

தமிழ்நாடு

மாக

கட்டுப்பாடு

வாரியம்

**TAMILNADU  
POLLUTION  
CONTROL  
BOARD**

17

ஆண்டு அறிக்கை

**ANNUAL REPORT  
1999-2000**

ஆண்டுக் கணக்குகள்

**ANNUAL ACCOUNTS  
1999-2000**



**ANNUAL REPORT AND ACCOUNTS  
1999 - 2000**

**TAMILNADU POLLUTION CONTROL BOARD  
CHENNAI - 600 032**

ANNUAL REPORT AND ACCOUNTS  
1999 - 2000

TAMILNADU POLLUTION CONTROL BOARD  
CHENNAI - 600 032

**TAMIL NADU POLLUTION CONTROL BOARD**

**ANNUAL REPORT  
1999-2000**

**TAMIL NADU POLLUTION CONTROL BOARD  
76, MOUNT SALAI,  
GUINDY, CHENNAI 600 032.**

TAMIL NADU POLLUTION CONTROL BOARD

ANNUAL REPORT  
1999-2000

TAMIL NADU POLLUTION CONTROL BOARD  
6 MOUNT ROAD  
CHENNAI - 600 022

**CHAPTER-I**

**1.1 INTRODUCTION:**

Environment is a matrix of living and non living organisms. Nature has always been trying to keep a balance of various eco systems of the environment. But man's activities have interfered with the environment affecting it's quality.

Rapid industrialisation and consequent pollution problems have made the legislators, regulators and common people in India aware of the environmental implication of these activities. Environmental legislations and regulatory systems have been established for the purpose of preserving the environmental quality and achieving sustainable industrial progress. The Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 followed by the Environment (Protection) Act, 1986 are the principal environmental legislations in the country which ensure that ecological balance is maintained with industrial progress.

The Water (Prevention and Control of Pollution) Act, 1974 (Central Act 6 of 1974) was adopted in Tamil Nadu in August 1981. The Government of Tamil Nadu constituted the Tamil Nadu Prevention and Control of Water Pollution Board on 27.02.82 under the Water (P & C P) Act, 1974. This was later renamed as Tamil Nadu Pollution Control Board. The Air (Prevention and Control of Pollution) Act, 1981 came into force on 16.05.1981. The Board enforces the provisions of the Air (P & C P) Act, 1981 also.

**1.2 FUNCTIONS:**

The main functions of the TNPC Board are as follows:

- To plan a comprehensive programme for the prevention, control and abatement of water and air pollution.
- To encourage, conduct and participate in investigations and research relating to problems of water, land and air pollution and its prevention, control and abatement there of.
- To inspect sewage and trade effluent treatment plants for their effectiveness and review plans, specifications for corrective measures.

- To lay down, modify or annul effluent standards for the sewage/trade effluents and for the emissions of air pollutants into the atmosphere from the industrial plants and automobiles and for the discharge of any air pollutant into the atmosphere from any other source.
- To evolve Best Economic Viable Treatment Technology for Sewage and Trade Effluents.
- To evolve efficient methods of disposal of sewage and trade effluent on land.
- To identify sites assist for the treatment and monitor for the storage and disposal of hazardous wastes.
- To identify and monitor the isolated storage of hazardous chemicals.
- To collect samples of sewage/trade effluents and emissions of air pollutants and to analyse the same for specific parameters.
- To perform such other functions as may be prescribed by the State Government or Central Pollution Control Board.



## **2.1 COMPOSITION OF THE BOARD**

The Board has been constituted by the State Government. It comprises of Chairman, five Officials nominated by the State Government, five persons to represent local authorities, three non-officials to represent the interests of agriculture, fishery or industry or trade, two persons to represent the companies or corporations owned by the State Government and a full time Member Secretary. The composition of the Board may be seen at Annexure - 1

## **2.2 ORGANISATIONAL SET UP**

In the field Five Regional offices, Eighteen District Environmental Engineer's Offices and two Assistant Environmental Engineer's Offices are functioning for the effective monitoring of industries and enforcement of the provisions of the Acts. The Board has delegated powers to Chairman to grant consent to all "Green Site" applications received from new industries.

The Board has delegated powers to Joint Chief Environmental Engineers in the Region and District Environmental Engineers in the District offices as follows:

### Joint Chief Environmental Engineers in the Region

1. Issues of "Consent to Establishment" and "Consent to Operate" to New Industries falling under ORANGE CATEGORY( LARGE, MEDIUM AND SMALL)
2. Issue of "Consent to Operate" to existing industries falling under Orange category as above
3. Issue of renewal of Consent to Orange Large and Medium category industries

### District Environmental Engineers in the District offices

1. Issues of "Consent to Establishment" and "Consent to Operate" to New Industries falling under GREEN CATEGORY( LARGE, MEDIUM AND SMALL)
2. Issue of "Consent to Operate" to existing industries falling under Green category as above
3. Issue of renewal of Consent to industries falling under Small Orange category and to all Green Category of industries



The Location of District Offices are shown in Annexure - II

To assist the Board in monitoring the industries, Three Advanced Environmental Laboratories, Nine District Environmental Laboratories and Three Mobile Environmental Laboratories are functioning. These laboratories carry out analysis of samples of sewage / trade effluents and emissions and hazardous wastes.

The total number of employees in the Board as on 31.03.2000 is 727

The Organisation Chart of the Board and the staff strength are furnished in Annexures III & IV . The yearwise growth of the Board is shown in Annexure V.



### 3.2 ORGANISATIONAL SET UP

The Board has delegated powers to Joint Chief Environmental Engineers in the Region and District Environmental Engineers in the District offices as follows:

Joint Chief Environmental Engineers in the Region

1. Issues of Consent to Establishment and Consent to Operate for New Industries falling under ORANGE CATEGORY (LARGE, MEDIUM AND SMALL)
2. Issue of Consent to Operate for existing industries falling under Orange category as above
3. Issue of renewal of Consent to Operate for Large and Medium category industries

District Environmental Engineers in the District Offices

1. Issues of Consent to Establishment and Consent to Operate for New Industries falling under GREEN CATEGORY (LARGE, MEDIUM AND SMALL)
2. Issue of Consent to Operate for existing industries falling under Green category as above
3. Issue of renewal of Consent to Operate for Large and Medium category industries

## CHAPTER - III

### PRESENT STATE OF ENVIRONMENTAL PROBLEMS AND CONTROL MEASURES.

#### General :

To mitigate the pollution problems various environmental legislations have been passed as given below.

#### LEGISLATIONS :

1. The Water (Prevention and Control of Pollution ) Act, 1974 as amended in 1978 and in 1988.
2. The Tamil Nadu Water (Prevention and Control of Pollution ) Rules, 1983.
3. The Water (Prevention and Control of Pollution) Cess Act,1977, as amended in 1991.
4. The Water (Prevention and Control of Pollution) Cess Rules, 1978 as amended in 1992.
5. The Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987.
6. The Air (Prevention and Control of Pollution) Rules, 1983.
7. The Environment (Protection) Act, 1986.
8. The Environment (Protection) Rules, 1986 and its subsequent amendments.
9. The Public Liability Insurance Act, 1991.
10. The Public Liability Insurance Rules, 1991.

#### NOTIFICATION

1. The Hazardous Wastes (Management and Handling) Rules, 1989 as amended in 2000.
2. Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended in 2000.
3. The Environment Impact Assessment Notification, 1994 as amended.

4. Bio Medical Waste (Management and Handling ) Rules, 1998 as amended in 2000.
5. Fly ash Utilisation Notification, 1999.
6. Recycled plastics manufacture and usage rules, 1999.

The field Officers of the Board inspect the industries under their jurisdiction periodically to assess the adequacy of the treatment measures provided by the industries to treat the sewage/trade effluents and gaseous emissions and to monitor their performance to mitigate the pollution from the industries. They also investigate complaints of pollution received from the public, organisations and Government. Depending upon the category viz, Red, Orange and Green, the industries are monitored periodically as mentioned below.

#### Red Category

- |        |   |                    |
|--------|---|--------------------|
| Large  | : | Once in a month    |
| Medium | : | Once in two months |
| Small  | : | Once in 3-4 months |

#### Orange Category

- |        |   |                      |
|--------|---|----------------------|
| Large  | : | Once in two months   |
| Medium | : | Once in three months |
| Small  | : | Once in 4-6 months   |

#### Green Category

- |        |   |                  |
|--------|---|------------------|
| Large  | : | Once in 3 months |
| Medium | : | Once in 6 months |
| Small  | : | Once in a year   |

### 3.1. The Board issues consent in two stages.

- a. **Consent to establish** : This is issued depending upon the suitability of the site before the industry takes up the construction activity.
- b. **Consent to Operate** : This is issued after the installation of suitable and adequate Effluent Treatment Plant and Air Pollution Control Measures to mitigate the pollution from the industry.

## **3. WATER POLLUTION CONTROL:**

Tamil Nadu Pollution Control Board enforces the provisions of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1978 and 1988. The main purpose of this Act is to prevent and control water pollution and to preserve or maintain or restore the quality of water. As per the provisions of the Water Act, the local bodies, agencies and industries which discharge sewage /trade effluent are required to apply and obtain the consent from the Board. All the industries generating trade effluent have to provide effluent treatment plant to treat the 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 effluents are collected regularly to assess the quality of effluent discharged and also to assess the efficiency of the effluent treatment plants provided.

During the year 1999-2000, 18,734 samples of sewage/trade effluent from the industries were collected and analysed.

During the year 1999-2000 the Board has issued 626 Consent to establish orders and 1372 Consent orders under the Water (Prevention and Control of Pollution) Act, 1974 as amended. Details of yearwise issue of consent is shown in Annexure - VI.

## **3.3. AIR POLLUTION CONTROL**

Tamil Nadu Pollution Control Board enforces the provisions of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987. The main purpose of this Act is to prevent and control air pollution and preserve the air quality. As per the provisions of the Air Act, the entire State of Tamil Nadu has been declared as 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. Industries which have not installed any air pollution control measures are persuaded to provide suitable air pollution control measures within a time frame. Ambient Air Quality survey is conducted in and around the industries regularly. Stack emission survey is also conducted 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. During the year 1999-2000, Ambient Air Quality Surveys have been Conducted in 466 industries.

The Board has issued 603 Consent to establish orders and 1312 consent orders under the Air (Prevention and Control of Pollution) Act, 1981 as amended during the year 1999-2000. Details of yearwise issue of consent is shown in Annexure - VII.

### **3.4. COMMON EFFLUENT TREATMENT PLANTS**

**3.4.1.** The untreated or partially treated effluents from Tanneries and Textile Bleaching and Dyeing units in Tamil Nadu were discharged on open lands or into the water sources thereby affecting the soil and ground water as well as surface water causing serious environmental problems. While the large and medium scale of such industries put up individual Effluent Treatment Plant, SSI units often expressed financial difficulties and lack of space and other constraints to put up the required Effluent Treatment Plant . Since a large number of these units are in clusters and also in Small Scale Sector, the Board has launched a massive programme of motivating these industries to set up Common Effluent Treatment Plants on the principle of 'Polluter Pays' by which beneficiary units themselves have to accept the full responsibility for setting up, operate and maintain the treatment facilities. Tamil Nadu Pollution Control Board assists the units in mobilisation of financial resources, acquisition of land and in the technical scrutiny of the proposals for the Common Effluent Treatment Plants.

### **3.4.2. FINANCIAL PATTERN OF CETP SCHEMES**

- a. Subsidy by Central Government : 25% of the project cost.
- b. Subsidy by State Government : 25% of the project cost.
- c. Beneficiary's Contributions : 20% of the project cost by way of share capital collections.
- d. Financial Institution Loans : Balance by way of loans from the Financial Institutions such as IDBI. (30% of project cost)

### **3.4.3. STATUS OF COMMON EFFLUENT TREATMENT PLANT:**

Common Effluent Treatment Plants are proposed in the following sectors:

Tanneries	: 23
Textile Bleaching & Dyeing Units	: 24
Hotels & Lodges	: 1
Incinerator for Hospital Wastes	: 1

Details of Common Effluent Treatment Plant Schemes and the funds so far received for the schemes from the State and Central Government are furnished in the Annexures VIII and IX.

During the year 1999-2000, Three CETPs at Karur and One CETP at Kodaikanal have been commissioned.

So far 12 CETP schemes for tanneries, 14 CETP schemes for textile dyeing units, and 1 CETP scheme for hotels and lodges and 1 common incinerator for Hospitals are under operation.

11 CETP Schemes for tanneries, 5 CETP schemes for textile dyeing units are under various stages of implementation. 5 CETP schemes for textile dyeing units are under initial stage of implementation.

### **3.5. MANAGEMENT OF HAZARDOUS WASTES AND HAZARDOUS CHEMICALS**

The GOI, MOEF have enacted the following rules under the Environment (Protection) Act, 1986 for the management of Hazardous Substances.

#### **3.5.1. Hazardous Wastes (Management & Handling) Rules, 1989**

- The main aim is to control the generation, collection, treatment, transportation and disposal of Hazardous wastes.

As per the above rules all the generators or receivers of hazardous wastes for the purpose of collection, reception, treatment, transport, storage and disposal of hazardous wastes have to obtain the authorisation of the Board. So far 1130 applications in Form I, seeking the authorisation for handling hazardous wastes have been received; for which 1118 authorisations have been issued.

The Board is taking effective steps for the safe disposal of hazardous wastes. As a first step, the Board has identified candidate sites in 8 Districts in the State for the disposal of hazardous wastes and has taken up measures to put up a Common Hazardous Waste Disposal site in an extent of 50 acre at Mannelure village in Tiruvallur District and in 89.64 acre at Siruseri village in Kancheepuram District for the treatment and safe disposal of hazardous wastes generated from the industries in Manali and Ennore area and Chennai and Kancheepuram Districts respectively. To assess the suitability of the site, National Environmental Engineering Research Institute (NEERI), Nagpur has conducted a comprehensive Environmental Impact and Risk Assessment Study at a cost of Rs. 21.5 lakhs and Rs. 10.5 lakhs respectively for the above mentioned two sites. In respect of the site at Siruseri village, Government have notified the site for establishing the Common Hazardous Waste Disposal facility. Enter upon permission has been obtained for the site identified in Vellore District and at in Perambalur District for conducting EIA studies.

A core committee has been formed for taking necessary steps to develop the Siruseri site into a Common Hazardous Wastes landfill facility.

### 3.5.2. Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC Rules), 1989.

- The main objective is to prevent the occurrence of major accidents during industrial activities.

As per the provisions of the MSIHC Rules, 1989 occupiers of Isolated Storages have to notify the sites to the Board either in Schedule 7 or prepare safety report as per Schedule 8, onsite/offsite emergency plan as per schedule 10 and 11 based on the quantity of chemicals stored. So far 25 Isolated storages of Hazardous chemicals have been identified and these units have furnished on site emergency plans.

Import of Hazardous chemicals is also covered under these rules. Units importing Hazardous chemicals as listed in Schedule I of these rules should ensure that all the details of physical and chemical properties of Hazardous Chemicals are maintained in the form of material safety data sheets. These rules empower the Board to request the Port Trust authorities to take appropriate steps regarding safe handling and storage of Hazardous Chemicals.

### 3.6 BIO MEDICAL WASTE (M & H) RULES, 1988

These rules apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle bio-medical waste in any form. Authorisation is required for handling Bio-Medical wastes. As per these rules Chairman TNPC Bd has been nominated as prescribed authority for issuance of authorisation. So for the Board has identified 1405 numbers of Private hospitals and 242 Govt. hospitals in the state. All the health care facilities have been directed to provide requisite treatment within the time schedule specified in the rule either individually or collectively for treatment of Bio-medical wastes. The Govt., in the Environment and Forests department has constituted an Advisory Committee as per rule of Bio-Medical Waste (M & H) Rules, 1998 as amended in 2000. The Chairman, TNPC Board has been nominated as the prescribed authority for implementation.

*Municipal solid waste  
plastic waste*

### 3.7. LABORATORIES

To assist the Board in the monitoring of industries, the Tamil Nadu Pollution Control Board has established 3 Advanced Environmental Laboratories, 10 District Environmental Laboratories and 3 Mobile Environmental Laboratories under section 17 (2) of the Water (Prevention and Control of Pollution) Act, 1974, as amended in 1978 and in 1988, so as to enable the Board to perform its functions efficiently and to cover the industries located in various Districts. Samples of effluents are collected periodically and analysed. The details of samples analysed Lab wise during the year (1999-2000) are shown at Annexure X, XI & XII.

2000-2001



## CHAPTER -IV

### MONITORING NETWORK FOR QUALITY OF WATER AIR AND SOIL

The Biosphere co exists with the atmosphere, which includes air and the hydrosphere which includes rivers, lakes and oceans and the lithosphere where the soil exists. These spheres are interwoven in a manner that is necessary for the welfare of the living being in the bio-sphere. If one (water, air or soil) is affected, the resulting damage would affect the other spheres also. The Board closely monitors the quality of water, air and soil in the State so as to ensure pollution free bio-sphere.

#### 4.1 AIR QUALITY MONITORING

##### 4.1.1 NATIONAL AMBIENT AIR QUALITY MONITORING (NAAQM)

Clean, dry air contains 78.09% nitrogen by volume and 20.94% oxygen and the remaining 0.97% is composed of gaseous mixture of carbon-di-oxide, helium etc as well as very small percentage of organic and inorganic gases.

The necessity to assess the Ambient Air Quality in the State gains significance due to the industrialisation, transportation and other man made activities which have direct impact on the human beings, vegetation and monuments of historical importance. Keeping this fact in view, the Board has been monitoring the air quality in and around the city of Chennai from the year 1987 onwards. This project is sponsored by the Central Pollution Control Board. Though initially there were five stations, they have been reduced to three as per the instructions of the Central Pollution Control Board. These stations are functioning in the following places.

- (a) Manali - Industrial Zone
- (b) Kathivakkam - Industrial Zone
- (c) Thiruvottriyur - Mixed Zone

Each station is run on 24 hours basis, twice a week. Samples collected from these stations are analysed for the Suspended Particulate Matter (SPM) and gaseous pollutants like sulphur -dioxide and oxides of nitrogen. This project has been extended to Thoothukudi, Coimbatore, Salem and Madurai also.

At Thoothukudi, Ambient air quality stations are functioning from the year 1988 in the following locations.



- (a) Regional Industries Laboratory - Industrial zone
- (b) Fisheries College - Industrial zone
- (c) A.V.M Building - Mixed zone

At Coimbatore, the Ambient Air Quality Stations are functioning from the year 1991 in the following locations.

- (a) Collectorate Office Building - Mixed zone
- (b) Saibaba Colony - Residential zone
- (c) SIDCO Building - Industrial zone

At Salem, the Ambient Air Quality station is functioning in the following location from July 1996 onwards.

- (a) Sowdeswari College - Mixed zone

At Madurai, the Ambient Air Quality Stations are functioning from July 1996 in the following location.

- (a) M.K. University Evening College - Residential zone
- (b) Fenner India Ltd., Building - Industrial zone
- (c) Kunnathur Chatram - Mixed zone

#### **4.1.1.a. AIR QUALITY IN CHENNAI CITY**

The Ambient Air Quality survey carried out under the NAAQM Project shows that the minimum and maximum level of Suspended Particulate Matter is 27 and 437 microgram per cubicmetre respectively. The minimum and maximum level of SO<sub>2</sub> is 0.05 and 237 microgram per cubicmetre respectively. The minimum and maximum level of NO<sub>x</sub> is 0.9 and 136 microgram per cubicmetre respectively. However the annual average concentration of SPM, SO<sub>2</sub> and NO<sub>x</sub> are generally within the standards, which may be in Annexure.-XIII A

#### **4.1.1.b. AIR QUALITY IN COIMBATORE, THOOTHUKUDI AND SALEM**

In Coimbatore, the minimum and maximum level of Suspended Particulate Matter is 18 and 340, SO<sub>2</sub> is 1 and 36.9 microgram per cubicmetre and Nox is 1.2 and 88 microgram per cubic metre respectively.

In Thoothukudi, the minimum and maximum level of SPM is 8 and 467 microgram per cubicmetre, SO<sub>2</sub> is 1 and 37.5 microgram per cubicmetre and NO<sub>x</sub> is 1 and 155 microgram per cubicmetre .

In Salem, the minimum and maximum level of SPM is 20 and 466 microgram per cubicmetre, SO<sub>2</sub> is 1 and 50.8 microgram per cubicmetre and NOx is 1.9 and 180.4 microgram per cubicmetre.

In Madurai the minimum and maximum level of SPM, is 36 and 630 microgram per cubicmetre, SO<sub>2</sub> is 0.6 and 40 microgram per cubicmetre and NOx is 2.3 and 156 microgram per cubic metre .

However the annual average concentration of SPM, SO<sub>2</sub> and NOx are generally within the standards, which may be in annexure XIII.

#### **4.1.2. CONTINUOUS AMBIENT AIR QUALITY MONITORING**

Board has commissioned its Chennai Ambient Air Quality Monitoring Programme in 5 locations in Chennai city covering traffic intersections are each at T.Nagar, Vallalar Nagar and Kilpauk, Residential area at Anna nagar and Adayar. The main objective of the programme are to assess the Ambient Air Quality and utilise the air quality data for corrective measure in future. The minimum , maximum and average values of pollutants recorded during the year 1999-2000 are in annexure - XIII C.

#### **4.2. WATER QUALITY MONITORING**

Water is very essential for human life and also for all living organisms and it is necessary for the survival of any form of life. But due to rapid increase in population and fast industrialisation, most of rivers, lakes, streams and other water resources are being increasingly polluted. The Board monitors the inland water quality under two major programmes namely.

