

தமிழ்நாடு
மாக
கட்டுப்பாடு
வாரியம்

**TAMILNADU
POLLUTION
CONTROL
BOARD**

16

ஆண்டு அறிக்கை
**ANNUAL REPORT
1998-99**

ஆண்டுக் கணக்குகள்
**ANNUAL ACCOUNTS
1998-99**





**ANNUAL REPORT AND ACCOUNTS
1998 - 1999**

**TAMILNADU POLLUTION CONTROL BOARD
CHENNAI - 600032**

TAMIL NADU POLLUTION CONTROL BOARD

**ANNUAL REPORT
1998-99**

TAMIL NADU POLLUTION CONTROL BOARD

**100, ANNA SALAI,
GUINDY, CHENNAI 600 032.**

ANNUAL REPORT 1998 - 1999

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 its 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 efficient methods of disposal of sewage and trade effluent on land.
- To identify sites 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.

CHAPTER - II

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

Thiru M. Devaraj I.A.S took over charge as Chairman on 1.06.97 and continued as Chairman of the Board during the financial year

Er. G.Rengasamy, took over charge as Member Secretary of the Board on 1.07.90 and continued as Member Secretary of the Board during the financial year.

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 Joint Chief Environmental Engineers in the Region are empowered to grant consent to existing Orange and green category industries. The Board has delegated powers to Joint Chief Environmental Engineers in the Region for the renewal of consent in the case of Red category small scale industries and Orange and Green Category industries. The Location of District Offices are shown in Annexure - II

To assist the Board in monitoring the industries, Three Advanced Environmental Laboratories, Eight 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 31.03.99 is 708

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.

CHAPTER - III

PRESENT STATE OF ENVIRONMENTAL PROBLEMS AND COUNTER MEASURES.

General:

To mitigate the pollution problems various environmental legislations have been passed and the same are given below in chronological order.

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
2. Manufacture, Storage and Import of Hazardous Chemical Rules ,1989
3. The Environment Impact Assessment Notification, 1994 as amended.
4. Bio Medical Waste (Management and Handling) Rules, 1998.

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. 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 building construction.
- b) **Consent to operate :** This is issued after the installation of the Effluent Treatment Plant and Air Pollution Control Measures to the satisfaction of the Board.

3.2 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 1998-99, 19,212 samples of sewage/trade effluent from the industries were collected and analysed .

During the year 1998-99 the Board has issued 564 Consent to establish orders and 1403 Consent orders under the Water (Prevention and Control of Pollution) Act, 1974 as amended . Details of year-wise 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 1998-99, Ambient Air Quality Surveys have been conducted in 412 industries.

The Board has issued 565 Consent to establish orders & 1419 consent orders under the Air (Prevention and Control of Pollution) Act, 1981 as amended during the year 1998-99. 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 tanneries 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 the 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	:	27
Textile Bleaching & Dyeing Units	:	27
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 1998-99, One Common Effluent Treatment Plant in Ayyampettai-Muthialpettai in Kancheepuram District and Eight CETPs in Tiruppur and One CETP in Karur for Textiles dyeing units have been commissioned. So far 12 CETP schemes for the Tanneries have been commissioned in State. (ie.,) Pammal, SIDCO Ranipet, Melvisharam, Madhavaram, Ramji Nagar, Ambur (Thuthipet), Ranipet, Pernambut (Bakkalapalli), Vaniyambadi, Udayenthiram, Ambur (Malligaithoppu) and Dindigul and one Common Incinerator for the Hospital wastes at Salem has also been commissioned. Works on Seven CETP schemes at Karur, eleven CETP schemes in Vellore District, two CETP schemes in Trichy District, one CETP scheme at Salem and one CETP scheme at Kodaikkanal are under progress.

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 1060 applications in Form I, seeking the authorisation for handling hazardous wastes have been received and 1052 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 acres at Mannelure village in Tiruvallur District and in 89.64 acres 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 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 Haz. 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.

3.7 LABORATORIES

To assist the Board in the monitoring of industries, the Tamil Nadu Pollution Control Board has established 3 Advanced Environmental Laboratories, 8 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 Labwise during the year 1998-99 are shown at Annexure X, XI & XII.

CHAPTER -IV

MONITORING NETWORK FOR QUALITY OF WATER AIR AND SOIL

The Bio sphere 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

4.1.2 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 18 and 238 micrograms per cubicmetre respectively. The minimum and maximum level of SO₂ is 0.05 and 317 micrograms per cubicmetre respectively. The minimum and maximum level of NO_x is 1 and 94 micrograms per cubicmetre respectively. However the annual average concentration of SPM, SO₂ and NO_x are generally within the standards except SPM in Tiruvottriyur.

4.1.3 AIR QUALITY IN COIMBATORE, THOOTHUKUDI AND SALEM:

In Coimbatore, the minimum and maximum level of Suspended Particulate Matter is 46 and 301, SO₂ is 1 and 27 and NO_x is 3 and 49 micrograms per cubicmetre respectively.

In Thoothukudi, the minimum and maximum level of SPM is 12 and 299 micrograms per cubicmetre, SO₂ is 0.05 and 35 micrograms per cubicmetre and NO_x is 4 and 38 micrograms per cubicmetre .

In Salem, the minimum and maximum level of SPM is 20 and 433 micrograms per cubicmetre, SO₂ is 0.26 and 103 micrograms per cubicmetre and NO_x is 0.6 and 28 micrograms per cubicmetre .

In Madurai the minimum and maximum level of SPM, is 22 and 679 micrograms per cubicmetre, SO₂ is 0.28 and 25 micrograms per cubicmetre and NO_x is 3 and 118 micrograms per cubic metre .

However the annual average concentration of SPM, SO₂ and NO_x are generally within the standards.

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	LAKES
1. Cauvery	1. Uthagamandalam
2. Thamiraparani	2. Kodaikkanal
3. Palar	3. Yercaud
4. Vaigai.	

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 pH values varied from 7.32 to 8.91 and Bio-Chemical Oxygen Demand values generally varied from 1 to 3.3 mg/l. 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 Komarapalayam 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 6.9 to 8.20 and Bio-Chemical Oxygen Demand varied from 1.90 to 2.60 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 Udhagamandalam, Kodaikkanal and Yercaud have been identified and monitored by collecting samples once in three months.

The total Coliform and faecal coliform in the Udhagamandalam lakes 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 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.

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 130 to 11288 MPN/100 ml, 160 to 4084 MPN/100 ml respectively.

4.3 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 the four city water ways at monthly intervals. The number of sampling points are as follows:

Sl.No.	River	Location /No. of Sampling Points	
		in River	in industrial outlets
1	Adyar	5	17
2	Cooum	11	5
3	Buckingham Canal	10	14
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 1998-99, 1314 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 Otteri nullah and the river Cooum. 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.

4.4.0 MONITORING OF COASTAL WATERS OF TAMIL NADU COAST:

The Board is monitoring the Tamil Nadu Coastal water quality at regular intervals. A total number of 32 coastal stations under 5 sectors were identified along the Tamil Nadu coast starting from Ennore to Kanyakumari. Sea water samples and sediments were collected and various Physico-chemical and Biological parameters for these samples were analysed.

Based on the coastal survey, the Board has identified hot spots along the coast line which are monitored so that the pollution load discharged into the sea could be assessed and corrective action taken.

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 Thirumangalam in Chennai city for goods transport vehicles and has been conducting vehicular emission tests since 2.5.92.

During the year 1998-99, 22,256 vehicles were tested. Among the total vehicles tested, 665 diesel driven vehicles and 6 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 Tamil 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 one Vehicle Emission Monitoring Station at the Nilgiris on 26.8.96 and 2 stations at Dindigul and Palani on 10.3.97 and one station at Chengalpattu during October, 1997.

In Udthagamandalam, during the year 1998-99, 8649 Petrol and Diesel driven vehicles were tested. Among the total vehicles tested, 80 petrol and 386 diesel driven vehicles were exceeding the emission standards prescribed.

In Dindigul and Palani, 4621 & 2181 vehicles were tested. Among the total vehicles tested, 212 and 33 vehicles were exceeding the emission standards prescribed respectively.

In Chengalpattu, 4477 vehicles were tested. Among the total vehicles tested, 91 vehicles were exceeding the emission standards prescribed.

The Board imparts training to the private entrepreneurs who opt for setting up emission testing centres. The details of vehicles tested and number of vehicles exceeded the standards are shown in annexure XIII

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 XIV.

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. The identified industries have been suggested on the adoption of alternatives with Zero ODS depending on the controlled substance used.

CHAPTER V

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 1398 closure notices during the year 1998-99. The Board has so far issued Show Cause Notices to 12725 industries and closure orders to 2724 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 213 cases disposed, 72 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 114 cases disposed, 78 cases have been decided in favour of the Board. The status of legal cases as on 31.3.99 are given in the annexure- XV

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 Honourable 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 1998 to March 1999, Six Meetings of the Board were held at Chennai as listed below:

Sl.No.	No. of subjects placed	Meeting No.	Date
01	48	164	28.4.98
02	27	165	20.5.98
03	30	166	19.8.98
04	35	167	15.1.99
05	12	168	1.2.99
06	18	169	10.3.99

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 Laboratory at Dindiquil in the place of Mobile Environmental Laboratory.

7.2.2 The Board has approved the recommendation of NEERI, Nagpur based on the study conducted by the Institute to assess the dust emission from stone crushing Industry and to arrive at the norms for the APC Measures to be provided by the Stone Crushing Units and the distance criteria from the National Highways, State Highways and Residential Areas.

7.2.3 The Board has approved the recommendations of the Committee constituted to decide the State Environmental Awards to the industries for the year 1997-98.

7.2.4 The Board has approved to adopt the standards for discharge of treated trade effluent from Aquaculture farms as recommended by the Expert Committee.

7.2.5 The Board approved the proposal for the Establishment of MEL at Tuticorin.

7.2.6 The Board approved the proposal for the Establishment of DEL at Erode.

CHAPTER VIII

8. COMMITTEES CONSTITUTED BY THE BOARD AND THEIR ACTIVITIES:

8.0. For more effective disposal of business, 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 9 meetings were conducted.

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.

Total number of 6513 books, 32 Video/Audio Cassettes and 72 no. of journals subscribed are available in the Library.

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.

8.4 HOSPITAL WASTE MANAGEMENT COMMITTEE

The Board is also taking necessary steps for environmentally safe management of Hospital wastes. In this regard a Committee headed by Dr. M. Santappa Scientific Advisor has been constituted. The committee would study the prevailing practices, evaluate various treatment and disposal options for the safe destruction of Bio-medical wastes and to recommend the most suitable treatment method for the destruction of Hospital wastes considering the aspects of both environmental impact and cost. So far 6 meetings have been conducted. The committee proposes to conduct an indepth survey for representative hospitals to generate authenticate statistics on Bio-Medical Waste generation.

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 audio-visual 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 crores 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 1998-99 Environment Training Institute has conducted 26 regular training programmes and 18 special programmes have been conducted and 296 participants in regular training programmes and 792 personnels in the special programmes were trained. Upto the year ending 1998-99, the Environmental Training Institute has conducted 79 training programmes and trained 1102 participants and conducted 19 special programmes and trained 978 participants in total since 1995.

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 Birthday, Gandhiji's Birthday and Nehru's Birthday 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 Pamphlets 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 free vehicle emission checkup campaign in co-ordination with Petroleum Conservation Research Association at Madurai and Coimbatore to create awareness among the public.

A Southern Regional Conference on Bio Medical Waste Management was conducted on Feb . 10, 11, and 12 ,1999 to create awareness about Bio Medical Waste (M&H)Rules, 1998 amongst hospitals, Govt. Dept.,

The Board participated in the Inter School Science Exhibition conducted by the SBOA Matriculation Higher Secondary School, Anna Nager in which more than 50,000 students have participated.

The Board participated in the Environmental Pollution Protection Exhibition conducted by the DAV Public School, Teynampet, for which more than 5000 students have participated.

Loyola College conducted a programme on "Water Resources for the next Millennium" for which Board organised Environmental Video Programme.

CHAPTER XI

OTHER IMPORTANT MATTERS DEALT WITH BY 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 and pollution in the vicinity of these areas needs to be monitored. The Board has taken up the monitoring of ecologically sensitive areas.

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. 256 industries have been identified to furnish the Environmental Statements as required.

Environmental Statements for the year 1997-98 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 1998-99, 15 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 hearings, 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. During the year 1998-99 Public hearings on various projects were conducted in the respective District Collectorates since May'98.

CHAPTER XII

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

[Rupees in Lakhs]

Opening Balance		3289.82
Expenditure during year 1998-99		1472.90
Receipts		2572.35
Closing Balance as on 31.3.99	Total	<u>4389.27</u>

DETAILS:

Receipts Of The Board -Grants received From State Government		Nil
Grants received from Central Government		Nil
Consent fees		1145.51
Monitoring and analytical charges		206.99
Cess reimbursement		234.65
Sale of Application Forms & Books		9.19
Others		976.01
	Total	<u>2572.35</u>

EXPENDITURE REVENUE:

1. Salary and GPF	774.47
2. T.A. and L.T.C.	18.33
3. Office Expenditure	<u>579.05</u>
(Stationery, Rent, Vehicle, Telephone, Printing, Hospitality, etc.)	

