

Important Projects Undertaken

1. Environmental Data Bank

In order to have effective environmental management, it is very much essential that correct and updated information on various environmental aspects are available easily & quickly. To cater to this need, CPCB initiated development of an Environmental Data Bank (EDB), which will help decision makers in planning the development and regulatory agencies in formulating the pollution control strategies, its effective implementation and assessment of its policies & programmes. Besides, EDB will also be useful to researchers, consultants, NGOs, industries and common person. EDB is web-enabled so that various user groups may access data/information on-line. Environmental data bank comprises various modules e.g. industrial pollution, air quality, water quality, coastal water quality, urban pollution, urban solid waste, hazardous waste, etc.

Presently, modules on air quality and water quality are made operational. On-line entry for data on air quality monitored under National Air Monitoring Programme and water quality monitored under GEMS/MINARS is being done regularly by SPCBs/PCCs. EDB could be accessed through CPCB's website (<http://www.cpcb.nic.in>). Raw as well as analyzed data could be viewed, downloaded & used for further analyses/ interpretation. So far, data entry has been initiated in respect of 329 air quality monitoring stations covering 26 States/UTs and 905 water quality monitoring stations covering 33 States/UTs .

2. On Line Data Transmission from Continuous Ambient Air Quality Monitoring Stations

Besides manual air quality monitoring, continuous systems have also been established at various places including Delhi , which provide instantaneous information on pollution levels of different pollutants. CPCB operates continuous ambient air quality monitoring (CAAQM) at three fixed locations viz. ITO, Sirifort & Delhi College of Engineering and one Mobile Van. Various pollutants viz. SO₂ , NO₂ , CO, RSPM, PM 2.5 , Benzene, Toluene, Xylene, Ozone, etc. are monitored. In order to make these data available to public without any time gap on real-time basis, a network for online real-time data transmission has been established at CPCB.

Important features of the system are as follow:

- Every 15 minutes data updation from these locations.
- Violation of Ambient Air Quality Standards reported immediately.
- Data validation with working ranges & instrumental ranges.
- Common System can fetch data available at any CAAQM Stations in country.
- Connectivity through mobile or landline.
- Instant access to previous & current data in desired formats.

Data could be viewed through CPCB's website (<http://www.cpcb.nic.in>). Air quality data of every 15 minutes (customizable) is being updated and displayed. Besides, analyzed data (short as well as long-term averages) and comparison with prescribed ambient air quality standards, etc. could also be viewed, downloaded for further interpretation or analysis. The values compared with prescribed standards and violations, if any, are being displayed. Software can also analyze the data as desired normally like comparisons with other stations, hourly, eight hourly, monthly, yearly Data analysis etc.

3. Online access of emission data from major industries

Enforcement mechanism needs improvement, as existing system is inadequate, particularly due to manpower shortage, manipulation by polluters, difficulty in continuous vigilance, etc. Large industries

have installed continuous monitoring of emissions. However, these data are not effectively used for enforcement and timely calibration of analyzers & reliability of data are always an issue of concern.

Online access to real-time data facilitate better enforcement as it provides constant vigil; is a hassle free system with timely corrective actions; brings measurement discipline; ensures reliability of data; and facilitates quick investigations even for the past periods

A pilot project for establishing online transmission of real-time data from Pragati Power Corporation Limited (PPCL), New Delhi has been completed and real-time data are transmitted online to database server at CPCB - HQ. The emission data of every 60-minute (customizable to 1 min) is being updated and displayed without human interference.

The values compared with prescribed standards and violations, if any, are being displayed for immediate attention and action by pollution control authorities. System has facility to analyze the data in various user-friendly formats.

The values are compared with prescribed standards and violations if any are being displayed. This makes it the utility much more comfortable to the user. Software can analyze the data as desired normally like comparisons with other stations, hourly, eight hourly, monthly, yearly Data analysis etc.

4. Website

The CPCB is maintaining a content rich website hosted at NIC Server with an address www.cpcb.nic.in ., which regularly updated.

5. Strengthening of LAN and Internet facility

CPCB local area network established in the year 2001 with 108 nodes has been increased to 143 nodes. The network was upgraded to 2Mbps connectivity and is being maintained with smooth and uninterrupted operation through out the year.