Floor, 807, Anna Salai, Chennai – 600 002.	Member	29.12.2014	31.3.2015
10	Dr. K. KOLANDASWAMY, M.B.B.S., DPH, DIH,MAE., Director of Public Health and Preventive Medicine, Chennai – 600 006.	Member	1.4.2014	31.3.2015
11	Thiru A.V. VENKATACHALAM, I.F.S., Member Secretary, Tamilnadu Pollution Control Board, 76, Mount Salai, Guindy,Chennai – 600 032.	Member	1.4.2014	24.7.2014
12	Dr. K. KARTHIKEYAN, M.Tech., Ph.D., Member Secretary, Tamilnadu Pollution Control Board, 76, Mount Salai, Guindy,Chennai – 600 032.	Member	25.7.2014	23.1.2015
13	Thiru. C. VIJAYARAJ KUMAR, I.A.S. , Managing Director, TWAD Board, Chepauk, Chennai – 600 005.	Member	1.4.2014	31.03.2015

14	Thiru. N. SANKAR, B.E., Director (Generation) / TANGEDCO., Tamilnadu Electricity Board, Electricity Avenue (NPKRR Maligai), 800, Anna Salai, Chennai – 600 002.	Member	1.4.2014	30.06.2014
15	Thiru. ANNA DURAI, Director (Generation) / TANGEDCO.,A/c., Tamilnadu Electricity Board, Electricity Avenue (NPKRR Maligai), 800, Anna Salai, Chennai – 600 002.	Member	1.7.2014	16.7.2014
16	Thiru. S. DEVARAJAN, Director (Generation) / TANGEDCO., Tamilnadu Electricity Board, Electricity Avenue (NPKRR Maligai), 800, Anna Salai, Chennai – 600 002.	Member	17.7.2014	31.3.2015
17	Tmt. MADHUMATHI KUMAR, DGM (P&SP) / General Manager (P&R) SIPCOT, 194, Marshall Road, Chennai – 600 008.	Special Invitee	1.4.2014	31.03.2015
18	Thiru. JAGMOHAN SINGH RAJU, I.A.S., Commissioner and Director of Industries and Commerce, A/c., 36, South Canal Bank Road, Mandavelipakkam, R.A. Puram, Chennai – 600 028.	Special Invitee	1.4.2014	31.3.2015
19	Thiru. H. MALLESSAPPA, I.F.S., Director of Environment Department, Ground Floor, Panagal Building, Saidapet, Chennai – 600 015.	Special Invitee	1.4.2014	31.03.2015

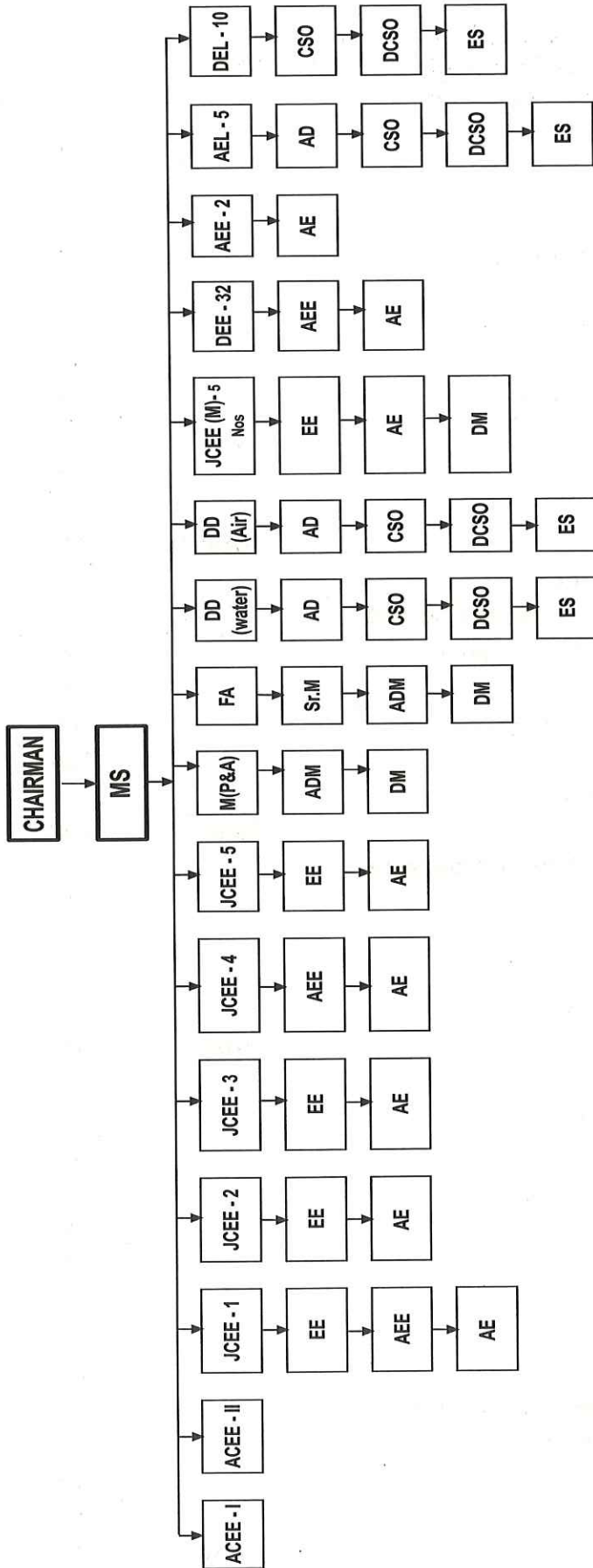
ANNEXURE - II



TAMILNADU POLLUTION CONTROL BOARD LOCATION OF DISTRICT OFFICES AND LABORATORIES



ORGANISATION CHART



s Work Allocation

- ACEE - I - Construction, P&D, Care Air, 17 Category
- ACEE - II - Lab, 17 Category, Care Centre

s Work Allocation

- JCEE - 1 - Tanneries, Textiles, Petrochemical, Power, Sugar, Distillery
- JCEE - 2 - Dairy, Sago, Stone Crushers, BMW, Glass, Paint
- JCEE - 3 - ETI, Pharma, Pesticides, Rubber, Explosives, MSW, Plastics
- JCEE - 4 - Cement, Engg., Foundry, hotels, Industrial Estates, Orange, Chemicals, Pulp & Paper
- JCEE - 5 - P&D, Construction, BMS, Legislative Assembly Questions, Computer Section, Care Air

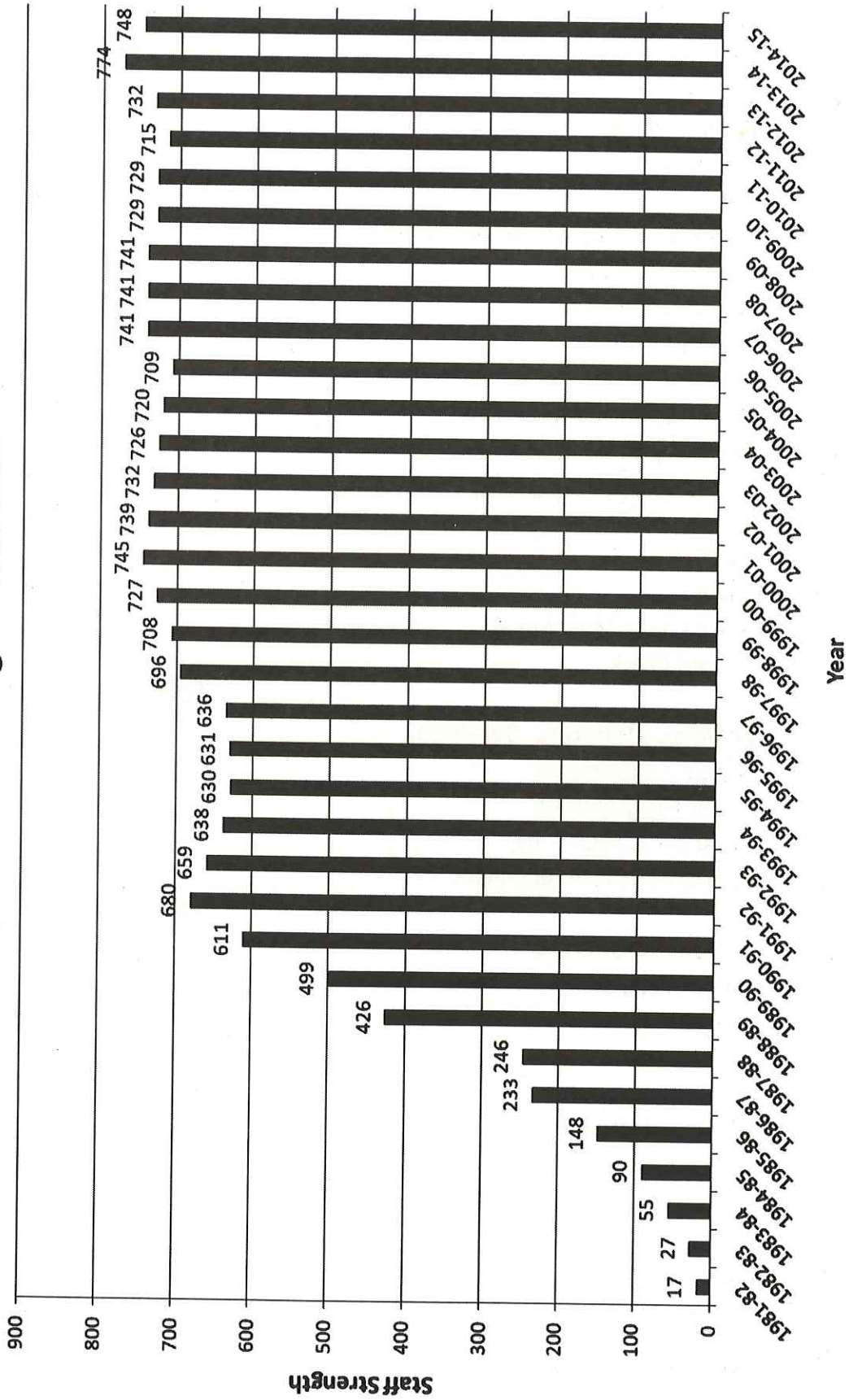
- ACEE - Additional Chief Environmental Engineer
- JCEE - Joint Chief Environmental Engineer
- JCEE (M) - Joint Chief Environmental Engineer (Monitoring)
- EE - Environmental Engineer
- DEE - District Environmental Engineer
- AEE - Assistant Environmental Engineer
- AE - Assistant Engineer
- FA - Financial Advisor
- Sr.M - Senior Manager
- M(P&A) - Manager (Personnel & Administration)
- DM - Deputy Manager
- ADM - Additional Manager
- DD - Deputy Director
- AD - Assistant Director
- CSO - Chief Scientific Officer
- DSCO - Deputy Chief Scientific Officer
- ES - Environmental Scientist
- AEL - Advanced Environmental Laboratory
- DEL - District Environmental Laboratory