CAPTIAL:

1. Fixed Assets	44.56
2. Other Assets	37.86
3. Advances to staff	<u>18.63</u>
Sub Total	1472.90

CHAPTER XIII

ANNUAL ACCOUNT FOR THE YEAR 1998-99

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 1997-98	Approved Outlay for the year 1998-99	Anticipated Expenditure	Proposed Outlay for the year 1999-2000	Tentative capital content
01	State Plan	1996-2000	--	--	--	--	--
02	Prevention of Water and Air Pollution		--	--	--	--	--
03	<u>Control of Water and Air Pollution</u> 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. M.Devaraj, I.A.S. Tamil Nadu Pollution Control Board.	Chairman	1.4.98	31.3.99
Officials Nominated by The State Government				
2.1	Thiru.K.S. Sripathi., I.A.S., Secretary to Government, Environment and Forests Department, Fort St. George, Chennai - 9.	Member	1.4.98	31.3.99
3.1	Tmt. Girija Vaidyanathen Spl Secretary to Government, Finance Department Fort St. George, Chennai - 9.	Member	20.4.98	30.9.98
3.2	Thiru T. Pitchandi, I.A.S Spl. Secretary to Finance, Fort St. George, Chennai - 9	Member	1.10.98	31.3.99
4	Dr. T. Prabakara Rao, I.A.S., Director of Town and Country Planning, 807, Anna Salai, Guindy, Chennai -2	Member	1.4.98	31.3.99
5	Thiru. Sanwat Ram, I.A.S., Director of Municipal Administration, Ezhilagam Annexe Building, Vith floor, Chepauk, Chennai - 5	Member	1.4.98	31.3.99
6.1	Dr. N. Vijaya Raghavan, Director of Public Health and Preventive Medicine, Chennai - 6	Member	1.4.98	10.5.98
6.2	Dr. R.Ayyathurai, M.D., Director of Public Health and Preventive Medicine, Chennai - 6	Member	11.5.98	31.3.99

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

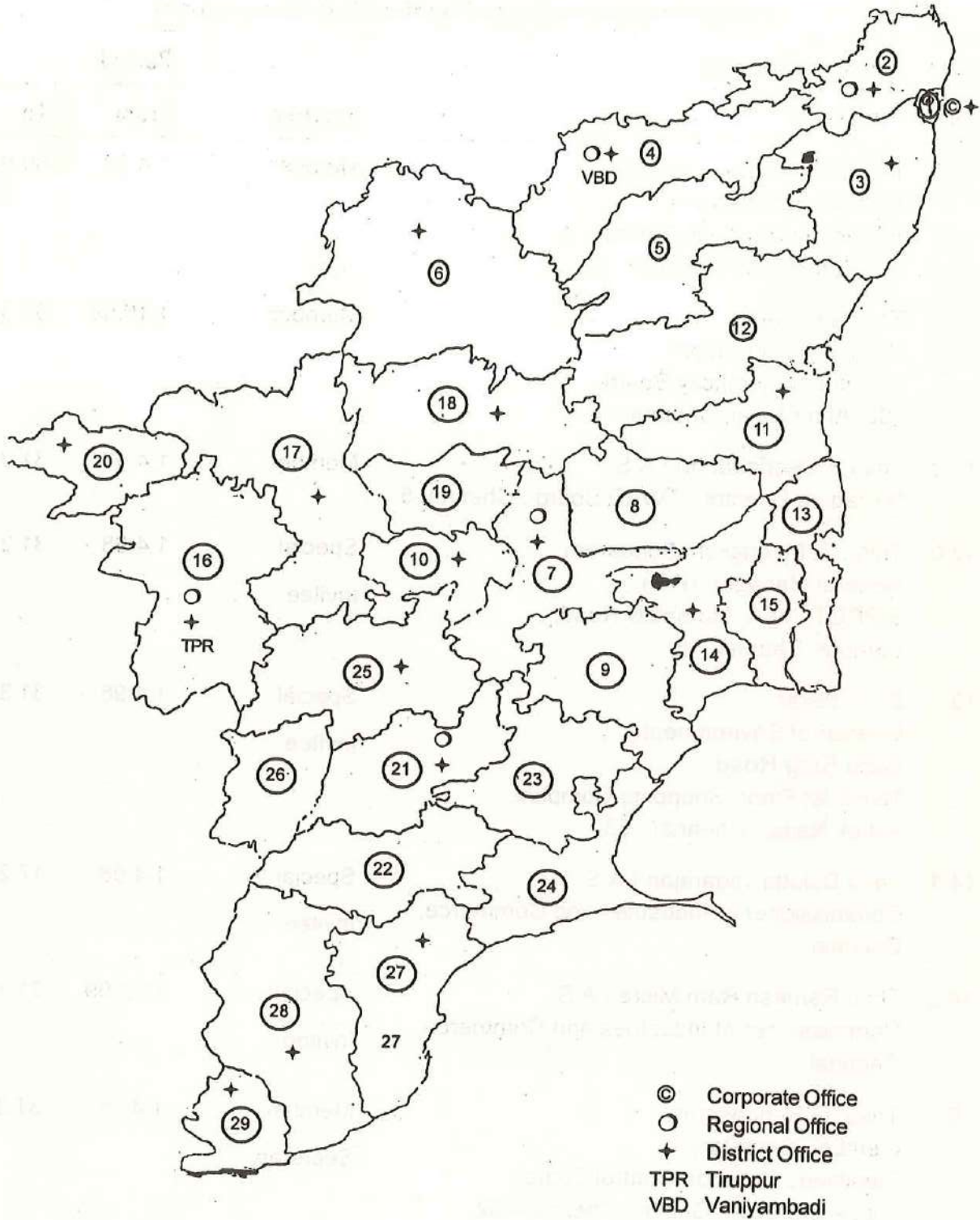
Sl. No.	Name and address	Position	Period	
			From	To
7.0	Thiru. P.Gopal B.Sc., MLA., Mettur Dam, Salem District.	Member	1.4.98	31.3.99
8.0	Thiru N. Rafeeq Ahmed, Chairman, Leather Exports Promotion Council, 53, Sydenhams Road, Chennai - 3.	Member	1.4.98	31.3.99
9.0	Tmt. Banumathi Baskaran, State Level Fisheries Wing Organiser, 18, Corp. Colony, 3rd Lane, Tondiarpet, Chennai - 81	Member	1.4.98	31.3.99

**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	Thiru S.R. Krishnamoorthy, Member (Generation), Tamilnadu Electricity Board, 800, Anna Salai, Chennai - 2.	Member	1.4.98	30.9.98
10.2	Er. Justis Paul., Member (Generation), Tamilnadu Electricity Board, 800, Anna Salai, Chennai - 2.	Member	1.10.98	31.3.99
11.0	Thiru K.Deenabandu I.A.S., Managing Director., TWAD Board., Chennai-5	Member	1.4.98	31.3.99
12.0	Thiru. T. Meenakshi Sundaram General Manager, (P.F), SIPCOT, 19 A, Marshalls Road, Egmore, Chennai - 8.	Special Invitee	1.4.98	31.3.99
13.	Dr. T.Sekar Director of Environment, West Ring Road, TNHB Ist Floor, Shopping Complex, Ashok Nagar, Chennai - 83.	Special Invitee	1.4.98	31.3.99
14.1	Thiru D.Jothi Jagarajan I.A.S., Commissioner of Industries and Commerce, Chennai	Special Invitee	1.4.98	17.2.99
14.2	Thiru Ramesh Ram Misra I.A.S., Commissioner of Industries and Commerce, Chennai	Special Invitee	18.2.99	31.3.99
15	Thiru. G.Rengasamy, Member Secretary, Tamilnadu Pollution Control Board, 100, Anna Salai, Guindy, Chennai - 32.	Member- Secretary	1.4.98	31.3.99

ANNEXURE - 2

Location of District Offices



Chennai Region

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

Vellore Region

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

Tiruchy Region

- 7) Trichy
- 8) Perambalur
- 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

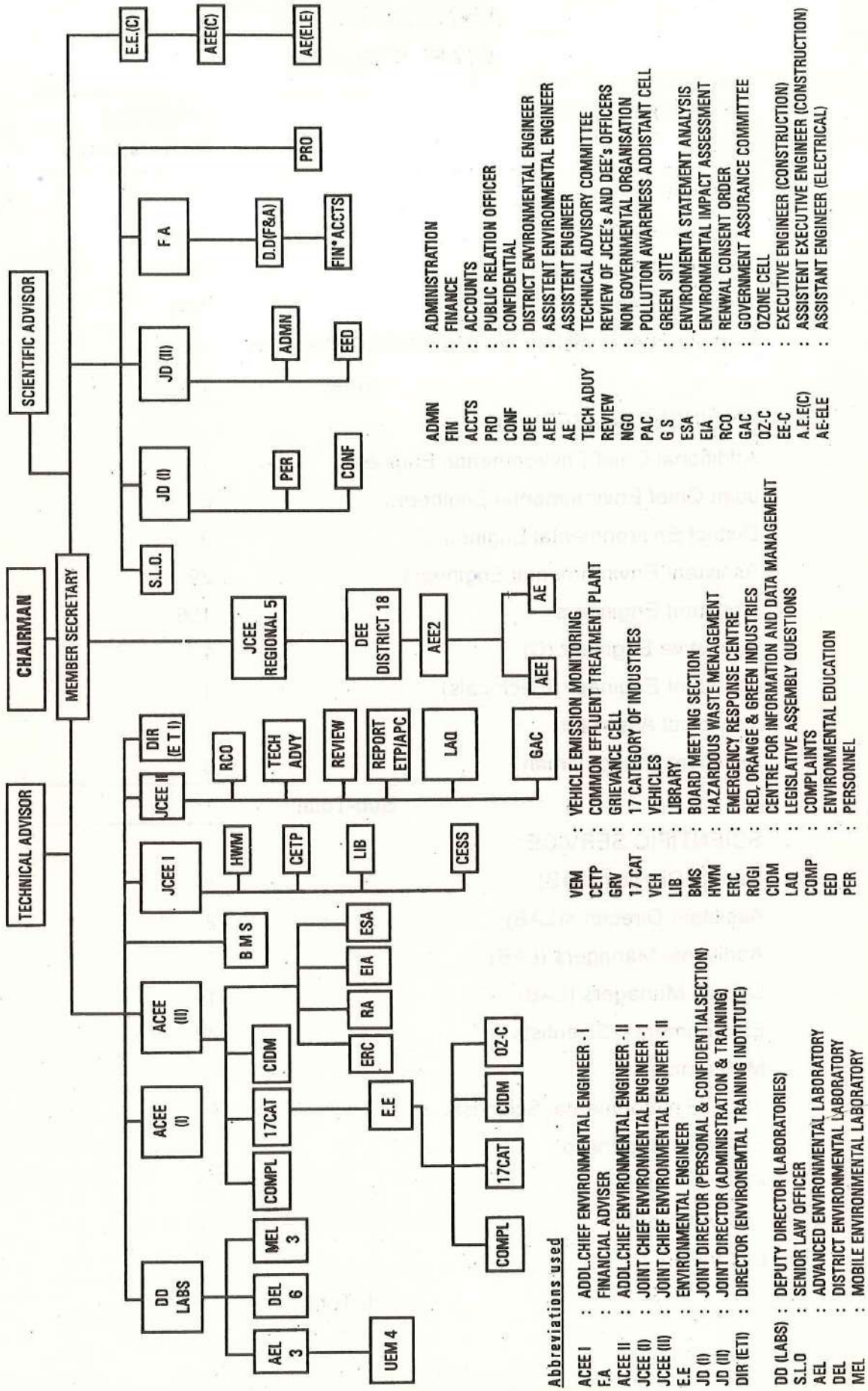
- 21) Madurai
- 22) Virudhunagar
- 23) Sivagangai
- 24) Ramanathapuram
- 25) Dindigul
- 26) Theni

27) Tuticorin

28) Tirunelveli

29) Nagercoil

ANNEXURE - III ORGANISATION CHART



Abbreviations used

- ACEE I : ADDL.CHIEF ENVIRONMENTAL ENGINEER - I
- FA : FINANCIAL ADVISER
- ACEE II : ADDL.CHIEF ENVIRONMENTAL ENGINEER - II
- JCEE (I) : JOINT CHIEF ENVIRONMENTAL ENGINEER - I
- JCEE (II) : JOINT CHIEF ENVIRONMENTAL ENGINEER - II
- E.E : ENVIRONMENTAL ENGINEER
- JD (I) : JOINT DIRECTOR (PERSONAL & CONFIDENTIAL SECTION)
- JD (II) : JOINT DIRECTOR (ADMINISTRATION & TRAINING)
- DIR (ETI) : DIRECTOR (ENVIRONMENTAL TRAINING INSTITUTE)
- DD (LABS) : DEPUTY DIRECTOR (LABORATORIES)
- S.L.O : SENIOR LAW OFFICER
- AEL : ADVANCED ENVIRONMENTAL LABORATORY
- DEL : DISTRICT ENVIRONMENTAL LABORATORY
- MEL : MOBILE ENVIRONMENTAL LABORATORY