- Monitoring of Indian National Aquatic Resources System (MINARS).
- Global Environmental Monitoring System (GEMS).

##### **4.2.1. MONITORING OF INDIAN NATIONAL AQUATIC RESOURCES SYSTEM (MINARS)**

The following rivers and lakes are being monitored for water quality under this project.

###### **RIVERS**

1. Cauvery
2. Thamiraparani
3. Palar
4. Vaigai

###### **LAKES**

1. Uthagamandalam
2. Kodaikanal
3. Yearcaud

This project is funded by the Central Pollution Control Board, New Delhi.

#### **4.2.1.1. RIVER CAUVERY**

River Cauvery is a major river in the State, which drains more than one third of the State. River Cauvery has been identified as a major river for studying the impact of pollution caused by various activities of domestic and industrial sectors.

Quality of water in River Cauvery is being monitored at 16 places along the river. These places have been selected on the basis of the location of outlets for the discharge of industrial effluents and domestic wastes.

Various Physico - Chemical and Biological parameters are analysed in respect of each of the monitoring stations and analysis is done at Advanced Environmental Laboratory, Salem. Sampling is done on monthly basis. The mean values of water quality are furnished in annexure-XIV

The overall analysis of the data reveals that the faecal contamination of surface water of river Cauvery is a common phenomenon all along the course of the river basin due to the unhygienic anthropogenic activities and disposal of either untreated or partially treated municipal waste into the river systems directly or indirectly.

The pollution abatement proposals for five stretches of river Cauvery namely Tiruchirapalli, Erode, Bhavani, Pallipalayam and Komarapalaym as prepared by the Board are under various stages of implementation by the Tamil Nadu Water Supply and Drainage Board and by the concerned Local Bodies under the National River Action Plan. The implementation of the work is coordinated by the Director of Environment, Chennai.

#### **4.2.1.2. RIVER THAMIRAPARANI**

The Board is monitoring the water quality of river Thamiraparani on a monthly basis at 7 Stations. Various Physico-Chemical parameters and Biological parameters are analysed in respect of each monitoring station. Analysis is done at Advanced Environmental Laboratory, Madurai.

The water quality study at seven points in the river Thamiraparani shows that the level of pH values varied from 6.0 to 8.50 and Bio-Chemical Oxygen Demand varies from 2.90 to 5.1 mg/l.

#### **4.2.1.3. RIVER PALAR**

One station viz., Vaniyambadi Municipal Head works is being monitored every month under this project. Analysis of water samples is done at Advanced Environmental Laboratory, Chennai.

#### **4.2.1.4. RIVER VAIGAI**

The water quality of river Vaigai is being monitored under this programme by collecting the sample every month from the collection well of Thirubuvanam Head Works and analysed for Physico-Chemical and Bacteriological characteristics.

#### **4.2.1.5 LAKES**

Under this programme 3 important lakes of Tamil Nadu at Udthagamandalam, Kodaikanal and Yercaud have been identified and monitored by collecting samples once in three months.

The total Coliform, BOD and faecal coliform in Udthagamandalam lake is found to be exceeding the standards prescribed due to the discharge of surface and sludge into the lake either directly or indirectly.

#### **4.2.2.0. GLOBAL ENVIRONMENTAL MONITORING SYSTEM (GEMS)**

Under the Global Environmental Monitoring System, 4 stations have been identified in river Cauvery basin and are regularly monitored every month. The project is funded by the Central Pollution Control Board.

The monitoring stations are located in the following places.

- a) Mettur
- b) Pallipalayam
- c) Musiri
- d) Musiri - Borewell

Various Physico - Chemical and Biological parameters are analysed in respect of each station. Analysis is done at Advanced Environmental Laboratory, Salem and the mean values are at appendix:-

In general, from the mean values of the characteristics, it is observed that the river water quality at the above places meet the standards prescribed for surface water criteria under class "C" for all parameters, except the parameters of Total Coliform and Faecal coliform. The observed ranges of Total Coliform and Faecal coliform is from 30 to 5100 MPN/100 ml, 11 to 2190 MPN/100 ml respectively.

#### **4.3.0. MONITORING OF WATER QUALITY OF CITY WATER WAYS OF CHENNAI CITY**

The Board is monitoring the water quality of Chennai City waterways namely the Cooum, Adyar, Buckingham Canal and Otteri Nullah from the year 1989. Regular water samples are taken from these four city water ways at monthly intervals. The number of sampling points are as follows:

SI.No.	River	Location /No. of Sampling Points	
		in River	in industrial outlets
1	Adyar	5	12
2	Cooum	11	4
3	Buckingham Canal	10	17
4	Otteri Nullah	8	6

The Board is monitoring the outfalls from various industries that discharge effluents into city waterways and also the outfalls from sewage treatment plants of the city. During the year 1999-2000, 1246 samples were collected and analysed at Advanced Environmental Laboratory, Chennai.

In general, Chennai City Waterways are contaminated by various organic and inorganic pollutants received from domestic, industrial and other man-made activities. The levels of contamination of the pollutants is relatively high in Buckingham canal followed by Otterinullah, the river Cooum and Adayar river. As per GO Ms. No.248 E & F Department dated 12.10.96 a High Level Committee has been formed to monitor the works as a measure of permanent remedy to keep the Chennai City Water Ways clean. Tamil Nadu Public Works Department is taking action for awarding consultancy services for the Chennai City Water Ways rehabilitation and reclamation project.

#### **4.5 VEHICULAR EMISSION MONITORING**

##### **4.5.1. VEHICLE EMISSION MONITORING IN CHENNAI CITY.**

The Board has established three vehicular emission testing centres at Guindy, Royapuram and Ambattur in Chennai city for goods transport vehicles and has been conducting vehicular emission tests since 2.5.92.

During the year 1999-2000, 23226 vehicles were tested. Among the total vehicles tested, 665 diesel driven vehicles and 4 petrol driven vehicles did not comply with the emission

standards. Emission under control certificate for the vehicles not complying with the emission standards were issued only after corrective measures to comply with the emission standards are taken by the vehicles.

#### **4.5.2. VEHICLE EMISSION MONITORING IN THE DISTRICTS**

As per amendment in the Tami Nadu Motor Vehicles Act, 1989, vide G.O. Ms. No. 1181 Home (Transport V) Department dated 26.8.96, testing of all vehicles except Goods Transport Vehicles in Chennai Urban Agglomeration area is entrusted to private testing agencies, which are to be authorised by the Transport Department in coordination with the Board, The Board is to continue to issue test certificates in respect of Goods Carriage vehicles for obtaining fitness certificate and to issue test certificates for all transport vehicles in Kancheepuram, Thiruvallur, Dindigul and the Nilgiris Districts. Accordingly the Board has commissioned two Vehicle Emission Monitoring Station in Nilgiris District at Udthagamandalam on 26.8.96 and Katteri on August'99 and 2 stations at Dindigul and Palani on 10.3.97 and one station at Chengalpattu during October, 1997.

The Board imparts training to the private entrepreneurs who opt for setting up emission testing centres and has issued certificates nearly 200 centres for their instruments and trained 940 persons representing from private emission testing centres at Chennai, Coimbatore, Salem, Madurai and Trichirapalli. The details of vehicles tested and number of vehicles exceeded the standards are shown in annexure XV.

#### **4.6. MONITORING OF 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES**

The Ministry of Environment and Forests, Government of India, New Delhi vide Gazette Notification No.66/Dt. 12.2.92 has fixed a deadline for the 17 categories of highly polluting units to install the requisite facilities to meet the standards. In Tamil Nadu 201 industries were identified as on 31.03.99 as highly polluting units and the Chief Executives of all the units were called for discussions. Based on the discussions, action plan has been evolved for each unit to improve the existing treatment facilities with time bound programme to achieve the standards prescribed by the Board under the Water and Air Acts.

All the units have provided adequate pollution control measures to comply with Tamil Nadu Pollution Control Board Standards. Details are shown in annexure - XVI.

#### 4.7. OZONE MONITORING CELL

Earth is protected by the presence of ozone (ie a thin layer of 1 ppm to 5ppm by volume) in stratosphere and the ozone layer serves as a protecting shield from the harmful effects of ultra violet rays coming from solar radiation. Depletion of ozone would lead to harmful effects, as the ultra-violet rays could reach the earth easily.

Considering the importance of the issue, the Board has established a Ozone Monitoring Cell as per G.O. Ms.No. 212 dated 29.6.95 and it is functioning since 1.9.95 in the Board's Head office.

The main objectives are:

- To Survey, identify and to have an inventory of the industries in the State, producing or consuming Ozone Depleting Substances (ODS).
- Estimate the present demand and make future projections.
- Study the scope of the application of environmental friendly substitutes.
- Commit to phaseout Ozone Depleting Substances by the year 2010 for essential uses as agreed to by all the countries.

The Board has conducted a detailed survey of the industries in the State producing or consuming Ozone Depleting Substances. From the survey 55 industries in the State have been identified to consume Ozone Depleting Substances. The quantity of various Ozone Depleting Substances used in the State has also been estimated. Whenever the new industries approach the Board for consent, the consent orders are being issued with a condition that they should not use the ODS. The identified industries have been suggested on the adoption of alternatives with Zero ODS depending on the controlled substance used.



**ENVIRONMENTAL STANDARDS**

The Board has evolved standards for the discharge of treated sewage/trade effluents depending upon the mode of disposal either into inland surface water, sewer, marine coastal areas or on land. Treated effluent from the industries must satisfy the respective standards before its disposal.

The Board has evolved Ambient Air Quality standards and Emission standards for thirteen specific industries.

The Board is monitoring the units so that they adhere to the effluent/emission standards prescribed by the Board.





## CHAPTER - VI

### **6.1. PROSECUTION LAUNCHED AND CONVICTION SECURED FOR FAILURE TO CONTROL POLLUTION**

The Board has issued 1002 Show Cause Notices and 168 closure notices during the year 1999-2000. The Board has so far issued Show Cause Notices to 13727 industries and closure orders to 2892 industries for not complying with the conditions prescribed by the Board. Also the Board has so far filed 321 cases under the Water (Prevention and Control of Pollution) Act, 1974 and out of 236 cases disposed, 73 cases have been decided in favour of the Board. The Board has filed 134 cases under the Air (Prevention and Control of Pollution) Act, 1981 and out of 117 cases disposed, 78 cases have been decided in favour of the Board. The status of legal cases as on 31.3.2000 are given in the annexure- XVII.

### **6.2 Constitution of Green Bench**

During the year 1996-97, the Hon'ble High Court of Madras has constituted a Green Bench as per the directions of Hon'ble Supreme Court of India to deal with the cases pertaining to tanneries and environmental related cases. The Green Bench is sitting every Thursday.



## CHAPTER - VII

During the period from April 1999 to March 2000, Seven Meetings of the Board were held at Chennai as listed below:

Sl.No.	No. of subjects placed	Meeting No.	Date
01	26	170	7.4.99
02	15	171	19.5.99
03	20	172	24.6.99
04	31	173	12.8.99
05	38	174	27.10.99
06	15	175	24.11.99
07	34	176	24.2.2000

### 7.2. MAJOR POLICY DECISIONS TAKEN BY THE TAMIL NADU POLLUTION CONTROL BOARD DURING THE YEAR 1998-99

7.2.1 The Board has approved the proposals to establish a District Environmental Engineer's office at Virudhunagar.

7.2.2 The Board has approved the proposal of the constitution of an Advisory Committee for Environmental Training Institute.

7.2.3 The Board approved the proposal for the Establishment of MEL at Karur.

7.2.4 The Board approved the proposal for the Establishment of new District office at Namakkal by bifurcating the existing district office at Salem.

7.2.5 The Board approved the proposal to maintain a panel of consultants as recommended by the Committee, constituted by the Board.

7.2.6 The Board approved the proposal to delegate certain powers to the Regional Joint Chief Environmental Engineers and District Environmental Engineers offices.



## CHAPTER - VIII

### 8. COMMITTEES CONSTITUTED BY THE BOARD AND THEIR ACTIVITIES

**8.0.** For more effective functioning of the Board, certain committees were constituted by the Board. These are detailed below.

#### 8.1. TECHNICAL ADVISORY COMMITTEE

To assist the Board in its various functions, such as evaluation of standards for various pollutants in effluent and emission, evaluation of economical effluent treatment methods for various industries, to obtain the views of experts in problematic cases etc., the Board has constituted a Technical Advisory Committee consisting of experts from various fields. During the year 6 meetings were conducted to discuss about M/s Sterlite Industries., M/s MRL., M/s SIV Industries., and M/s Kothari Sugars (Distillery unit)

#### 8.2. LIBRARY COMMITTEE

To streamline the system of purchase of publications for the Library and to suggest measures for its improvement and better maintenance, a Library Committee has been constituted. The committee reviews periodically the requirements and functioning of the library. During the year 2 meetings were conducted.

In the Library 6950 books, 42/11 Video/Audio Cassettes and 72 numbers of journals subscribed and 50 Periodicals are available.

##### 8.2.1 Board has Membership in the following

1. Chemical Industries Association.
2. International Association on Water Quality.
3. British Council Division.
4. Indian National Scientific Documentation Centre.
5. Tata Energy Research Institute
6. United States Information Service.
7. Indian Environmental Association.
8. National Geographic Society.

9. Air and Waste Management Association.

10. International Congress of Chemistry and Environment.

The Library has also been provided with 2 computers by DANIDA. DANIDA has also provided 600 books and Internet facilities for the Library. Libsys system has been installed to search the required documents.



### 9.2. ENVIRONMENTAL TRAINING INSTITUTE

The Board has set up an Environmental Training Institute with a Head Office, Gundy, Chennai-35. The main objective of the Training Institute is to impart training to staff of the Government and Non-Governmental Organizations and to make them competent and capable of controlling and advising small, medium and large scale industries on pollution treatment and prevention techniques suitable to their needs. During the year 1999-2000 Environment Training Institute has conducted 24 programmes and 366 participants were trained.



## CHAPTER - IX

### 9.1. ENVIRONMENTAL TRAINING

With a view to promote environmental awareness, Senior Officers, Engineers/Scientists and also Ministerial Staff have participated in Training/Seminars/ Workshops all over India and abroad.

The Board has set up an Environmental Pavilion inside the premises of the Periyar Science and Technology Centre at Kotturpuram, Chennai. The pavilion has a permanent Exhibition centre and an Auditorium with facilities like audiovisual equipments such as public address system, slide and over head-projector, and a 60 m.m. projector to be used by the Board and NGOs.

### 9.2. ENVIRONMENTAL TRAINING INSTITUTE

The Board has set up an Environmental Training Institute with Danish Assistance of Rs.4.0 crore in the 3rd floor of its Head Office, Guindy, Chennai-32.

The main objective of the Training institute is to impart training to staff of the Board, personnel from the Industries and Non-Governmental Organisations and to make them competent and capable of controlling and advising small, medium and large scale Industries on pollution treatment and prevention techniques suitable to their needs. During the year 1999-2000 Environment Training Institute has conducted 24 programmes and 366 participants were trained.



## CHAPTER -X

### ENVIRONMENTAL AWARENESS AND PUBLIC PARTICIPATION

The Board has been playing a catalytic role in the creation of environmental awareness among the public, students etc., and has been participating in seminars and workshops related to environmental issues.

The Board gives away awards every year on World Environment Day for winners of Essay Competitions, Elocution Competitions and Drawing / Cartoon / Painting Competitions conducted for the students on Anna's Birth day, Gandhiji's Birthday and Nehru's Birth day respectively. These Competitions are organised to highlight the awareness on environment and pollution control among the Public and Industries.

The Board is participating every year in the Republic Day Parade with a Pageantry carrying the models of various activities of the Board for display. In order to create Environmental Awareness among the Public and Industries, the Board is participating every year in various Exhibitions/Trade Fairs conducted at Island Grounds, Chennai as well as in New Delhi.

The Board is publishing a Newsletter for creating environmental awareness and the Newsletter and other Phamphlets published are distributed among the Industries, NGOs, Institutions etc.,. The Board has installed a traffic signal to regulate the city traffic with an Environmental Protection slogan at Guindy Junction near the Board's Head Office.

The Board has conducted surprise emission checkup in different places at Chennai during 14.07.99 to 16.7.99 in co-ordination with State Transport Departments and Police (traffic) Department. To create awareness among the public, the air and noise pollution caused by vehicle and their health hazards, Board has conducted a workshop on 11.3.2000 to Drivers, mechanics of Chennai Transport Corporation, Auto rickshaw, Lorry, Taxi drivers, Traffic Police, Vehicle emission testing centres., etc in association with Transport and Police Department so as to inculcate the habit of proper maintenance of vehicles.

In order to create awareness among the students, Board invited school children of various schools in the state of Tamilnadu through Director of School Education to visit our permanent exhibition put up at our Environmental Pavilion. As a result, 88 schools from all over Tamilnadu have visited our Environmental pavilion and benefited. Video Programme shows are conducted at Environmental Pavilion Auditorium daily to the students, public and NGOs who are visiting Environmental pavilion.



## CHAPTER - XI

### OTHER IMPORTANT MATTERS DEALT WITH THE BOARD

#### 11.1 MONITORING OF ECOLOGICALLY SENSITIVE AREAS

Ecologically sensitive areas like Pitchavaram Mangrove Forests etc., are nature's gifts and need to be protected. These areas are closely monitored by the Board so as to protect them from any Environmental degradation and the developmental project in these areas are allowed subject to the siting criteria prescribed.

#### 11.2 IMPLEMENTATION OF PUBLIC LIABILITY INSURANCE ACT, 1991.

The purpose of the above Act is to provide immediate relief to the persons affected by accidents occurring, while handling hazardous substances and for matters connected with or incidents there to. The Implementation of Public Liability Insurance Act, 1991 is vested with the District Collectors . While issuing consent to the industries handling hazardous chemicals, a condition is imposed to the effect that such units avail insurance policies under Public Liability Insurance Act, 1991.

#### 11.3. ENVIRONMENTAL STATEMENT

The Ministry of Environment and Forests, Government of India have notified the Environmental Statement Rules, 1993.

Environmental Statements have been obtained from all the 17 category of highly polluting industries to assess their compliance with the standards prescribed by the Board.

#### 11.4. APPLIED RESEARCH AND DEVELOPMENT

The Board has established an Applied Research and Development wing in the Advanced Environmental Laboratory at Chennai with a view to develop cleaner technologies that would reduce the generation of pollution during the year 1996-97. The wing in consultation with University of Chennai has prepared a research project entitled "Bio-Treatment of Tannery effluent by Microbes" to study the degradation of tannins and other organic and inorganic compounds of tannery effluent. Tanneries have been identified for implementing the project. This project is in progress.

## **11.5. WORLD BANK ASSISTED INDUSTRIAL POLLUTION CONTROL PROJECT**

World Bank is providing assistance for institutional strengthening of the selected State Pollution Control Boards in India under Industrial Pollution Control Project through the Ministry of Environment and Forests, Government of India. The Board is one of the State Boards provided with the assistance to the extent of US \$ 2.517 Million. The financial assistance is towards the procurement of equipments for institutional strengthening. The Board has so far received Rs. 71.88 lakhs worth of equipments and other components under the project in Phase I.

## **11.6. RESEARCH FUND**

The Board has set up a research fund to grant Financial Assistance to recognised Research Institutions and Universities for taking up research activities in the field of pollution abatement including reduction / reuse / recycling or any other beneficial use of waste generated with a view to developing sound environmental technologies.

During the year 1999-2000, 10 proposals have been received and evaluated by an Expert Committee. The Committee selected 3 proposals for consideration of funding.

## **11.7. PUBLIC HEARING PANEL**

Government in G.O. Ms. NO.487/E&F EC-III/Dept. dt. 22.12.97 have constituted Public Hearing Panels as required under schedule IV of E.IA. Notification 1994 - as amended on 10.4.1997 for 23 Districts and subsequently constituted Public Hearing Panels for the remaining 6 Districts on 21.3.98. Constitution of Public Hearing Panels has been published in the leading Newspapers. Public Hearing Panels, after conducting public hearing inviting suggestions and objections, on the project from the public, will send it's views to the Board so that No Objection Certificates can be issued to the industries by the Board to enable them to approach the Ministry of Environment and Forests, Government of India to get the Environmental Clearance. Public Hearings on various project are conducted in the respective Collectorates, since May 1998, and during the year 1999-2000 , 113 Public Hearing were conducted.

## **11.8 Customs and Excise Duty Reduction for Pollution Control Equipments**

Under the notification of the Ministry of Finance, the Ministry of Environment and Forests issues certificates for reduction of rates on customs duty and excise duty to the industries/users for a list of pollution control equipments. TNPC Board has issued certificates to the industries for availing the said concession.



## **11.9 Zoning Atlas for siting of Industries**

The programme on Zoning Atlas for siting of industries under the Environmental Management Capacity building Technical Assistance Project of the World Bank which is being sponsored by the CPCB to TNPCB during 1997-98, initially for the Districts of Tiruvallur and Kancheepuram. TNPCB has completed the project with assistance from Anna University. Further Board has identified 11 priority Districts for preparation of Zoning Atlas during 2000-2003 and sent the proposal to CPCB, Which is under consideration of the MOEF.,

## **11.10. Industrial Estate planning**

There are 63 industrial estates in Tamilnadu and many industrial estates are in the anvil as the industrial activities are growing up. Board has identified 7 industrial estates to take up the Industrial Estate Planning Study during 2000-2003 and sent a proposal to CPCB, which is under consideration by the MOEF.

## **11.11. Industrial Pollution Complaints**

Complaints from various individuals / organisation / NGOs etc., regarding pollution being caused by certain industries. These complaints were attended to by calling reports along with the exact and comments from the field officers of the Board. Action as required based on the reports have been taken then & there and the industries were also directed to provide the necessary pollution control measures.