**ANNEXURE – IV A
STAFF DETAILS AS ON 31.03.2015**

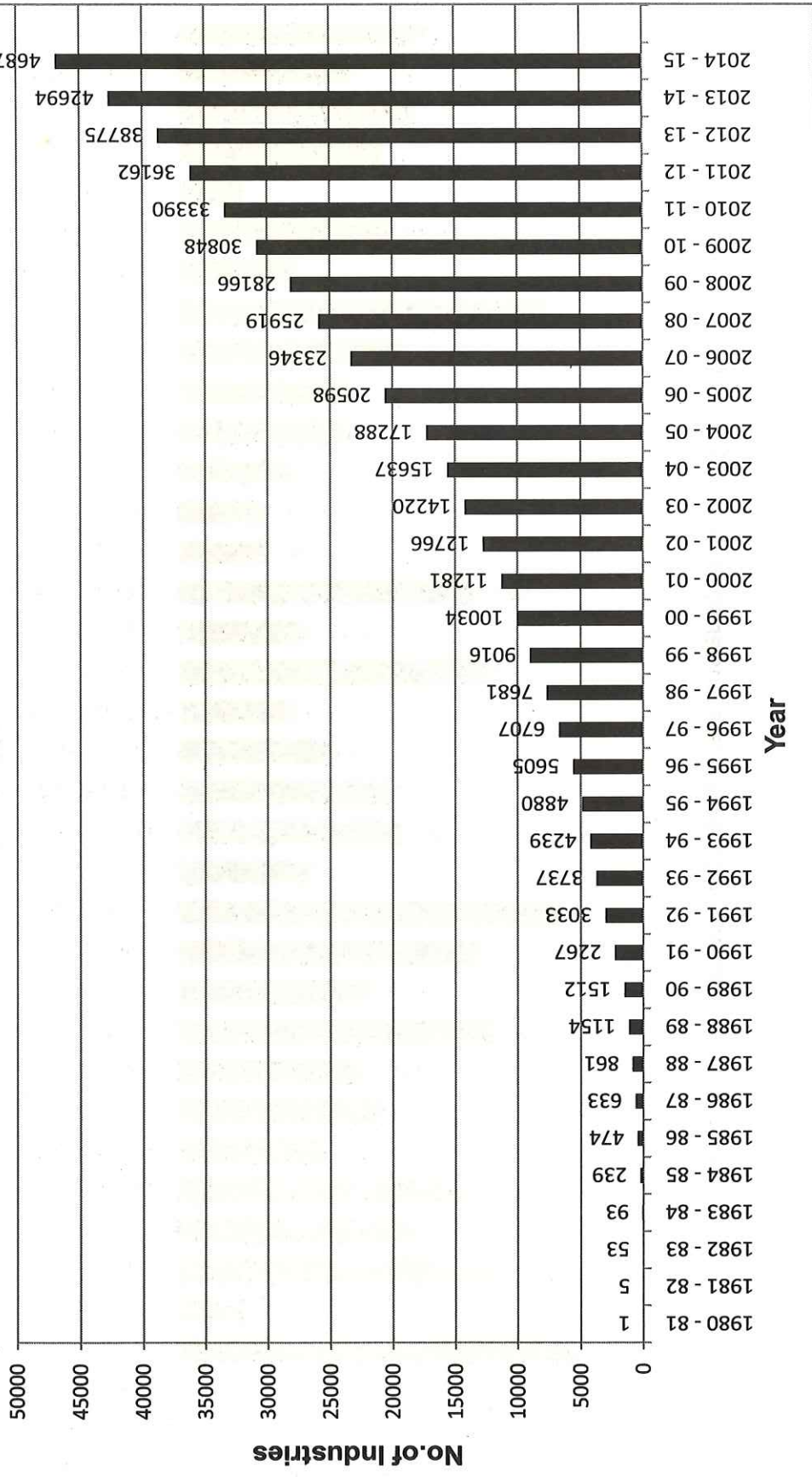
Sl.No.	Name of the Post	No. of Staff
1	Chairman	1
2	Member Secretary	-
3	Engineering Service	203
4	Engineering Sub Ordinate Service	11
5	Scientific Service	78
6	Scientific Sub Ordinate Service	93
7	General Service	19
8	General Sub Ordinate Service	294
9	Miscellaneous services	4
10	Basic Service	43
11	Deputation	2
	Total	748
	I. Engineering Service	
1	Additional Chief Environmental Engineer	2
2	Joint Chief Environmental Engineer	9
3	Environmental Engineer	44
4	Assistant Environmental Engineer	43
5	Assistant Engineer	104
6	Assistant Engineer (Auto)	1
	Total	203
	II. Engineering Sub Ordinate Service	
1	Junior Engineer	1
2	Technical Assistant	2
3	Electrician	5
4	Assistant Draughts Man	3
	Total	11
	III. Scientific Service	
1	Deputy Director (Labs)	2
2	Assistant Director (L)	7
3	Chief Scientific Officer	8
4	Deputy Chief Scientific Officer	20
5	Environmental Scientist	38
6	Senior Meteorologist	1
7	Meteorologist	2
	Total	78
	IV. Scientific Sub Ordinate Service	
1	Junior Environmental Scientist	7
2	Field Assistant	55
3	Lab Assistant	31
	Total	93

	V. General Service	
1	Senior Manager (F & A)	1
2	Manager	1
3	Law Officer	1
4	Additional Manager	4
5	Deputy Manager	12
	Total	19
	VI. General Sub Ordinate Service	
1	Assistant Manager	61
2	General Assistant	74
3	Assistant	67
4	Private Secretary	1
5	Steno Typist (Grade – I)	3
6	Steno Typist (Grade – II)	18
7	Steno Typist (Grade – III)	4
8	Telephone Operator	2
9	Typist	10
10	Driver	46
11	Motor Cycle Messenger	1
12	Record Clerk	7
	Total	294
	VII. Miscellaneous Services	
1	Senior Programmer	1
2	Junior Programmer	1
3	Librarian (Grade – II)	1
4	Assistant Statistical Officer	1
	Total	4
	VIII. Basic Service	
1	Office Assistant	37
2	Sweeper	5
3	Watchman	1
	Total	43
	IX. Deputation	
1	Financial Adviser	1
2	Manager Law	1
	Total	2
	Pensioners	
1	Pensioners	161
2	Family Pensioners	54
	Total	215

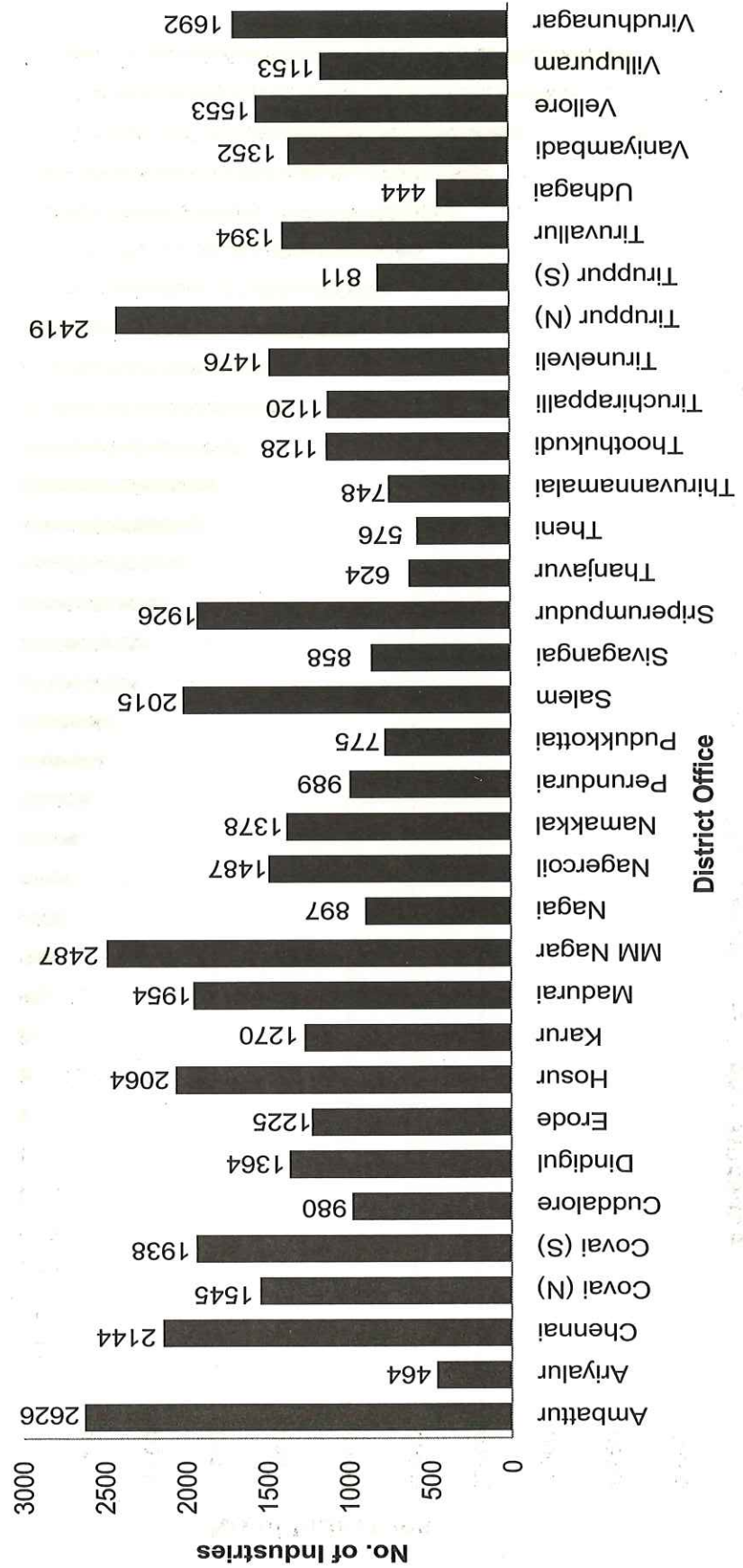
TNPCB Staff Strength - Year Wise



Annexure - VA : Year Wise Industries under the purview of TNPCB



Annexure - V-B: Number of Industries under each District Office



ANNEXURE - VI

TAMILNADU POLLUTION CONTROL BOARD

STATUS OF AIR QUALITY OF IMPORTANT CITIES/ TOWNS OF TAMILNADU - UNDER NATIONAL AIR QUALITY MONITORING PROGRAMME(NAMP), ANNUAL AVERAGE CONCENTRATIONS OF AIR POLLUTANTS, 2014-2015