- VEM : VEHICLE EMISSION MONITORING
- CETP : COMMON EFFLUENT TREATMENT PLANT
- GRV : GRIEVANCE CELL
- 17 CAT : 17 CATEGORY OF INDUSTRIES
- VEH : VEHICLES
- LIB : LIBRARY
- BMS : BOARD MEETING SECTION
- HWM : HAZARDOUS WASTE MANAGEMENT
- ERC : EMERGENCY RESPONSE CENTRE
- ROGI : RED, ORANGE & GREEN INDUSTRIES
- CIDM : CENTRE FOR INFORMATION AND DATA MANAGEMENT
- LAQ : LEGISLATIVE ASSEMBLY QUESTIONS
- COMP : COMPLAINTS
- EED : ENVIRONMENTAL EDUCATION
- PER : PERSONNEL

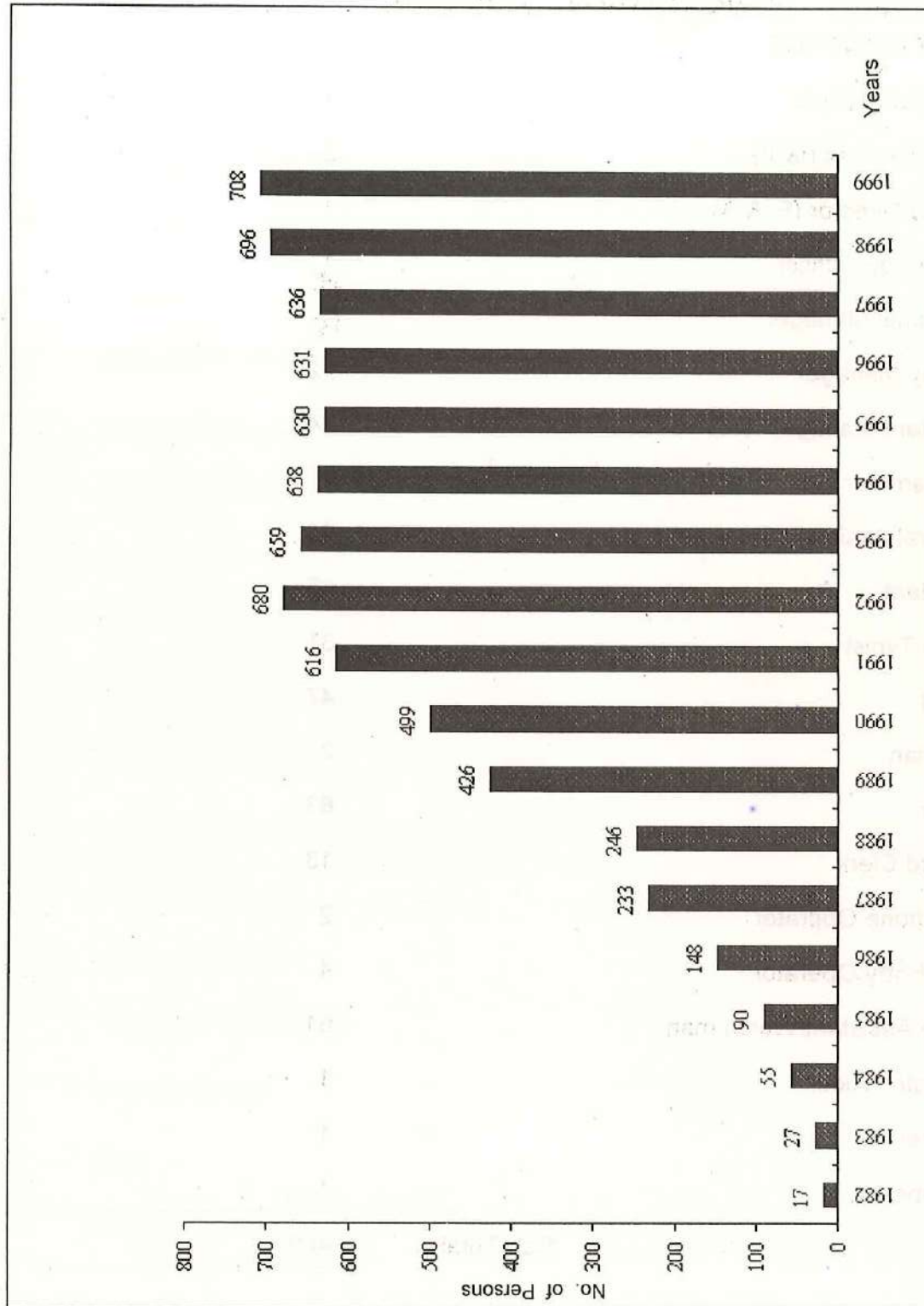
- ADMN : ADMINISTRATION
- FIN : FINANCE
- ACCTS : ACCOUNTS
- PRO : PUBLIC RELATION OFFICER
- CONF : CONFIDENTIAL
- DEE : DISTRICT ENVIRONMENTAL ENGINEER
- AE : ASSISTANT ENVIRONMENTAL ENGINEER
- AE : ASSISTANT ENGINEER
- TECH ADUY : TECHNICAL ADVISORY COMMITTEE
- REVIEW : REVIEW OF JCEE's AND DEE's OFFICERS
- NGO : NON GOVERNMENTAL ORGANISATION
- PAC : POLLUTION AWARENESS ASSISTANT CELL
- G S : GREEN SITE
- ESA : ENVIRONMENTA STATEMENT ANALYSIS
- EIA : ENVIRONMENTAL IMPACT ASSESSMENT
- RCO : RENEWAL CONSENT ORDER
- GAC : GOVERNMENT ASSURANCE COMMITTEE
- OZ-C : OZONE CELL
- EE-C : EXECUTIVE ENGINEER (CONSTRUCTION)
- A.E.E(C) : ASSISTANT EXECUTIVE ENGINEER (CONSTRUCTION)
- AE-ELE : ASSISTANT ENGINEER (ELECTRICAL)

ANNEXURE - IV
STAFF STRENGTH

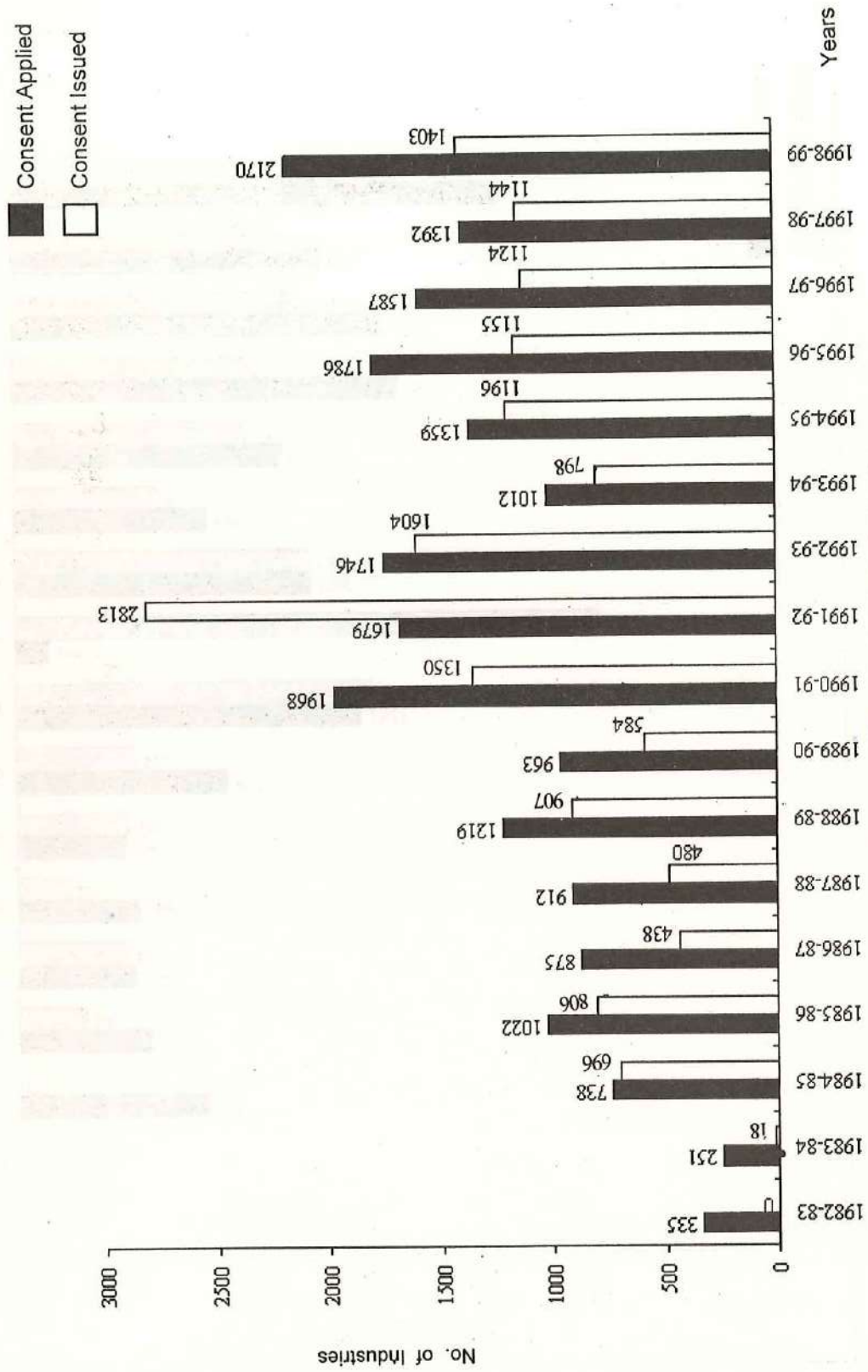
NAME OF THE POST	PRESENT STRENGTH
Chairman	1
Member Secretary	1
Engineering Service	157
Scientific Service	140
Personnel/Administration/Accounts/Miscellaneous	409
Total	708
ENGINEERING SERVICE	
Additional Chief Environmental Engineer	1
Joint Chief Environmental Engineers	6
District Environmental Engineers	9
Assistant Environmental Engineers	29
Assistant Engineers	106
Executive Engineer (C)	1
Assistant Engineer (Electricals)	1
Technical Assistant	1
Assistant Draughtsman	3
Sub-Total	157
SCIENTIFIC SERVICE:	
Deputy Director (LAB)	1
Assistant Director s(LAB)	2
Additional Managers (LAB)	2
Deputy Managers (LAB)	19
Environmental Scientists	47
Metereologist	3
Junior Environmental Scientists	9
Electrical Supervisor	1
Field Assistants	43
Lab. Attendants	12
Electrician	1
Sub-Total	140

NAME OF THE POST	PRESENT STRENGTH
PERSONNEL / ADMINISTRATION / ACCOUNTS / MISCELLANEOUS	
Financial Advisor	1
Joint Directors (I& II)	2
Deputy Director (F & A)	1
Senior Law Officer	1
Additional Manager	6
Deputy Manager	12
Assistant Manager	24
Programmer	1
General Assistant/Store keeper	69
Assistant	65
Steno Typist	31
Typist	47
Librarian	2
Driver	63
Record Clerk	13
Telephone Operator	2
Data Entry Operator	4
Office Assistant/Watch man	61
Despatch Rider	1
Cleaner	1
Sweeper	1
Sub-Total	409

