

Environment, Climate Change and Forest Department— Budget Speech 2021-2022-"Setting up of the Integrated Environmental Monitoring Studio with Continuous Ambient Air Quality Monitoring Stations (CAAQMS)" by Tamil Nadu Pollution Control Board — Orders — Issued.

### ENVIRONMENT, CLIMATE CHANGE AND FOREST (EC2) DEPARTMENT

G.O.(Ms.)No.115

Dated: 27.11.2021 பிலவ, கார்த்திகை–11 திருவள்ளுவர் ஆண்டு -2052

#### Read:

- 1. From the Member Secretary (in-charge), Tamil Nadu Pollution Control Board Letter No. TNPCB/DD(Labs)I/ 018848/2021, dated: 01.10.2021 and e-mail dated: 22.10.2021.
- 2. G.O.(Ms).No.100, Environment, Climate Change and Forest (EC.1) Department, Dated 03.11.2021
- 3. G.O.(Ms).No.108, Environment, Climate Change and Forest (EC2) Department, Dated 16.11.2021.

#### **ORDER**:

Air pollution is the greatest environmental threat to public health globally. Clean air saves lives, and also contributes to economic prosperity by reducing health care costs and improving overall well being of people.

2. Robust air quality monitoring helps in understanding and assessing the level of pollution in relation to the ambient air quality standards. Monitoring of air quality is also essential to guard against extreme events and plan better standards.

3. The ambient air quality in Tamil Nadu is monitored by the Tamil Nadu Pollution Control Board. A total of 52 Air Quality Monitoring Stations (AQMS) are being operated across the State of Tamil Nadu in 38 districts. These stations collect the data about 8 pollutants and provide comprehensive information about the air quality. 4. Pollutants such as Carbon Monoxide (CO), Particulate matter (PM 10 and PM 2.5), Nitrous Oxide (NOX), sulphur dioxides (SO2) are manually monitored at 52 stations under the National Air Monitoring Programme (NAMP).

5. The Government of India has launched the National Air Quality Index (AQI) in 2014, a tool for effective dissemination of air quality information to people. The Ministry of Environment, Forest and Climate Change, Government of India describes the Air Quality Index (AQI) as 'One Number - One Colour-One Description' for easy understanding of people within their vicinity. The main objective of the AQI is to inform and caution the public about the risk of exposure to daily pollution levels. As per Indian AQI, primarily the health-related index is divided into six AQI categories, namely Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe.

6. It is essential to strengthen air quality monitoring network encompassing all urban, suburban and industrial areas in the State of Tamil Nadu. Currently, Air Quality Index is reported with a lag of time which is woefully inadequate as the air quality standards can change quickly within a short time span. It is therefore essential to put in place Continuous Ambient Air Quality Monitoring Stations (CAAQMS) to report AQI on real-time basis. Real time monitoring results will help in instantly calculating AQI which in turn would enable Tamil Nadu Pollution Control Board to issue health Advisories. This would also help in finding the source of pollution to help in taking measures to reduce and control the same. Tamil Nadu Pollution Control Board currently has 34 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) as given in the Table A. A mobile monitoring station is also operating in the State. These stations are being operated continuously 24/7 on all days. The monitored parameters are posted on Tamil Nadu Pollution Control Board website as AQI for public viewing.

S.No.	District Name	<b>District Headquarters</b>	No.of stations
1.	Ariyalur	Ariyalur	1
2.	Chengalpet	Chengalpet	1
З.	Chennai	Chennai	4
4.	Coimbatore	Coimbatore	2
5.	Cuddalore	Cuddalore	2
6.	Dindigul	Dindigul	1
7.	Erode	Erode	1
8.	Kancheepuram	Kancheepuram	1
9.	Karur	Karur	1
10.	Krishnagiri	Krishnagiri	1
11.	Madurai	Madurai	1
12.	Nagapattinam	Nagapattinam	1

**Table-A** 

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13.	Namakkal	Namakkal	1
14.	Pudukottai	Pudukottai	1
15.	Ramanathapuram	Ramanathapuram	1
16.	Ranipet	Ranipet	1
17.	Salem	Salem	1
18.	Thanjavur	Thanjavur	1
19.	Thiruvallur	Thiruvallur	3
20.	Tuticorin	Tuticorin	1
21.	Tiruchirapalli	Tiruchirapalli	2
22.	Tirunelveli	Tirunelveli	1
23.	Tiruppur	Tiruppur	1
24.	The Nilgiris	Udagamandalam	1
25.	Vellore	Vellore	1
26.	Virudhunagar	Virudhunagar	1
20.		TOTAL	34

7. To strengthen the real-time monitoring and to provide a comprehensive real time picture of the air quality in the State, Government has decided to set up 25 additional Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at district headquarters and major cities which have a population of one lakh and above.

8. During the Budget Session 2021-2022, the Hon'ble Minister for Finance & Human Resources Management Department among other things has made the following Announcement:-

"The Tamil Nadu Pollution Control Board will establish Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in all district headquarters and in towns with a population of more than one lakh. India's first integrated Environment Monitoring Studio will be established for forecast of air quality on a real time basis with an early warning system".