Sl.No.	City & Location	Category	Annual Average Concentrations of Air Pollutants in $\mu\text{g}/\text{m}^3$												
			SO ₂			NO ₂			RSPM						
			Max	Min	Avg	Max	Min	Avg	Max	Min	Avg				
1	CHENNAI														
a)	Kathivakkam	Industrial	14	11	13	16	12	14	14	64	41	49			
b)	Manali	Industrial	14	11	13	17	13	15	15	61	35	44			
c)	Thiruvottiyur	Industrial	15	11	13	17	13	15	15	63	37	46			
d)	Anna Nagar	Residential	18	13	15	30	18	23	108	51	69				
e)	Adyar	Residential	16	12	14	21	17	19	72	46	53				
f)	Kilpauk	Commercial (Traffic-intersection)	21	17	19	31	24	27	131	67	83				
g)	Thiyagarayanagar	Commercial (Traffic-intersection)	22	17	19	44	26	30	132	76	92				
h)	Vallalar Nagar	Commercial (Traffic-intersection)	Temporarily closed due to administrative reasons												
2	COIMBATORE														
a)	DCO	Mixed	4	4	4	27	23	26	65	27	45				
b)	Ponaiyarajapuram	Residential	4	4	4	19	24	22	67	33	49				
c)	SIDCO	Industrial	4	4	4	29	23	27	88	38	57				
3	THOOTHUKUDI														
a)	Raja Agencies	Industrial	18	14	15	25	17	21	147	77	105				
b)	AVM Buildings	Mixed	11	8	9	14	10	12	111	47	67				
c)	SIPCOT	Industrial	17	13	15	24	14	19	121	54	84				
4	MADURAI														
a)	M/s.Susee Cars & Trucks (P) Ltd.,	Industrial	15	12	14	46	17	27	72	39	49				
b)	Madurai Corporation Office(SZ)	Mixed	15	13	14	32	18	26	72	41	59				
c)	Highways project Buildings	Residential	15	10	11	35	16	25	71	32	52				
5	SALEM														
a)	Sowdeswari college building	Mixed	10	8	9	39	22	29	67	55	61				
Prescribed standards(Annual average) for Industrial,Residential,Rural&Other areas						50			40			60			

Note: SO₂: Sulphur di oxide NO₂: Nitrogen di Oxides

RSPM : Respirable Suspended Particulate Matter (< 10 micron size)

ANNEXURE -VII

TAMIL NADU POLLUTION CONTROL BOARD PERFORMANCE OF LABORATORIES (APRIL 2014 TO MARCH 2015)

Sl No.	Name of the Laboratory	Water Samples										Air Survey				Noise			
		Effluent		Projects			Sludge	Well/Water Samples	River Water	Others	Total	No. of Industries	AAQS Stations	SM Stations	NAMP	No. of Industries	Regular Stations	Complaints	No. of Stations
		Sewage Effluents	Effluents	GEMS	MINARs	CCW													
Advanced Environmental Laboratories																			
1	Chennai	1,800	1,107	-	104	353	12	92	-	-	3,468	119	744	653	2,949	118	852	-	-
2	Madurai	847	274	-	41	-	-	114	103	46	1,425	82	483	152	1,609	81	653	4	35
3	Salem	1,838	112	35	382	-	34	239	149	54	2,843	65	368	179	1,536	54	496	6	38
4	Cuddalore	981	115	-	-	-	-	77	12	58	1,243	63	352	185	1,543	61	453	2	15
5	Coimbatore	902	525	-	-	-	-	17	66	6	1,516	74	368	242	1,412	68	610	8	40
District Environmental Laboratories																			
6	Ambattur	1,753	638	-	-	-	-	-	-	28	2,419	76	433	338	1,188	76	412	5	34
7	Manali	1,261	430	-	-	-	-	88	32	3	1,814	55	387	180	-	54	294	10	31
8	Dindigul	721	12	-	-	-	-	28	-	4	765	40	290	77	-	40	259	3	15
9	Hosur	746	406	-	-	-	-	51	2	10	1,215	103	501	258	-	106	967	3	15
10	Trichy	1,180	309	-	-	-	-	217	44	15	1,765	110	544	242	1,807	111	657	1	15
11	Tirunelveli	485	171	-	120	-	-	19	-	72	867	27	185	37	-	30	153	1	4
12	Tiruppur	2,346	69	-	-	-	-	110	51	54	2,630	61	404	134	-	46	266	7	76
13	Vellore	1,095	211	-	-	-	-	225	49	27	1,607	65	483	382	-	65	415	1	5
14	Maraimalai Nagar	1,251	839	-	-	-	-	56	10	45	2,201	101	542	305	-	100	589	1	6
15	Thoothukudi	215	-	-	-	-	-	-	-	-	215	40	247	72	1,323	30	117	3	36
	Total	17,421	5,218	35	647	353	46	1,333	518	422	25,993	1,081	6,331	3,436	13,367	1,040	7,193	55	365

ANNEXURE-VIII - A

CAUVERY RIVER WATER QUALITY(UNDER GEMS PROGRAMME)2014 -2015

S.NO	Name of stations	D.O mg/L	pH	Conductivity m mhos/cm	BOD at 27 C mg/L	Nitrate mg/L	Fecal coliform MPN/100 ml	Total coliform MPN/100 ml	Turbidity NTU	Phenophthaline Alkalinity mg/L	Total Alkalinity mg/L	Chloride mg/L	COD mg/L	Total Kjeldahl Nitrogen mg/L	Ammonia-N,as N mg/L	Hardness as CaCO3 mg/L	Calcium as Ca++ mg/L	Magnesium as Mg++ mg/L	Sulphate mg/L	Sodium mg/L	Total Dissolved Solids mg/L	Total Fixed Solids mg/L	Total Suspended Solids mg/L	Phosphate mg/L	Boron mg/L	Potassium mg/L	Fluoride mg/L	DBU Class
1	Mettur	6	8.0	379	2	0.25	14397	9087	1.58	10.00	144.33	31.75	39.33	3.22	1.3	131.58	27.40	15.39	16.75	33.89	258.67	240.00	6.50	0.01	0.00	3.77	0.31	E
2	Pallipalayam	7	8.1	438	2	0.20	7269	13449	3.50	12.27	155.83	49.50	33.33	3.50	1.4	130.33	27.36	15.68	26.31	43.29	301.33	281.17	8.33	0.02	0.00	4.85	0.35	E
3	Musiri borewell	6	7.3	1417	1	0.26	14020	17534	1.00	4.50	298.00	205.00	68.00	3.08	1.0	446.00	98.00	49.00	12.50	145.50	838.00	750.00	4.00	0.03	0.00	17.00	0.40	D
4	Musiri ferrygate	8	8.3	570	2	0.35	5134	18366	13.83	12.83	185.50	71.08	67.33	3.27	1.2	175.67	33.86	22.35	36.17	60.43	389.00	365.33	7.67	0.03	0.01	7.28	0.37	D

*CPCB-GEMS /MINARS Water quality criteria

DBU Class Designated Best Use

mg/L-milligram per liter

MPN-Most probable number

A - Drinking Water Source without conventional treatment but after disinfection

B - Outdoor bathing (organised)

C - Drinking water source after conventional treatment and disinfection

D-Propagation of wild life and fisheries

E -Irrigation, Industrial cooling,controlled waste disposal

< E Not meeting A,B,C,D & E Criteria

ANNEXURE-VIII - B

CAUVERY RIVER WATER QUALITY - (UNDER MINARS PROGRAMME 2014 - 2015)

S.NO	Name of stations	D.O mg/L	pH	Conductivity m mhos/cm	BOD at 27 C mg/L	Nitrate mg/L	Fecal coliform MPN/100 ml	Total coliform MPN/100 ml	Turbidity NTU	Phenophthaline Alkalinity mg/L	Total Alkalinity mg/L	Chloride mg/L	COD mg/L	Total Kjeldahl Nitrogen mg/L	Ammonia as N mg/L	Hardness as CaCO3 mg/L	Calcium as Ca++ mg/L	Magnesium as Mg++ mg/L	Sulphate mg/L	Sodium mg/L	Total Dissolved Solids mg/L	Total Fixed Solids mg/L	Total Suspended Solids mg/L	Phosphate mg/L	Boron mg/L	Potassium mg/L	Fluoride mg/L	DBU Class
1	Pathira kaliannan koi	8	9.2	128	1	0.28	6941	29912	1.25	1.00	44.83	13.83	20.67	2.66	1.1	40.42	9.02	4.76	4.75	10.31	93.67	84.50	10.92	0.03	0.00	1.83	0.27	below E
2	Srumugai	7	7.5	140	1	0.26	6252	20478	6.67	2.00	52.00	14.00	22.67	2.85	1.2	46.08	9.57	5.31	8.60	13.43	107.67	97.67	4.75	0.02	0.00	2.34	0.34	D
3	Bhavani segar	7	7.7	163	2	0.27	13239	30875	4.08	1.00	61.67	18.56	22.00	2.85	1.2	54.67	12.85	5.42	9.08	13.43	121.00	110.50	8.83	0.03	0.58	3.29	0.32	D
4	Bhavani	6	8.0	566	2	0.37	13495	22821	4.67	13.17	182.67	66.50	31.33	3.22	1.3	202.17	38.34	25.03	32.33	49.17	372.67	350.00	7.42	0.02	0.00	7.13	0.34	below E
5	R.N. Pudur	5	8.0	383	1	0.24	7633	10630	1.58	11.00	154.33	35.42	45.33	3.73	1.5	131.92	29.20	14.53	22.85	40.62	279.67	260.67	6.50	0.02	0.00	4.95	0.32	below E
6	Vairapalayam	5	7.9	775	9	0.19	2362573	2974056	7.67	6.58	189.17	129.17	70.00	7.42	1.9	144.25	30.11	17.57	43.50	69.92	486.00	433.67	16.75	0.06	0.00	11.42	0.40	below E
7	P. Velur	7	8.3	552	2	0.29	7243	19201	1.83	14.08	173.67	69.33	44.67	3.41	1.4	157.67	28.82	18.93	35.17	51.78	364.33	338.00	7.58	0.01	0.00	6.70	0.34	below E
8	Mohanur	7	8.3	556	2	0.23	7765	34355	3.27	16.82	188.73	62.45	39.27	3.26	1.3	160.18	29.15	21.23	31.55	54.25	369.45	343.27	9.91	0.04	0.00	6.75	0.34	below E
9	Madathukulam	8	7.7	150	1	0.29	489	911	4.71	1.00	66.86	12.29	27.43	2.88	1.0	63.43	15.57	6.00	9.23	9.00	124.57	110.86	8.00	0.03	0.00	2.06	0.35	C
10	Thirumukkulai	7	8.3	517	1	0.27	7344	20648	1.00	12.42	189.25	62.00	47.33	3.92	1.6	152.17	30.58	18.56	30.33	53.31	343.33	321.33	6.83	0.03	0.00	6.15	0.37	below E
11	Trichy U/S	8	8.3	497	1	0.22	22818	55171	2.17	14.25	171.33	56.75	60.67	3.41	1.3	156.56	32.19	18.43	29.25	53.27	343.00	320.67	8.33	0.04	0.00	7.19	0.32	below E
12	Trichy D/S	5	7.9	811	5	0.78	102097	2027631	14.82	14.10	238.18	106.36	72.00	4.43	1.6	194.55	39.90	23.01	40.18	75.95	504.36	469.82	11.27	0.26	0.00	18.15	0.31	below E
13	Grand Anaiicut	6	8.1	717	3	0.23	25395	45758	18.33	15.83	221.00	100.75	58.00	4.83	2.0	840.75	85.78	152.12	31.67	76.21	468.17	442.00	12.33	0.16	0.00	14.80	0.36	below E
14	Coleeroon	7	8.1	6417	2	0.28	24399	144203	3.58	14.67	159.67	1969.67	93.33	4.83	2.0	840.75	85.78	152.12	260.08	1240.77	4178.00	3880.33	13.58	0.04	0.00	36.99	0.32	below E
15	Pitchavaram	4	9.3	3091	2	0.29	122586	235049	18.42	23.09	276.00	867.67	70.67	4.42	1.4	492.50	65.00	80.25	100.50	400.70	1832.33	1745.00	63.00	0.23	0.00	37.36	0.34	below E
16	Karunthattankudi	8	8.4	611	2	0.30	285	474	3.75	14.25	183.00	91.25	25.00	58.80	1.4	148.13	34.50	17.13	27.13	67.63	401.50	378.50	7.00	0.01	0.00	7.13	0.38	C