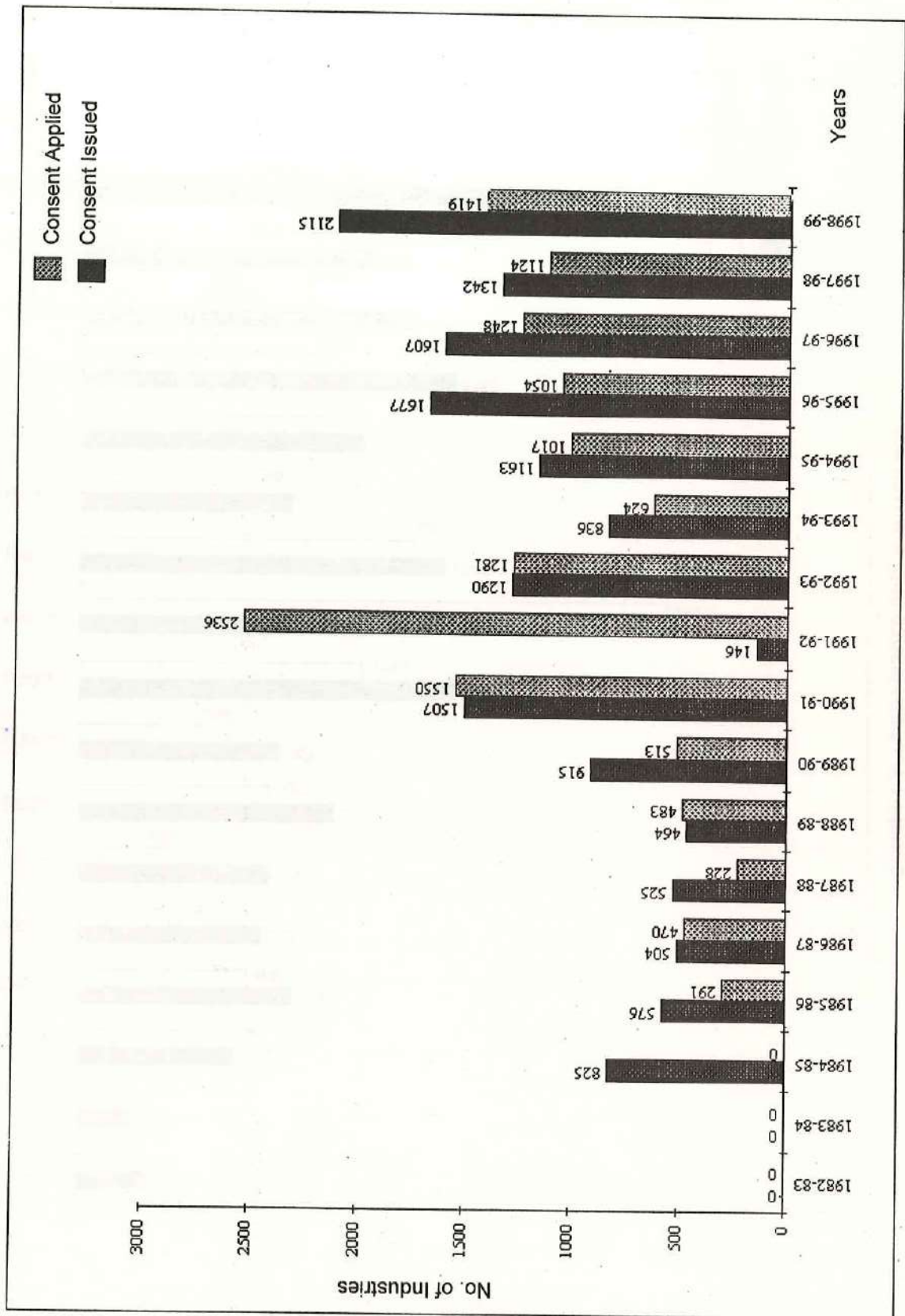
Annexure - V
TAMIL NADU POLLUTION CONTROL BOARD
ORGANISATIONAL GROWTH FROM THE YEAR 1982 TO 1999



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



Annexure - VII
TAMIL NADU POLLUTION CONTROL BOARD
CONSENT APPLIED / ISSUED 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.)
I. Under Operation:					
1	Pammal / Pallavaram	Kancheepuram	145	3000	7.03
2	Madhavaram-TALCO Industrial Estate	Thiruvallure	14	400	1.25
3	Ranipet (SIDCO)	Vellore	87	2500	2.95
4	Melvisharam	Vellore	35	3400	3.63
5	Thuthipet	Vellore	51	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	19	891	1.60
10	Ranipet	Vellore	75	4000	4.60
11	Dindigul	Dindigul	69	2533	5.00
12	Malligaithopu	Vellore	11	1100	2.00
II. Under Progress:					
13	Melpudupet	Vellore	19	550	1.51
14	Chettithangal	Vellore	11	480	1.39
15	Perumalpet	Vellore	50	4000	11.49
16	Pudur	Vellore	9	600	1.42
17	Valayampet (Vaniyambadi)	Vellore	20	1470	2.00
18	SIDCO & SIPCOT PHASE -II, Ranipet	Vellore	40	1560	2.52
19	Ambur (Mittalam)	Vellore	19	1500	2.59

20	Gundur	Tiruchirapalli	14	1775	2.85
21	Chengalvarayan-pattarai	Vellore	17	400	1.80
22	V.Kota Road	Vellore	60	2475	2.87
23	Sembattu	Tiruchirapalli	18	2400	3.00

III. Schemes dropped

24	Vaniyambadi	Vellore	21	2000	2.45
25	M.C.Road, Ambur	Vellore	13	450	2.20
26	Tarawali, Ambur	Vellore	14	800	2.75
27	Pernambut (Eruguthimullumedu)	Vellore	10	700	1.54

B. DYEING UNITS:

Sl. No.	Location of CETP	District	No. of Beneficiary units	Quantity of effluent [in KLD]	Cost of Project [in Crores]
I. Under Operation					
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	Karruppanpalayam	Karur	40	750	1.08
10	Manickapurampudur (Tiruppur)	Coimbatore	11	1600	1.27

II. Under Progress

11	R.K.Puram	Karur	49	1250	1.93
12	Andankoil	Karur	49	1900	2.14
13	Amaravathi Nagar	Karur	53	2400	2.44
14	Light House	Karur	58	1150	1.44
15	Thirumanilaiyur	Karur	62	2100	2.08
16	Sukkaliyur	Karur	80	1400	1.69
17	Sellandipalayam	Karur	150	2600	2.25
18	Vellimalai	Salem	10	98	0.14
19	Vanavil Nagar	Salem	24	900	1.26
20	Vanna Nagar	Salem	32	1200	1.47
21	Erumappalayam	Salem	27	1017	1.32
22	Gugai	Salem	24	900	1.35

III Under Initial Stages

23	Erode - I	Erode	211	1164	*1.02
24	Erode - II	Erode	191	725	*4.00

IV. Schemes Dropped

25	Bhavani	Erode	62	450	1.06
26	Chennimalai	Erode	81	500	0.95
27	Komarapalayam	Salem	57	4959	3.39

C. HOTELS

1	Kodaikanal	Dindigul	90	820	1.30
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D. HOSPITALS

1	Salem	Salem	64	450 kg/hr	0.05
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* To be finalised.

ANNEXURE -IX
FUNDS SO FAR RECEIVED FOR THE CETP SCHEMES
FROM THE STATE AND CENTRE BY TNPCB

[Rs.in Lakhs]

SL. NO.	NAME OF CETP	GOVT. OF INDIA	GOVT. OF TAMILNADU	TOTAL
(1)	(2)	(3)	(4)	(5)
YEAR 1991-92				
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
YEAR 1992-93				
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
YEAR 1995-96				
9	Ranipet - SIDCO	45.00	50.00	95.00
10	Visharam	45.00	50.00	95.00
11	Bakkalapalli	40.00	-	40.00
YEAR 1996-97				
12	R.K. Puram	***30.00	48.22	78.22
13	Andankoil	***30.00	50.00	80.00
14	Amaravathi Nagar	***30.00	50.00	80.00
15	Thiruvai	***30.00	50.00	80.00
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 (1)	GOVT. OF INDIA (2)	GOVT. OF TAMILNADU (3)	TOTAL (4)
YEAR 1996-97				
22	Ayyampettai - Muthialpettai	***13.00	13.20	26.20
23	Chettithangal	***31.25	34.85	66.10
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)	20.00	50.00	70.00
36	Angeripalayam (Tiruppur)	-	50.00	50.00
37	Veerapandi (Tiruppur)	-	12.50	12.50
38	Chinnakarai (Tiruppur)	20.00	50.00	70.00
39	Kannangalpalayam (Tiruppur)	-	50.00	50.00
40	Light House (Karur - IV)	***12.50	7.37	19.87
41	Sukkaliyur (Karur - VI)	-	42.13	42.13
42	Sellandipalayam (Karur - VII)	-	50.00	50.00
43	Karuppampalayam (Karur - VIII)	-	27.00	27.00
44	Melpudupet	***31.25	-	31.25
45	R.K. Puram (Karur-I)	***18.25	-	18.25

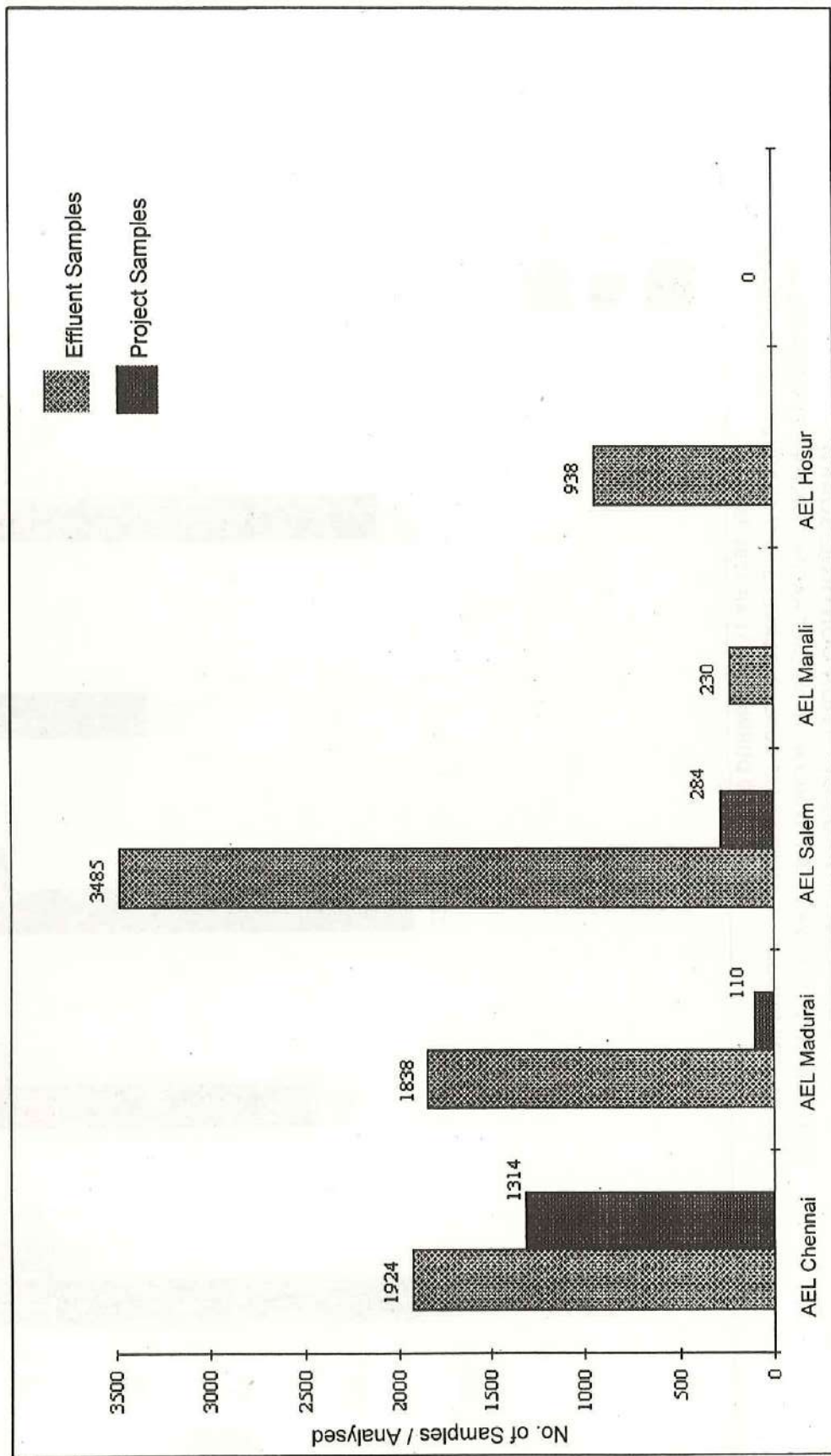
SL. NO.	NAME OF CETP	GOVT. OF INDIA	GOVT. OF TAMILNADU	TOTAL
(1)	(2)	(3)	(4)	(5)
46	Ranipet - SIDCO	*** 5.00	-	5.00
47	Visharam	*** 3.25	-	3.25
48	Valayampet (Vaniyambadi)	*** 27.50	-	27.50
49	Perumalpet	*** 25.00	-	25.00
50	SIPCOT - SIDCO Phase -II (Ranipet)	*** 20.00	-	20.00
51	Amaravathi Nagar (Karur)	*** 20.00	-	20.00
52	Andankoil (Karur)	*** 20.00	-	20.00
53	Thirumalilaiyur(Karur)	*** 20.00	-	20.00
YEAR 1998-1999				
54	Andipalayam-Tiruppur	53.75	3.75	57.50
55	Mannarai-Tiruppur	67.75	17.75	85.50
56	Manikapurampudur	31.75	-	31.75
57	Angeripalayam	180.00	130.00	310.00
58	Veerapandi	168.75	118.75	287.50
59	Chinnakarai	41.25	11.25	52.50
60.	Kasipalayam	35.00	55.00	90.00
61	Kunnangalpalayam	54.00	4.00	58.00
62	R.K.Puram- Karur	-	0.03	0.03
63	Amaravathi nagar	11.00	11.00	22.00
64	Tiruvai- Karur	22.00	2.00	24.00
65	Andankoil	-	3.59	3.59
66	Karuppampalayam	27.00	-	27.00
67	Sellandipalayam	-	6.25	6.25