9. In accordance with the above announcement, Government has decided to set up State of the Art Continuous Ambient Air Quality Monitoring Stations (CAAQMS) connected to a State of the Art Integrated Environment Monitoring Studio.

10. The Environmental Monitoring Studio shall provide information on real time monitoring of the ambient air quality to regulatory bodies to take immediate preventive and corrective measures. The data will also be brought in the public domain to alert people about air pollution standards.

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The data generated shall help various stake holders to take action for abatement of pollution. The Studio will integrate various modules on Air Quality, Water Quality, Solid Waste Management and On-line tracking of waste movement in the State of Tamil Nadu. The Studio will have a Dash Board of various other on-line modules operated by Tamil Nadu Pollution Control Board.

The Environmental Monitoring Studio will consist of a Central Command Centre for visual depiction of the data from the following

- a) Tracking of Hazardous Waste Movement
- b) Tracking of Bio-Medical Waste Movement
- c) Tracking of E-Waste Movement
- d) Care Air Centre Continuous Emission Monitoring System and Continuous Ambient Air Quality Monitoring System (Existing stations and proposed stations)
- e) Water Quality Watch Functioning and evaluation of Individual Effluent Treatment Plants of 17 category industries and other critically polluting industries, Sewage Treatment Plants of Local bodies, Common Effluent Treatment Plants and River body Monitoring.
- f) On-line Consent Management and Monitoring System
- g) On-line Grievance Petition and Redressal System
- h) On-line Legal Cases Management and Monitoring System
- i) Web Based Geo-Spatial Service
- j) Integrated Lab Module

11. Forecast of air quality on a real time basis with an early warning system will be established as one of the modules of the Integrated Environmental Monitoring Studio.

12. The project shall enable forecasting of Air Quality standards with an early warning system to ensure safe air quality for the people in Tamil Nadu. The proposed system will also focus on selective action in the non-attainment areas.

13. The total expenditure for establishment of 28 Nos. of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in towns with population of more than one lakh, and for setting up a State of the Art Integrated Environmental Monitoring Studio for forecasting Air quality on a Real Time basis with an early warning systems will be approximately Rs.64 crores.

14. The Government accords administrative sanction for Rs.64 crores to establish a State of the Art Integrated Environmental Monitoring Studio by Tamil Nadu Pollution Control Board with 28 Nos. of Continuous Ambient Air Quality Monitoring Stations (CAAQMS). The expenditure towards setting up of the Integrated Environmental Monitoring Studio and establish of 28 Nos. of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) will be met from the funds of Tamil Nadu Pollution Control Board. The Tamil Nadu Pollution Control Board shall set up 17 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in phase I the following places in Tamil Nadu as given in Table B :-

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S.No.	District Name	Proposed locations of Continuous Ambient Air Quality Monitoring Stations	No.of stations
1.	Dharmapuri	Dharmapuri	1
2.	Kallakurichi	Kallakurichi	1
3.	Mayiladuthurai	Mayiladuthurai	1
4.	Kanniyakumari	Nagercoil	1
5.	Perambalur	Perambalur	1
6.	Sivagangai	Sivagangai	1
7.	Tenkasi	Tenkasi	1
8.	Theni	Theni	1
9.	Tiruvarur	Tiruvarur	1
10.	Tirupathur	Tirupathur	1
11.	Tiruvannamalai	Tiruvannamalai	1
12.	Villupuram	Villupuram	1
13.	Tiruvallur	Avadi	1
14.	Chengalpet	Tambaram	1
15.	Thanjavur	Kumbakonam	1
16.	Erode	Erode	1
17.	Kancheepuram	Kancheepuram	1
TOTAL			17

15. Tamil Nadu Pollution Control Board shall follow the procedures laid down in Tamil Nadu Transparency in Tenders Act, 1998 which is in force while establishing the Continuous Ambient Air Quality Monitoring Stations. No change of places be allowed without Government Order. Real time data shall be published on the Tamil Nadu Pollution Control Board website for public viewing. 16. This order issues with the concurrence of Finance Department vide its U.O.No.3620/Fin(AHD&F)/2021, Dated 29.10.2021.

# (BY ORDER OF THE GOVERNOR)

## SUPRIYA SAHU PRINCIPAL SECRETARY TO GOVERNMENT

То

The Chairman, Tamil Nadu Pollution Control Board, Chennai - 32. The Director of Environment, Chennai-15. Copy to:-The Private Secretary IV to Chief Minister, Secretariat, Chennai-9. The Special Personal Assistant to Chief Minister, Hon'ble Chief Minister's Office, Secretariat, Chennai-9. The Special/Senior Personal Assistant to the Hon'ble Minister for Environment, Climate Change and Youth Welfare and Sports Development, Secretariat, Chennai - 9. The Private Secretary to Principal Secretary to Government, Finance Department, Chennai-9. The Private Secretary to Principal Secretary to Government, Environment, Climate Change and Forest Department, Chennai-9. The Private Secretary to Special Secretary (Environment, Climate Change), Environment, Climate Change and Forest Department, Chennai-9. Environment, Climate Change & Forest (FR.7/EC.1) Department, Secretariat, Chennai -9. Finance Department, Secretariat, Chennai -9. Stock File / Spare Copy.

//FORWARDED BY ORDER//

N-B 27, 11-204

SECTION OFFICER