*CPCB/SEMS / MINARS Water quality criteria

DBU Class Designated Best Use

A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

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A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

A - Drinking Water Source without conventional treatment but after disinfection

**ANNEXURE VIII-C
CAUVERY RIVER WATER QUALITY-(UNDER MINARS PROGRAMME)2014-2015**

S.NO	Name of stations	D.O mg/L	pH	Conductivity m mhos/cm	BOD at 27 C mg/L	Nitrate mg/L	Fecal coliform MPN/100 ml	Total coliform MPN/100 ml	Turbidity NTU	Phenophthaline Alkalinity mg/L	Total Alkalinity as CaCO ₃ mg/L	Chloride mg/L	COD mg/L	Total Kjeldahl Nitrogen mg/L	Ammonia,N as N mg/L	Hardness as CaCO ₃ mg/L	Calcium as Ca++ mg/L	Magnesium as Mg+ mg/L	Sulphate mg/L	Sodium mg/L	Total Dissolved Solids mg/L	Total Fixed Solids mg/L	Total Suspended Solids mg/L	Phosphate mg/L	Boron mg/L	Potassium mg/L	Fluoride mg/L	DBU Class
1	Komarapalayam	6	8.2	416	2	0.25	10122	15463	4.08	9.17	153.00	44.92	36.67	3.50	1.4	130.42	25.21	16.48	21.03	40.71	288.00	286.33	10.67	0.04	0.00	5.83	0.32	below E
2	Urrachikottai	8	8.0	347	1	0.30	16474	17883	1.00	11.00	140.83	30.42	39.33	3.03	1.3	127.67	26.19	15.27	18.00	34.23	252.67	235.33	7.33	0.02	0.00	4.56	0.43	below E
3	Vairapalayam	5	7.9	775	9	0.19	2362573	2974056	7.67	6.58	189.17	129.17	70.00	7.42	1.9	144.25	30.11	17.57	43.50	69.92	486.00	433.67	16.75	0.06	0.00	11.42	0.40	below E
4	Pugalur	8	8.3	520	1	0.26	6090	29366	1.00	14.50	169.00	64.00	36.67	3.73	1.4	146.88	31.42	19.25	31.25	56.08	354.00	332.67	8.08	0.03	0.00	5.88	0.37	below E
5	Pettavalthalai	8	8.2	585	1	0.27	22898	51410	3.42	18.67	195.17	65.67	58.00	3.45	1.3	177.67	34.51	22.22	36.58	55.99	386.33	361.33	9.33	0.02	0.00	7.02	0.41	below E
6	Kumbakonam	8	8.3	480	1	0.27	541	959	4.14	10.00	159.71	55.86	25.14	3.68	1.6	148.43	31.29	17.14	22.71	41.00	326.86	302.29	8.00	0.04	0.00	5.10	0.32	C
7	Meyyadurai	7	8.1	345	2	0.22	3094	4316	2.40	5.20	130.40	32.80	33.60	3.25	1.4	114.00	26.60	11.60	16.20	26.80	242.40	215.20	11.60	0.04	0.00	4.25	0.39	below E
8	Sathiyamanagalam	7	7.8	189	2	0.36	11626	33385	3.42	2.82	84.50	30.42	35.33	3.17	1.3	94.75	16.70	12.27	19.75	20.45	185.33	171.67	8.00	0.04	0.00	3.99	0.35	E
9	Kalingalayan Canal (B5)	6	8.2	499	1	0.18	6592	14594	1.88	8.75	178.75	42.50	30.00	3.63	1.5	183.75	40.38	20.50	31.00	33.00	330.50	307.00	10.88	0.02	0.00	4.25	0.31	below E
10	Kalingalayan Canal (B10)	7	8.2	484	1	0.22	10406	22140	3.63	9.38	166.00	41.88	29.00	3.49	1.4	181.25	39.63	20.13	25.63	32.00	316.50	296.00	11.13	0.01	0.00	4.13	0.42	below E
11	Thirumanimthar	0	7.7	2370	45	0.78	17485000	31675000	55.83	44.33	634.67	414.00	160.33	37.27	8.2	499.17	61.08	88.17	74.00	288.65	1543.00	1431.50	64.25	32.71	0.03	36.08	0.35	below E
12	Vasista	2	7.4	1915	231	0.97	34141916	608248373	126.67	22.73	618.17	258.50	545.33	42.39	10.5	474.08	75.47	69.32	44.33	144.83	1271.92	1120.92	321.00	35.92	0.04	99.86	0.37	below E
13	Sarabanga	8	7.8	3081	39	0.57	324067917	1473334167	101.83	48.17	546.83	604.25	219.42	36.89	8.1	476.33	83.92	64.77	116.75	304.92	1835.00	1692.00	132.00	37.97	6.62	54.71	0.34	below E

*CPCE-GEMS / MINARS Water quality criteria

DBU Class Designated Best Use

A - Drinking Water Source without conventional treatment but after disinfection

B - Outdoor bathing (organised)

C - Drinking water source after conventional treatment and disinfection

D-Propagation of wild life and fisheries

E -Irrigation, Industrial cooling,controlled waste disposal

< E Not meeting A,B,C,D & E Criteria

mg/L-milligram per liter

MPN-Most probable number

ANNEXURE - IX
TAMIRAPARANI RIVER WATER QUALITY - (UNDER MINARS PROGRAMME) -20142015

S.NO	Name of stations	D.O mg/L	pH	Conductivity mhos/cm	BOD at 27 C mg/L	Nitrate mg/L	Fecal coliform MPN/100 ml	Total coliform MPN/100 ml	Turbidity NTU	Phenolphthaleine Alkalinity mg/L	Total Alkalinity as CaCO3 mg/L	Chloride mg/L	COD mg/L	Total Kjeldahl Nitrogen mg/L	Ammonia ^N as N mg/L	Hardness as CaCO3 mg/L	Calcium as Ca++ mg/L	Magnesium as Mg++ mg/L	Sulphate mg/L	Sodium mg/L	Total Dissolved Solids mg/L	Total Fixed Solids mg/L	Total Suspended Solids mg/L	Phosphate mg/L	Boron mg/L	Potassium mg/L	Fluoride mg/L	DBU Class
1	Papanasam	7	6.5	61	3	0.15	15	48	3.50	1.00	16.58	10.88	24.00	2.07	0.6	16.92	11.33	5.58	5.67	5.00	45.67	36.83	4.67	0.10	0.00	1.1	0.01	B
2	Cheranmdevi	6	6.4	110	3	0.19	18	56	6.75	1.00	37.92	15.46	33.33	2.08	0.6	35.75	26.58	9.00	11.69	8.33	80.50	67.67	7.00	0.12	0.50	1.5	0.01	B
3	Kokirakulam	6	6.5	144	3	0.35	23	82	6.00	1.00	45.13	17.63	38.67	2.29	0.6	42.83	32.25	12.00	14.67	10.25	105.50	92.17	7.33	0.13	0.00	2.1	0.01	B
4	Murapanadu	7	6.8	220	2	2.16	14	45	4.75	1.00	83.50	25.08	28.67	2.95	0.6	98.42	67.00	31.00	14.43	13.17	158.17	146.00	5.42	0.07	0.00	2.6	0.01	A
5	Thiruvidaimanudur	7	7.7	80	3	0.24	14	45	5.00	1.00	25.42	12.97	33.33	2.07	0.6	23.67	16.17	6.58	9.23	5.83	59.17	48.83	6.17	0.09	1.50	1.3	0.01	B
6	Ambasamudram	7	7.7	65	5	0.11	15	46	4.50	1.00	18.00	10.72	29.33	2.00	0.6	18.00	12.08	5.75	6.97	4.83	49.50	39.50	4.83	0.14	0.00	1.3	0.01	D
7	Author	7	7.2	1281	3	0.45	25	62	5.83	1.00	142.00	367.92	41.33	3.15	0.6	248.58	117.67	115.30	52.00	106.50	878.00	928.67	7.33	0.09	0.00	10.8	0.01	A
8	Eral	7	7.0	473	2	0.24	20	60	6	0.90	119.50	41.67	29.33	3.08	0.6	138.92	92.25	46.67	18.7	24.83	347.17	330.00	6.33	0.08	0.00	4.7	0.01	B
9	Kalidai Kurichi	7	6.2	74	3	0.2	14	52	5	1.00	23.92	11.55	32.67	4.12	0.7	21.67	14.75	7.08	9.06	5.25	55.5	43.50	6.00	0.13	0.00	1.3	0.01	B
10	Sri vaikuntam	7	6.7	234	2	0.15	15	51	4.1	1.00	80.00	23.92	27.33	2.79	0.6	83.50	60.67	20.29	14	14.17	170.5	150.67	5.17	0.07	0.00	3.0	0.01	B
11	Vellakovil	7	8.2	156	2	0.41	16	61	7.1	1.00	53.50	20.53	40.67	2.85	0.7	54.50	38.08	13.92	15.9	11.67	118.67	104.50	8.17	0.15	0.84	2.3	0.01	B
12	Sivalaperi	7	6.8	225	2	0.21	18	58	6	2.10	75.50	31.95	47.33	2.72	0.6	49.63	44.33	16.25	22.3	19.75	162.67	148.00	7.84	0.14	0.00	2.8	0.05	B

*CPCB/GEMS / MINARS Water quality criteria

DBU Class Designated Best Use

A - Drinking Water Source without conventional treatment but after disinfection

B - Outdoor bathing (organised)