* To be returned

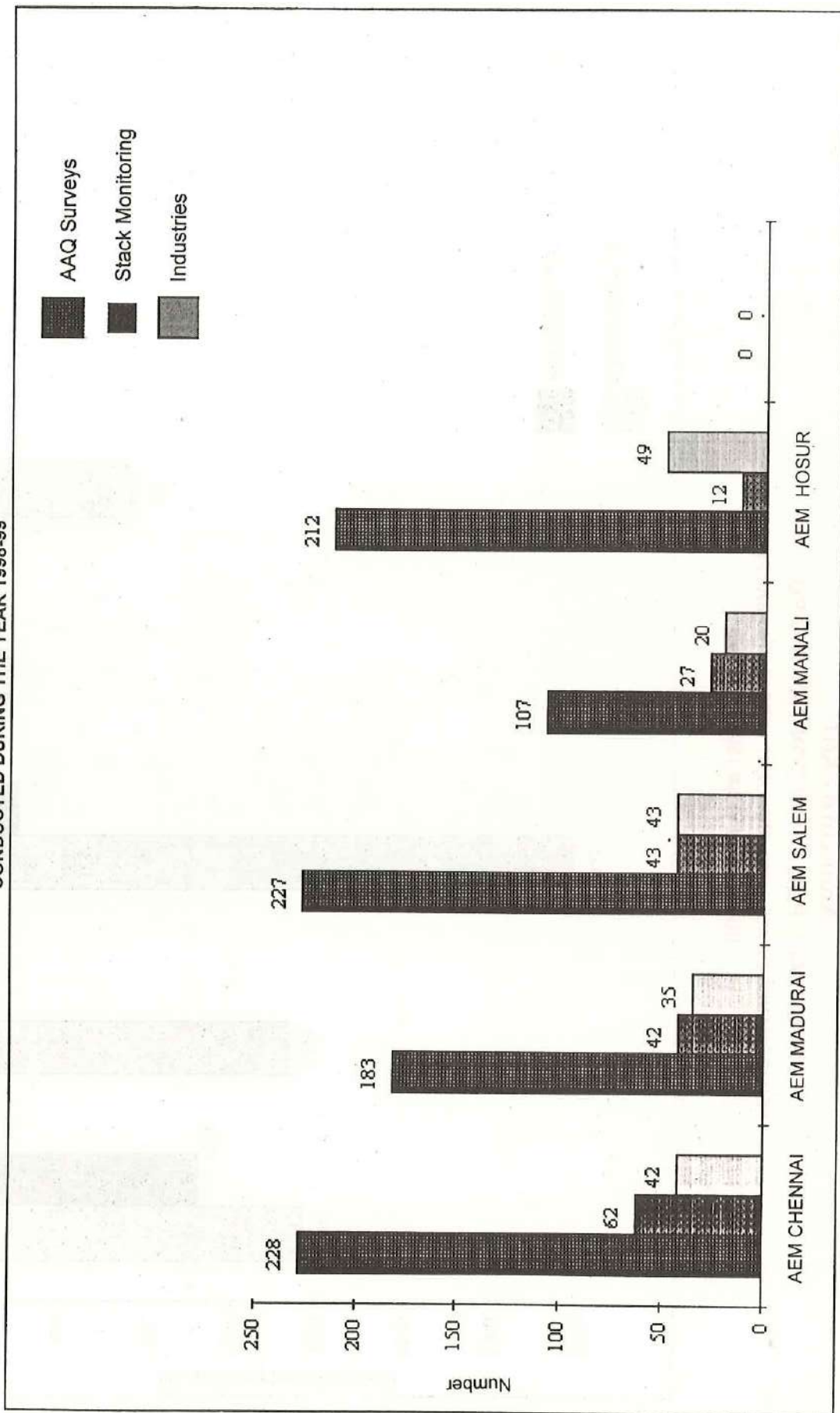
** To be adjusted

*** Amount released to IDBI

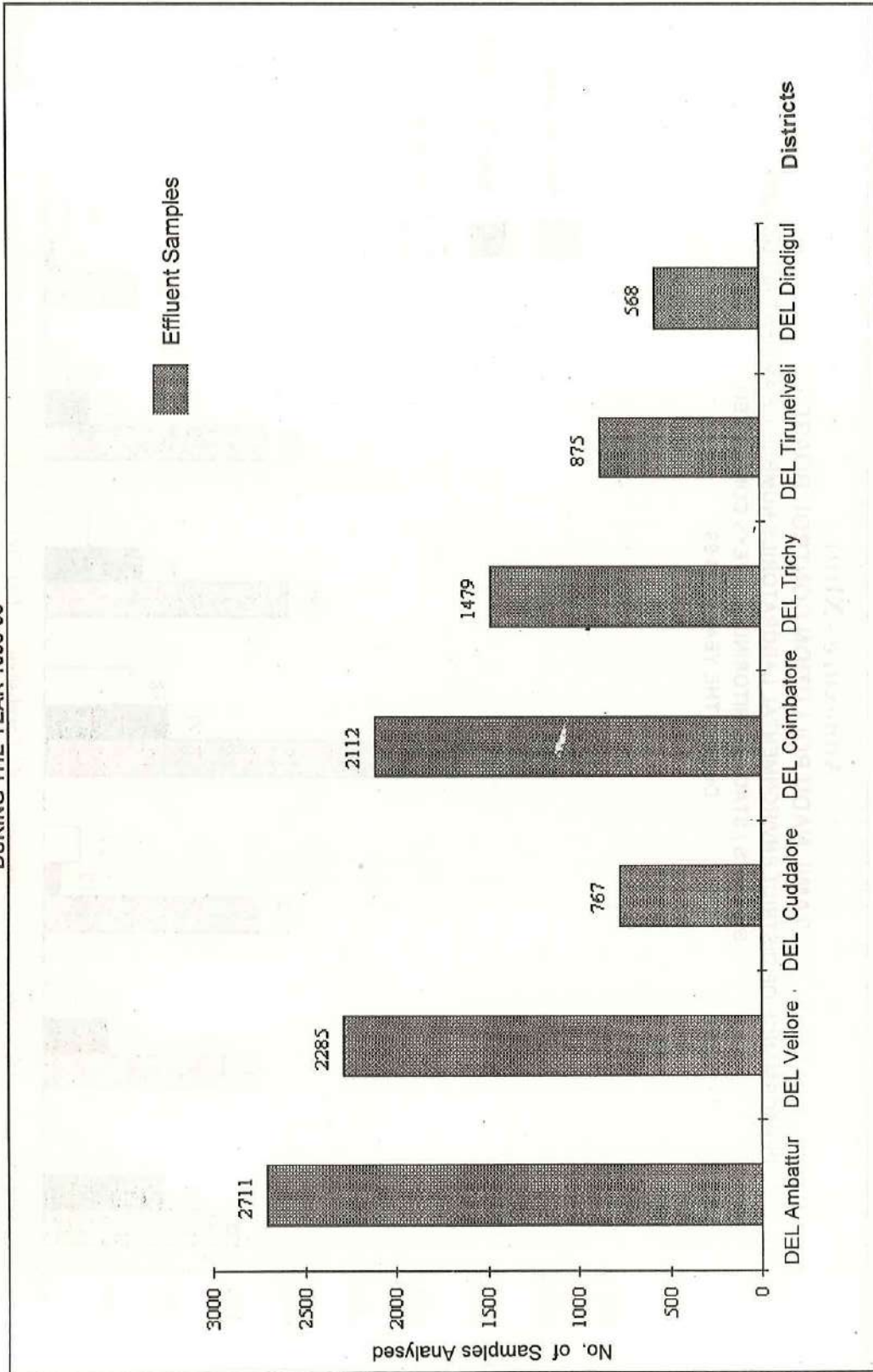
Annexure - X(i)
TAMIL NADU POLLUTION CONTROL BOARD
PERFORMANCE OF AEL / MEL EFFLUENT / PROJECTS - SAMPLES
DURING THE YEAR 1998-99



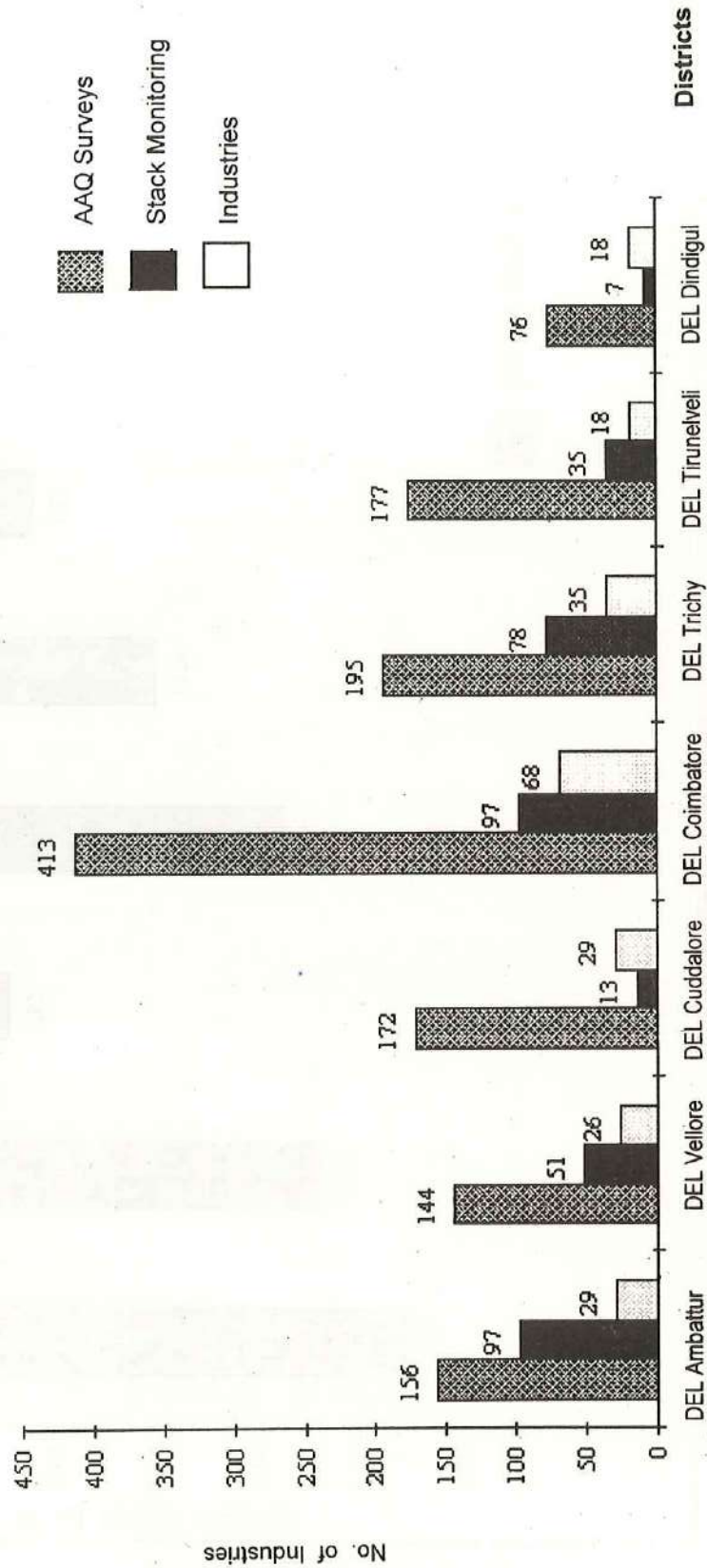
Annexure - X(ii)
TAMIL NADU POLLUTION CONTROL BOARD
PERFORMANCE OF ADVANCED ENVIRONMENTAL LABORATORY / MOBILE ENVIRONMENTAL
LABORATORY NUMBER OF AMBIENT AIR QUALITY SURVEYS / STACK MONITORING SURVEYS
CONDUCTED DURING THE YEAR 1998-99



