

Profile & Important Activities

1. **Creation of Environmental Data Bank;**
2. **On Line Data Transmission from Continuous Ambient Air Quality Monitoring Stations**
3. **Online access of emission data from major industries**
4. **Website Management;**
5. **Software Development for e-Governance;**
6. **Strengthening of LAN and Internet facility**
7. Maintenance of user nodes regarding viruses, compatibility, upgradation etc. at CPCB Head Office.
8. Providing training on Computer to the staff of various Divisions in CPCB.
9. Technical support for procurement of system hardware & software and utility package.
10. Technical Support to Zonal Offices of CPCB and SPCBs on Computer related activities.

Creation of Environmental Data Bank

In order to have effective environmental management, it is very much essential that we have correct and updated information on various environmental aspects and should also be able to retrieve this information easily & quickly. In view of this, CPCB is working on development of environmental data bank. The data bank 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, the data bank will also be useful to researchers, consultants, NGOs, industries and common person. The data bank will be web-enabled so that various user groups may access data/information on-line. The proposed environmental data bank would comprise various database e.g. industrial pollution, air quality, water quality, coastal water quality, urban pollution, urban solid waste, hazardous waste, cleaner process technologies, etc.

The data structure for various environmental parameters has been designed considering the requirement and availability of data and necessary software has been developed, which would not only help in creation of environmental data bank but also facilitate users to search & get the desired data. Necessary training would be given to the State Pollution Control Boards, enabling them to put up the data as per the designed formats for building up the databank.

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.

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.

Website Management

CPCB maintains its website for putting useful environmental related information/data in public domain. Information are continuously updated and upgraded. In order to make the website more informative and interactive, it was redesigned and the new website was launched in March 2003. Some of the important features of the new website are:

- Query based on-line search & retrieval of nation-wide air & water quality data including trend analysis
- Access to summary of all the publications brought out by CPCB
- Access to complete text of Newsletters brought out by CPCB on various environmental issues with download facility
- Links to websites of State Pollution Control Boards and other environmental related websites
- Citizens' guides for creating awareness and increasing participation of public for improving environmental quality
- Daily information including graphical view for air pollution levels in metropolitan cities
- Answers to frequently asked questions
- Public opinion on current environmental issues through poll
- Some information also available in Hindi

Software Development for e-Governance

A number of application software are being developed for gradual shifting towards e-governance.

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.