## **AIR QUALITY ANALYSIS OF TAMILNADU**

## PHASE 3

## **EXISTING SYSTEM**

The Tamil Nadu Pollution Control Board (TNPCB) is the regulatory body responsible for monitoring and controlling air quality in Tamil Nadu. Here are the key components of the air quality analysis system:

Air Quality Monitoring Stations: The TNPCB operates several air quality monitoring stations throughout the state, including in major cities like Chennai, Coimbatore, and Madurai. These stations use specialized equipment to measure various air pollutants, including particulate matter (PM2.5 and PM10), sulfur dioxide (SO2), nitrogen dioxide (NO2), carbon monoxide (CO), ozone (O3), and other pollutants.

**Data Collection:** Continuous monitoring instruments at these stations collect real-time data on air quality parameters. The data collected is transmitted to a central server for analysis.

**Data Analysis:** The collected data is analyzed to assess air quality in different locations. This analysis helps in determining the concentration of various pollutants in the air.

**Air Quality Index (AQI):** The TNPCB or relevant authorities may calculate and report an Air Quality Index (AQI) based on the collected data. The AQI provides a standardized way to communicate air quality information to the public.

**Public Information:** The TNPCB or government agencies typically make air quality data and AQI readings available to the public through various channels, including websites, mobile apps, and public awareness campaigns. This helps residents stay informed about the air quality in their areas.

**Regulation and Enforcement:** The TNPCB enforces air quality standards and regulations to control pollution sources. Industries and other sources of pollution are required to adhere to emission limits and other guidelines.

**Emergency Response:** In cases of severe air pollution events, the authorities may issue health advisories and take emergency measures, such as regulating vehicular movement and shutting down industrial operations, to mitigate the impact on public health.

It's important to note that air quality monitoring and analysis are ongoing processes, and the government may periodically update the infrastructure and procedures to ensure accurate and up-to-date information.

For the most current and detailed information regarding air quality analysis in Tamil Nadu, it is recommended to consult the official website of the Tamil Nadu Pollution Control Board or relevant government agencies responsible for environmental monitoring.