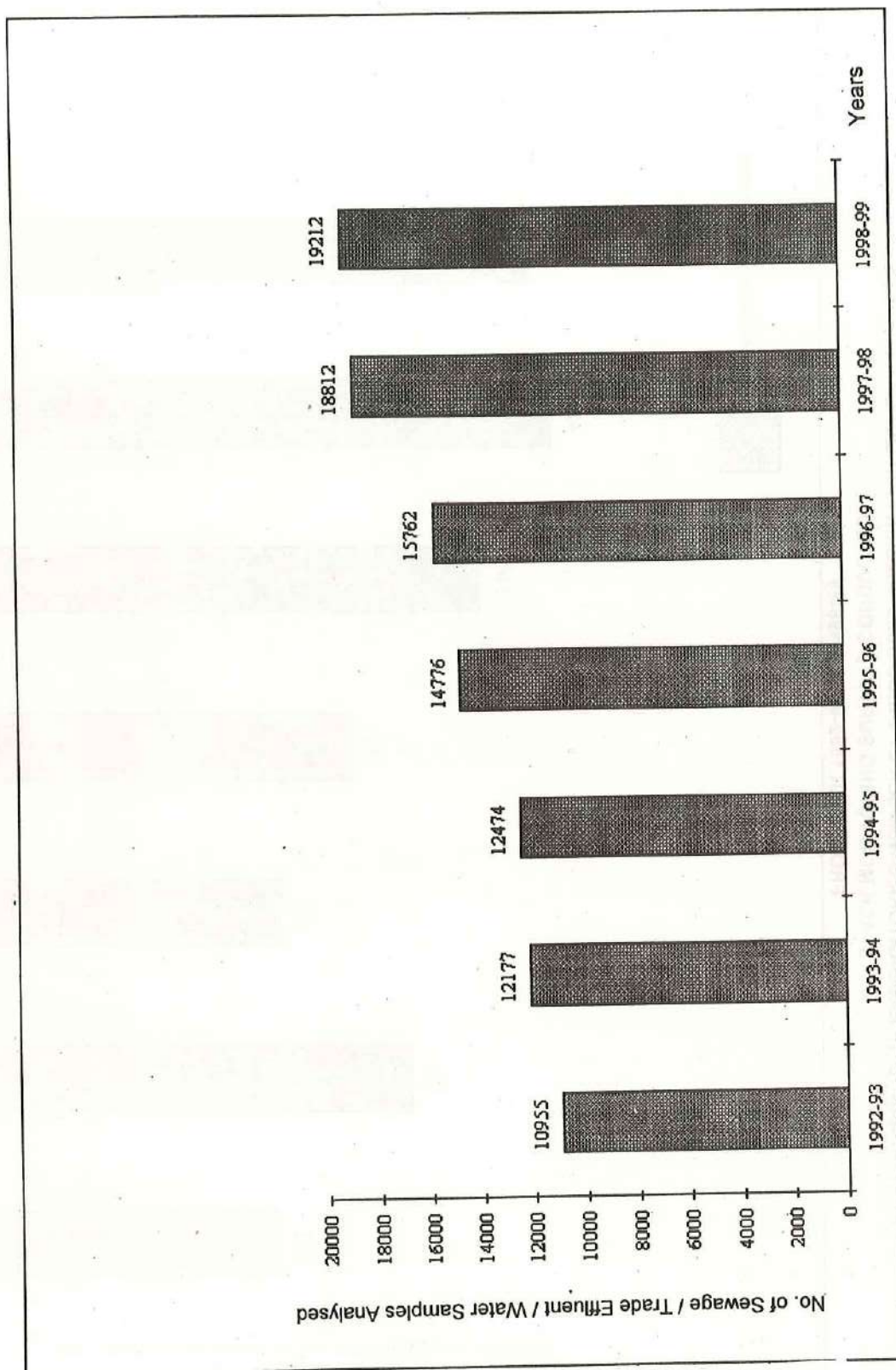
Annexure - XI(i)
TAMIL NADU POLLUTION CONTROL BOARD
PERFORMANCE OF DISTRICT ENVIRONMENTAL LABORATORIES EFFLUENT /
PROJECT - SAMPLES COLLECTED / ANALYSED
DURING THE YEAR 1998-99



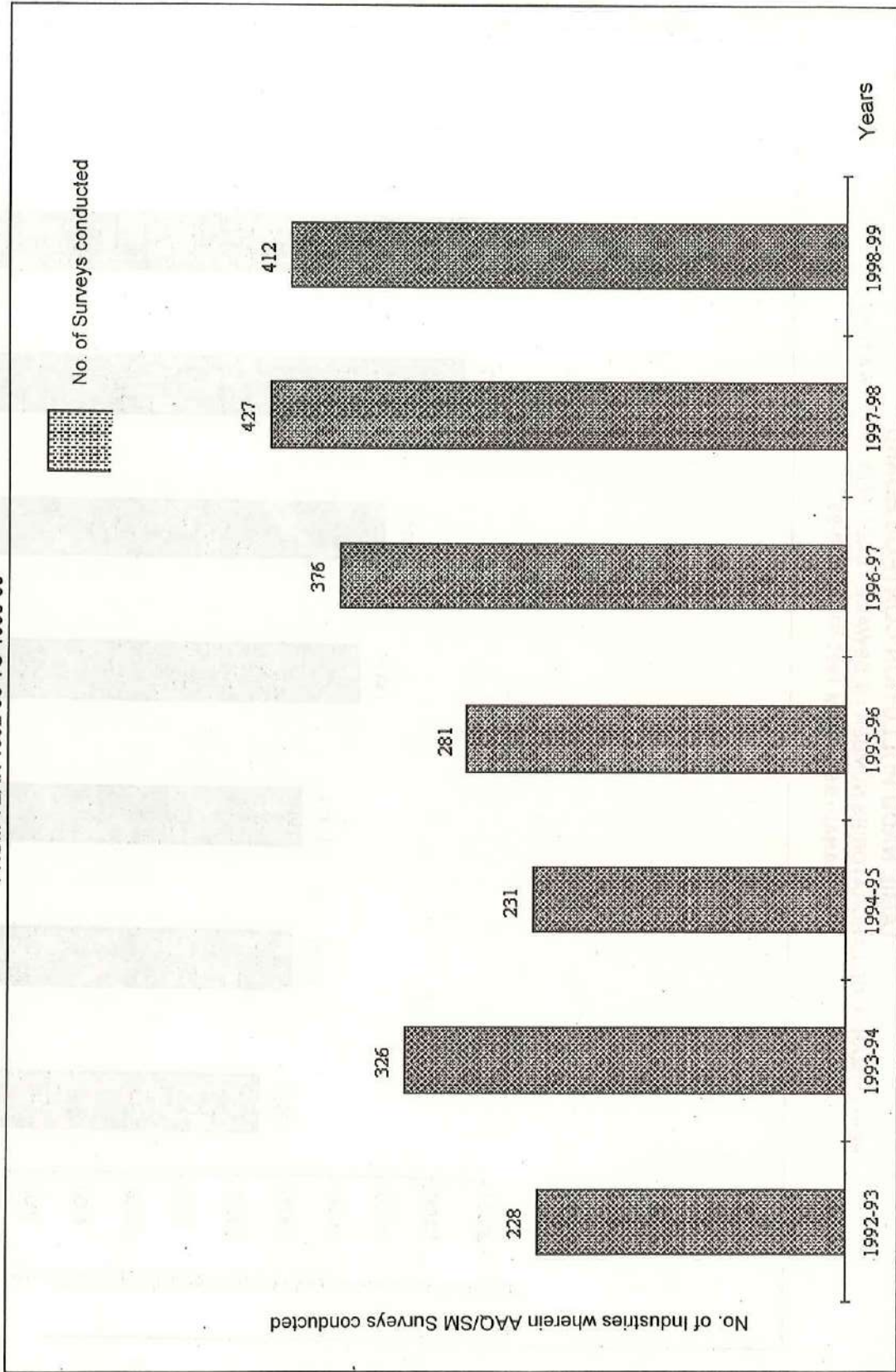
Annexure - XI(ii)
TAMIL NADU POLLUTION CONTROL BOARD
PERFORMANCE OF DISTRICT ENVIRONMENTAL LABORATORIES NUMBER OF AMBIENT AIR QUALITY
SURVEYS / STACK MONITORING SURVEYS CONDUCTED
DURING THE YEAR 1998-99



Annexure - XII(i)
TAMIL NADU POLLUTION CONTROL BOARD
PERFORMANCE OF LABORATORIES NUMBER OF SEWAGE TRADE EFFLUENT / WATER SAMPLES
ANALYSED FROM 1992-93 TO 1998-99



Annexure - XII(ii)
TAMIL NADU POLLUTION CONTROL BOARD
PERFORMANCE OF LABORATORIES NUMBER OF INDUSTRIES AMBIENT AIR QUALITY SURVEYS /
STACK MONITORING SURVEYS CONDUCTED
FROM YEAR 1992-93 TO 1998-99



Annexure XIII

Vehicular Emission Monitoring

Statement showing the details of vehicles tested and No. of
Vehicles exceeded the standards during the period
April, 1998 to March, 1999

STATION	DIESEL			PETROL			Total No. of vehicles tested	No. of vehicles exceed limit (Petrol+Diesel)
	Within the limit	Exceeded the limit	Total	Within the limit	Exceeded the limit	Total		
Chennai	21,308	665	21,973	277	6	283	22,256	671
Ooty	3,674	386	4,060	4,509	30	4,589	8,649	466
Dindigul	3,482	194	3,676	927	18	945	4,621	212
Palani	1,480	33	1,513	668	0	668	2,181	33
Chengalpattu	1,711	29	1,740	2,675	62	2,737	4,477	91
Total	31,655	1,307	32,962	9,056	166	9,222	42,184	1,473

Annexure XIV

Summary of pollution control status of 17 categories of industries in Tamilnadu as on 31.03.1999

Sl. No.	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 *	13	-	13
4.	Copper Smelter	1	-	1
5.	Distillery	16	-	16
6.	Dyes & Dye Intermediate	1	-	1
7.	Fertilizer	10	-	10
8.	Integrated Iron & Steel	1	-	1
9.	Tanneries	75	-	75
10.	Pesticide	4	-	4
11.	Petrochemicals	8	-	8
12.	Basic Drugs & Pharmaceutical	19	-	19
13.	Pulp & Paper **	05	-	05
14.	Oil Refinery	2	-	2
15.	Sugar	36	-	36
16.	Thermal Power Plant	7	-	7
17.	Zinc Smelter	-	-	-
Total		201	-	201

* 200 Tpd and above.

** 30 Tpd and above.

Annexure XV

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	213
3	Out of the cases decided , No. of cases in which:	
	a. decisions were in favour of the Board	72
	b. decisions were against the Board	112
4	Out of Sl. 3 (a) above, no. of cases in which	
	a. Conviction orders were passed	72
	b. Restraint orders were passed	-
	c. Cases withdrawn	12
5	No. of cases pending in the court	108

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	114
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	32
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	20

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	1050
2	Number of cases decided by the Court	835
3	Number of cases where decisions were in favour of the Board	682
4	Number of cases where decisions were against the Board	153
5	Number of cases pending in the Court	215

E. Public Interest Litigation Cases

1	Number of cases filed	652
2	Number of cases decided by the Court	508
3	Number of cases where decisions were in favour of the Board	534
4	Number of cases where decisions were against the Board	118
5	Number of cases pending in the Court	144

F. Closure Orders

1	Total Number of closure orders issued as on 31.3.99 under both Acts	2724
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G. Appellate Authority

1	Total number of Appeals pending	378
2	Total number of Appeals disposed	285

**ANNUAL ACCOUNTS FOR THE YEAR
1998-99**

**TAMILNADU POLLUTION CONTROL BOARD
CHENNAI - 600032**

PAGES

RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED 31st MARCH 1999

142 to 145

INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31st MARCH 1999

146 to 147

BALANCE SHEET
AS AT 31st MARCH 1999

148 to 151

AUDITOR'S REPORT

**ON THE ACCOUNTS OF THE TAMIL NADU POLLUTION CONTROL BOARD
FOR THE YEAR ENDED 31ST MARCH 1999.**

We have audited the attached Balance Sheet, the Receipts and Payments Account and the Income Expenditure Account for the year ended 31st March 1999 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 explanation, 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 31st March 1999

- (ii) In the case of Receipts and Payments account, of the total receipts and payments of the Board for the year ended 31st March 1999, 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 31st March 1999.