## **11.12 Green Cover Projects**

To mitigate Air and Noise pollution in Urban areas and to enhance the quality of living conditions in Urban areas in Tamilnadu, a major programme for development of green belt in municipal corporation areas has been launched with the Central assistance of Rs. 4. Crore. The above programme has further been extended in all the urban and municipality areas with participation from industries and with Central assistance of Rs.76.50 lakhs and with Board assistance of Rs 25.50lakhs. The programme is being implemented in close co-ordination with other Govt., departments, Local bodies and Industrial establishments.

## CHAPTER XII

### FINANCE AND ACCOUNTS OF THE BOARD (PROVISIONAL FIGURES SUBJECT TO AUDIT)

[Rupees in Lakhs]

Opening Balance	4389.27
Expenditure during year 1999-2000	1302.27
Receipts	1846.76
Closing Balance as on 31.3.2000	<b>Total 4933.76</b>

#### DETAILS:

##### Receipts Of The Board-Grants

Received From State Government	Nil
Grants received from Central Government	Nil
Consent fees	1086.63
Monitoring and analytical charges	212.61
Cess reimbursement	169.72
Sale of Application Forms & Books	6.82
Others	370.98
<b>Total</b>	<b>1846.76</b>

#### EXPENDITURE REVENUE:

1. Salary and GPF	845.04
2. T.A. and L.T.C.	24.14
3. Office Expenditure (Stationery, Rent, Vehicle, Telephone, Printing, Hospitality, etc.)	258.11

#### CAPTIAL:

1. Fixed Assests	39.86
2. Other Assets	108.81
3. Advances to staff	27.11
<b>Sub Total</b>	<b>1302.27</b>



## CHAPTER XIII

### ANNUAL ACCOUNT FOR THE YEAR 1999-2000 OUTLAY AND EXPENDITURE OF STATE SCHEMES: [Rupees in Lakhs]

Sl. No.	Head of Development Group Head/Name of Scheme	Ninth Five Year plan Outlay	Actual Expenditure for the year 1998-99	Approved Outlay for the year 1999-2000	Anticipated Expenditure	Proposed Outlay for the year 2000-2001	Tentative capital content
01	State Plan	1996-2000	—	—	—	—	—
02	Prevention of Water and Air Pollution		—	—	—	—	—
03	Control of Water and Air Pollution Establishment of continuous Air Quality Monitoring Systems at Tuticorin & Cuddalore	Yet to be received	—	—	—	—	—



## ANNEXURE - I

### LIST OF BOARD MEMBERS

Sl. No.	Name and address	Position	Period	
			From	To
1.0	Thiru. <b>M.Devaraj</b> , I.A.S., Tamil Nadu Pollution Control Board. <b><u>Officials Nominated by</u></b> <b><u>The State Government</u></b>	Chairman	1.4.98	31.3.2000
2.1	Thiru. <b>K.S. Sripathi</b> ., I.A.S., Secretary to Government, Environment and Forests Department, Fort St. George, Chennai - 9.	Member	10.6.96	9.11.99
2.2	Thiru. <b>S.Rajarethinam</b> , I.A.S., Secretary to Government, Environment and Forests Department, Fort St. George, Chennai - 9.	Member	10.11.99	Till date
3.0	Thiru. <b>T. Pitchandi</b> , I.A.S., Spl. Secretary to Finance, Fort St. George, Chennai - 9	Member	1.10.98	Till date
4	<b>Dr. T. Prabakara Rao</b> , I.A.S., Director of Town and Country Planning, 807, Anna Salai, Guindy, Chennai -2	Member	9.9.96	1.12.99
4.1	<b>Dr. S.Gurumurthy</b> , I.A.S., Spl. Commissioner of Town & Country Planning, 807, Anna Salai, Guindy, Chennai -2	Member	2.12.99	Till date
5	Thiru. <b>Sanwat Ram</b> , I.A.S., Director of Municipal Administration, Ezhilagam Annexe Building, VIth floor, Chepauk, Chennai - 5	Member	15.10.97	4.4.99
5.1	Thiru. <b>K.Ganesan</b> , I.A.S., Director of Municipal Administration, Ezhilagam Annexe Building, VIth floor, Chepauk, Chennai - 5	Member	5.4.99	Till date
6.	<b>Dr. R.Ayyathurai</b> , M.D., Director of Public Health and Preventive Medicine, Chennai - 6	Member	11.5.98	Till date

**Non-Official-Members Nominated by the State Government to represent  
Agriculture / Fisheries / Industries / Trade**

Sl. No.	Name and address	Position	Period	
			From	To
7.0	Thiru. P. Gopal B.Sc., MLA., Mettur Dam, Salem District.	Member	16.7.97	Till date
8.0	Thiru N. Mohamad Hassim, Chairman, Leather Exports Promotion Council, 53, Sydenhams Road, Chennai - 3.	Member	16.7.97	23.11.99
8.1	Thiru. Mohan N. Srinivas, Regional Chairman(South Region), Leather Exports Promotion Council, Race View Towers 2-B.,71, Mount Road., Chennai - 324	Member	24.11.99	Till date
9.0	Tmt. Banumathi Baskaran, State Level Fisheries Wing Organiser, 18, Corp. Colony, 3rd Lane, Tondiarpet, Chennai - 81	Member	16.7.97	Till date

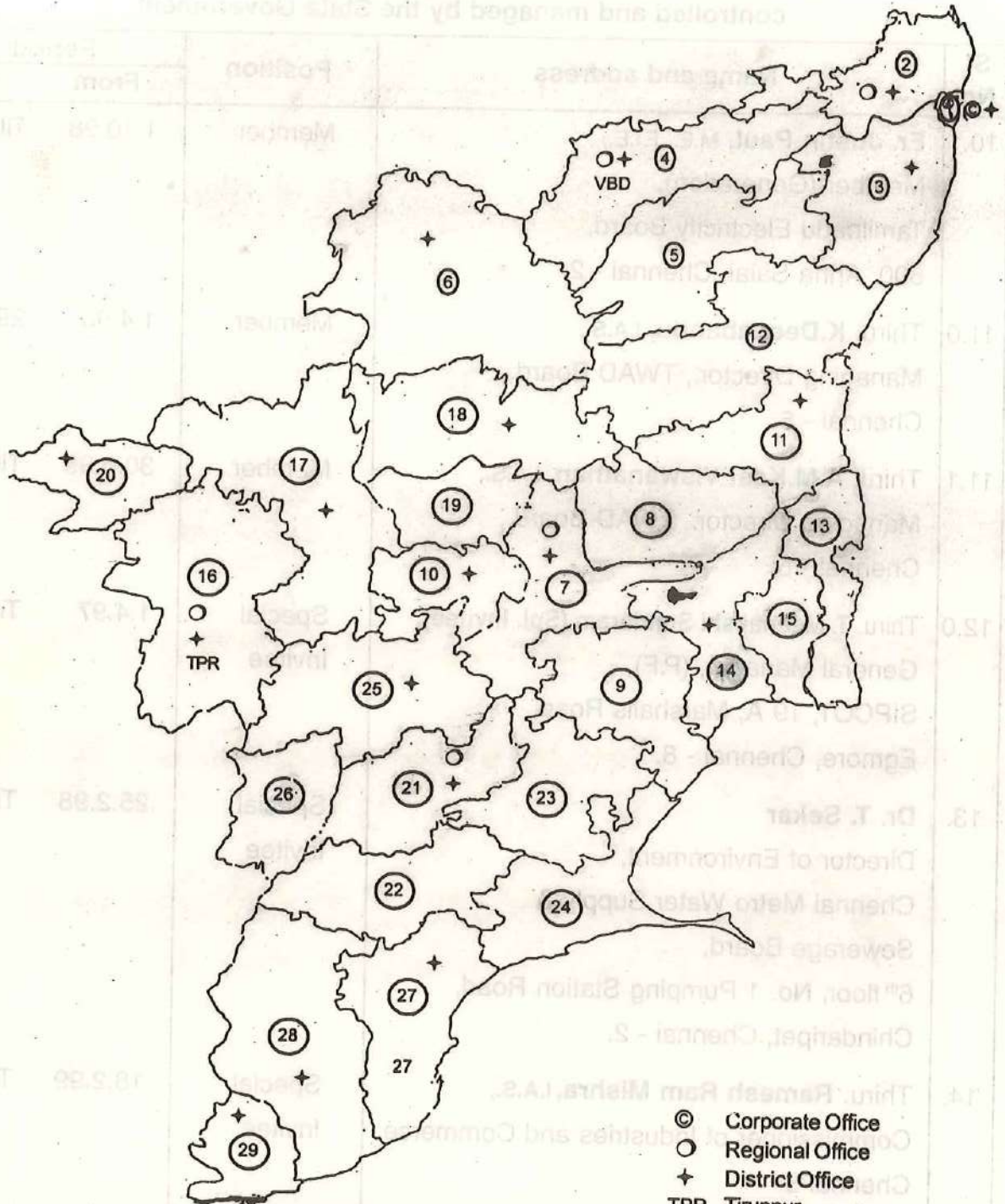


**Personnel Nominated by the State Government to represent the Companies  
controlled and managed by the State Government**

Sl. No.	Name and address	Position	Period	
			From	To
10.1	<b>Er. Justin Paul, M.E., F.I.E.,</b> Member (Generation), Tamilnadu Electricity Board, 800, Anna Salai, Chennai - 2.	Member	1.10.98	Till date
11.0	<b>Thiru. K.Deenabandu, I.A.S.,</b> Managing Director., TWAD Board., Chennai - 5	Member	1.4.98	29.6.99
11.1	<b>Thiru. A.M.Kasi Viswanathan, I.A.S.,</b> Managing Director., TWAD Board., Chennai - 5	Member	30.6.99	Till date
12.0	<b>Thiru. T. Meenakshi Sundaram (Spl. Invitee),</b> General Manager, (P.F), SIPCOT, 19 A, Marshalls Road, Egmore, Chennai - 8.	Special Invitee	1.4.97	Till date
13.	<b>Dr. T. Sekar</b> Director of Environment, Chennai Metro Water Supply & Sewerage Board, 6 <sup>th</sup> floor, No. 1 Pumping Station Road, Chindaripet, Chennai - 2.	Special Invitee	25.2.98	Till date
14.	<b>Thiru. Ramesh Ram Mishra, I.A.S.,</b> Commissioner of Industries and Commerce, Chennai-5	Special Invitee	18.2.99	Till date
15.	<b>Thiru. G. Rengasamy,</b> Member Secretary, Tamilnadu Pollution Control Board, 100, Anna Salai, Guindy, Chennai - 32.	Member Secretary	1.7.90	Till date

## ANNEXURE - 2

### Location of District Offices



- ⊙ Corporate Office
- Regional Office
- + District Office
- TPR Tiruppur
- VBD Vaniyambadi

#### Chennai Region

- 1) Chennai
- 2) Tiruvallur
- 3) Kanchipuram

#### Vellore Region

- 4) Vellore
- 5) Thiruvannamalai
- 6) Dharmapuri

#### Tiruchy Region

- 7) Trichy
- 8) Peramballur
- 9) Pudukottai
- 10) Karur
- 11) Cuddalore
- 12) Villupuram
- 13) Nagapattinam

#### 14) Thanjavur

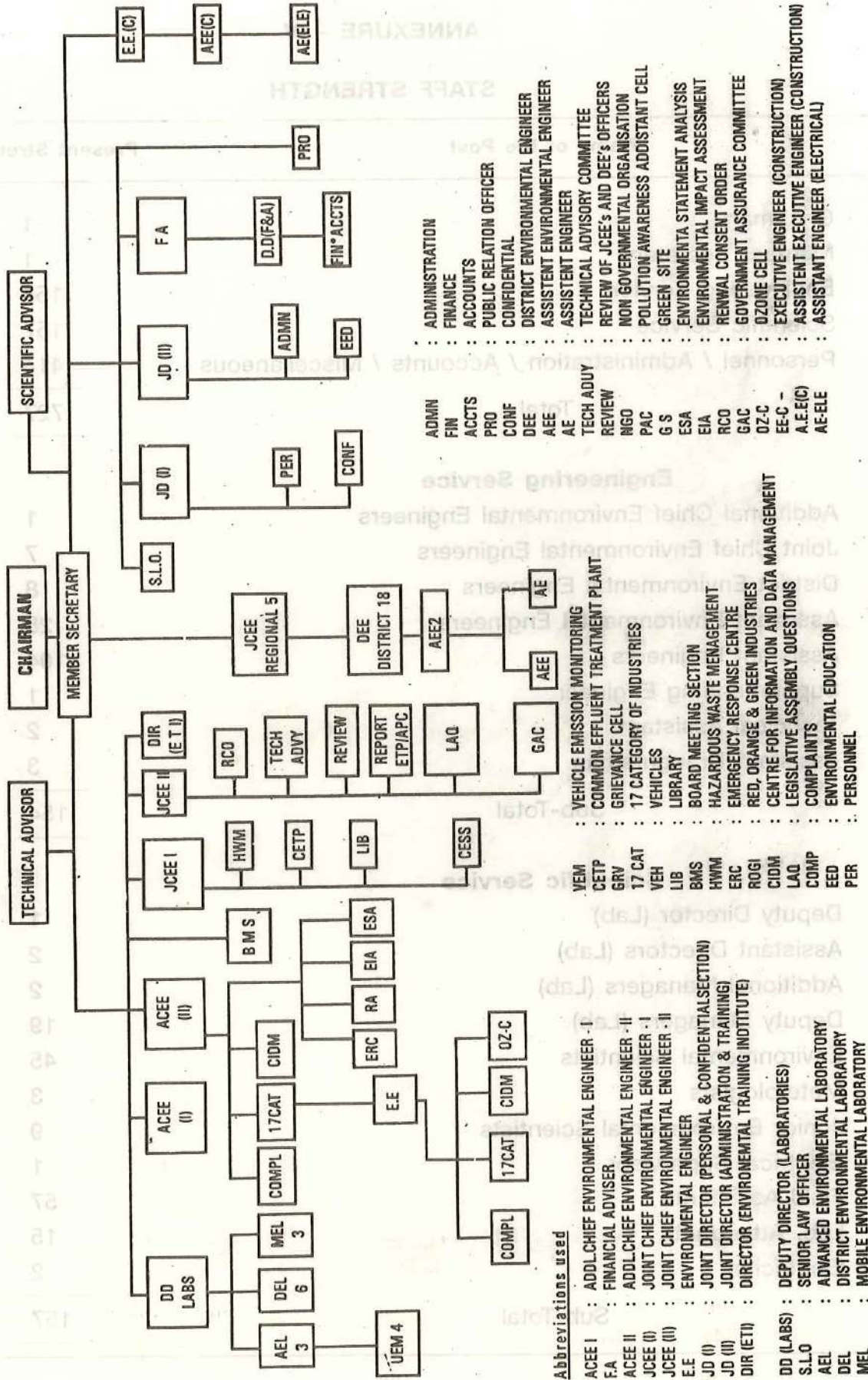
- 15) Tiruvarur
- #### Coimbatore Region
- 16) Coimbatore
  - 17) Erode
  - 18) Salem
  - 19) Namakkal
  - 20) Nilgiris

#### Madurai Region

- 21) Madurai
- 22) Virudhunagar
- 23) Sivagangai
- 24) Ramanathapuram
- 25) Dindigul
- 26) Theni
- 27) Tuticorin
- 28) Tirunelveli
- 29) Nagercoil

# ANNEXURE - III

## ORGANISATION CHART





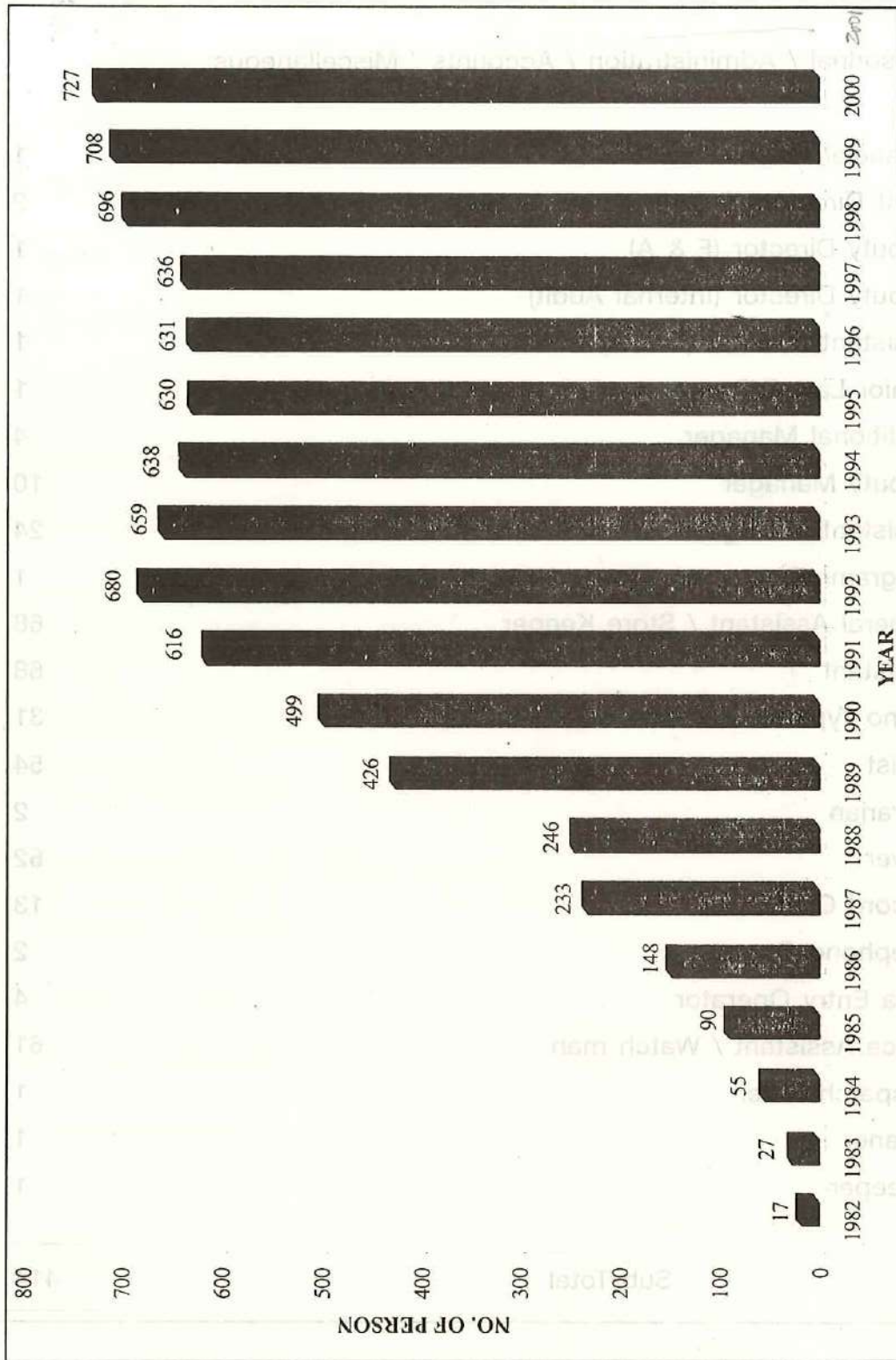
## ANNEXURE - IV

### STAFF STRENGTH

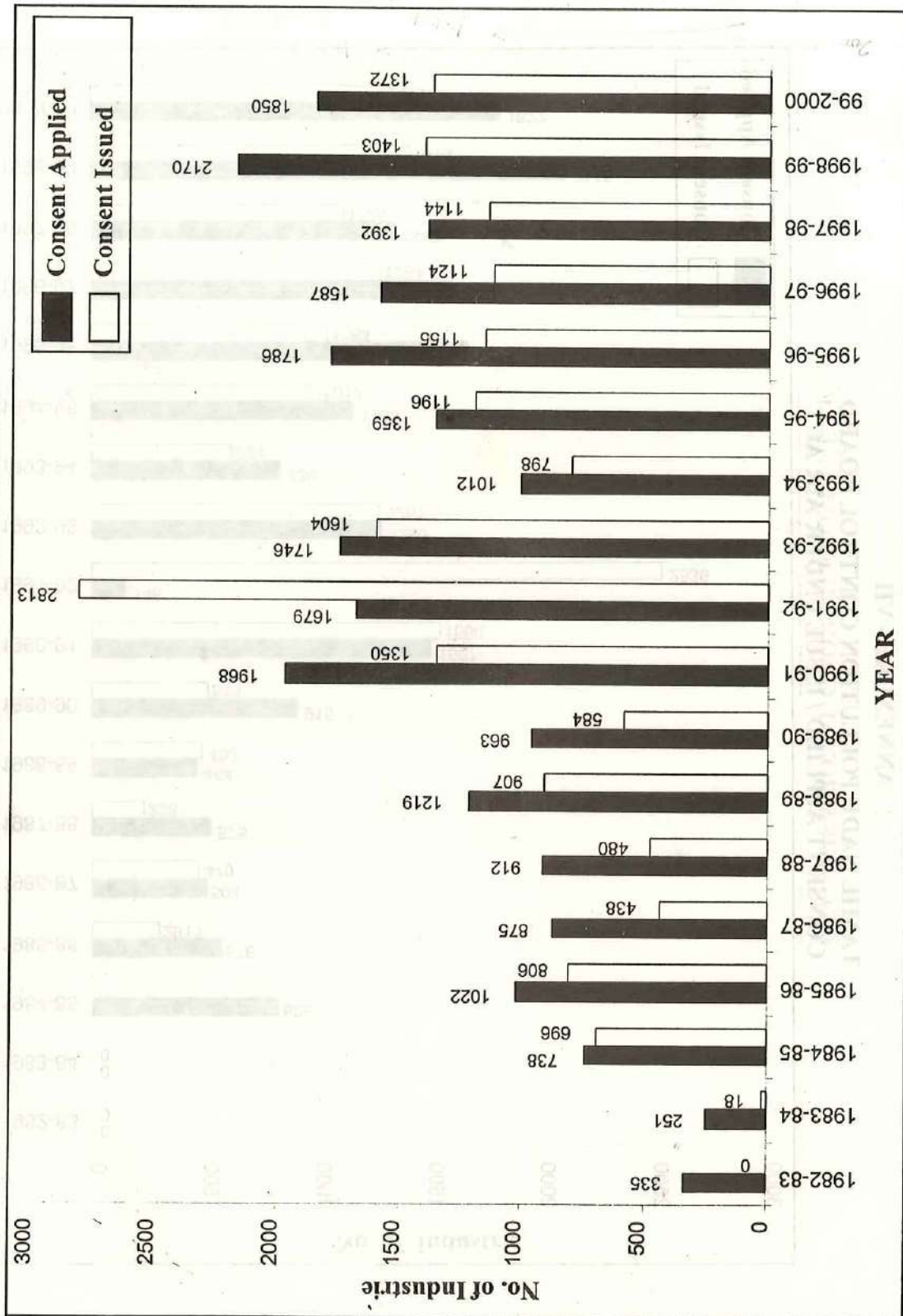
Name of the Post	Present Strength
Chairman	1
Member Secretary	1
Engineering Service	154
Scientific Service	157
Personnel / Administration / Accounts / Miscellaneous	414
<b>Total</b>	<b>727</b>
<b>Engineering Service</b>	
Additional Chief Environmental Engineers	1
Joint Chief Environmental Engineers	7
District Environmental Engineers	8
Assistant Environmental Engineers	28
Assistant Engineers	104
Superintending Engineer	1
Technical Assistant	2
Assistant Draughtsman	3
<b>Sub-Total</b>	<b>154</b>
<b>Scientific Service</b>	
Deputy Director (Lab)	1
Assistant Directors (Lab)	2
Additional Managers (Lab)	2
Deputy Managers (Lab)	19
Environmental Scientists	45
Meteorologists	3
Junior Environmental Scientists	9
Electrical Supervisor	1
Field Assistants	57
Lab. Attendants	15
Electrician	2
<b>Sub-Total</b>	<b>157</b>