C - Drinking water source after conventional treatment and disinfection

D-Propagation of wild life and fisheries

E -Irrigation, Industrial cooling, controlled waste disposal

< E Not meeting A,B,C,D & E Criteria

mg/L-milligram per liter

MPN-Most probable number

ANNEXURE -X
PALAR & VAIGAI RIVER WATER QUALITY(UNDER MINARS PROGRAMME)2014 -2015

S.NO	Name of stations	D.O mg/L	pH	Conductivity m hos/cm	BOD at 27 C mg/L	Nitrate mg/L	Fecal coliform MPN/100 ml	Total coliform MPN/100 ml	Turbidity NTU	Phenophthaline Alkalinity mg/L	Total Alkalinity as CaCO3 mg/L	Chloride mg/L	COD mg/L	Total Kjeldahl Nitrogen mg/L	Ammonia-N,as N mg/L	Hardness as CaCO3 mg/L	Calcium as Ca++ mg/L	Magnesium as Mg++ mg/L	Sulphate mg/L	Sodium mg/L	Total Dissolved Solids mg/L	Total Fixed Solids mg/L	Total Suspended Solids mg/L	Phosphate mg/L	Boron mg/L	Potassium mg/L	Fluoride mg/L	DBU Class
1	Vaigai	6	7.8	1742	3	1.25	2	6	3.50	9.50	412.00	348.00	40.48	0.28	0.6	382.50	65.07	53.46	76.50	244.35	1091.00	968.00	6.00	0.98	2.08	16.70	0.91	B
2	Palar	6	7.4	1013	2	0.60	213	388	1.00	23.91	281.91	104.82	8.00	10.55	2.8	236.00	46.00	25.73	56.91	76.91	625.09	522.73	5.09	0.39	0.23	4.64	0.20	B

*CPCB-GEMS / MINARS Water quality criteria

DBU Class Designated Best Use

mg/L-milligram per liter

MPN-Most probable number

A- Drinking Water Source without conventional treatment but after disinfection

B - Outdoor bathing (organised)

C-Drinking water source after conventional treatment and disinfection

D-Propagation of wild life and fisheries

E-Irrigation, Industrial cooling,controlled waste disposal

< E Not meeting A,B,C, D & E Criteria

**ANNEXURE - XI
LAKE WATER QUALITY(UNDER MINARS PROGRAMME)2014 -2015**

S.NO	Name of stations	D.O mg/L	pH	Conductivity m mhos/cm	BOD at 27 C mg/L	Nitrate mg/L	Fecal coliform MPN/100 ml	Total coliform MPN/100 ml	Turbidity NTU	Phenothaline Alkalinity mg/L	Total Alkalinity as CaCO3 mg/L	Chloride mg/L	COD mg/L	Total Kjeldahl Nitrogen mg/L	Ammonia as N mg/L	Hardness as CaCO3 mg/L	Calcium as Ca++ mg/L	Magnesium as Mg++ mg/L	Sulphate mg/L	Sodium mg/L	Total Dissolved Solids mg/L	Total Fixed Solids mg/L	Total Suspended Solids mg/L	Phosphate mg/L	Boron mg/L	Potassium mg/L	Fluoride mg/L	DBU Class
1	Uthagamandalam	5	7.4	456	8.03	0.34	10632370	59570963	32.56	1.37	127.70	47.70	70.43	8.06	2.5	111.52	32.47	7.48	14.76	33.82	285.04	251.85	30.81	0.04	0.00	13.67	0.37	below E
2	Kodaikanal	4	7.1	104	5.00	0.92	9	13	3.39	1.08	28.82	15.15	55.36	0.34	2.2	30.78	8.88	1.82	5.19	6.63	66.78	62.39	10.17	0.15	0.43	2.12	0.31	E
3	Yercaud	6	7.7	371	3.54	0.27	59164	133705	19.19	4.45	116.33	54.56	63.36	5.50	1.9	99.64	26.21	8.93	7.08	37.26	256.11	232.33	35.69	0.05	0.00	11.08	0.42	below E
4	Veeranam	8	8.3	473	2.94	0.30	28964	49009	2.58	12.00	146.61	59.78	52.67	3.72	1.4	131.06	23.70	17.97	27.00	58.72	328.89	306.89	17.11	0.05	0.45	6.98	0.34	below E
5	Poondi	6	7.5	674	2.47	0.76	715	1785	10.25	9.45	134.55	104.09	8.00	13.82	3.2	152.36	36.36	15.00	54.82	68.09	454.18	373.64	18.91	2.89	0.26	4.64	0.37	below E
6	Red Hills	8	7.6	562	2.00	0.57	957	2230	7.33	8.50	122.33	85.00	8.00	14.58	3.6	125.00	25.92	14.33	52.67	53.67	370.33	293.92	21.33	3.06	0.39	3.75	0.36	below E
7	Potur	6	8.2	710	2.08	0.66	888	2400	5.00	4.83	121.67	141.42	8.00	14.08	3.3	132.17	36.67	9.83	49.67	60.33	470.33	361.83	29.33	2.10	0.38	5.92	0.39	below E
8	Pulicat	6	7.6	47405	2.08	0.60	373	804	23.00	8.92	128.42	17943.25		12.67	3.0	7208.33	1158.67	1078.83	2385.00	8333.75	37159.58	31141.92	685.33	2.83	0.71	177.50	1.26	below E

mg/L-milligram per liter
MPN Most probable number

*CPCB-GEIMS / MINARS Water quality criteria

DBU Class Designated Best Use

A- Drinking Water Source without conventional treatment but after disinfection

B-Outdoor bathing (organised)

D-Propagation of wild life and fisheries

E-Irrigation, Industrial Cooling, Controlled Waste disposal

Below E Not meeting A,B,C,D & E Criteria

ACCOUNTS

**AUDITOR'S REPORT TO THE MEMBERS OF THE
TAMILNADU POLLUTION CONTROL BOARD
FOR THE YEAR ENDED 31st MARCH 2015**

We have audited the attached Balance Sheet of Tamil Nadu Pollution Control Board as at March 31, 2015 and also the Receipts and payments account and Income and Expenditure Account for the year ended on that date annexed thereto.

These financial statements are the responsibility of the entity's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the auditing standards generally accepted in India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statements presentation. We believe that our audit provides a reasonable basis for our opinion.

We report that:

1. We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
2. In our opinion proper books of account as required by law have been kept by the Board so far as it appears from our examination of those books.
3. The attached Balance Sheet, Receipts and Payments account and Income and Expenditure account which are set out as provided in Rule 36 of the Tamil Nadu Water (Prevention and Control of Pollution) Rules, 1983 and dealt with by this report are in agreement with the books of accounts.
4. In our opinion and to the best of information and according to the explanations given to us, the said accounts read with the schedules thereto and the notes thereon attached hereto subject to the following:

- a. Refer point no II(e) of the notes to accounts with respect to Land advance of Rs.2.49 crores which is outstanding for a long time.
- b. Refer point no. II(f) of the notes to accounts with respect to Advance to suppliers for purchase of fixed assets and other expenditure for an amount of Rs 0.17 Crores is outstanding for more than one year and requires adjustment in the books of accounts.
- c. Refer point no. II (g) of the notes to accounts with respect to non recoverability of cess amounting to Rs.781.00 crores due from Thermal Stations and local bodies in turn to be remitted to the Ministry of Environment and Forest, Government of India.
- d. The Internal Audit wing is not commensurate with the size of this organization. The Internal Audit wing has not furnished the report for the year under audit.
- e. The entity follows cash basis of accounting for Consent Fees and Cess Re-Imbursement. However Consent Fees received in advance of (-)Rs.0.35 crores (net) received during the year has not been treated as income and to that extent the income of the Board has been understated.

Give the information required by the Tamil Nadu Water (Prevention and control of pollution) Rules 1983, in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- (a) In the case of Balance Sheet, of the State of affairs of the Board as at March 31, 2015,
- (b) In the case of the Receipts and Payments account of the total receipts and payments of the Board for the year ended 31st March 2015 and
- (c) In the case of the Income and Expenditure account of the excess of Income over Expenditure for the year ended 31st March 2015.

For Velu & Co.
Chartered Accountants
FR.NO : 004589 S

Date: 29-09-2015
Place: Chennai

Partner P.T. Jayakumar
M. No. [M.No. 200239]

New No.145/83, Triplicane High Road, (Near Triplicane Post Office), Triplicane, Chennai-600 005.
Ph:4556 7597, 2851 4248 Cell:9840106280 e-mail : veluandco1965@gmail.com/jayakumarpt@rediffmail.com

ANNUAL STATEMENT
Receipts and Payments for the
See Rules 36 of Tamil Nadu Water

PREVIOUS YEAR	RECEIPTS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. Ps.		Rs. Ps.	Rs. Ps.
573582901.97	A. OPENING BALANCE		
	a. Bank	754910863.64	
	b. Cash	-	
	c. Funds in Transit	-	754910863.64
	B. GRANTS RECEIVED		
	a. From Government	-	
	b. From other Agencies	-	
	c. Schemes		-
	C. FEES		
313910.00	a. Consultant Registration Fees	-	
764999940.38	b. Cost of Applications	135550.00	
80385933.00	c. Consent Fees	765966302.00	
	d. Cess Collections	75242708.80	
	e. Fees for handling H. Waste	-	841344560.80
126678475.00	D. Services & Rental Charges (Lab Analysis Charges <i>Sch - A</i>)		134424196.00
258553680.00	E. INTEREST ON INVESTMENT		149702831.00
	F. MISCELLANEOUS		
5030265.00	a. Others (<i>Schedule-B</i>)	7809768.00	
209712721.00	b. Cess Re-imburement	-	7809768.00
2019257826.35	C/o		1888192219.44

Chennai - 600 032
Date: 29/09/2015

OF ACCOUNT

year ended 31 March 2015.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR		PAYMENTS	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
		A. CAPITAL EXPENDITURE				
45392516.00		a. Assets - Land and Building	90448780.00			
13565741.00		b. Laboratory Equipments	4393179.00			
40800.00		c. Vehicles	54938.00			
2210618.00		d. Furniture	1180166.00			
1292231.00		e. Office Appliances	1218461.00			
97115.00		f. Library Books	149088.00			
948100.00		g. Electrical Installation	-			
132220.00		h. Computer	11554.00			97456166.00
		B. REVENUE EXPENDITURE				
		A. ADMINISTRATIVE				
362980943.40		a. Salaries	405804433.00			
101299001.00		b. Pension & Gratuity Contribution	102786572.00			
11596028.00		c. Surrender Leave Salaries	12314168.00			
1599794.00		d. Bonus	1575015.00			
3358613.00		e. Medical Expenses	2960984.00			525441172.00
		B. BOARD LABORATORY				
483007.00		a. Running Expenses of Labs	593746.00			
3713443.00		b. Lab. Chemicals etc.,	1377361.00			1971107.00
		C. RUNNING & MAINTENANCE OF VEHICLE				16147955.00
13891153.00						
		D. SCHEME				-
562601323.40		C/o				641016400.00