For P.S. SUBRAMANIA IYER & CO.,

Chartered Accountants

Chennai,

Sd/- G. HARIHARAN

30 December 1999.

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
Rs. P		Rs. P	Rs. P
	OPENING BALANCE		
15539180.58	a. Bank	58140430.96	
24530.00	b. Cash	13935.50	
4834624.67	c. Funds in Transit	5146398.00	63300764.46
	I. GRANTS RECEIVED		
-	a. From Government		-
-	b. From other Agencies		-
	II. FEES		
-	a. Consultant Registration Fees	15.00	
909890.00	b. Cost of Application	919610.00	
121849886.00	c. Consent Fees	102042166.10	
30799727.58	d. Cess Collection	27335448.32	130297239.42
30167085.00	III. INTEREST ON INVESTMENT		44817089.00
	IV. MISCELLANEOUS		
16340542.63	a. Others (Schedule-A)	29946820.10	
9951547.00	b. Cess Re-imburement	23464178.00	53410998.10
230417013.46	C/o		291826090.98

BOARD, CHENNAI - 600 032

ended 31st March 1999.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	PAYMENTS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. P		Rs. P	Rs. P
	I. CAPITAL EXPENDITURE		
6290294.00	a. Assets - Land Advance and Building Development	90000.00 13858578.20	
1191593.00	b. Laboratory Equipment	712022.00	
43728.00	c. Vehicles	—	
540421.00	d. Furniture	989322.00	
280542.00	e. Office Appliance	128618.00	
420279.00	f. Library Books	759383.00	
15940.00	g. Schemes	753486.00	
32179.00	h. Security Deposit	1900.00	
38000.00	I. Software Development	57500.00	
—	j. Electrical	118677.50	
296480.00	k. Lab. Chemicals etc.,	217488.00	17686974.70
	II. REVENUE EXPENDITURE		
	A. ADMINISTRATIVE		
31655680.53	i. Salaries	37530704.25	
285321.50	ii. Pension Contribution	1234849.00	
10435825.77	iii. Contingent Expenditure	21193844.70	
1520901.90	iv. Surrender Leave Salary	2528949.00	
1072194.00	v. Bonus	1214778.00	
1810865.30	vi. Medical Expenses	1976073.65	65679198.60
	B. BOARD LABORATORY		
66406.40	I. Running Expenses of Lab.		207141.55
55996651.40	C/o		83573314.85

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
Rs. P		Rs. P	Rs. P
230417013.46	B/F		291826090.98
	V. DEPOSITS & ADVANCES		
241850.00	i. EMD Received		
29188.00	ii. Security Deposit	120595.00	
658012.15	iii. Advance to Staff (Schedule - B)	176169.65	
166165010.00	iv. Short Term Deposit	—	
555000.00	v. Refundable Performance Guarantee Deposit	—	
			296764.65
113485889.00	VI. OTHERS (Schedule - E(1))		105215869.40
511551962.61	Total		397338725.03

Chennai - 600 032
Date :30 /12/99

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

Sd/-
K.P. Bhanumati B.A
Fin. Adviser

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

BOARD, CHENNAI - 600 032

ended 31st March 1999.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	PAYMENTS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. P		Rs. P	Rs. P
55996651.40	B/F		83573314.85
2816572.35	C. Running & Maintenance of Vehicle		3236808.85
	D. MAINTENANCE & REPAIRS		
839535.90	i. Buildings and land , Rent	4309106.25	
4125252.00	ii. Furniture & Fixture	14175.00	
6081.00	iii. Scientific instruments	387371.50	
324803.05	iv. Office Appliance	546254.00	
489817.10	v. Electrical Installation	558536.75	
310426.80	vi. Insurance of Assets	86507.00	
263835.00	vii. Other Assets	2969814.50	
			8871765.00
588029.00	E. Fees to Consultant and Specialists		42671.00
448018.00	F. Law Charges		433315.00
17008965.95	G. Miscellaneous	—	
28700.00	H. Expenses for audit		40817.75
	III. MISCELLANEOUS (Schedule-C)		25429467.17
29593082.00	a. Cess Remittance		27797899.00
3925523.35	IV. ADVANCE (Schedule - D)		3575492.70
	V. Deposits		
244380914.00	a. Short Term Deposits	95953246.00	
87104991.25	b. Others (Schedule - E)	87976897.04	
			183930143.04
	VI. CLOSING BALANCE		
58140430.96	Bank	54017038.67	
13935.50	Cash	18013.50	
5146398.00	Funds in Transit	6371978.50	
			60407030.67
511551962.61	Total		397338725.03

Subject to our report of even date & Schedules + notes attached
For M/s. P.S. Subramania Iyer & Co., Chartered Accountants

Sd/-
S. Rajarethinam I.A.S.
Chairman I/c

Sd/-
G. Hariharan
Partner

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

PREVIOUS YEAR	EXPENDITURE	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. P		Rs. P	Rs. P
	REVENUE EXPENDITURE		
	A. ADMINISTRATIVE		
1071637.70	I. Pay of officers	2124396.80	
13241968.55	ii. Pay of Establishment	39929145.95	
39185238.66	iii. Allowance & Honororia (Sch-F)	34131101.25	
	iv. Contribution to Gratuity & Provision for Pension	8723300.00	
8212260.00	v. Surrender Leave Salary	2589971.50	
1516187.90			87497915.50
1154998.64	B. Running Expenses of Labs.		1910036.70
3055806.76	C. Running and Maintenance of Vehicle (Sch- G)		3397097.10
	D. Maintenance and Repairs		
10655.00	I. Furniture & Fixtures	13447.00	
402287.90	ii. Lab. Equipments & Instruments	332482.55	
512544.40	iii. Office Appliance	395636.00	
398159.65	iv. Electrical Installation	620334.75	
802528.05	v. Building	1110763.50	
			2472663.80
370529.00	E. Fees to Consultants and Specialists		412643.75
470250.00	F. Law Charges		488200.00
10274595.00	G. Depreciation (Form XV)		13145630.92
16578877.91	H. Miscellaneous (Sch - H)		18403054.47
13670.00	I. Fees for Audit		26250.00
-	J. Prior Period Expenditure		21258383.17
132928633.56	K. Excess of income over Exp.		75014822.19
	L. Notes to B/S (Sch-S)		
230200828.68	Total		224026697.60

Chennai - 600 032
Date :30 /12/99

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

Sd/-
K.P. Bhanumati B.A
Fin. Adviser

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

OF ACCOUNT

the year ended 31st March 1999.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	INCOME	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. P		Rs. P	Rs. P
—	I. GRANTS RECEIVED		
—	a. From Government	—	
—	b. From other Agencies	—	
—	Less: Amount utilised for Capital Expenditure	—	
	Net Grant available for Revenue Expenditure	—	
137721998.60	II. Fees (Sch -I)		118923628.10
19630499.25	III. Services & Rental Charges (Lab Analysis Charges Sch - J)		24593405.70
	IV. Miscellaneous Receipts		
465872.89	I. Others (Sch - K)	739752.80	
9951547.00	ii. Cess Reimbursement	23464178.00	
			24203930.80
58169140.31	V. Interest on Investment		56305733.00
4261770.63	VI. Prior Period Adjustment	—	—
230200828.68	Total		224026697.60

Subject to our report of even date & Schedules + notes attached
For M/s. P.S. Subramania Iyer & Co., Chartered Accountants

Sd/-
S. Rajarethinam I.A.S.
Chairman I/c

Sd/-
G. Hariharan
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.	P		Rs.	P	Rs.	P
		A. CAPITAL FUND				
		a. GRANTS				
50526922.18		I. Grants received from Govt. for capital exp. as on I.4.98	50526922.18			
		ii. Grants received from Govt. for capital exp. During the current year and utilised upto 31.3.99	-			
		iii. Grants received towards specific schemes from other agencies	-		50526922.18	
		b. Excess of Income over Expenditure				
263273647.00		I. As at 01.04.98	375843570.56			
		ii. Less: Prior Period Adjustment	-			
			375843570.56			
20358710.00		iii. Less: Amount transferred to Depreciation Fund	13604886.00			
			362238684.56			
132928633.56		iv. Add: Surpluses during the year	75014822.19		437253506.75	
75011909.16		c. Depreciation Fund			88616795.16	
		B. OTHER DEPOSITS				
2462786.83		I. Deposits for supply & works (Schedule L)	2483876.33			
44944782.05		ii. Refundable Performance Guarantee Deposits	43905819.05		46389695.38	
		C. AMOUNT DUE				
351168480.54		I. Cess Payable	455995581.49			
		Less: Provision	1624425.47			
			454371156.02			
24026624.89		ii. Others (Schedule M)	60268900.04		514640056.06	
923985076.21		C/o			1137426975.53	

OF ACCOUNT

at 31st March 1999.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	ASSETS	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. P		Rs. P	Rs. P
	I. FIXED ASSETS		
8286224.65	a. LAND DEVELOPMENT	8376224.65	
	b. Building under Construction		
5235162.25	I. Hosur	4000000.00	
5556760.00	ii. Tirunelveli	4000000.00	
1020000.00	iii. Trichy	2000000.00	
	iv. Madurai	4520000.00	22896224.65
	II. OTHER ASSETS		
64546060.17	a. As per Form XV		77033316.24
	b. Stock in hand		
755006.22	I. Lab Chemicals	682942.15	
1235721.36	ii. Glassware	1050889.26	
200734.05	iii. Misc. Stores	202479.16	
378208.62	iv. Filter Paper	713866.33	2650176.90
557524.00	III. SCHEMES		
56995.00	IV. SOFTWARE DEVELOPMENT		
	V. SUNDRY DEBTORS		
	Cess Receivable		
270257933.72	a. From Industries	354716517.97	
83749795.45	b. From Local Bodies	99851983.30	
		454568501.27	
4553110.53	Less: Provision for doubtful Debts	1624425.47	452944075.80
437283014.96	C/o		555523793.59

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

PREVIOUS YEAR	LIABILITIES	TOTAL OF SUB HEAD	TOTAL OF MAJOR HEADS
Rs. P.		Rs. P	Rs. P
923985076.21	B/f		1137426975.53
99956.98	D. Environmental Impact Study		139956.98
18150642.93	E. Income received in advance (Schedule - N)		27279319.40
61487000.00	F. Subsidies for common Effluent treatment plants		64924000.00
1170608.69	G. Environmental Education Fund Reserve		1170608.69
500000.00	H. Emergency response centre		500000.00
1005393284.81	Total		1231440860.60

Chennai - 600 032
Date :30 /12/99

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

Sd/-
K.P. Bhanumati B.A
Fin. Adviser

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

OF ACCOUNT

at 31st March 1999.

(Prevention and control of Pollution) rules 1983.

PREVIOUS YEAR	ASSETS	TOTAL OF SUB HEAD		TOTAL OF MAJOR HEADS	
		Rs.	P	Rs.	P
437283014.96	B/f			555523793.59	
	VI. ADVANCES & DEPOSITS				
45116606.22	a. Misc. amounts recoverable (Schedule - O)	50137382.94			
4920408.77	b. Others amounts recoverable (Schedule - P)	4810765.00			
1385646.40	c. Deposits (Schedule - Q)	1394644.40		56342792.34	
	VII. CASH				
	a. Deposits				
453389844.00	i. Term Deposits with Banks (Schedule R)			559167244.00	
58140430.96	b. Cash at Bank	54017038.67			
13935.50	c. Cash in Hand	18013.50			
5146398.00	d. Cash in Transit	6371978.50		60407030.67	
1005396284.81	Total			1231440860.60	

Subject to our report of even date & Schedules + notes attached
For M/s. P.S. Subramania Iyer & Co., Chartered Accountants

Sd/-
S. Rajarethinam I.A.S.
Chairman I/c

Sd/-
G. Hariharan
Partner

TAMIL NADU POLLUTION CONTROL BOARD

FORM - XV

ANNUAL STATEMENT OF ACCOUNTS - FIXED ASSETS AS ON 31st MARCH 1999.

See Rules 36 of Tamil Nadu Water (Prevention and control of Pollution) rules 1983.

Sl. No.	Particulars of Assets	Percentage	Opening Balance on 1/4/98	Additions and sales adjustment during the year	Total	Depreciation	Closing Balance on 31/03/99	Cumulative Depreciation as on 31/03/99
1	Building	10%	45342299.16	11809601.45	57151900.61	5715190.00	51436710.61	31490519.99
2	Library Books	10%	1206315.90	771412.00	1977727.90	197772.00	1779955.90	930272.13
3	Vehicle	33.33%	1268899.70	2064943.94	3333843.64	1192969.00	2140874.64	8737316.51
4	Furniture & Fixture	10%	4074058.45	4144157.90	8218216.35	1124726.00	7093490.35	5194176.88
5	Office Appliance	10%	4692593.70	342453.00	5035046.70	503505.00	4531541.70	3433982.44
6	Lab Equipment	33.33%	7528907.81	6830230.28	14359138.09	4786375.00	9572763.09	37754489.05
7	Electrical Installations	15%	432985.45	129343.50	562328.95	84349.00	477979.95	1076038.16
			64546060.17	26092142.07	90638202.24	13604886.00	77033316.24	88616795.16

* Depreciation includes Rs.459255.08 being depreciation provided for assets relating to earlier years capitalised during the year amounting to Rs.859694.58

Subject to our report of even date
& Schedules + notes attached
For M/s. P.S. Subramania Iyer & Co.,
Chartered Accountants

Sd/.