Name of the Post	Present Strength
<b>Personnel / Administration / Accounts / Miscellaneous</b>	
Financial Advisor	1
Joint Directors (I & II)	2
Deputy Director (F & A)	1
Deputy Director (Internal Audit)	1
Assistant Director (F & A)	1
Senior Law Officer	1
Additional Manager	4
Deputy Manager	10
Assistant Manager	24
Programmer	1
General Assistant / Store Keeper	68
Assistant	68
Steno Typist	31
Typist	54
Librarian	2
Driver	62
Record Clerk	13
Telephone Operator	2
Data Entry Operator	4
Office Assistant / Watch man	61
Despatch Rider	1
Cleaner	1
Sweeper	1
<b>Sub-Total</b>	<b>414</b>

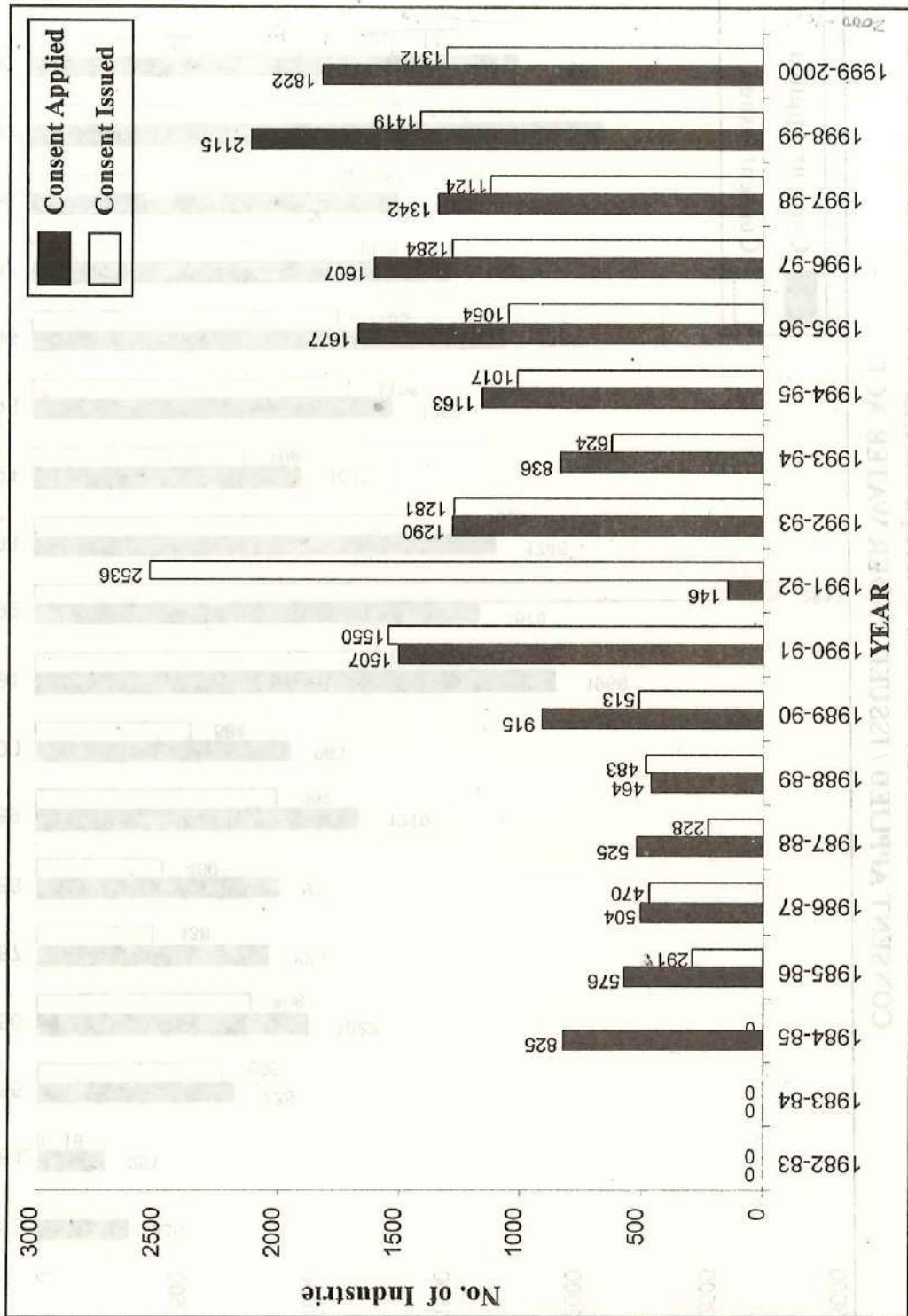
**ANNEXURE -V**  
**TAMIL NADU POLLUTION CONTROL BOARD**  
**ORGANISATIONAL GROWTH FROM THE YEAR 1982 TO 2000**



ANNEXURE - VI  
TAMIL NADU POLLUTION CONTROL BOARD  
CONSENT APPLIED / ISSUED UNDER WATER ACT



**ANNEXURE - VII**  
**TAMIL NADU POLLUTION CONTROL BOARD**  
**CONSENT APPLIED / ISSUE UNDER AIR ACT**



## ANNEXURE -VIII

### DETAILS OF COMMON EFFLUENT TREATMENT PLANT SCHEMES AT VARIOUS PLACES:

#### A. TANNERIES:

SL. NO.	LOCATION OF CETP	DISTRICT	NO.OF BENEFICIARY UNITS	QUANTITY OF EFFLUENT (in KLD)	COST OF PROJECT (Rs.in Cr.)
<b>I. Under Operation:</b>					
1	Pammal / Pallavaram	Kancheepuram	144	3000	7.03
2	Madhavaram-TALCO Industrial Estate	Thiruvallur	14	400	1.25
3	Ranipet (SIDCO)	Vellore	87	2500	2.95
4	Melvisharam	Vellore	35	3400	3.63
5	Thuthipet	Vellore	44	2219	4.14
6	Ramji Nagar	Tiruchirapalli	5	525	0.60
7	Valayampet [Vaniyambadi- Talco]	Vellore	110	2948	3.37
8	Udayenthiram	Vellore	10	220	0.7
9	Bakkalapalli	Vellore	18	891	1.60
10	Ranipet	Vellore	75	4000	4.60
11	Dindigul	Dindigul	61	2533	5.00
12	Malligaihopu	Vellore	17	1100	2.00
<b>II. Under Progress:</b>					
13	Melpudupet	Vellore	12	600	1.51
14	Chettithangal	Vellore	6	600	1.39
15	Perumalpet	Vellore	17	4000	11.02
16	Pudur	Vellore	5	600	1.42
17	Valayampet (Vaniyambadi)	Vellore	10	1470	2.00
18	SIDCO & SIPCOT PHASE -II, Ranipet	Vellore	17	1560	2.52
19	Ambur (Mittalam)	Vellore	4	1500	2.59
20	Gundur	Tiruchirapalli	5	1775	2.85

SL. NO.	LOCATION OF CETP	DISTRICT	NO.OF BENEFICIARY UNITS	QUANTITY OF EFFLUENT (in KLD)	COST OF PROJECT (Rs.in Cr.)
21	Chengalvarayan-pattarai	Vellore	6	400	1.80
22	V. Kota Road	Vellore	47	2475	2.87
23	Sembattu	Tiruchirapalli	14	2400	3.00
<b>B. DYEING UNITS:</b>					
<b>I. Under Operation</b>					
1	Ayyampet-Muthialpet	Kancheepuram	65	1500	1.43
2	Andipalayam (Tiruppur)	Coimbatore	21	4500	2.15
3	Kunnangalpalayam (Tiruppur)	Coimbatore	19	4250	2.16
4	Angeripalayam (Tiruppur)	Coimbatore	92	8500	7.20
5	Chinnakarai (Tiruppur)	Coimbatore	31	5000	2.45
6	Kasipalayam (Tiruppur)	Coimbatore	20	4000	2.20
7	Mannarai (Tiruppur)	Coimbatore	32	4200	2.71
8	Veerapandi (Tiruppur)	Coimbatore	74	10000	6.75
9	Manickapurampudur (Tiruppur)	Coimbatore	11	1600	1.27
10	Karruppanpalayam	Karur	40	750	1.08
11	Amaravathi Nagar	Karur	17	750	1.63
12	Thirumanilaiyur	Karur	56	2100	2.08
13	Sukkaliyur	Karur	63	1400	1.69
14	Vellimalai	Salem	10	98	0.14
<b>ii. Under Progress</b>					
15	R.K.Puram	Karur	48	1250	1.93
16	Andankoil	Karur	35	1900	2.14
17	Erumappalayam	Salem	27	1017	1.32

SL. NO.	LOCATION OF CETP	DISTRICT	NO.OF BENEFICIARY UNITS	QUANTITY OF EFFLUENT (in KLD)	COST OF PROJECT (Rs.in Cr.)
18	Light House	Karur	46	1150	1.44
<b>III. Under Initial Stages</b>					
19	Sellandipalayam	Karur	133	2600	2.25
20	Vanavil Nagar	Salem	24	900	1.26
21	Vanna Nagar	Salem	32	1200	1.47
22	Gugai	Salem	24	900	1.35
23	Komarapalayam	Namakkal	57	4959	3.39
24	Seelanaickenpathi	Salem	15	150	1.98
<b>C.HOTELS</b>					
1	Kodaikanal	Dindigul	90	820	1.30
<b>D. HOSPITALS</b>					
1	Salem	Salem	64	450 kg/hr	0.05



## ANNEXURE -IX

### FUNDS SO FAR RECEIVED FOR THE CETP SCHEMES FROM THE STATE AND CENTRE BY TNPCCB

[Rs. in Lakhs]

SL. NO.	NAME OF CETP	GOVT. OF INDIA	GOVT. OF TAMILNADU	TOTAL
<b>YEAR 1991-92</b>				
1	Pammal/Pallavaram	50.00	50.00	100.00
2	Erode (Tanneries)	* 50.00	50.00	* 100.00
3	Tiruppur	37.50	37.50	* 75.00
4	Ayyampet-Muthialpet	22.50	22.50	45.00
<b>YEAR 1992-93</b>				
5	Bhavani	7.50	7.50	15.00
6	Erode -I (Dyeing) B.P. Agraharam	15.00	15.00	30.00
7	Erode -II (Dyeing) Kasipalayam	17.50	17.50	35.00
8	Karur	21.14	21.14	* 42.28
<b>YEAR 1995-96</b>				
9	Ranipet - SIDCO	45.00	50.00	95.00
10	Visharam	45.00	50.00	95.00
11	Bakkalapalli	40.00	—	40.00
<b>YEAR 1996-97</b>				
12	R.K. Puram (Karur)	**48.22	48.22	96.44
13	Andankoil (Karur)	**50.00	50.00	100.00
14	Amaravathi Nagar (Karur)	**50.00	50.00	100.00
15	Thiruva (Karur)	**50.00	50.00	100.00
16	SIPCOT- SIDCO Phase -II (Ranipet)	30.00	50.00	80.00
17	Valayampet (Vaniyambadi)	**22.50	50.00	72.50
18	Kodaikanal	**32.50	32.50	65.00
19	Perumalpet	**25.00	50.00	75.00
20	Madhavaram- TALCO Industrial Estate	25.00	31.25	56.25
21	Melpudupet	—	37.78	37.78

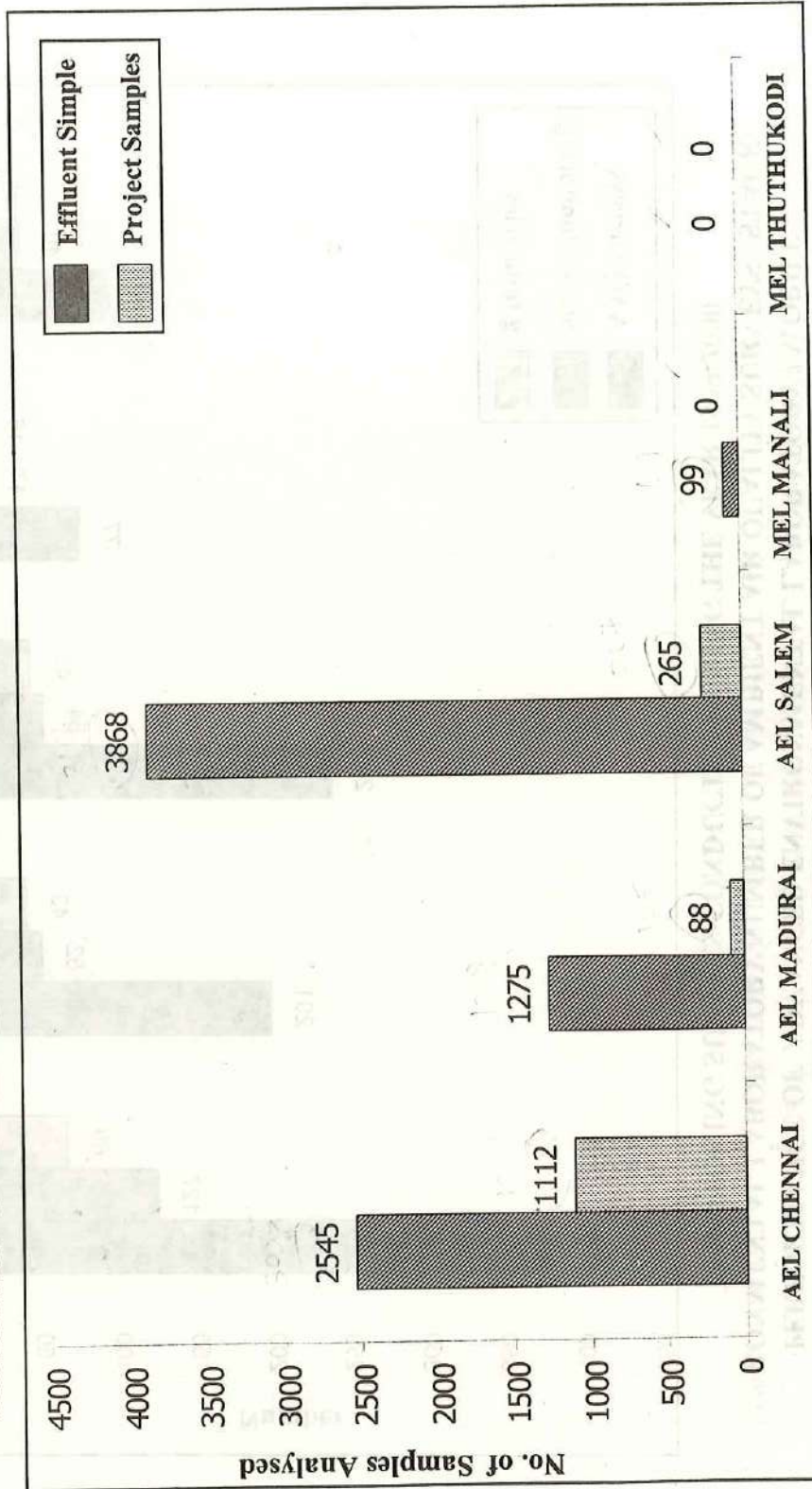
SL. NO.	NAME OF CETP	GOVT. OF INDIA	GOVT. OF TAMILNADU	TOTAL
<b>YEAR 1997-98</b>				
22	Ayyampettai - Muthialpettai	**13.00	13.20	26.20
23	Chettithangal	-	34.85	34.85
24	Pernambut (Eruguthi Mullumedu)	-	38.50	38.50
25	Ambur (Mittalam)	-	50.00	50.00
26	Pudur	-	35.50	35.50
27	Maligaihope	-	50.00	50.00
28	M.C. Road	-	50.00	50.00
29	Tarawali	-	50.00	50.00
30	Gundur	-	50.00	50.00
31	Ramji Nagar	-	15.00	15.00
32	Andipalayam (Tiruppur)	-	50.00	50.00
33	Mannarai(Tiruppur)	-	50.00	50.00
34	Manickapurampudur (Tiruppur)	-	31.75	31.75
35	Kasipalayam (Tiruppur)	-	50.00	50.00
36	Angeripalayam (Tiruppur)	-	50.00	50.00
37	Veerapandi (Tiruppur)	-	12.50	12.50
38	Chinnakarai (Tiruppur)	-	50.00	50.00
39	Kunnangalpalayam (Tiruppur)	-	50.00	50.00
40	Light House (Karur)	-	14.74	14.74
41	Sukkaliyur (Karur)	-	42.13	42.13
42	Sellandipalayam (Karur)	-	50.00	50.00
43	Karuppampalayam (Karur)	-	27.00	27.00
44	Melpudupet	**30.00	-	30.00
45	Ranipet -SIDCO	** 5.00	-	5.00
46	Visharam	** 3.25	-	3.25
47	Valayampet (Vaniyambadi)	** 27.50	-	27.50
48	SIPCOT - SIDCO Phase II (Ranipet)	**20.00	-	20.00

SL. NO.	NAME OF CETP	GOVT. OF INDIA	GOVT. OF TAMILNADU	TOTAL
<b>YEAR 1998-1999</b>				
49	Andipalayam-Tiruppur	53.75	3.75	57.50
50	Mannarai-Tiruppur	50.00	17.75	67.75
51	Manikapurampudur	25.00	-	25.00
52	Angeripalayam	50.00	130.00	180.00
53	Veerapandi	40.00	118.75	158.75
54	Chinnakarai	50.00	11.25	61.25
55	Kasipalayam	50.00	55.00	105.00
56	Kunnangalpalayam	54.00	4.00	58.00
57	R.K.Puram (Karur)	-	0.03	0.03
58	Amaravathi nagar (Karur)	**11.00	11.00	22.00
59	Tiruvai (Karur)	-	2.00	2.00
60	Andankoil (Karur)	-	3.59	3.59
61	Karuppampalayam (Karur)	27.00	-	27.00
62	Sellandipalayam (Karur)	-	6.25	6.25
<b>Year 1999 - 2000</b>				
63	Manikapurampudur	6.75	-	6.75
64	Veerapandi	128.75	-	128.75
65	Angeripalayam	130.00	-	130.00
66	Kasipalayam	5.00	-	5.00
67	Chinnakarai	11.25	-	11.25
68	Mannarai	17.75	-	17.75
69	Maligaihoppu (Ambur)	50.00	-	50.00
70	Light house area (Karur)	12.50	-	12.50
71	Perumalpet	50.00	-	50.00
72	R.K. Puram (Karur)	0.03	-	0.03
73	Chettithangal	31.25	-	31.25
74	Melpudupet	1.25	-	1.25
75	Thiruvai (Karur)	2.00	-	2.00