Subject to our report of even date & Schedules + Notes attached
for **Velu & Co., FR.NO : 004589 S**
Chartered Accountants

ANNUAL STATEMENT
Receipts and Payments for the
See Rules 36 of Tamil Nadu Water

PREVIOUS YEAR	RECEIPTS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. Ps.		Rs. Ps.	Rs. Ps.
2019257826.35	B/F		1888192219.44
	G. DEPOSITS & ADVANCES		
6121804.00	a. Earnest Money Deposits	704910.00	
553447.00	b. Security Deposits	3033709.00	
738456.00	c. Advances to Staff (Sch. - C)	1031603.00	
4874303567.00	d. Short Term Deposits	3434152678.00	3438922900.00
564785830.45	H. OTHERS (Schedule - D)		563162102.12
153279.49	I. WAYS & MEANS ADVANCE		-
7465914210.29	Total		5890277221.56

Chennai - 600 032

Date: 29/09/2015

Sd/-
K. Chitra B.Com, MBA, FCA.,
Senior Manager (F&A)

Sd/-
R. Vijaya M.A., B.Ed.,
Financial Adviser

Sd/-
Dr. K. Karthikeyan M. Tech, Ph.D.,
Member Secretary

OF ACCOUNT

year ended 31 March 2015.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	PAYMENTS	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
		Rs.	Ps.	Rs.	Ps.
562601323.40	B/F			641016400.00	
	E. MAINTENANCE & REPAIRS				
6425975.00	a. Buildings	5300393.00			
45509.00	b. Furniture & Fixtures	19389.00			
846686.00	c. Scientific instruments	1241923.00			
1426600.00	d. Office Appliances	1405541.00			
2128457.00	e. Electrical Installations	1381112.00			
85442.00	f. Insurance of Assets	58917.00			
1260235.00	g. Other Assets	1078786.00		10486061.00	
	F. FEES TO CONSULTANTS & SPECIALISTS				
-					
6548008.00	G. LAW CHARGES			5313855.00	
	H. AUDIT FEES			50562.00	
-					
306035437.25	I. MISCELLANEOUS (Schedule-E)			281708372.10	
90252549.00	C. CESS REMITTANCE			92810293.00	
8927548.00	D. ADVANCE (Schedule - F)			9762657.00	
	E. WAYS & MEANS ADVANCE				
	F. DEPOSITS				
5677450000.00	a. Short Term Deposits	4612012208.00			
46969577.00	b. Others (Schedule - G)	84535465.82		4696547673.82	
	G. CLOSING BALANCE				
754910863.64	a. Bank	152536454.64			
	b. Cash	-			
	c. Funds in Transit	44893.00		152581347.64	
7465914210.29	Total			5890277221.56	

Subject to our report of even date & Schedules + Notes attached
for **Velu & Co., FR.NO : 004589 S**
Chartered Accountants

Sd/-
K. Skandan I.A.S.,
Chairman

Sd/-
P.T. Jayakumar [M.No. 200239]
Partner

ANNUAL STATEMENT
Income and Expenditure Account for the
See Rules 36 of Tamil Nadu Water

PREVIOUS YEAR	EXPENDITURE	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
		Rs.	Ps.	Rs.	Ps.
180542293.00	A. Administrative				
201855257.50	a. Pay of officers and Pay of Establishments	182502728.00			
	b. Allowance & Honororia (<i>Schedule-H</i>)	238504028.00			
307537208.00	c. Contribution to Gratuity & Provision for Pension	354604115.00			
124216063.00	d. Surrender Leave Salaries	37554651.00		813165522.00	
5805854.73	B. Running Expenses of Labs.			3523418.71	
15503771.00	C. Running and Maintenance of Vehicles (<i>Schedule-I</i>)			17762583.00	
	D. Maintenance and Repairs				
87043.00	a. Furniture & Fixtures	90639.00			
619478.00	b. Lab. Equipments & Instruments	1703683.00			
1995807.00	c. Office Appliance & Others	2053717.00			
1378245.00	d. Electrical Installations	1024246.00			
6386715.00	e. Building	4969282.00		9841567.00	
221529.00	E. Fees to Consultants and Specialists			333949.00	
10644139.00	F. Law Charges			980600.00	
56180.00	G. Fees for Audit			56180.00	
290486386.15	H. Miscellaneous (<i>Schedule-J</i>)			275595897.10	
31610373.23	I. Depreciation			27995035.00	
35006405.00	J. Prior Period Adj.Account			4648877.00	
812385427.87	K. Excess of income over Exp.trf to B/S			901170916.64	
2026338175.48	Total			2055074545.45	

Chennai - 600 032
Date: 29/9/2015

Sd/ -
K. Chitra B.Com, MBA, FCA.,
Senior Manager (F&A)

Sd/ -
R. Vijaya M.A., B.Ed.,
Financial Adviser

Sd/ -
Dr. K. Karthikeyan M. Tech, Ph.D.,
Member Secretary

OF ACCOUNT

ended 31st March 2015.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	INCOME	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
		Rs.	Ps.	Rs.	Ps.
	A. Grants received				
-	a. From Government		-		
-	b. From other Agencies		-		
-			-		
-	Less: Amount utilised for Capital Expenditure		-		
-	Net Grant available for Revenue Expenditure		-		-
1191502797.38	B. Fees (Schedule-K)			1298372142.45	
127544691.00	C. Services & Rental Charges (Schedule-L)			135866556.00	
4009152.10	D. Miscellaneous Receipts				
209712721.00	a. Others (Schedule-M)	9344980.00			
	b. Cess Reimbursement		-	9344980.00	
493568814.00	E. Interest on Investment			611490867.00	
-	F. Prior Period Adj.Account				-
2026338175.48	Total			2055074545.45	

Subject to our report of even date & Schedules + Notes attached
for **Velu & Co., FR.NO : 004589 S**
Chartered Accountants

Sd/-
K. Skandan I.A.S.,
Chairman

Sd/-
P.T. Jayakumar [M.No. 200239]
Partner

ANNUAL STATEMENT
Balance Sheet as on
See Rules 36 of Tamil Nadu Water

PREVIOUS YEAR		LIABILITIES	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
		A. CAPITAL FUND				
		a. Grants				
54526922.18		i. Grants received from Govt. for capital exp. upto the yr.2004-05.	54526922.18			
	-	ii. Grants received from Govt. for capital exp. During the current year and utilised.		-		
	-	iii. Grants received towards specific schemes from other agencies		-		
		iv. Less: Amount transferred to Depreciation Fund		-		54526922.18
		b. Excess of Income over Expenditure				
4226595146.41		i. As at 01.04.14	4986505028.05			
812385427.87		ii. Add: Surplus during the year	901170916.64			
			5887675944.69			
(52475546.23)		iii. Less: Amount transferred to Depreciation Fund	28401232.00			5859274712.69
		B. EARMARKED FUND				
1780051345.00		a. Pension Fund (<i>Schedule-N</i>)	2135092175.00			
504634404.41		b. Depreciation Fund (<i>Sch-N</i>)	558629534.41			
253596267.00		c. E.L. encashment Fund (<i>Sch-N</i>)	272115144.00			
3363250.00		d. CETP Development Fund	3363250.00			2969200103.41
		C. OTHER DEPOSITS				
86024425.23		a. Deposits for supply & works (<i>Schedule -O</i>)	86464711.23			
3729000.00		b. Eco Devlpt. Measure Deposit	3729000.00			90193711.23
		D. AMOUNT DUE				
6144342765.72		a. Cess Payable	7849498163.26			
	-	Less: Cess unrecoverable		-		7849498163.26
45961254.00		b. Other Liability (<i>Schedule -P</i>)				38566986.00
13862734661.59		C/o				16861260598.77

OF ACCOUNT

31st March 2015.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR		ASSE	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
		A. FIXED ASSETS				
12306284.65		a. Land Development	12306284.65			
58315000.00		b. Buildings Under Construction	117283780.00		129590064.65	
		B. OTHER ASSETS			133726310.20	
116361182.20		a. As per Form XV				
		b. Stock in hand				
1903450.11		i. Lab Chemicals	1806063.71			
1002755.19		ii. Glassware	980199.35			
211914.37		iii. Misc. Stores	125058.27			
3034468.41		iv. Filter Paper	1531122.04		4442443.37	
		C. SUNDRY DEBTORS				
		a. Cess Receivable				
4730656210.34		i. From Industries	6391742431.08			
1403682773.80		ii. From Local Bodies	1442041257.80			
			7833783688.88			
		Less: Cess unrecoverable		-	7833783688.88	
20000.00		b. Amount Receivable - PWD				-
383845.00		c. Project Study - Receivable			383845.00	
240752715.50		d. Ways and Means Advance Receivable			240752715.50	
		D. ADVANCES & DEPOSITS				
738439450.15		a. Misc. amounts recoverable (Schedule - R)	770543621.97			
15602436.00		b. Advances to Staff (Schedule - S)	13660626.00			
2428671.00		c. Deposits (Schedule - T)	2418549.00		786622796.97	
7325101156.72		C/o			9129301864.57	

ANNUAL STATEMENT
Balance Sheet as on
See Rules 36 of Tamil Nadu Water

PREVIOUS YEAR		LIABILITIES	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
13862734661.59		B/f			16861260598.77	
	264956.98	E. ENVIRONMENTAL IMPACT STUDY				264956.98
562747254.45		F. INCOME RECEIVED IN ADVANCE (Schedule - Q)			558938573.12	
21498500.00		G. SUBSIDIES FOR COMMON EFFLUENT TREATMENT PLANTS			21498500.00	
1189893.34		H. ENVIRONMENTAL EDUCATION FUND RESERVE			1189893.34	
500000.00		I. EMERGENCY RESPONSE CENTRE			500000.00	
692000.00		J. C P C B GREEN BELT			692000.00	
1930077.00		K. SCHEMES			2995077.00	
12085550.00		L. SPONSORSHIP FOR SCHEMES			12085550.00	
14463642893.36		Total			17459425149.21	

Chennai - 600 032
Date: 29/09/2015

Sd/ -
K. Chitra B.Com, MBA, FCA.,
Senior Manager (F&A)

Sd/ -
R. Vijaya M.A., B.Ed.,
Financial Adviser

Sd/ -
Dr. K. Karthikeyan M. Tech, Ph.D.,
Member Secretary

OF ACCOUNT

31st March 2015.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	ASSETS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. Ps.		Rs. Ps.	Rs. Ps.
7325101156.72	B/f		9129301864.57
	E. INVESTMENTS		
1780051345.00	1. Pension Fund Investment	2135092175.00	
504634404.41	2. Depreciation Fund Investment	558629534.41	
253596267.00	3. EL Encashment Fund Inv.	272115144.00	
3363250.00	4. CETP Develop. Fund Investment	3363250.00	
3841985606.59	5. Other term deposits	5208341833.59	8177541937.00
	F. CASH & BANK BALANCE		
754910863.64	a. Balance with Banks	152536454.64	
-	b. Cash in Hand	-	
-	c. Funds under Transit	44893.00	152581347.64
14463642893.36	Total		17459425149.21

Subject to our report of even date & Schedules + Notes attached
for Velu & Co., FR.NO : 004589 S
Chartered Accountants

Sd/-
K. Skandan I.A.S.,
Chairman

Sd/ -
P.T. Jayakumar [M.No. 200239]
Partner

FORM - XV

ANNUAL STATEMENT OF ACCOUNTS - FIXED ASSETS AS ON 31st MARCH 2015.
See Rules 36 of Tamil Nadu Water (Prevention and control of Pollution) rules 1983.