G. Hariharan
Partner

Sd/-

S. Rajarethinam I.A.S.
Chairman I/c

Sd/-

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

Sd/-

K.P. Bhanumati B.A
Fin. Adviser

Sd/-

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

Chennai - 600 032
Date : 30 /12/99

**SCHEDULE OF RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

RECEIPTS

**SCHEDULE - A
MISCELLANEOUS RECEIPTS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Analysis Charges (Fees)	11065294.50	
2	Cess Appeal Fee	1150.00	
3	Interest Income	5152.90	
4	Miscellaneous Income	587886.00	
5	MINAR	456850.00	
6	VEM Test Fees	3123974.00	
7	Enlistment Fees	1105.00	
8	A.A.Q.S	7113629.00	
9	Sale of legal Books	1725.00	
10	Public Hearing	3829769.00	
11	Rent (Corporate Office)	118900.00	
12	Bio-Medical Waste	861893.40	
13	GEMS	53060.00	
14	Sale of Vehicle	326992.00	
15	ETI	1079896.75	
16	Others	350100.00	
17	NAAQM	450850.00	
18	Interest on Loans / Advance	38249.00	
19	Receipt from Ecology GOI	471000.00	
20	Petty Cash	9343.55	
TOTAL		29946820.10	

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

SL.NO	DESCRIPTION	Rs.	Ps.
1	Temporary Advance	54740.65	
2	L.T.C. Advance	6663.00	
3	Vehicle Advance	570.00	
4	Tour Advance	66574.00	
5	Festival Advance	1700.00	
6	Handloom Advance	400.00	
7	Telephone & Telex	20134.00	
8	PRL	25388.00	
TOTAL		176169.65	

**SCHEDULE OF RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

RECEIPTS

**SCHEDULE - C
MISCELLANEOUS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Advertisement and Publicity	1150732.00	
2	Postage/Telegram	629218.75	
3	Electricity/Water Charges	3103026.50	
4	Printing and Stationery	1519630.45	
5	Telephone and Telex	2182405.10	
6	Staff Welfare Expenses	208695.40	
7	Pollution Awareness Expenses	296626.00	
8	Training and Seminar	128731.00	
9	Entertainment	104512.65	
10	Miscellaneous Expenses	99889.65	
11	Newspaper and Periodicals	144243.50	
12	Conveyance	104341.80	
13	Wages	2101299.60	
14	Office Expenses	179060.60	
15	Expenses through petty cash	587737.55	
16	Prior period adjustment account	91365.00	
17	Travelling expenses	1182413.70	
18	Trade Fair	423466.00	
19	Land Maintenance expenses	49588.50	
20	Bank interest and commission	78062.07	
21	LTC Expenses	22297.00	
22	ETI Expenses	599567.25	
23	Other Expenses	469478.00	
24	Environmental Pavilion Expenses	16006.00	
25	Gratuity	1694549.00	
26	Honorarium	6000.00	
27	Sale of Vehicle	59723.00	
28	Public Hearing	596348.50	
29	Financial Assistance to Proj.	1597176.00	
30	Interim Relief	2458.00	
31	Pay Comm. Arrears	5731457.00	
32	T.D. & O.T.	7301.00	
33	O/s. Expenses	262060.60	
	TOTAL	25429467.17	

**SCHEDULE OF RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

PAYMENT

SCHEDULE - D

ADVANCE TO STAFF (PAYMENT)

SL.NO	DESCRIPTION	Rs.	Ps.
1	Festival Advance	472700.00	
2	Education Advance	5000.00	
3	Furniture Advance	3600.00	
4	Cycle Advance	10212.00	
5	Handloom Advance	21500.00	
6	Marriage Advance	38000.00	
7	Pay Advance	30885.00	
8	Tour Advance	594077.25	
9	Temporary Advance	679989.20	
10	L.T.C. Advance	44552.00	
11	Others	49170.50	
12	Imprest to Staff	9283.75	
13	TTA	13307.00	
14	Warm Cloth Advance	1000.00	
15	Motor Vehicle Advance	1465686.00	
16	Personal Computer Advance	136530.00	
	TOTAL	-----	3575492.70

SCHEDULE - E

DEPOSITS AND ADVANCES (PAID) (OTHERS)

1	Advance to Suppliers	10052912.54
2	Earnest Money Deposit (refund)	169850.00
3	Rent Advance	130506.00
4	Retention Money Deposit	23003.00
5	CETP Expenses	870.00
6	RPGD	1038963.00
7	FBF	166378.00
8	Electricity Deposit	27151.00
9	TDS Others	153203.50
10	CETP subsidy released	74275000.00
11	Advance for Construction (Guindy)	89816.00
12	Pre Paid Expense	491987.00
13	Staff death claim paid	13154.00
14	Telephone & Telex Deposit	15000.00
15	Miscellaneous Deposit	900.00
16	Land Advance	1000000.00
17	Sundry Creditor Others	328203.00
	TOTAL	-----
		87976897.04

**SCHEDULE OF RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

RECEIPTS

SCHEDULE - E (I)

ADVANCES AND DEPOSITS (OTHERS) (RECEIVED)

SL.NO	DESCRIPTION	Rs.	Ps.
1	Consent Fees received in advance	24133197.00	
2	Cess received in advance	81691.40	
3	Analysis fees received in advance	2627900.00	
4	A.A.Q.S received in advance	586081.00	
5	Enlistment Deposit	5000.00	
6	Environment Impact Study	40000.00	
7	Rent Advance	30000.00	
8	CETP - Fund recd. (GOI \ State Govt.)	73312000.00	
9	Refund recd. from CETP Units	4400000.00	
	TOTAL	105215869.40	

**SCHEDULE FORMING PART OF INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

**EXPENDITURE
SCHEDULE - F
ALLOWANCES AND HONORORIA**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Allowances	18621223.85	
2	Wages	2162092.50	
3	Travelling Expenses	1759221.30	
4	Medical Reimbursement	1971193.15	
5	Honorarium	6360.00	
6	Bonus	1214778.00	
7	LTC Expenses	85438.00	
8	Interim Relief	351354.25	
9	Term Duty	34793.40	
10	Over time	47095.80	
11	Payment of VI Pay Commission Arrears	7877551.00	
	TOTAL		34131101.25

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

SL.NO	DESCRIPTION	Rs.	Ps.
1	Repairs	1228487.90	
2	Fuel	1921591.20	
3	Hire Charges	149921.00	
4	Insurance	97097.00	
	TOTAL		3397097.10

**SCHEDULE FORMING PART OF INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

**EXPENDITURE
SCHEDULE - H
MISCELLANEOUS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Office Expenses	334349.20	
2	Telephone & Telex	2288969.65	
3	Sundries	113397.05	
4	Entertainment Expenses	205601.25	
5	Printing & Stationery	2121632.25	
6	Electricity & Water Charges	3277507.00	
7	Postage & Telegram	663348.35	
8	Advertisement & Publicity	613127.00	
9	Rent on Buildings	2643243.00	
10	Newspaper and Periodicals	182992.05	
11	Pollution Awareness Expenses	1287577.50	
12	Coastal Project Expenses	808.90	
13	Family Benefit Fund Contribution	139408.00	
14	Conveyance Expenses	268563.10	
15	Staff Welfare Expenses	279607.05	
16	Training and Seminar Expenses	130718.00	
17	Bank Interest	89733.87	
18	Land Maintenance Expenses	37207.50	
19	Trade Fair Expenses	740562.00	
20	NAAQM Expenses	3907.50	
21	CETP Expenses	870.00	
22	E T I Expenses	289538.50	
23	Financial Assistance to Projects	1789176.00	
24	Expenses of audit	16815.75	
25	Software expenses	139795.00	
26	Property Tax	267018.00	
27	Environmental Pavilion Expenses	381002.00	
28	Insurance of Assets	96579.00	
	TOTAL	18403054.47	

**SCHEDULE FORMING PART OF INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

**INCOME
SCHEDULE - I
FEES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Consent Fees	118004218.10	
2	Consent Forms	919410.00	

TOTAL		118923628.10	

**SCHEDULE - J
SEVICE AND RENTAL CHARGES**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Analysis Charges	11438264.50	
2	MINAR	456850.00	
3	AAQS	8399337.00	
4	VEM Test Fees	3123974.00	
5	GEMS	53060.00	
6	Biomedical Waste Mgmt.	711663.30	
7	NAAQM	410256.90	

TOTAL		24593405.70	

**SCHEDULE - K
Miscellaneous**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Cess Appeal Fees	1150.00	
2	Miscellaneous Income	619544.80	
3	Enlistment Fees	1105.00	
4	Sale of Legal Books	1725.00	
5	Interest on Loans & Advance	71128.00	
6	Others	45100.00	

TOTAL		739752.80	

**SCHEDULE FORMING PART OF INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED ON 31st MARCH 1999.**

**LIABILITIES
SCHEDULE - L
OTHER DEPOSITS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	EMD	562591.20	
2	Security Deposits	1035135.65	
3	Enlistment Deposits	285500.00	
4	Retention Money Deposits	285649.48	
5	Miscellaneous Deposits	315000.00	
TOTAL		<u>2483876.33</u>	

**SCHEDULE - M
SUNDRY CREDITORS**

SL.NO	DESCRIPTION	Rs.	Ps.
1	P.R.L.	1036242.00	
2	Pension Payable	51118065.50	
3	Outstanding Liability	4356327.19	
4	Staff Death Claim Payable	(13154.00)	
5	T D S (Officers)	16288.00	
6	T D S (Others)	15693.50	
7	Sundry Creditors - Others	148067.00	
8	Sundry Creditors Guindy	81678.00	
9	Public Hearing Fund	3509692.85	
TOTAL		<u>60268900.04</u>	

**SCHEDULE - N
INCOME RECEIVED IN ADVANCE**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Consent Fees	26534107.00	
2	Cess Income	111507.40	
3	Analysis Fees	226990.00	
4	AAQS	406715.00	
TOTAL		<u>27279319.40</u>	

**SCHEDULE FORMING PART OF BALANCE SHEET
AS ON 31st MARCH 1999.**

ASSETS

SCHEDULE - O

MISCELLANEOUS ADVANCES

SL.NO	DESCRIPTION	Rs.	Ps.
1	Advance to Suppliers	407174.90	
2	Rent Advance	753578.15	
3	Insurance Claim Receivable	43243.00	
4	Land Advance	2881395.00	
5	Prepaid Expenditure	407062.60	
6	Staff Welfare Fund	12701.15	
7	Tax Advance to ETI	382784.14	
8	Interest Receivable	45132175.00	
9	Others	117269.00	
TOTAL		50137382.94	

**SCHEDULE - P
ADVANCES TO STAFF**

SL.NO	DESCRIPTION	Rs.	Ps.
1	Tour Advance	307369.50	
2	Temporary Advance	24950.00	
3	Marriage Advance	128436.00	
4	Festival Advance	295615.00	
5	Handloom Advance	12050.00	
6	Driver Training Advance	10432.50	
7	Pay Advance	2500.00	
8	Cycle Advance	23188.00	
9	Motor Vehicle Advance	3733787.00	
10	House Building Advance	10789.00	
11	Personal Computer Advance	132530.00	
12	Miscellaneous Advance	39416.00	
13	Educational Advance	1000.00	
14	Staff Housing Scheme	12662.00	
15	Furniture Advance	1440.00	
16	Warm Cloth Advance	500.00	
17	TT Advance	74100.00	
TOTAL		4810765.00	

**SCHEDULE FORMING PART OF BALANCE SHEET
AS ON 31st MARCH 1999.**

ASSETS

SCHEDULE - Q

DEPOSITS

SL.NO	DESCRIPTION	Rs.	Ps.
1	Telephone & Telex	1006889.00	
2	T.N.E.B.	373554.00	
3	Miscellaneous Deposits	9273.40	
4	Staff Higher Studies Deposit	4928.00	
TOTAL		----- 1394644.40 -----	

SCHEDULE - R

SCHEDULE FOR TERM DEPOSITS

SL.NO	DESCRIPTION	Rs.	Ps.
1	Pension Fund Investment	51118065.50	
2	Depreciation Fund Investment	88616795.16	
3	Refundable Performance Guarantee Deposit Investment	43905819.05	
4	Model ETP for Sago Plant	447000.00	
5	Other term deposit	375079564.29	
TOTAL		----- 559167244.00 -----	

SCHEDULE - S

NOTES FORMING PART OF ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 1999.

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.

2. (a) Cess Receivable Rs.45,45,68,501.27 include disputed amounts from the following industries / local bodies:

i. Ennore Thermal Power Station	:	16,59,78,843
ii. North Madras Thermal Power Station	:	10,40,77,163
iii. Tuticorin Thermal Power Station	:	8,08,83,877
iv. Seshasayee Paper and Boards Ltd.,	:	22,11,080
v. Local Bodies	:	9,98,51,983

b) Provision has been made for doubtful debts Rs.16,24,425.47 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 or pending registration at various places.

4. Funds in Transit include Rs.15,05,759 which are required to be reconciled and adjusted. Revenue impact, if any, on these is not ascertainable.
5. Term deposit of RS. 1,01,37,492/= is subject to lieu in favour of Canara Bank, for opening Letter of Credit. The Board is contingently liable for Letter of Credit opened to the extent of Rs.1,33,374.

Chennai - 600 032
Date :30 /12/99

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

Sd/-
K.P. Bhanumati B.A
Fin. Adviser

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

Subject to our report of even dated
M/s. P.S. Subramania Iyer & Co.,
Chartered Accountants

Sd/-
S. Rajarethinam I.A.S.
Chairman I/c

Sd/-
G. Hariharan
Partner

