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# **Press Release**

## 1. AMBIENT AIR QUALITY MONITORING

In the vicinity of major cities, the quality of the ambient air is being affected by emissions from the industries and from the ever increasing vehicular population. For monitoring the ambient air quality in major cities and Towns of Tamil Nadu, TNPCB conducts ambient air quality survey at 28 locations under National Air Quality Monitoring Programme (NAMP) by installing Respirable Dust samplers. The locations are given below.

| SI.No. | City/Town  | Sample Location                    | Land Use                            | Monitoring parameter                   |
|--------|------------|------------------------------------|-------------------------------------|--|
| 1      | Chennai    | Kathivakkam                        | Industrial zone                     | PM <sub>10</sub> , PM <sub>2.5</sub> , |
|        |            | Manali                             | Industrial zone                     | SO <sub>2</sub> , NO <sub>2</sub>      |
|        |            | Thiruvottiyur                      | Industrial zone                     |  |
|        |            | Kilpauk                            | Commercial and traffic intersection |  |
|        |            | Thiyagaraya Nagar                  | Commercial and traffic intersection |  |
|        |            | Nungambakkam                       | Commercial and traffic intersection |  |
|        |            | Anna Nagar                         | Residential zone                    |  |
|        |            | Adyar                              | Residential zone                    |  |
| 2      | Coimbatore | District Collector<br>Office       | Mixed zone                          |  |
|        |            | Ponnaiyarajapuram                  | Residential zone                    |  |
|        |            | SIDCO building                     | Industrial zone                     |  |
| 3      | Madurai    | Highways Project building          | Residential zone                    |  |
|        |            | Susee Cars and<br>Trucks Co Ltd    | Industrial zone                     |  |
|        |            | Madurai Corporation office (south) | Mixed zone                          |  |

| 4 | Salem           | Sowdeswari College      | Mixed zone           |  |
|---|-----------------|-------------------------|----------------------|--|
| 5 | Tiruchirappalli | Gandhi Market           | Commercial zone      |  |
|   |                 | Main Guard Gate         | Traffic intersection |  |
|   |                 | Bishop Heber<br>College | Mixed zone           |  |
|   |                 | Golden rock             | Residential zone     |  |
|   |                 | Central Bas stand       | Traffic intersection |  |
| 6 | Thoothukudi     | Raja Agencies           | Industrial zone      |  |
|   |                 | SIPCOT                  | Industrial zone      |  |
|   |                 | AVM Building            | Mixed zone           |  |
| 7 | Mettur          | Raman Nagar             | Residential zone     |  |
|   |                 | SIDCO                   | Industrial zone      |  |
| 8 | Cuddalore       | Echankadu village       | Residential zone     |  |
|   |                 | Imperial College        | Commercial zone      |  |
|   |                 | SIPCOT                  | Industrial zone      |  |

All the above stations are functioning on 24 hours basis, twice a week, the samples collected from NAMP stations are analysed for the Particulate Matter ( $PM_{10}$ ) ( $PM_{2.5}$ ) and gaseous pollutants such as Sulphur dioxide and Nitrogen dioxide. The report of analysis is enclosed in the annexure. During the period 2018-19, the annual average values of Sulphur dioxide and Nitrogen dioxide were found to be well within the prescribed standards in all the above stations and  $PM_{10}$  value exceeded in few places which is mainly due to vehicular movement. The main reason for the higher values of  $PM_{10}$  is due to resuspension of sand and dust matter in the roads due to heavy vehicular movements. In Thoothukudi town the  $PM_{10}$  values were slightly higher than the annual average values for which action plan was prepared to reduce the  $PM_{10}$  value. The action plan was approved by Central Pollution Control Board and the necessary action is taken with the coordination with the other Government and Non Governmental organizations. The details are uploaded in TNPCB website

## 2. CONTINUOUS AMBIENT AIR QUALITY MONITORING STATIONS

Besides manual air quality monitoring, the Board has installed nine automatic Continuous Ambient Air Quality Monitoring (CAAQM) stations. Five stations are installed at Chennai (viz) Koyambedu, Royapuram, Perungudi (Sai Nagar),

Kodungaiyur, Manali, and one station each at SIPCOT Gummidipoondi, SIPCOT Thoothukudi, SIPCOT Perundurai and Coimbatore. All the monitoring stations are in operation. All monitoring stations monitor PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>,NH<sub>3</sub>, O<sub>3</sub>, CO and Benzene on a continuous basis. Important features of the system are;

- i. Data updation at a frequency of 15 minutes from the locations.
- ii. Immediate reporting of violation of Ambient Air Quality Standards.
- iii. Data validation with working ranges and instrumental ranges.
- iv. Common System can fetch the available data from any CAAQM Stations in state.
- v. Connectivity through mobile or landline communication network.
- vi. Instant access to previous and current data in desired formats.
- vii. The software can also analyze the data as desired normally like comparisons with other stations, hourly, eight hourly, monthly, yearly Data analysis etc.

#### 3. MOBILE CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION

In March 2016, TNPCB has commissioned one mobile continuous ambient air quality monitoring station to monitor the ambient air quality on real time basis. The Mobile station has the facility to monitor Sulphur dioxide (SO<sub>2</sub>), Nitrogen dioxide (NO<sub>2</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>), Carbon monoxide (CO), Benzene, Toluene, Ethylbenzene, Xylene (BTEX), Particulate matter size less than 10 micron (PM<sub>10</sub>) and Particulate matter size less than 2.5 micron (PM<sub>2.5</sub>) .The station also have weather monitoring station to measure Wind Direction, Wind Speed, Ambient Temperature, Related Humidity, Solar Radiation, Rainfall, Barometric Pressure etc. This mobile station can be used to monitor the air quality in hotspots of Chennai city and other places. TNPCB is the first State Board in the country to have a mobile continuous ambient air quality monitoring facility.

Further Tamil Nadu pollution Control Board has taken steps to install 25 numbers of continuous ambient air quality monitoring station to monitor the ambient air quality on real time basis. These stations are proposed to be established in the Educational Institutions in the districts. The data collected through these CAAQM stations will be used by General Public and Students.

### 4. CARE AIR CENTRE

In order to monitor both source emissions and ambient air quality on a real time basis of the industries located in the State, TNPCB has established Care Air Centre for Accessing Real Time Air Quality Information Report at the corporate office, Chennai. In this Centre real time emission monitoring system of industries belonging to Red category and especially for 17 category highly polluting units are connected and monitored on 24 X 7 basis. This is the first of its kind in India. When the emission levels exceeds the norms, the inbuilt system will inform the concerned industry and the District Environmental Engineer, Member Secretary through an automated Short Messaging System (SMS) and Electronic Mail (e.mail) to take immediate remedial action. Up to 31<sup>st</sup> May-2019, 340 units are connected to Care Air Centre for online monitoring.

### 5. Awareness Programmes

During the Festival seasons especially Deepavali and Bhogi festivals, to control air pollution various awareness programmes are conducted by TNPCB to impart the message to the public about the necessity for controlling air polluting air during the above festival days. Further during Deepavali and Bhogi Festivals Tamil Nadu Pollution Control Board monitors the air quality in major towns and the results are made available in the public domain.

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