Sl. No.	Particulars of Assets	Rate of Depreciation	Opening Balance on 01/04/2014		Additions and Adjustment during the year		Total		Depreciation		Closing Balance on 31/03/2015		Cumulative Depreciation on 31/03/2015	
			Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.
1	Building	10.00%	44551659.20		3148000.00		76031659.20		5712612.00		70319047.20		138185306.60	
2	Computer	60.00%	5523819.13		3371040.00		8894859.13		4843088.00		4051771.13		37907143.00	
3	Electrical Installations	15.00%	3523431.68		0.00		3523431.68		528515.00		2994916.68		7552445.11	
4	Furniture & Fixture	10.00%	10435585.31		1582657.00		12018242.31		1136481.00		10881761.31		23124163.23	
5	Lab Equipment	33.33%	31145241.72		4494378.00		35639619.72		11303357.00		24336262.72		125179112.57	
6	Library Books	10.00%	1678297.93		154218.00		1832515.93		175121.00		1657394.93		5973309.03	
7	Office Appliance	10.00%	10303449.08		1404236.00		11707685.08		1183187.00		10524498.08		21235359.14	
8	Vehicle	33.33%	9199698.15		3178707.00		12378405.15		3494601.00		8883804.15		49873106.43	
9	Software Development	60.00%	0.00		101124.00		101124.00		24270.00		76854.00		24270.00	
	Total		116361182.20		45766360.00		162127542.20		28401232.00		133726310.20		409054215.11	

Chennai - 600 032
Date: 29/9/2015

for Velu & Co., FR.NO : 004589 S
Chartered Accountants

Sd/-

K. Chitra B.Com, MBA, FCA,
Senior Manager (F&A)

Sd/-

R. Vijaya M.A., B.Ed.,
Financial Adviser

Sd/-

Dr. K. Karthikeyan M. Tech, Ph.D.,
Member Secretary

Sd/-

K. Skandan I.A.S.,
Chairman

Sd/-

P.T. Jayakumar [M.No. 200239]
Partner

**SCHEDULE FORMING PART OF
RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 2015.**

RECEIPTS

SCHEDULE - A
Services & Rental Charges

SL.NO	DESCRIPTION	Rs.	Ps.
1	Air Ambient Quality Survey	72402870.00	
2	Analysis Charges	59685847.00	
3	Bio Medical Management	1496170.00	
4	Cess Appeal Fees	1450.00	
5	GEMS / MINARS / NAMP	304959.00	
6	Noise Leavel Measurement	413600.00	
7	Stack Monitoring	119300.00	
	TOTAL	134424196.00	

SCHEDULE - B
MISCELLANEOUS RECEIPTS

SL.NO	DESCRIPTION	Rs.	Ps.
1	Environment Training Institute	871364.00	
2	Interest on Loans & Advance	307717.00	
3	Miscellaneous Income	2766054.00	
4	Public Hearing	2428722.00	
5	Rent	1347959.00	
6	Right to Information Fees	42977.00	
7	Sale of legal Books	44975.00	
	TOTAL	7809768.00	

**SCHEDULE FORMING PART OF
RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 2015.**

**SCHEDULE - C
ADVANCE TO STAFF (Receipts)**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Computer Advance	34270.00	
2	Temporary Advance	920070.00	
3	Tour Advance	55813.00	
4	Vehicle Advance	21450.00	
	TOTAL	1031603.00	

**SCHEDULE - D
ADVANCES AND DEPOSITS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Cess received in advance	23745749.00	
2	Consent Fees received in advance	529208376.12	
3	Analysis Fees Advance	1257440.00	
4	AAQS Fees Advance	300000.00	
5	Others - Court Deposit	2119702.00	
6	Rent Advance	392509.00	
7	Schemes	6100029.00	
8	Sundry - Others	38297.00	
	TOTAL	563162102.12	

**SCHEDULE FORMING PART OF
RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 2015.**

**PAYMENT
SCHEDULE - E
MISCELLANEOUS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	AAQS Expenses	482226.00	
2	Advertisement & Publicity	2155022.00	
3	Appellate Authority Expenses	187003.00	
4	Bank interest and commission	20554.10	
5	Board Meeting Expenses	2625588.00	
6	Consultant Fees	287781.00	
7	Contract Charges / Wages	37575148.00	
8	Conveyance	700211.00	
9	Electricity / Water Charges	9920095.00	
10	Entertainment	151485.00	
11	Environmental Pavilion Expenses	38794.00	
12	ETI Expenses	468510.00	
13	Expenses of Audit	44171.00	
14	Land Maintenance Expenses	98920.00	
15	Leave Travel Concession	76196.00	
16	Miscellaneous Expenses	1709413.00	
17	Newspaper & periodicals	374544.00	
18	Office Expenses	3018013.00	
19	Outstanding Expenses	6612303.00	
20	Petty Cash Expenses	360760.00	
21	Pollution Awareness Expenses	181355398.00	
22	Postage / Telegram	2168777.00	
23	Printing and Stationery	4271430.00	
24	Prior Period Expense	2756304.00	
25	Property tax	1082702.00	
26	Rent	8129641.00	
27	Staff Welfare Expenses	3175367.00	
28	Telephone and Telex	4747029.00	
29	Trade Fair	1231689.00	
30	Training and Seminar	1030814.00	
31	Travelling expenses	4799099.00	
32	Turn duty and Overtime Allow.	53385.00	
	TOTAL	281708372.10	

**SCHEDULE FORMING PART OF
RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 2015.**

PAYMENT

SCHEDULE - F

ADVANCE TO STAFF (PAYMENT)

SL.NO	DESCRIPTION	Rs.	Ps.
1	Festival Advance	1960000.00	
2	Handloom Advance	399800.00	
3	Leave Travel Concession	149080.00	
4	Motor Vehicle Advance	1053535.00	
5	Personal Computer Advance	400.00	
6	Temporary Advance	4429066.00	
7	Tour Advance	260800.00	
8	House Building Advance	1499976.00	
9	Marriage Advance	10000.00	
	TOTAL	9762657.00	

SCHEDULE - G

DEPOSITS AND ADVANCES (PAID) (OTHERS)

SL.NO	DESCRIPTION	Rs.	Ps.
1	Advance to Suppliers	78318557.82	
2	Land Advance	10000.00	
3	Teleohone Deposit	1500.00	
4	Earnest Money Deposit	4053690.00	
5	Rent Advance	1081200.00	
6	Retention Money Deposit	66281.00	
7	Security Deposit	1004237.00	
	TOTAL	84535465.82	

**SCHEDULE FORMING PART OF
RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 2015.**

EXPENDITURE

**SCHEDULE - H
ALLOWANCES AND HONORARIA**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Allowances	221803272.00	
2	Bonus	1538015.00	
3	Contributory Pension Scheme	7350937.00	
4	Health Insurance	235130.00	
5	Leave Travel Concession Expenses	225066.00	
6	Medical Reimbursement	1490552.00	
7	Special Provident Fund-Board's Contribution	350000.00	
8	Travelling Expenses	5457185.00	
9	Turn Duty and Overtime Allowances	53871.00	
	TOTAL	238504028.00	

**SCHEDULE - I
RUNNING AND MAINTENANCE OF VEHICLES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Fuel	6847219.00	
2	Hire Charges	8273373.00	
3	Insurance	733998.00	
4	Repairs	1907993.00	
	TOTAL	17762583.00	

**SCHEDULE FORMING PART OF
RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 2015.**

EXPENDITURE

**SCHEDULE - J
MISCELLANEOUS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Air Ambient Quality Survey Expenses	177854.00	
2	Advertisement & Publicity	1313834.00	
3	Appellate Authority Expenses	2047442.00	
4	Bank Charges	20610.10	
5	Board Meeting / Other meeting Expenses	3058819.00	
6	Contract Charges / Wages	39541078.00	
7	Conveyance Expenses	737251.00	
8	DEE Legal Sample	351745.00	
9	Electricity & Water Charges	10649155.00	
10	Entertainment Expenses	231276.00	
11	Environmental Pavilion Expenses	38794.00	
12	Expenses of audit	44171.00	
13	Insurance of Assets	58917.00	
14	Land Maintenance Expenses	103585.00	
15	Loss of sale of asset	18435.00	
16	Newspaper and Periodicals	403592.00	
17	Office Expenses	3982054.00	
18	Pollution Awareness Expenses	182222493.00	
19	Postage Expenses	2176461.00	
20	Printing & Stationery	5263800.00	
21	Property Tax and Rates	1082702.00	
22	Rent on Buildings	7352207.00	
23	Staff Welfare Expenses	3796604.00	
24	Sundries	2630925.00	
25	Telephone Expenses	5426480.00	
26	Trade Fair Expenses	1834799.00	
27	Training and Seminar Expenses	1030814.00	
	TOTAL	275595897.10	

**SCHEDULE FORMING PART OF
RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 2015.**

**INCOME
SCHEDULE - K
FEES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Consent Fees	1298236592.45	
2	Consent Forms	135550.00	
	TOTAL	1298372142.45	

**SCHEDULE - L
SEVICES AND RENTAL CHARGES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Air Ambient Quality Survey	72792780.00	
2	Analysis Charges	62235917.00	
3	NAAQM / NAMP / GEMS	304959.00	
4	Noise level survey fees	413600.00	
5	Stack Moniroring	119300.00	
	TOTAL	135866556.00	

**SCHEDULE - M
MISCELLANEOUS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Bio-Medical Waste Authorisation Fees	1515670.00	
2	Cess Appeal Fees	1450.00	
3	Environmental Training Inst.	345629.00	
4	Fees for Right to Information	42619.00	
5	Interest on Loans & Advance	982825.00	
6	Miscellaneous Income	5237823.00	
7	Public Hearing	1173989.00	
8	Sale of Books	44975.00	
	TOTAL	9344980.00	

**SCHEDULE FORMING PART OF BALANCE SHEET
AS ON 31st MARCH 2015.**

**SCHEDULE-N
EARMARKED FUND**

PENSION FUND ACCOUNT

SL.NO	DESCRIPTION		AMOUNT
1	Opening balance as on 01-04-14		1780051345.00
	Add: Interest @ 6%		88072145.00
			1868123490.00
	Less: Disbursement from fund		
	a) Pension disbursed by Corp. Office	33797817.00	
	b) Pension disbursed by Units	19083081.00	
			52880898.00
			1815242592.00
	Add: Contribution to the Fund		319849583.00
	Closing balance as on 31-03-15		2135092175.00