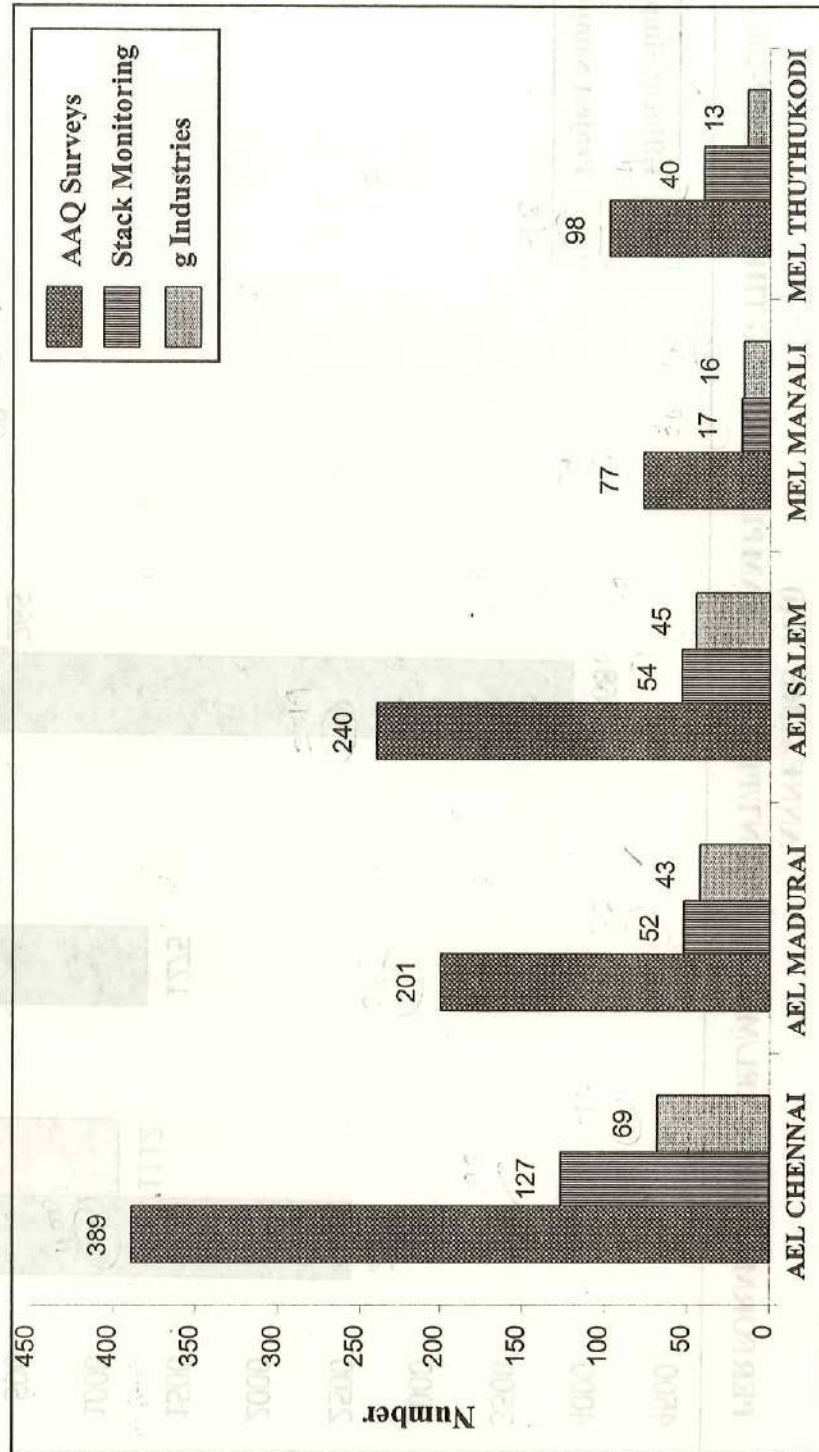
\* To be adjusted for other schemes

\*\* Amount released to IDBI

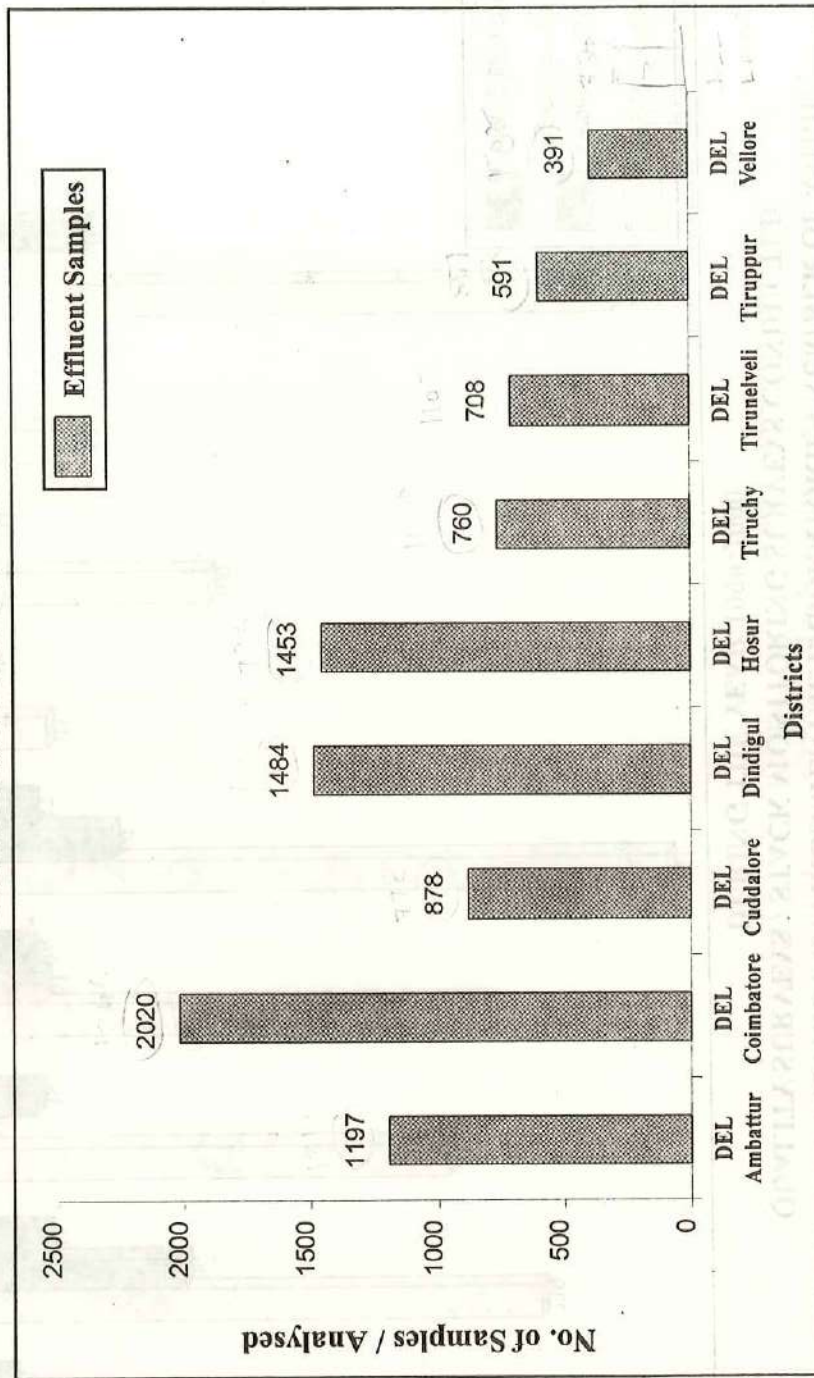
ANNEXURE - X (i)  
 PERFORMANCE OF AEL/MEL EFFLUENT/PROJECTS-SAMPLES DURING THE YEAR 1999-2000



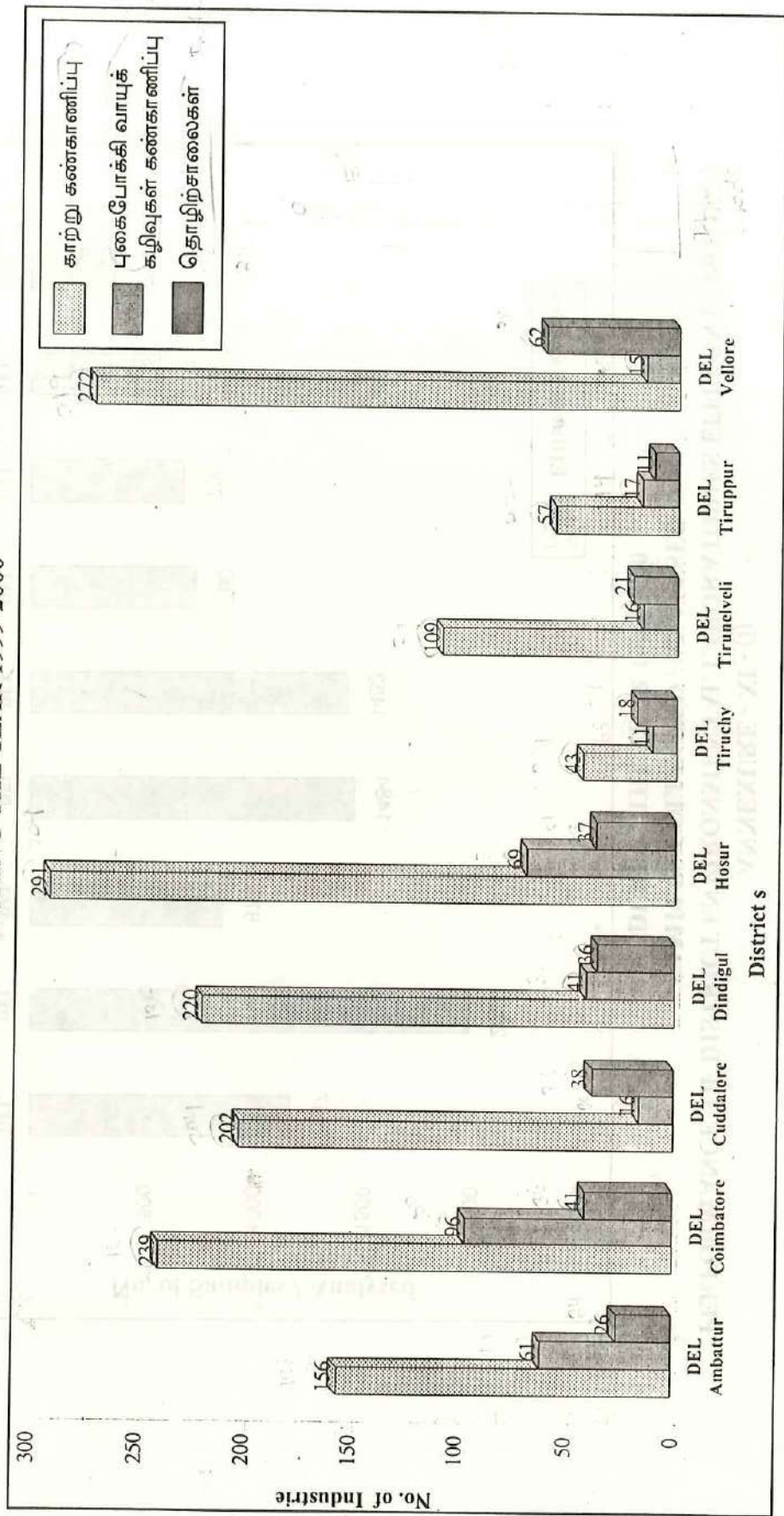
**ANNEXURE - X (ii)**  
**PERFORMANCE OF ADVANCED ENVIRONMENTAL LABORATORY / MOBILE ENVIRONMENTAL LABORATORY NUMBER OF AMBIENT AIR QUALITY SURVEYS / STACK MONITORING SURVEYS / INDUSTRIES CONDUCTED DURING THE YEAR 1999-2000**



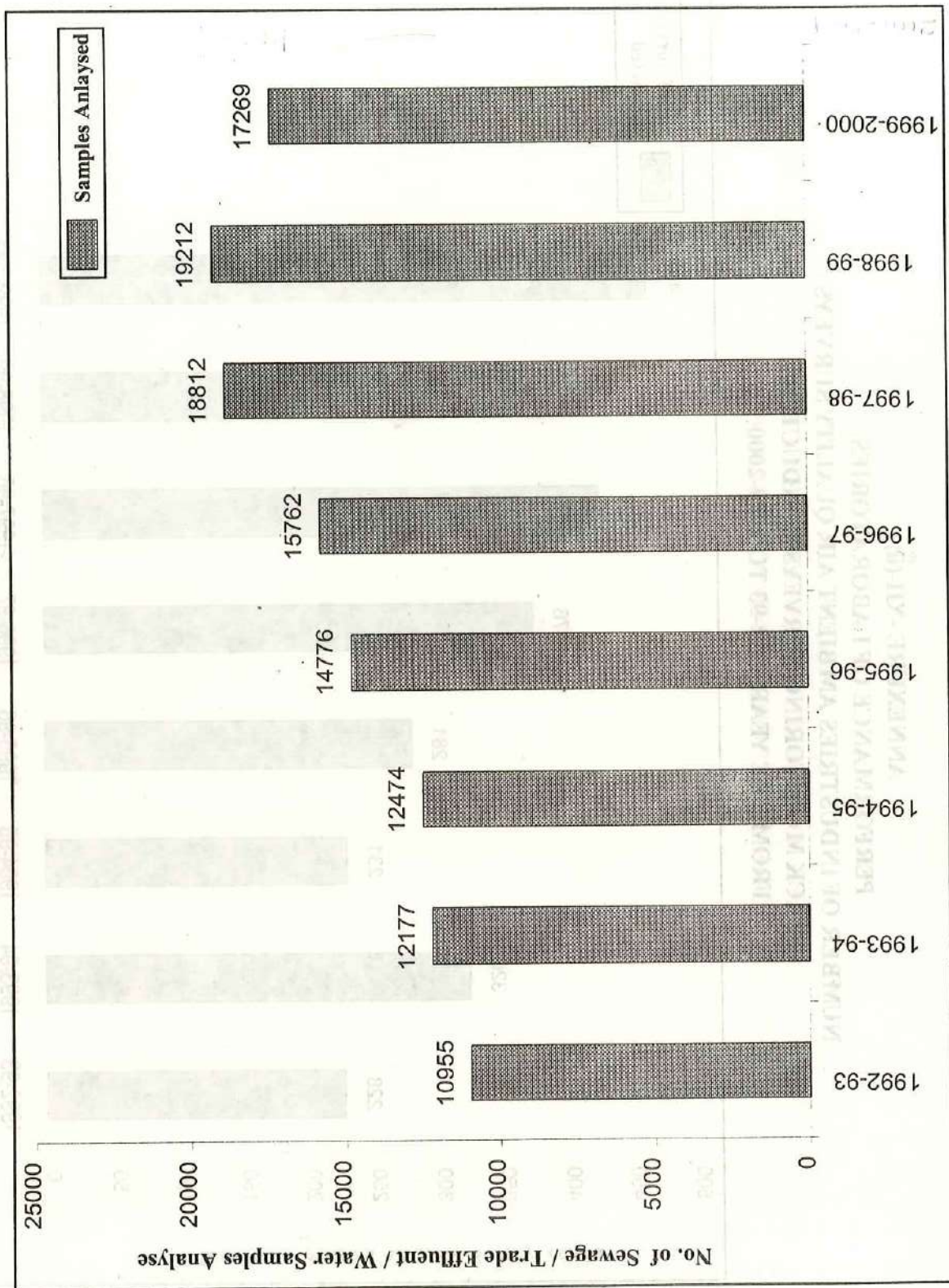
**ANNEXURE - XI - (i)**  
**PERFORMANCE OF DISTRICT ENVIRONMENTAL LABORATORIES EFFLUENT / PROJECT**  
**SAMPLES COLLECTED / ANALYSED**  
**DURING THE YEAR 1999-2000**



**ANNEXURE - XI (ii)**  
**PERFORMANCE OF DISTRICT ENVIRONMENTAL LABORATORIES NUMBER OF AMBIE**  
**QUALITY SURVEYS / STACK MONITORING SURVEYS CONDUCTED**  
**DURING THE YEAR 1999-2000**

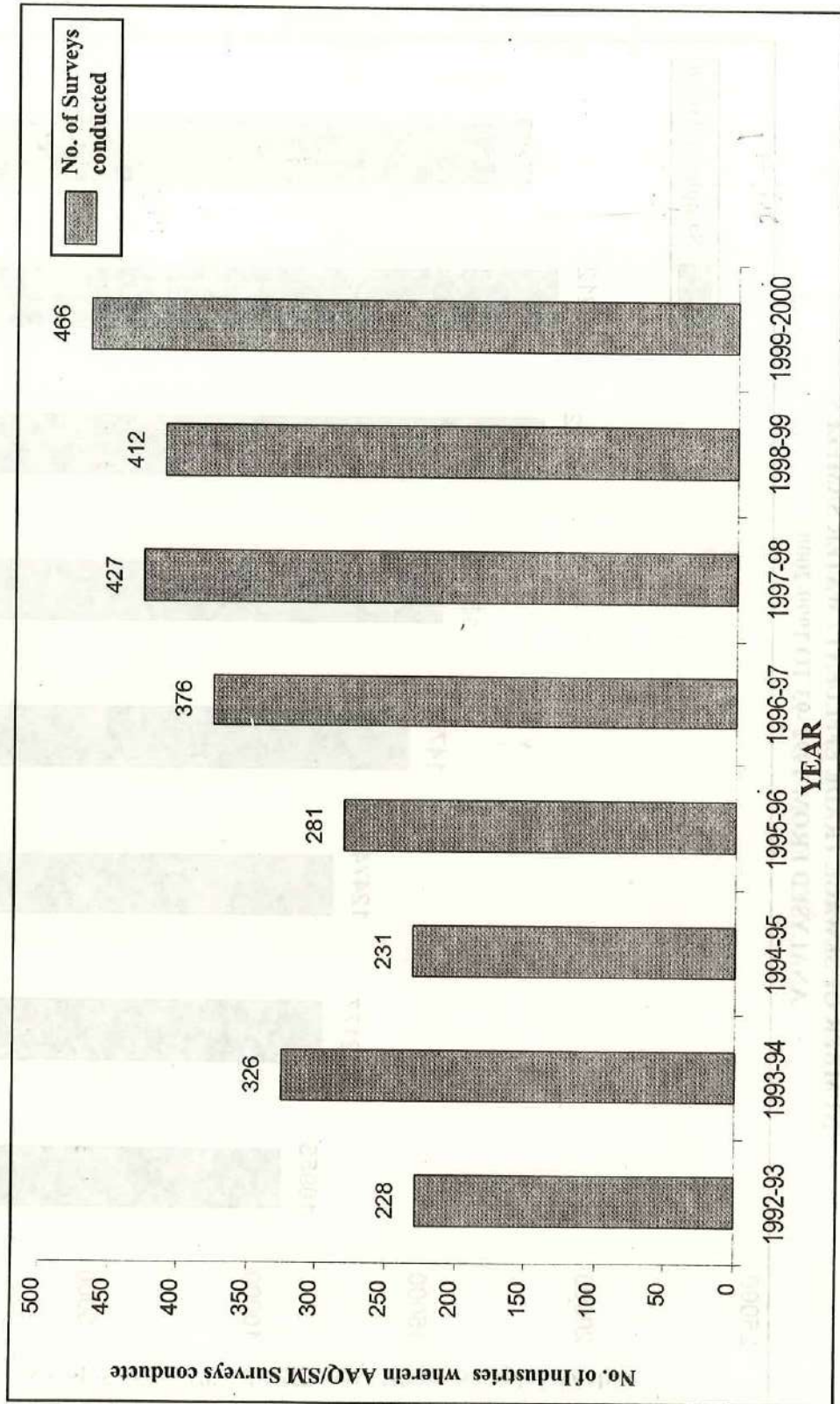


**ANNEXURE - XII (i)**  
**PERFORMANCE OF LABORATORIES**  
**NUMBER OF SEWAGE TRADE EFFLUENT / WATER SAMPLES**  
**ANALYSED FROM 1992 -93 TO 1999-2000**



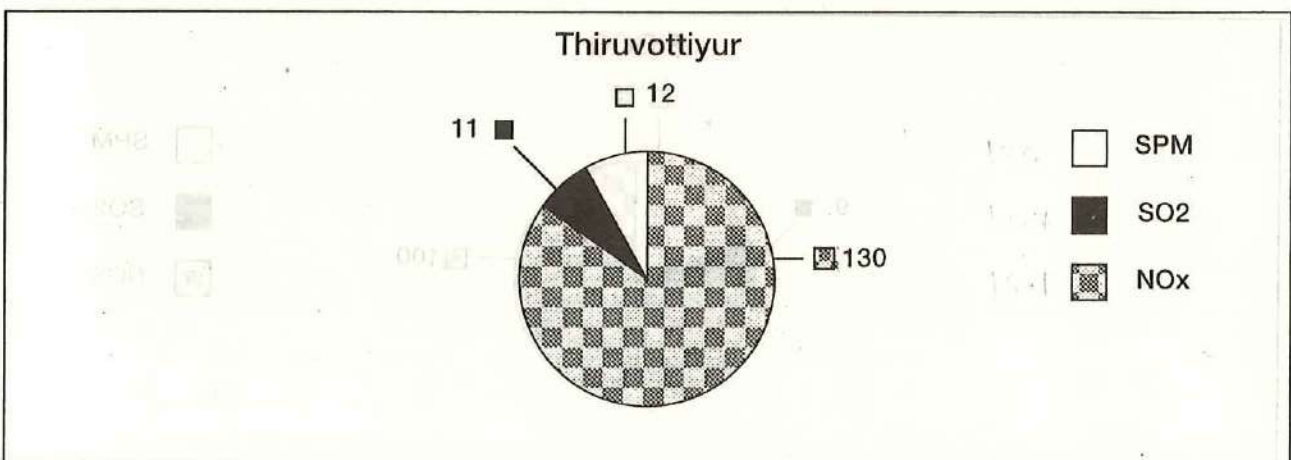
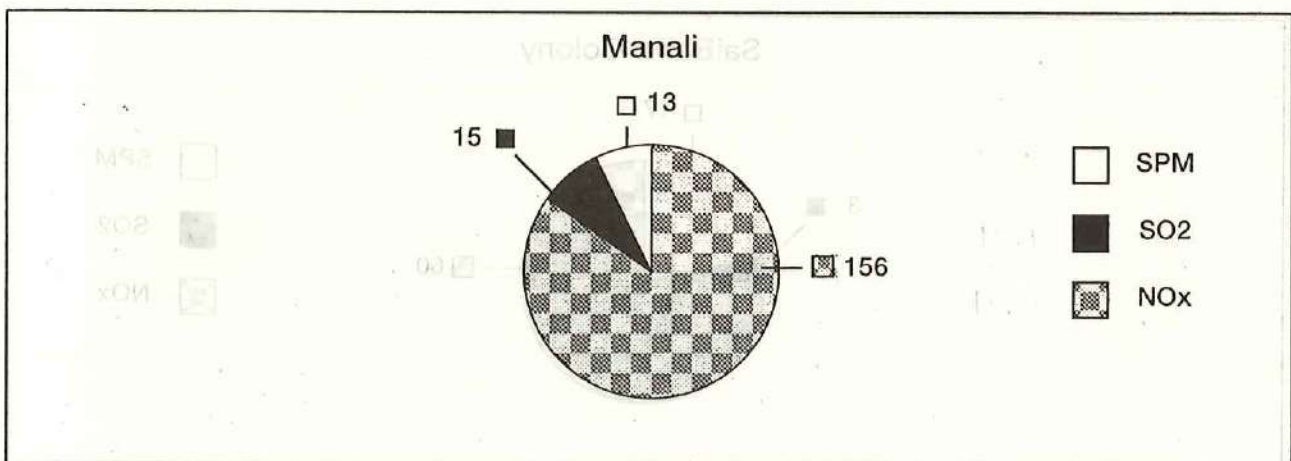
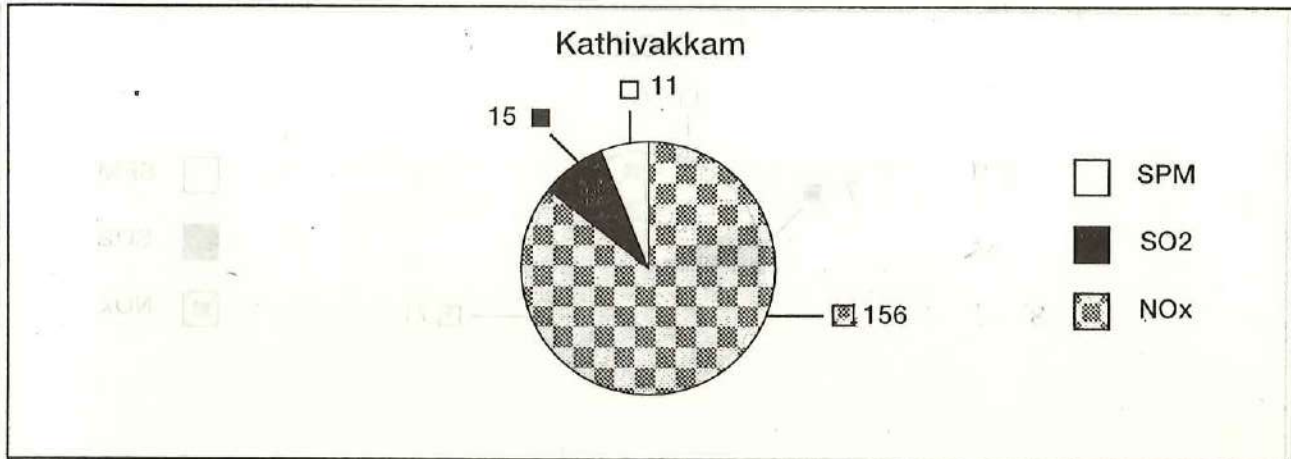


**ANNEXURE -XII-(ii)  
PERFORMANCE OF LABORATORIES.  
NUMBER OF INDUSTRIES AMBIENT AIR QUALITY SURVEYS /  
STACK MONITORING SURVEYS CONDUCTED  
FROM THE YEAR 1992-93 TO 1999-2000**



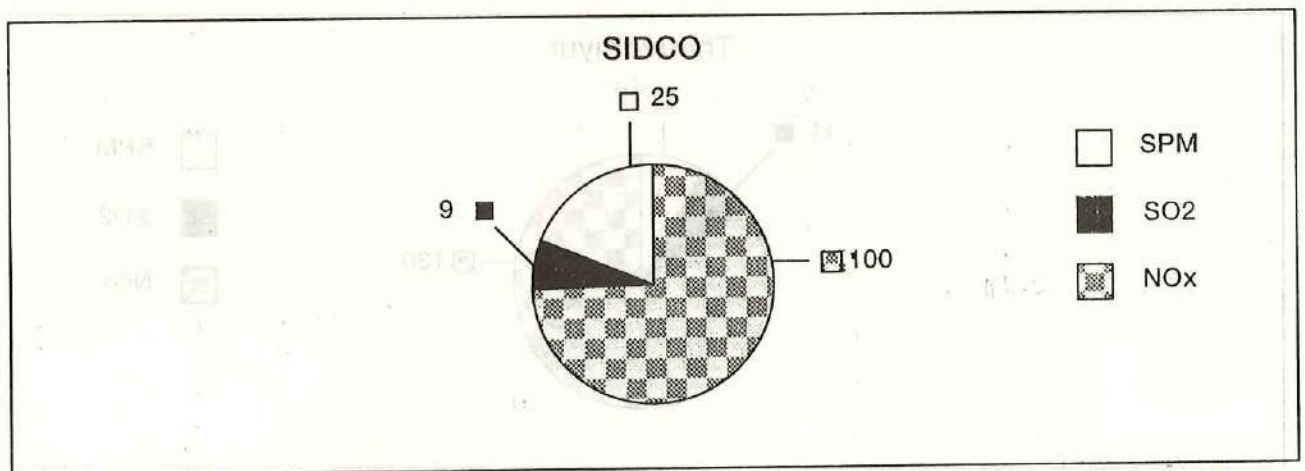
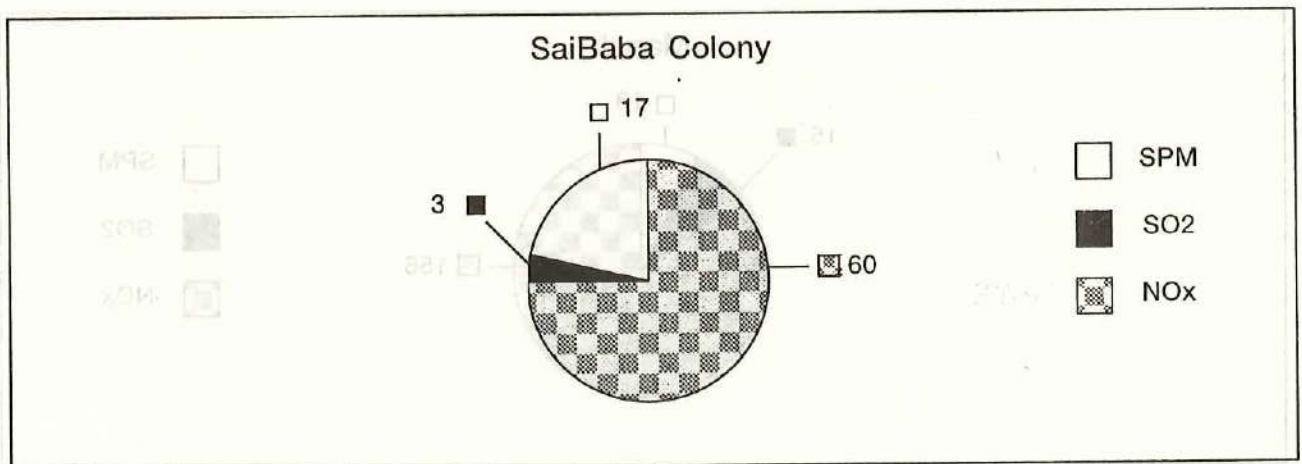
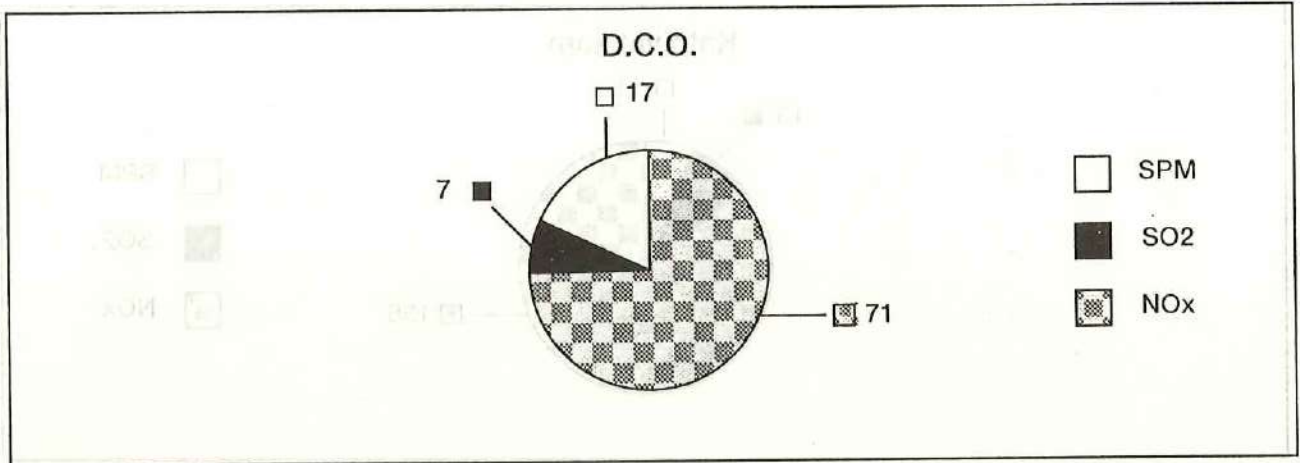
**ANNEXURE - XIII - A**  
**National Ambient Air Quality Monitoring**  
**Chennai 1999 - 2000**

**Annual Average Concentration of Pollutants**  
**( $\mu\text{g}/\text{m}^3$ )**



**ANNEXURE - XIII - B**  
**National Ambient Air Quality Monitoring**  
**Coimbatore 1999 - 2000**

**Annual Average Concentration of Pollutants**  
**( $\mu\text{g}/\text{m}^3$ )**



**ANNEXURE - XIII - C**

Tamil Nadu Pollution Control Board

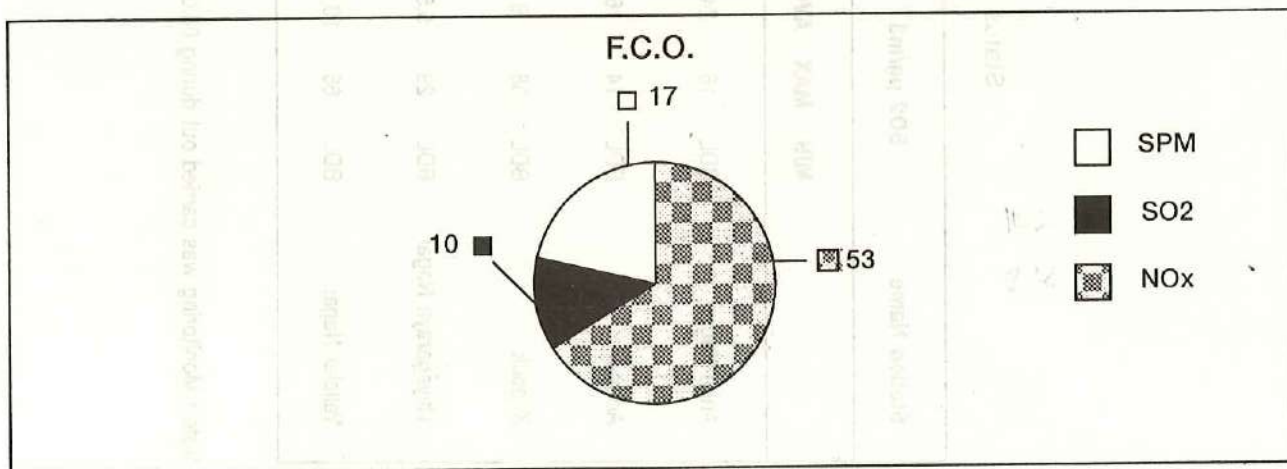
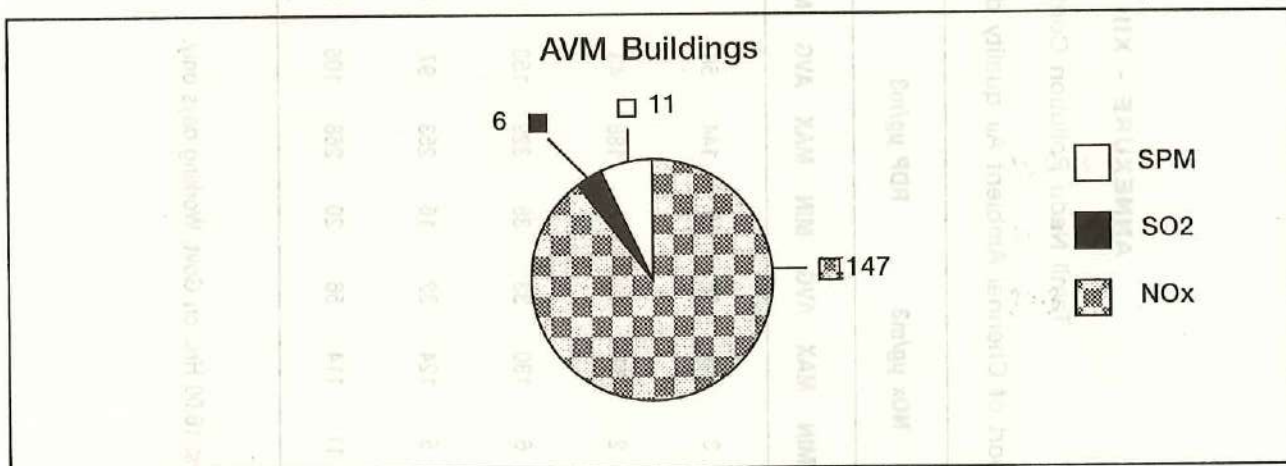
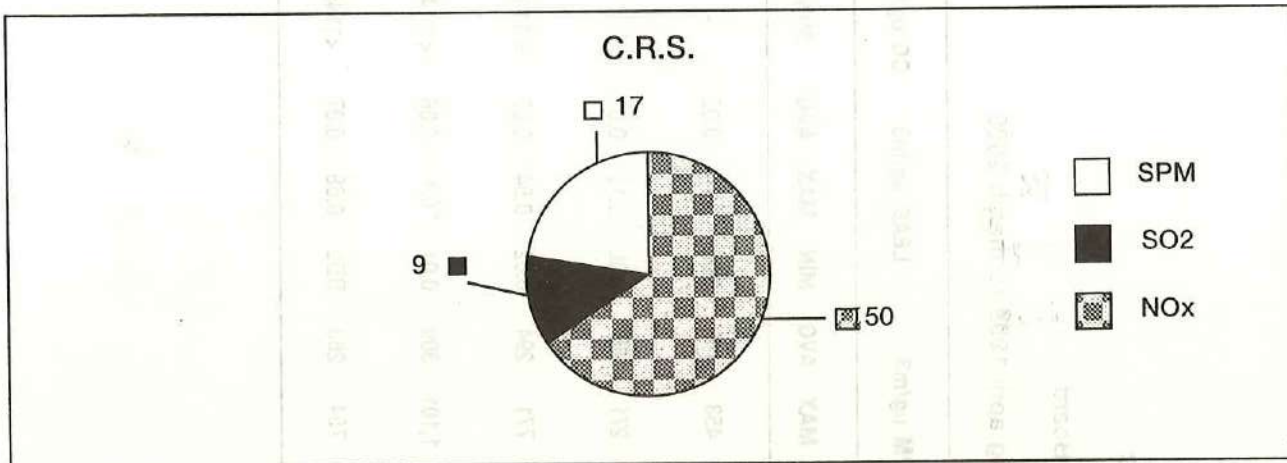
Status Report of Chennai Ambient Air quality during april 1999 to march 2000

Station Name	SO <sub>2</sub> µg/m <sup>3</sup>			NO <sub>x</sub> µg/m <sup>3</sup>			RDP µg/m <sup>3</sup>			SPM µg/m <sup>3</sup>			LEAD µg/m <sup>3</sup>			CO µg/m <sup>3</sup>		
	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG
Anna Nagar	BDL	16	24	3	46	15	5	144	56	23	453	108	BDL	0.14	0.02	-	-	-
Adayar	BDL	14	16	2	39	12	7	186	43	15	271	66	BDL	0.11	0.02	-	-	-
Kilpauk	BDL	38	8	6	130	33	36	329	153	59	771	294	0.02	0.54	0.07	< 1145	8,015	1,673
Thiyagaraya Nagar	BDL	29	5.5	5	124	32	16	253	97	64	1,101	309	0.01	0.4	0.06	< 1145	2,290	< 1145
Vallalar Nagar	BDL	66	10.5	11	114	56	20	268	106	20	754	263	BDL	0.68	0.07	< 1145	3,435	< 1145

Note : Monitoring was carried out during 08.00 Hrs. to 16.00 Hrs. on Govt. Working days only.

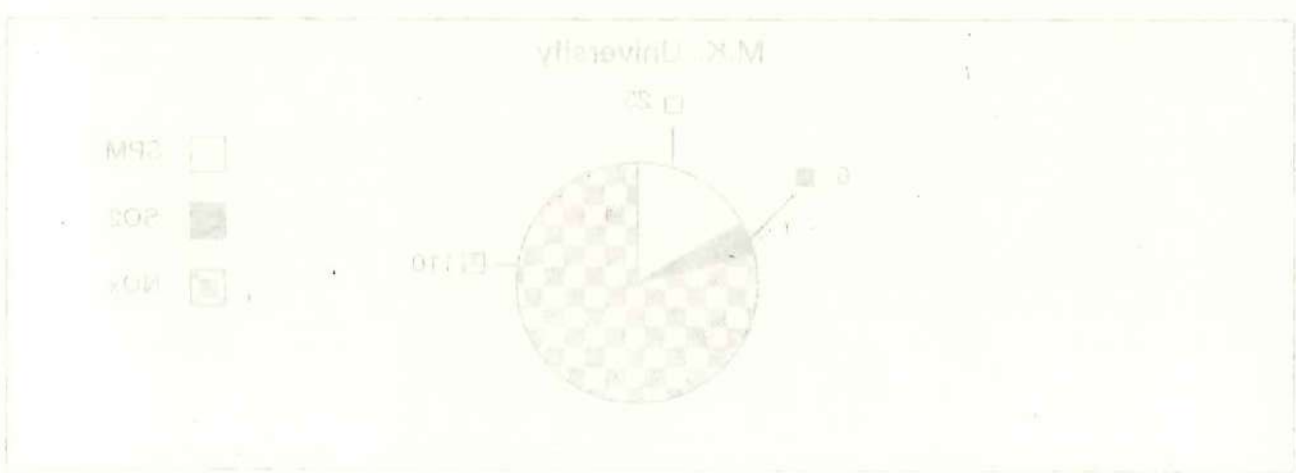
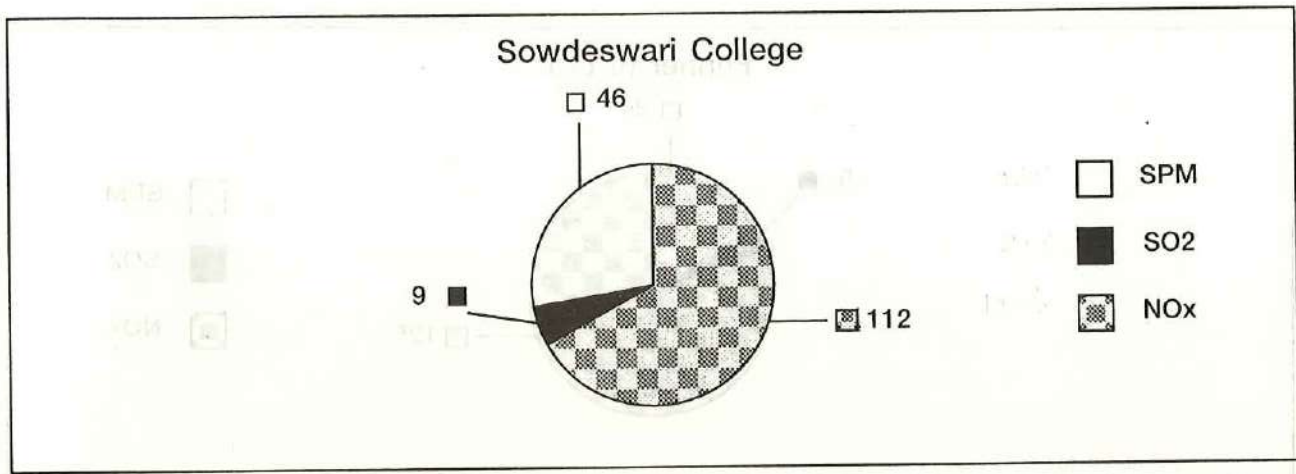
National Ambient Air Quality Monitoring  
Thuthukudi 1999 - 2000

Annual Average Concentration of Pollutants  
( $\mu\text{g}/\text{m}^3$ )