EARN LEAVE ENCASHMENT FUND

	DESCRIPTION		AMOUNT
2	Opening balance as on 01-04-14		253596267.00
	Add: Interest @ 6%		9032325.00
			262628592.00
	Less: Disbursement from fund		
	a) Disbursement to retirees-Board	8050118.00	
	b) Disbursement to retirees-Units	7870544.00	
			15920662.00
			246707930.00
	Add: Contribution to the Fund		25407214.00
	Closing balance as on 31-03-15		272115144.00

DEPRECIATION FUND ACCOUNT

	DESCRIPTION		AMOUNT
3	Opening balance as on 01-04-14		504634404.41
	Add: Interest @ 6%		25593898.00
			530228302.41
	Add: Current year's Depreciation		28401232.00
	Closing balance as on 31-03-15		558629534.41

**SCHEDULE FORMING PART OF BALANCE SHEET
AS ON 31st MARCH 2015.**

LIABILITIES

**SCHEDULE - O
OTHER DEPOSITS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Deposit- Court	77677165.23	
2	Earnest Money Deposit	2676753.00	
3	Miscellaneous Deposits	198973.00	
4	Retention Money Deposits	1606650.00	
5	Security Deposits	4305170.00	
	TOTAL	86464711.23	

**SCHEDULE - P
OTHER LIABILITIES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Others	3339551.00	
2	Outstanding Liability	30571631.00	
3	Pay Roll Liabilities	3908411.00	
4	Staff Claim Payable	203357.00	
5	Tax Deducted at Source (Staffs)	474350.00	
6	Tax Deducted at Source (Others)	69686.00	
	TOTAL	38566986.00	

**SCHEDULE - Q
INCOME RECEIVED IN ADVANCE**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Air Ambient Quality Services	296000.00	
2	Anylysis charges	3807915.00	
3	Cess Fees	24052369.00	
4	Consent Fees	530782289.12	
	TOTAL	558938573.12	

**SCHEDULE FORMING PART OF BALANCE SHEET
AS ON 31st MARCH 2015.**

ASSETS

**SCHEDULE - R
MISCELLANEOUS ADVANCES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Advance to Suppliers	66576603.82	
2	Interest Receivable	672590898.00	
3	Land Advance	24857753.00	
4	NGT - Receivable	2348845.00	
5	SEIAA Expenses	1435204.00	
6	Rent Advance	2734318.15	
	TOTAL	770543621.97	

**SCHEDULE - S
ADVANCES TO STAFF**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Festival Advance	1233100.00	
2	Handloom Advance	238190.00	
3	LTC Advance	4000.00	
4	Marriage Advance	11365.00	
5	Motor Vehicle Advance	7761383.00	
6	Other Advance	1088.00	
7	Personal Computer Advance	2207602.00	
8	Temporary Advance	862351.00	
9	Tour Advance	70734.00	
10	House Building Advance	1270813.00	
	TOTAL	13660626.00	

**SCHEDULE - T
DEPOSITS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Customs Deposit	295552.00	
2	Electricity Deposit	1047258.00	
3	Gas Deposit (Miscellaneous deposit)	41529.00	
4	Telephone & Telex Deposit	1034210.00	
	TOTAL	2418549.00	

Notes Forming Part of the Accounts for the year ended 31st March 2015.

I. Significant Accounting Policies and Convention:

(i) The financial statements have been prepared on the assumption of going concern concept.

(ii) Revenue Recognition: Revenues are recognized in the following manner:

a. Consent Fees:

Consent Fees received relating to the period up to which financial statements are drawn is accounted on cash basis and the amount received beyond the date of Balance Sheet is accounted as "consent fees received in advance" and is carried as liability. The consent fees advance has not been segregated yearwise.

Other Fees, Services Charges, Cess reimbursement and other Income:

On Cash basis.

b. Interest on Investments:

On accrual basis.

c. Revenue on Earmarked Funds:

Revenue accrued on earmarked funds is recognized on accrual basis and transferred to the respective fund accounts.

(iii) Investments: Investments are stated at the carrying cost.

(iv) Fixed Assets: Fixed Assets are stated at written down value.

(v) Expenses: On accrual basis.

(vi) Depreciation:

Depreciation is calculated on written down value by applying the following rates:

Building - 10%

Computer - 60%

Electrical Installations - 15%

Furniture and Fixtures - 10%,

Lab Equipments - 33.33%,

Library Books- 10%,

Office Appliances - 10%,

Vehicles - 33.33%.

(vii) Stock on Hand: Stock of Lab chemicals, Glassware, Misc. Stores & Filter papers are valued at cost. Cost is arrived under First in First out method.

(viii) Retirement Benefits:

a) Gratuity: Gratuity is administered by a separate Trust managed by the Life Insurance Corporation of India. The contribution made against the fund is charged to revenue.

b) Pension: Contribution to Pension is provided in the accounts as per Actuarial valuation. Fixed Deposits are earmarked and transferred to separate fund account to meet out the liability.

c) Earn Leave: Contribution to Earned Leave is provided in the accounts as per Actuarial valuation. Fixed Deposits are earmarked and transferred to separate fund account to meet out the liability.

II Notes on Accounts:

a) Consent Fees / Cess

The Board is collecting Cess and consent fees. However necessary information/data is not available to determine whether all industries to which the provisions of the Act apply have paid Cess and consent fees. In the absence of such information, income from this head has been recognized on the basis of available records.

b) Interest accrued on deposits has been adopted as worked out by Board.

c) Internal Audit:

The Board's Internal Audit System needs to be strengthened and internal audit conducted regularly and the Internal Audit Report furnished to audit each year.

d) Fixed Assets:

The fixed assets have been physically verified by independent Officers of the Board. The Fixed Assets are not numbered.

e) Land Advances:

This represents amount paid towards the land cost to SIPCOT amounting to Rs.2,48,57,753/- which is yet to be capitalized pending registration.

f) Advance to suppliers:

Rs 17,49,117/- has been paid as Advance to Suppliers for purchase of assets and other expenditure and is pending adjustment for more than one year.

g) Cess receivable includes disputed amount from the following Thermal stations/ Local Bodies.

Rs. (in Crores)

i)	Ennore Thermal Power Station.	97.33	
ii)	North Chennai Thermal Power Station	187.69	
iii)	NTPC TN Energy Gen Co	0.47	
iii)	Tuticorin Thermal Power Station	351.31	636.80
iv)	Local bodies		144.20

h) Income Tax:

h) Position under Income Tax Act, 1961:

1. The Board's income has been notified as exempt u/s10(46) for assessment years from 2014-15 to 2018-19 vide GOI Gazette Notification No.86/2014 dated 23-12-2014.
2. The Board has been assessed for the AY 2011-12 against the NIL income filed by it against the notice served u/s 148. The income tax payable with interest as per demand notice u/s156 is Rs.79.82 crores. The Board has filed an appeal with Commissioner of Income Tax (Appeals) -17 on 05-05-2015.
3. The Board has also filed application u/s 119(2)(b) for redressal to CBDT New Delhi seeking direction to Director (Exemption) Chennai to dispose the application made by the Board for exemption u/s10(23C)(iv) dated 27-08-2004 in spite of the expiry of the period specified there-in and to deal with the same on the merits in accordance with law.

i) Project Study Receivable:

Rs.3,83,845/- has been paid to various agencies for conducting studies on environment issues. These sums were proposed to be collected from the industries to which the issues related to. However these sums remain to be collected till date.

j) Pension Fund

The assumptions for valuation are as under:

Date of Valuation	31-03-2015
Employee Profile	
Age of Retirement	58 / 60 years
No. of Employees	531
Total monthly relevant salary for pension	2,60,99,016/-
No. of pensioners	163

Total monthly pension	32,34,736/-
No. of family pensioners	53
Total monthly family pension	6,96,306/-

Assumptions as per AS 15R

Discount rates as per Para 78	7.80%
Salary escalation fixed as per Para 83-91 and 120(1)	3.00%
Pension Escalation Rate (DA Increase)	6.50%
Attrition rate fixed	1.00%

Funding mechanism	Earmarked deposits
Present value of obligation	2,13,50,92,175/-

k) Earn Leave Encashment Fund:

The assumptions for valuation are as under:

Date of Valuation	31-03-2015
--------------------------	------------

Employee Profile

Age of Retirement	58 / 60 years
No. of Employees	754
Total monthly relevant salary for leave encashment	3,22,94,547/-
Average Age	48.50
Average past service	17.80
No. of leave days (EL)	1,80,960 days
No. of Leave days (UEL-PA)	67,860 days
Decrement adjusted /estimated future service	8.80

Assumptions as per AS 15R

Discount rates as per Para 78	7.80%
Expected rate of return computer as per Paras 107-109	0.00%
Salary escalation fixed as per Para 83-91 and 120(1)	3.00%
Attrition rate fixed	1.00%
Proportion of leave availment	10.00%
Proportion of encashment during service	10.00%
Proportion of encashment on separation	80.00%

Funding mechanism	Earmarked deposits
Present value of obligation for Earned Leave	20,26,47,929/-
Present value of obligation for UEL - PA	6,94,67,215/-
TOTAL	27,21,15,144/-

j) Contingent Liability:

1. A sum of Rs. 7,63,25,790/- as quarterly interest is payable upto 31.03.2013 as per G.O. (Ms).No. 209 Environment and Forests (EC-1) Department dated 31.12.2011. The Board has written to the Government for waiver of interest @ 12.00 % & penal interest @ 2.50%.

k) Previous year figures are regrouped and reclassified wherever considered necessary.

l) **Position on balance outstanding in Ways & Means advance Payable / Receivable :** The sum of Rs. 75.00 crores was received on 31.12.2011 and was disbursed to Noyyal River Acyacutdars Protection Association (NRAPA) Account on 23.01.2012. As per the terms and conditions of the G.O the Board remitted Rs.15.00 crores to the Govt., as part refund on 22.10.2012. On 01.11.2012 the Hon'ble High Court of Madras quashed the G.O. (Ms).No. 209 Environment and Forests (EC-1) Department dated 31.12.2011 and directed the beneficiaries to refund the sum. Consequent to this the balance sum of Rs.50.90 crores in the Account of NRAPA was remitted to Board. The Board has remitted the balance sum Rs.60.00 crores to the Govt.,. A balance of Rs.24.07 crores is due from NRAPA.

III. Events occurring after the date of Balance Sheet:

Nil

For Velu & Co.
Chartered Accountants
FR.NO : 004589 S

Date : 29-09-2015

Place : Chennai

Partner P.T. Jayakumar
M. No. 200239



தமிழ்நாடு மாசு கட்டுப்பாடு வாரியம்
TAMILNADU POLLUTION CONTROL BOARD

76, Mount Salai, Guindy, Chennai - 600 032.