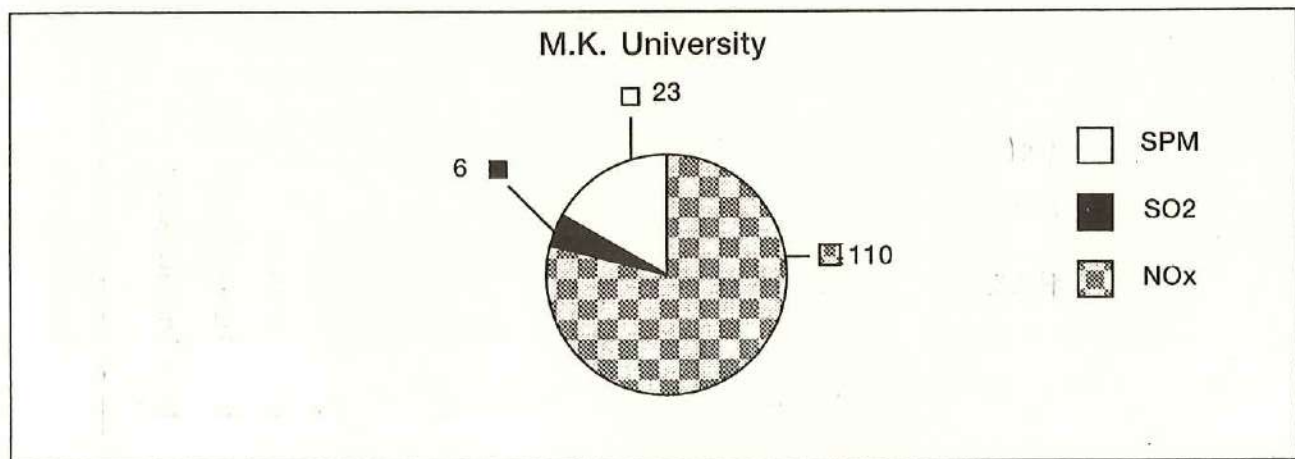
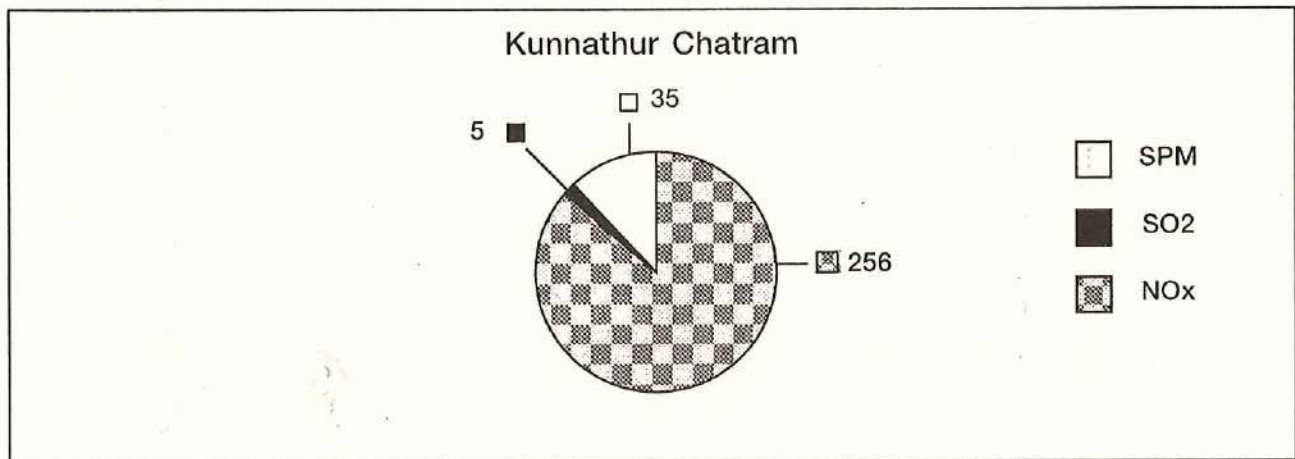
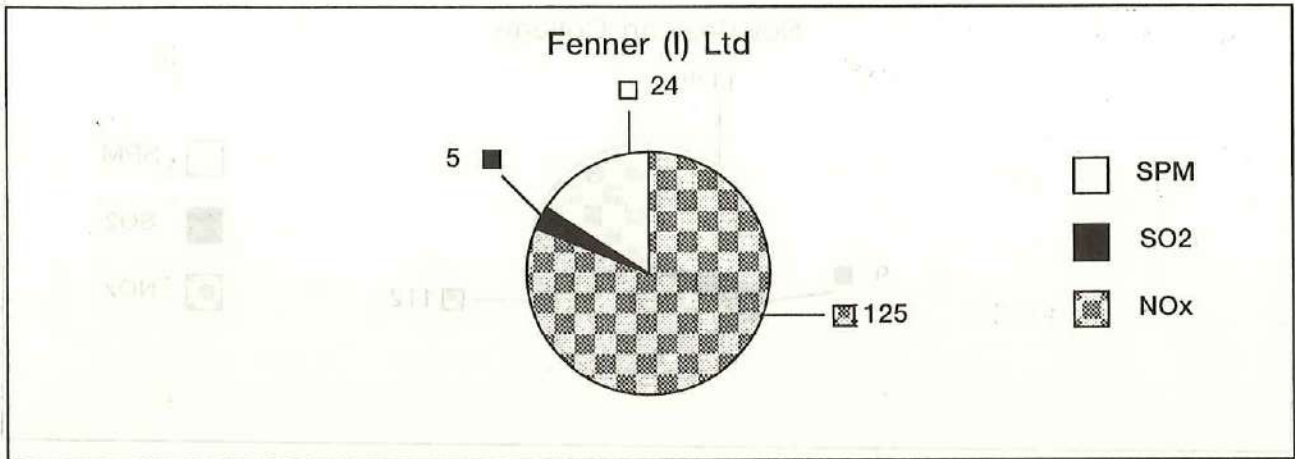
National Ambient Air Quality Monitoring  
 Salem 1999 - 2000

Annual Average Concentration of Pollutants  
 ( $\mu\text{g}/\text{m}^3$ )



National Ambient Air Quality Monitoring  
Madurai 1999 - 2000

Annual Average Concentration of Pollutants  
( $\mu\text{g}/\text{m}^3$ )



## ANNEXURE - XIV

RIVER WATER QUALITY - RIVER CAUVERY  
UNDER MINARS PROGRAMME, 1999 - 2000

Sl. Station	ph (Range)	DO mg/l	BOD mg/l	Cl mg/l	SO <sub>2</sub> mg/l	TDS mg/l	NO <sub>3</sub> mg/l	TH mg/l	FC MPN/ 100 ml	TC MPN/ 100 ml
1. Pathrakaliamman Koil	7.2 - 8.2	7.5	1.5	16	14	168	0.25	64	4,680	7,450
2. Trichy U/S	7.9 - 8.7	5.9	2.0	55	20	390	0.27	201	6,360	11,820
3. Grand Anaicut	7.7 - 8.7	6.3	1.7	86	20	465	0.28	220	660	2,480
4. Sirumugai	7.1 - 7.7	7.8	1.5	22	24	271	0.28	98	7,060	13,530
5. Bhavani	7.9 - 8.8	6.2	1.5	52	14	368	0.30	145	1,470	2,410
6. Karunthattankudi	8.1 - 8.9	7.3	0.9	57	8	437	0.28	210	210	3,250
7. Madathukulam	7.6 - 9.1	8.1	1.3	40	15	242	0.34	126	130	2,760
8. Erode	7.9 - 8.9	6.5	2.5	63	26	416	0.26	210	610	2,730
9. Bhavani Sagar	7.9 - 8.6	7.4	1.6	23	13	295	0.24	183	385	1,600
10. R.N. Pudur	7.8 - 8.7	7.0	1.2	35	12	277	0.20	165	355	1,080
11. P. Vellur	7.8 - 8.7	8.2	1.6	42	12	315	0.30	147	110	900
12. Mohannur	8.2 - 8.9	8.7	1.0	33	13	205	0.31	160	165	1,750
13. Trichy D/S	7.8 - 8.8	6.7	1.0	49	16	362	0.21	187	1,260	2,160
14. Coleroon	7.8 - 8.9	9.1	1.1	65	26	372	0.26	160	400	4,870
15. Pitchavaram	7.6 - 9.0	5.9	1.4	78	28	424	0.28	175	1,420	6,700
16. Thirumukkudal	7.7 - 8.5	7.2	1.1	42	24	348	0.30	196	1,040	2,410
<b>Standards I.S.I.</b>	<b>6.5 - 8.5</b>	<b>4</b>	<b>3</b>	<b>600</b>	<b>400</b>	<b>1500</b>	<b>50</b>	<b>-</b>	<b>-</b>	<b>5,000</b>



**ANNEXURE - XV**

**STATEMENT OF VEM PROGRAMME**

The number of Vehicles tested and Emission Levels Recorded

Period : April 1999 to March 2000

Station	Total Vehicle tested	Total Vehicle exceeded limit	Total Vehicle tested	Total Vehicle exceeded limit	Total Vehicle tested	Total Vehicle exceeded limit
Chennai City	23015	3646	211	14	23226	3660
Chengalpattu	1909	222	623	19	2532	241
Kancheepuram	1856	163	741	11	2597	174
Udhagamandalam	2752	1467	1376	56	4128	1523
Kattery	342	208	116	6	458	214
Dindigul	3729	898	1032	18	4761	916
Palani	1687	902	666	81	2353	983

## ANNEXURE - XVI

### Summary of Pollution control status of 17 categories of Industries in Tamilnadu as on 31.03.2000

Sl.	Category	Status (No. of Units)		
		Total No. of Units	Closed as per the direction of the board	Complying with Standards
1.	Aluminium Sheller	1	-	1
2.	Caustic Soda	3	-	3
3.	Cement*	15	-	15
4.	Copper Smeller	1	-	1
5.	Distillery	16	-	16
6.	Dyes & Dye Intermediate	1	-	1
7.	Fertilizer	9	-	9
8.	Integrated Iron & Steel	1	-	1
9.	Tanneries	79	-	79
10.	Pesticide	2	-	2
11.	Petrochemicals	6	-	6
12.	Basic Drugs & Pharmaceutical	15	-	15
13.	Pulp & Paper**	5	-	5
14.	Oil Refinery	2	-	2
15.	Sugar	36	-	36
16.	Termal Power Plant	9	-	9
17.	Zinc Smeller	-	-	-
	<b>Total</b>	<b>201</b>	<b>-</b>	<b>201</b>

\* 200 Tpd and above

\*\* 30 Tpd and above

## Annexure- XVII

### Status of legal cases as on 31.3.1999

#### Prosecutions launched against Polluting Industries

##### A. Water (Prevention and Control of Pollution) Act, 1974

1	Number of prosecutions launched (complaint lodged in court)	321
2	Out of number at( Sl. 1 above),Number of cases in which final orders were passed by the court	236
3	Out of the cases decided , No. of cases in which:	
	a. decisions were in favour of the Board	73
	b. decisions were against the Board	132
4	Out of Sl. 3 (a) above, no. of cases in which	
	a. Conviction orders were passed	73
	b. Restraint orders were passed	-
	c. Cases withdrawn	15
5	No. of cases pending in the court	85

##### B. Air (Prevention and Control of Pollution) Act, 1981

1.	No. of prosecutions launched	134
2	Out of number at (Sl. 1 above),Number of cases in which final orders were passed by the court	117
3	Out of the cases decided , No. of cases in which:	
	a. decisions were in favour of the Board	78
	b. decisions were against the Board	35
4	Out of Sl. 3 (a) above, no. of cases in which	
	a. Conviction orders were passed	78
	b. Restraint orders were passed	-
	c. Cases withdrawn	3
5	No. of cases pending in the court	17

##### C. Section 133 of the Code of Criminal Procedure

1	No. of prosecutions launched	1
2	Out of number at( Sl. 1 above),Number of cases in which final orders were passed by the court	1
3	Out of the cases decided , No. of cases in which:	
	a. decisions were in favour of the Board	1
	b. decisions were against the Board	-

4 Out of Sl. 3 (a) above, no. of cases in which

a. Conviction orders were passed -

b. Restraint orders were passed -

c. Cases withdrawn -

5 No. of cases pending in the court -

#### D. Writs in the High Court

1 Number of cases filed 1199

2 Number of cases decided by the Court 931

3 Number of cases where decisions were in favour of the Board 768

4 Number of cases where decisions were against the Board 163

5 Number of cases pending in the Court 268

#### E. Public Interest Litigation Cases

1 Number of cases filed 731

2 Number of cases decided by the Court 525

3 Number of cases where decisions were in favour of the Board 407

4 Number of cases where decisions were against the Board 118

5 Number of cases pending in the Court 206

#### F. Closure Orders

1 Total Number of closure orders issued as on 31.3.2000 under both Acts 159

#### G. Appellate Authority

1 Total number of Appeals pending 31

2 Total number of Appeals disposed 43



**ANNUAL ACCOUNTS FOR THE YEAR  
1999 - 2000**

**TAMILNADU POLLUTION CONTROL BOARD  
CHENNAI - 600 032**

ANNUAL ACCOUNTS FOR THE YEAR  
1999 - 2000

TAMILNADU POLLUTION CONTROL BOARD  
CHENNAI - 600 032

Receipts and payments Account  
for the year ended 31st March 2000

160 - 163

Income and Expenditure Account  
for the year ended 31st March 2000

164 - 165

Balance Sheet  
as at 31st March 2000

166 - 169



## AUDITOR'S REPORT

### ON THE ACCOUNTS OF THE TAMIL NADU POLLUTION CONTROL BOARD FOR THE YEAR ENDED 31<sup>ST</sup> MARCH 2000.

We have audited the attached Balance Sheet, the Receipts and Payments Account and the Income and Expenditure Account for the year ended 31<sup>st</sup> March 2000, of Tamil Nadu Pollution Control Board and signed by us this even date and have to report thereon as under:

- a) We have obtained all information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit.
- b) In our opinion, the Board has kept proper books of account, so far as appears from our examination of such books.
- c) 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 in this report are in agreement with the books of account maintained by the Board.
- d) It is noted that demands regarding "Consent fees" are raised on the basis of fixed Asset values as declared by the applicants in many cases. It was observed that no indication or note was available at Board Office indicating the basis of the levy as to whether fees has been computed on the value of assets indicated by Audited Balance Sheet, valuers' certificates or the Board's assessment's as the case may be. The Board is collecting cess and consent fees, however, necessary information/data is not available to determine whether all industries to which the provision of the Act applies have paid cess and consent fees. In absence of such information, income from this head has been recognised on the basis of available records. While cess is accounted on accrual basis the consent fees is accounted on receipt basis only.
- e) The Board has an Internal Audit System but the audit is being conducted for the previous years for which statutory audit has already been completed and not for the period under audit.
- f) In our opinion and to the best of our information and according to explanations given to us, the said accounts, read with the Schedules thereto and the notes thereon attached hereto and subject to the remarks contained in para (d) and (e) above and subject to Notes (2) to (5) regarding Cess Receivable, Advance for purchase of land, Advance to suppliers / staff and funds in transit 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:

- (i) In the case of the Balance Sheet, of the State of affairs of the Board as 31<sup>st</sup> March 2000
- (ii) In the case of Receipts and Payments account, of the total receipts and payments of the Board for the year ended 31<sup>st</sup> March 2000, and
- (iii) In the case of the Income and Expenditure account of the excess of Income over Expenditure of the Board for the Year ended 31<sup>st</sup> March 2000.

Chennai,  
29 November 2000

For M/s. **ESSVEEYAR,**  
Chartered Accountants

Sd/-

**K.R.T. Krishnamoorthi**

Partner

**TAMIL NADU POLLUTION CONTROL**

Receipts and Payments for the year

See Rules 36 of Tamil Nadu Water

PREVIOUS YEAR	RECEIPTS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
	<b>OPENING BALANCE</b>		
58140430.96	a. Bank	54017038.67	
13935.50	b. Cash	18013.50	
5146398.00	c. Funds in Transit	6371978.50	60407030.67
	<b>I. GRANTS RECEIVED</b>		
0.00	a. From Government	—	
0.00	b. From other Agencies	—	—
	<b>II. FEES</b>		
15.00	a. Consultant Registration Fees	620000.00	
919610.00	b. Cost of Application	670915.00	
102042166.10	c. Consent Fees	86827766.30	
27335448.32	d. Cess Collection	38840450.15	126959131.45
	<b>III. INTEREST ON INVESTMENT</b>		
44817089.00			52760388.00
	<b>IV. MISCELLANEOUS</b>		
29946820.10	a. Others (Schedule-A)	29832024.83	
23464178.00	b. Cess Re-imbursement	16971686.00	
0.00	c. CPCB for Green Belt Scheme	40000000.00	86803710.83
291826090.98	<b>C/o</b>		326930260.95

**BOARD, CHENNAI - 600 032**

ended 31 March 2000.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	PAYMENTS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
	<b>I. CAPITAL EXPENDITURE</b>		
90000.00	a. Assets - Land Advance and		
13858578.20	Building Development	11530000.00	
712022.00	b. Laboratory Equipment	498208.00	
0.00	c. Vehicles	18090.00	
989322.00	d. Furniture	370169.00	
128618.00	e. Office Appliance	437490.00	
759383.00	f. Library Books	636935.00	
753486.00	g. Schemes	16650.00	
1900.00	h. Security Deposit	0.00	
57500.00	i. Software Development	9675.00	
118677.50	j. Electrical	68528.00	
217488.00	k. Lab. Chemicals etc.,	0.00	13585745.00
	<b>II. REVENUE EXPENDITURE</b>		
	<b>A. ADMINISTRATIVE</b>		
37530704.25	i. Salaries	40094508.25	
1234849.00	ii. Pension & Gratuity Contribution	2200743.00	
21193844.70	iii. Contingent Expenditure	27178140.80	
2528949.00	iv. Surrender Leave Salary	2931291.00	
1214778.00	v. Bonus	1233557.00	
1976073.65	vi. Medical Expenses	2020696.50	75658936.55
	<b>B. BOARD LABORATORY</b>		
207141.55	i. Running Expenses of Lab.		225362.15
83573314.85	<b>C/o</b>		89470043.70



**BOARD, CHENNAI - 600 032**

ended 31 March 2000.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	PAYMENTS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
83573314.85	<b>B/F</b>		89470043.70
3236808.85	<b>C. Running &amp; Maintenance of Vehicle</b>		3309463.32
	<b>D. MAINTENANCE &amp; REPAIRS</b>		
4309106.25	i. Buildings and land, Rent	4077487.00	
14175.00	ii. Furniture & Fixture	51068.00	
387371.50	iii. Scientific instruments	306756.00	
546254.00	iv. Office Appliance	449868.50	
558536.75	v. Electrical Installation	525479.60	
86507.00	vi. Insurance of Assets	85913.00	
2969814.50	vii. Other Assets	0.00	5496572.10
	<b>E. Fees to Consultant and Specialists</b>		133387.50
42671.00	<b>F. Law Charges</b>		179811.00
433315.00	<b>G. Expenses for audit</b>		43769.50
40817.75	<b>H. CPCB for Green Belt Scheme</b>		2000000.00
	<b>III MISCELLANEOUS (Schedule-C)</b>		20741656.30
25429467.17	a. Cess Remittance		36198342.00
27797899.00	<b>IV ADVANCE (Schedule - D)</b>		4505718.30
3575492.70	<b>V Deposits</b>		
	a. Short Term Deposits	967900000.00	
95953246.00	b. Others (Schedule - E)	61883300.75	1029783300.75
87976897.04	<b>VI CLOSING BALANCE</b>		
	Bank	34152503.94	
54017038.67	Cash	16600.00	
18013.50	Funds in Transit	5692144.00	39861247.94
6371978.50			
397338725.03	<b>Total</b>		1249723312.41

Subject to our report of even date & Schedules + notes attached  
For M/s. ESSVEEYAR Chartered Accountants

sd/-

**Sheela Rani Chunkath I.A.S.**  
Chairperson

sd/-

**K.R.T. Krishnamoorthi**  
Partner

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

PREVIOUS YEAR		EXPENDITURE	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
		<b>REVENUE EXPENDITURE</b>				
		<b>A. ADMINISTRATIVE</b>				
2124396.80		i. Pay of officers	2580398.00			
39929145.95		ii. Pay of Establishment	45618050.30			
34131101.25		iii. Allowance & Honororia (Sch-F)	34037035.00			
		iv. Contribution to Gratuity & Provision for Pension	9719348.00			
8723300.00		v. Surrender Leave Salary	2912972.50			
2589971.50						94867803.80
1910036.70		<b>B. Running Expenses of Labs.</b>				1368306.27
		<b>C. Running and Maintenance of Vehicle (Sch- G)</b>				3579931.37
3397097.10		<b>D. Maintenance and Repairs</b>				
		i. Furniture & Fixtures	53681.00			
13447.00		ii. Lab. Equipments & Instruments	421421.00			
332482.55		iii. Office Appliance	546072.50			
395636.00		iv. Electrical Installation	1018287.60			
620334.75		v. Building	1948073.50			
1110763.50						3987535.60
		<b>E. Fees to Consultants and Specialists</b>				332354.50
412643.75		<b>F. Law Charges</b>				279811.00
488200.00		<b>G. Depreciation (Form XV)</b>				11625215.00
13145630.92		<b>H. Miscellaneous (Sch - H)</b>				19125481.95
18403054.47		<b>I. Fees for Audit</b>				27500.00
26250.00		<b>J. Prior Period Expenditure</b>				262590.10
21258383.17		<b>K. Excess of income over Exp.</b>				88235920.98
75014822.19		<b>L. Notes to B/S (Sch-S)</b>				
224026697.60		<b>Total</b>				223692450.57

Chennai - 600 032  
Date: 29/11/2000

sd/-  
**D. Kannan** B.Com FCA  
Deputy Director (F&A)

sd/-  
**R. Devaki B.A.**  
Fin. Adviser

sd/-  
**G. Rengasamy B.E., M.Tech.**  
Member Secretary

**OF ACCOUNT**

ended 31 March 2000.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR		INCOME	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
		<b>I. GRANTS RECEIVED</b>				
	—	a. From Government		—		
	—	b. From other Agencies		—		
		Less: Amount utilised for Capital Expenditure		—		
	—	Net Grant available for Revenue Expenditure				—
118923628.10		<b>II. Fees (Sch -I)</b>			114219408.30	
24593405.70		<b>III. Services &amp; Rental Charges (Lab Analysis Charges Sch - J)</b>			26217135.00	
739752.80		<b>IV. Miscellaneous Receipts</b>				
23464178.00		i. Others (Sch - K)	2124622.27			
		ii. Cess Reimbursement	16971686.00		19096308.27	
56305733.00		<b>V Interest on Investment</b>			64159599.00	
224026697.60		<b>Total</b>			223692450.57	

Subject to our report of even date & Schedules + notes attached  
**For M/s. ESSVEEYAR Chartered Accountants**

sd/-  
**Sheela Rani Chunkath I.A.S.**  
 Chairperson

sd/-  
**K.R.T. Krishnamoorthi**  
 Partner



**ANNUAL STATEMENT**

Balance Sheet as

See Rules 36 of Tamil Nadu Water

PREVIOUS YEAR		LIABILITIES	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
		<b>A. CAPITAL FUND</b>				
		a. GRANTS				
50526922.18		i. Grants received from Govt. for capital exp. upto 01.04.1999	50526922.18			
		ii. Grants received from Govt. for capital exp. During the current year and utilised upto 31.3.2000		—		
		iii. Grants received towards specific schemes from other agencies		—		
						50526922.18
		b. Excess of Income over Expenditure				
375843570.56		i. As at 01.04.99	437253506.75			
(13604886.00)		ii. Less : Amount transferred to Depreciation Fund	(11625215.00)			
			425628291.75			
75014822.19		iii. Add : Surplus during the year	88235920.98			
						513864212.73
88616795.16		c. Depreciation Fund				100242010.16
		<b>B. OTHER DEPOSITS</b>				
2483876.33		i. Deposits for supply & works (Schedule L)	2711839.33			
43905819.05		ii. Refundable Performance Guarantee Deposits	42234319.05			
						44946158.38
		<b>C. AMOUNT DUE</b>				
455995581.49		i. Cess Payable	517312705.23			
(1624425.47)		Less : Provision	(287046.54)			
			517025658.69			
9150834.54		ii. Others (Schedule M)	12965049.56			
						529990708.25
1086308910.03		<b>C/o.</b>				1239570011.70

**OF ACCOUNT**

on 31 March 2000.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR		ASSETS	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
8376224.65		<b>I. FIXED ASSETS</b>				
		a. <b>LAND DEVELOPMENT</b>				8376224.65
		b. <b>Building under Construction</b>				
4000000.00		i. Hosur	6180000.00			
4000000.00		ii. Tirunelveli	5500000.00			
2000000.00		iii. Trichy	5500000.00			
4520000.00		iv. Madurai	8870000.00			
						26050000.00
		<b>II. OTHER ASSETS</b>				
77033316.24		a. <b>As per Form XV</b>				71486991.24
		b. <b>Stock in hand</b>				
682942.15		i. Lab Chemicals	1010760.64			
1050889.26		ii. Glassware	1040111.73			
202479.16		iii. Misc. Stores	240706.96			
713866.33		iv. Filter Paper	857674.80			
						3149254.13
		<b>III. SUNDRY DEBTORS</b>				
		<b>Cess Receivable</b>				
354716517.97		a. From Industries	410210630.06			
99851983.30		b. From Local Bodies	102936272.40			
						513146902.46
(1624425.47)		Less : Provision for doubtful Debts	(287046.54)			
						512859855.92
555523793.59		<b>C/o.</b>				621922325.94



**OF ACCOUNT**

on 31 March 2000.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR		ASSETS	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
Rs.	Ps.		Rs.	Ps.	Rs.	Ps.
555523793.59		<b>B/f</b>				621922325.94
		<b>IV. ADVANCES &amp; DEPOSITS</b>				
50137382.94		a. Misc. amounts recoverable (Schedule - O)	67116281.34			
4810765.00		b. Others amounts recoverable (Schedule - P)	4825531.25			
1394644.40		c. Deposits (Schedule - Q)	1386495.40			
						73328307.99
		<b>V. CASH</b>				
		<b>a. Deposits</b>				
559167244.00		i. Term Deposits with Banks (Schedule - R)				683219790.00
54017038.67		<b>b. Cash at Bank</b>	34152503.94			
18013.50		<b>c. Cash in Hand</b>	16600.00			
6371978.50		<b>d. Cash in Transit</b>	5692144.00			
						39861247.94
		<b>Total</b>				
1231440860.60						1418331671.87

Subject to our report of even date & Schedules + notes attached  
For M/s. ESSVEEYAR Chartered Accountants

sd/-  
Sheela Rani Chunkath I.A.S.  
Chairperson

sd/-  
K.R.T. Krishnamoorthi  
Partner

**TAMIL NADU POLLUTION CONTROL BOARD**  
**FORM - XV**

**ANNUAL STATEMENT OF ACCOUNTS - FIXED ASSETS AS ON 31<sup>st</sup> MARCH 2000.**  
See Rules 36 of Tamil Nadu Water (Prevention and control of Pollution) rules 1983.

Sl. No.	Particulars of Assets	Percentage	Opening Balance on 01/04/1999	Additions and sales adjustment during the year	Total	Depreciation	Closing Balance on 31/03/2000	Cumulative Depreciation as on 31/03/2000
1	Building	10.00%	51436710.61	0.00	51436710.61	5143671.00	46293039.61	36634190.99
2	Library Books	10.00%	1779955.90	850952.00	2630907.90	263090.00	2367817.90	1193362.13
3	Vehicle	33.33%	2140874.64	1083001.00	3223875.64	1074517.00	2149358.64	9811833.51
4	Furniture & Fixture	10.00%	7093490.35	2280863.00	9374353.35	937435.00	8436918.35	6131611.88
5	Office Appliance	10.00%	4531541.70	479724.00	5011265.70	501126.00	4510139.70	3935108.44
6	Lab Equipment	33.33%	9572763.09	1284372.00	10857135.09	3618683.00	7238452.09	41373172.05
7	Electrical Installations	15.00%	477979.95	99978.00	577957.95	86693.00	491264.95	1162731.16
			<b>77033316.24</b>	<b>6078890.00</b>	<b>83112206.24</b>	<b>11625215.00</b>	<b>71486991.24</b>	<b>100242010.16</b>

For M/s. ESSVEEYAR Chartered Accountants

Sd/-  
K.R.T. Krishnamoorthi  
Partner

Sd/-  
G. Rengasamy B.E., M.Tech.  
Member Secretary

Sd/-  
R. Devaki B.A.  
Fin. Adviser

Sd/-  
D. Kannan B.Com FCA  
Deputy Director (F&A)

Sd/-  
Sheela Rani Chankath I.A.S.  
Chairperson

Chennai - 600 032  
Date : 29/11/2000

**SCHEDULE OF RECEIPTS AND PAYMENTS ACCOUNT  
FOR THE YEAR ENDED ON 31st MARCH 2000.**

**RECEIPTS**

**SCHEDULE - A**

**MISCELLANEOUS RECEIPTS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Analysis Charges (Fees)	12349031.80	
2	Flag Day Collection	21750.00	
3	Interest Income	23560.00	
4	Miscellaneous Income	1254212.33	
5	MINAR	203695.00	
6	VEM Test Fees	3959053.00	
7	Coastal Monitoring	200000.00	
8	A.A.Q.S	6389837.00	
9	Sale of legal Books	2500.00	
10	Public Hearing	2500000.00	
11	Rent (Corporate Office)	117500.00	
12	Bio-Medical Waste	17525.00	
13	GEMS	544540.00	
14	Sale of Vehicle	374078.00	
15	ETI	1563000.00	
16	NAAQM	294250.00	
17	Interest on Loans / Advance	10410.00	
18	Petty Cash	7082.70	
	<b>TOTAL</b>	<b>29832024.83</b>	

**SCHEDULE - B**

**ADVANCE TO STAFF (Receipts)**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Temporary Advance	238683.75	
2	L.T.C. Advance	8078.00	
3	Vehicle Advance	67188.00	
4	Tour Advance	209279.50	
5	Festival Advance	3450.00	
6	Pay Advance	4000.00	
7	Telephone & Telex	39095.00	
8	PRL	394544.21	
9	Marriage Advance	300.00	
10	Cycle Advance	457.00	
	<b>Total</b>	<b>965075.46</b>	

**PAYMENTS**  
**SCHEDULE - C**  
**MISCELLANEOUS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Advertisement and Publicity	924438.00	
2	Postage/Telegram	726533.00	
3	Electricity/Water Charges	3669205.50	
4	Printing and Stationery	1526170.40	
5	Telephone and Telex	2645787.30	
6	Staff Welfare Expenses	411268.70	
7	Pollution Awareness Expenses	3054.00	
8	Training and Seminar	226560.00	
9	Entertainment	50600.15	
10	Miscellaneous Expenses	79449.10	
11	Newspaper and Periodicals	137280.65	
12	Conveyance	116436.94	
13	Wages	1978228.50	
14	Office Expenses	104336.65	
15	Expenses through petty cash	753927.08	
16	Prior period adjustment account	90374.00	
17	Travelling expenses	1274890.50	
18	Trade Fair	242148.00	
19	Land Maintenance expenses	21667.00	
20	Bank interest and commission	237374.48	
21	LTC Expenses	33446.00	
22	ETI Expenses	1008744.10	
23	Property tax	137779.00	
24	Environmental Pavilion Expenses	62813.00	
25	Board Meeting Expenses	75502.35	
26	Honorarium	173.00	
27	Bio Medical Waste Mgmt. Exp.	438839.00	
28	Public Hearing	398323.50	
29	Financial Assistance to Proj.	100704.00	
30	Pay Comm. Arrears	1637955.00	
31	Turn duty and Overtime Allow.	13254.30	
32	O/s. Expenses	1614393.10	
	<b>TOTAL</b>	<b>20741656.30</b>	

**SCHEDULE - D****ADVANCE TO STAFF (PAYMENT)**

<b>SL.NO</b>	<b>DESCRIPTION</b>	<b>Rs.</b>	<b>Ps.</b>
1	Festival Advance	502625.00	
2	Furniture Advance	27900.00	
3	Cycle Advance	56654.00	
4	Handloom Advance	39100.00	
5	Marriage Advance	32550.00	
6	Pay Advance	42450.00	
7	Tour Advance	842764.00	
8	Temporary Advance	1512665.30	
9	L.T.C. Advance	118205.00	
10	Driver Trg. Advance	1219.00	
11	Imprest to Staff	13500.00	
12	TTA	500.00	
13	Warm Cloth Advance	2000.00	
14	Motor Vehicle Advance	1279170.00	
15	Personal Computer Advance	34416.00	
	<b>TOTAL</b>	<b>4505718.30</b>	

**SCHEDULE - E****DEPOSITS AND ADVANCES (PAID) (OTHERS)**

<b>SL.NO</b>	<b>DESCRIPTION</b>	<b>Rs.</b>	<b>Ps.</b>
1	Advance to Suppliers	3812849.75	
2	Earnest Money Deposit (refund)	168500.00	
3	Rent Advance	129000.00	
4	Retention Money Deposit	9721.00	
5	Staff Welfare Fund	435.00	
6	RPGD	1671500.00	
7	FBF	433348.00	
8	Electricity Deposit	29010.00	
9	Security Deposit	27756.00	
10	CETP subsidy released	47984500.00	
11	Advance for Construction (Guindy)	83527.00	
12	Pre Paid Expense	3465.00	
13	Staff death claim paid	15150.00	
14	Telephone & Telex Deposit	33000.00	
15	Enlistment Deposit	5000.00	
16	Sundry Creditor Others	7476539.00	
	<b>TOTAL</b>	<b>61883300.75</b>	



## SCHEDULE - E (I)

### ADVANCES AND DEPOSITS (OTHERS) (RECEIVED)

SL.NO	DESCRIPTION	Rs.	Ps.
1	Consent Fees received in advance	31366843.00	
2	Cess received in advance	600821.00	
3	Analysis fees received in advance	16140.00	
4	A.A.Q.S received in advance	918225.00	
5	CETP Subsidy Recd.	44453000.00	
	<b>TOTAL</b>	<b>77355029.00</b>	

### SCHEDULE - E DEPOSITS AND ADVANCES (PAID) (OTHERS)

SL.NO	DESCRIPTION	Rs.	Ps.
1	Advance to Suppliers		3812643.75
2	Earnest Money Deposit (refund)	168500.00	
3	Rent Advance	129000.00	
4	Retention Money Deposit	9751.00	
5	Staff Welfare Fund	435.00	
6	PRGD	1671500.00	
7	FBF	438248.00	
8	Electricity Deposit	29010.00	
9	Security Deposit	27756.00	
10	CETP subsidy released	47884500.00	
11	Advance for Construction (Guindy)	83527.00	
12	Pre Paid Expense	3455.00	
13	Staff death claim paid	15150.00	
14	Telephone & Telex Deposit	33000.00	
15	Entertainment Deposit	8000.00	
16	Sundry Creditor Others	1476509.00	
	<b>TOTAL</b>	<b>6186309.58</b>	

**SCHEDULE FORMING PART OF INCOME AND EXPENDITURE ACCOUNT  
FOR THE YEAR ENDED ON 31st MARCH 2000.**

**EXPENDITURE**

**SCHEDULE - F**

**ALLOWANCES AND HONORARIA**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Allowances	24273761.70	
2	Wages	2258024.50	
3	Travelling Expenses	2405936.00	
4	Medical Reimbursement	2026033.50	
5	Honorarium	5560.00	
6	Bonus	1233585.00	
7	LTC Expenses	133538.00	
8	Interim Relief	1866.00	
9	Turn Duty	19693.30	
10	Over time	63049.00	
11	Payment of VI Pay Commission Arrears	1615988.00	
	<b>Total</b>	<b>34037035.00</b>	

**SCHEDULE - G**

**Running and Maintenance of Vehicles**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Repairs	1235857.57	
2	Fuel	2103276.80	
3	Hire Charges	74794.00	
4	Insurance	166003.00	
	<b>Total</b>	<b>3579931.37</b>	

**SCHEDULE - H**  
**MISCELLANEOUS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Office Expenses	237711.65	
2	Telephone & Telex	2643357.90	
3	Sundries	168606.00	
4	Entertainment Expenses	151393.60	
5	Printing & Stationery	2032834.93	
6	Electricity & Water Charges	4156705.50	
7	Postage & Telegram	784983.95	
8	Advertisement & Publicity	1014761.00	
9	Rent on Buildings	2724811.00	
10	Newspaper and Periodicals	179771.25	
11	Pollution Awareness Expenses	183949.00	
12	Insurance of lab equipment	73820.00	
13	Family Benefit Fund Contribution	170201.00	
14	Conveyance Expenses	270192.39	
15	Staff Welfare Expenses	429723.35	
16	Training and Seminar Expenses	341820.00	
17	Bank Interest	255386.48	
18	Land Maintenance Expenses	19773.00	
19	Trade Fair Expenses	707066.00	
20	NAAQM Expenses	31566.00	
21	Board Meeting Expenses	134783.85	
22	E T I Expenses	1516863.10	
23	Financial Assistance to Projects	100704.00	
24	Expenses of audit	24523.00	
25	Bio-waste Management Expenses	421314.00	
26	Property Tax	137779.00	
27	Environmental Pavilion Expenses	46897.00	
28	Zoning Atlas Expenses	17685.00	
29	Insurance of Assets	146499.00	
<b>TOTAL</b>		<b>19125481.95</b>	

**INCOME**  
**SCHEDULE - I**  
**FEES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Consent Fees	113548293.30	
2	Consent Forms	671115.00	
<b>TOTAL</b>		<b>114219408.30</b>	

**SCHEDULE - J**  
**SEVICE AND RENTAL CHARGES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Analysis Charges	12643551.00	
2	MINAR	203695.00	
3	AAQS	7277430.00	
4	VEM Test Fees	3679053.00	
5	GEMS	544540.00	
6	Coastal Monitoring	200000.00	
7	NAAQM	305866.00	
8	E . T. I.	1363000.00	
<b>Total</b>		<b>26217135.00</b>	

**SCHEDULE - K**  
**Miscellaneous**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Cess Appeal Fees	1300.00	
2	Miscellaneous Income	1225594.27	
3	Consultant Registration Fees	620000.00	
4	Sale of Legal Books	2800.00	
5	Interest on Loans & Advance	42216.00	
6	Others	232712.00	
<b>TOTAL</b>		<b>2124622.27</b>	

**SCHEDULE FORMING PART OF BALANCE SHEET  
AS ON 31st MARCH 2000.**

**LIABILITIES**

**SCHEDULE - L  
OTHER DEPOSITS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	E.M.D.	625991.20	
2	Security Deposits	1194657.65	
3	Enlistment Deposits	280500.00	
4	Retention Money Deposits	295690.48	
5	Miscellaneous Deposits	315000.00	
<b>TOTAL</b>		<b>2711839.33</b>	

**SCHEDULE - M**

**SUNDRY CREDITORS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Flag Day Collection	21750.00	
2	P.R.L.	369927.90	
3	Outstanding Liability	6843132.39	
4	T D S (Officers)	26180.00	
5	T D S (Others)	361.42	
6	Public Hearing Fund	5703697.85	
<b>Total</b>		<b>12965049.56</b>	

**SCHEDULE - N**

**INCOME RECEIVED IN ADVANCE**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Consent Fees	31180643.00	
2	Cess Fees	600821.00	
3	Analysis Fees	16140.00	
4	AAQS	378245.00	
<b>Total</b>		<b>32175849.00</b>	

## SCHEDULE - Q

### DEPOSITS

SL.NO	DESCRIPTION	Rs.	Ps.
1	Telephone & Telex	967830.00	
2	T.N.E.B.	402564.00	
3	Miscellaneous Deposits	7600.00	
4	Staff Higher Studies Deposit	4928.00	
5	Others (Customs Deposit)	3573.40	
	<b>Total</b>	<b>1386495.40</b>	

## SCHEDULE - R

SL.NO	DESCRIPTION	Rs.	Ps.
1	Pension Fund Investment	63382745.50	
2	Depreciation Fund Investment	100242010.16	
3	Refundable Performance Guarantee Deposit Investment	43905819.05	
4	Model ETP for Sago Plant	447000.00	
5	Other term deposit	475242215.29	
	<b>Total</b>	<b>683219790.00</b>	

**ASSETS**  
**SCHEDULE - O**  
**MISCELLANEOUS ADVANCES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Advance to Suppliers	600392.90	
2	Rent Advance	658928.15	
3	Insurance Claim Receivable	43243.00	
4	Land Advance	2881395.00	
5	Prepaid Expenditure	43141.00	
6	Staff Welfare Fund	12701.15	
7	Tax Advance to ETI	382784.14	
8	Interest Receivable	62471028.00	
9	Others	22668.00	
<b>TOTAL</b>		<b>67116281.34</b>	

**SCHEDULE - P**  
**ADVANCES TO STAFF**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Tour Advance	258451.50	
2	Temporary Advance	211250.25	
3	Marriage Advance	109721.00	
4	Festival Advance	286715.00	
5	Handloom Advance	23830.00	
6	Driver Training Advance	4958.50	
7	Pay Advance	6500.00	
8	Cycle Advance	22144.00	
9	Motor Vehicle Advance	3674697.00	
10	L T C Advance	11954.00	
11	Personal Computer Advance	126188.00	
12	Miscellaneous Advance (P R L)	860.00	
13	Staff Housing Scheme	12662.00	
14	TT Advance	75600.00	
<b>Total</b>		<b>4825531.25</b>	

## SCHEDULE - S

### NOTES FORMING PART OF ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 2000.

#### 1. ACCOUNTING POLICIES:

a) Fixed Assets are shown at written down value. Depreciation has been provided at the following rates as decided by the Board, which is being followed consistently. Depreciation in respect of addition during the year has been provided for the full year.

i. Library Books	10.00%
ii. Vehicle	33.33%
iii. Furniture & Fixtures	10.00%
iv. Office Appliances	10.00%
v. Lab Equipment	33.33%
vi. Electrical Installation	15.00%
vii. Building	10.00%

b) Stock of Chemicals / Glassware and Consumables are as inventoried as at the close of the year and valued at cost.

c) Except for interest on investments, Other income is accounted on receipt basis.

d) Payment of Gratuity to the employees is covered under LIC's Groups Gratuity Scheme, and pension to employees is being provided on annual accrual basis. Leave salary is considered on cash basis.

2. (a) Cess Receivable Rs.51,57,63,826.36 include disputed amounts from the following industries / local bodies:

i. Ennore Thermal Power Station	:	18,09,81,279.00
ii. North Madras Thermal Power Station	:	12,03,84,218.00
iii. Tuticorin Thermal Power Station	:	10,66,26,381.00
iv. Local Bodies	:	1,02,93,672.00

b) Provision has been made for doubtful debts Rs.2,87,046.54 in respect of Cess receivable but not collected due to closure.



3. Miscellaneous Advances include Rs.18,81,345 paid towards purchase of lands registered and are pending registration at various places.
4. Funds in Transit include Rs.9,50,504 which are required to be reconciled and adjusted. Revenue impact, if any, on these is not ascertainable.

sd/-

**D. Kannan B.Com, FCA**  
Deputy Director (F&A)

sd/-

**R.Devaki B.A**  
Financial Adviser

sd/-

**G.Rengasamy B.E., M.Tech**  
Member Secretary

sd/-

**Sheela Rani Chunkath., I.A.S.,**  
Chairperson

Subject to our report of even dated  
**M/s.ESSVEEYAR,**  
Chartered Accountants

sd/-

**K.R. T. Krishnamoorthi**  
Partner

