MANUAL AMBIENT AIR QUALITY MONITORING STATION IN DELHI

Air Quality Monitoring is an important part of the air quality management. The Manual Ambient Air Quality Monitoring Station in Delhi has been established with objectives to determine the present air quality status and trends and to control and regulate pollution from industries and other source to meet the air quality standards. It also provides background air quality data needed for industrial siting and towns planning.
MONITORING LOCATIONS: Seven manual monitoring stations are being operated by CPCB at various land use locations like Pitampura, Janakpuri, Siri Fort, Nizamudin, Shahzada Bagh, Shahdara and Traffic Intersection (BSZ Marg) areas. Air pollutants viz., Sulphur Dioxide (SO2), Nitrogen Dioxide (NO2), PM2.5 and PM10 are being monitored regularly at all the locations.

Model Ambient Air Quality Monitoring Station at ITO (BSZ Marg), New Delhi:

The ambient air quality monitoring station located at ITO (BSZ Marg) was temporary shifted to Pragati Maidan (Near Metro Station along Mathura Road) due to metro construction activities. After completion of construction activities at ITO, DMRC has constructed a new monitoring stations building in place of our old demolished station building. The Model ambient air quality monitoring station has been developed in new building at BSZ Marg, ITO
Intersection. The instrument, equipment and other monitoring related items were shifted to ITO station and started the monitoring activities in the month of March, 2016. The view of station, sampling system and inside laboratory is shown in figure as below.

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<td>Figure a: Ambient air quality monitoring station, ITO (BSZ Marg), New Delhi</td>
<td>Figure b: Sampling system, ITO (BSZ Marg), New Delhi</td>
<td colspan="2">Figure c: Inside laboratory (On-line & Manual measurement), ITO (BSZ Marg), New Delhi</td>
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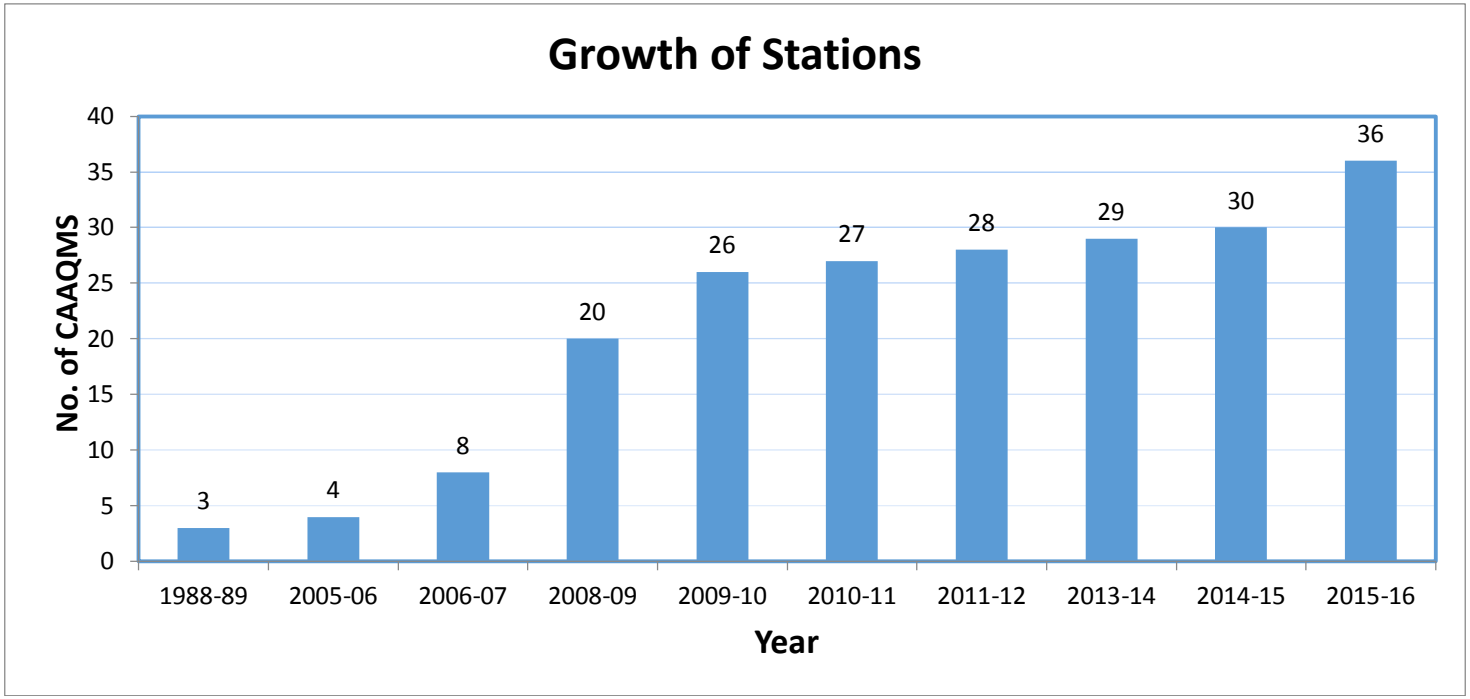
Station is being visited regularly by number of Dignitaries, Environmentalist, officials of SPCBs & PCCs, students, the personnel working in the field of environment etc.. Being an integrated station for both manual and automatic measurement, attempts are on to run the station as model station for all.

Growth of Continuous Ambient Air Quality Monitoring Station (CAAQMS) by CPCB & SPCBs in India

Central Pollution Control Board and SPCBs are continuously working to setup Continuous Ambient Air Quality Monitoring Stations on 50:50 sharing basis. The priority is given to set up stations at 46 identified million-plus cities in phase – I. On completion of this target, setting up of stations would start for 21 state capitals and UTs (except Delhi). In this direction, the growth of these stations is given in the graph below. The parameters monitored at most of the locations are SO_2, NO_2, NH_3, O_3, CO, Benzene, PM_{10} & $PM_{2.5}$ besides meteorological parameters. The AQI (Air Quality Index) of all these stations are being prepared on daily basis and available at CPCB website for information to public in general.



National Air Quality Index

The Hon'ble Prime Minister launched National **Air Quality Index** (AQI) on 6th April, 2015 to monitor air quality in major urban cities across the country on a real-time basis and to enhance public awareness. Air Quality Index (AQI) is one such tool for effective dissemination of air quality information to people. As a part of this, Union Environment Ministry proposed to extend the measurement of air quality on real time basis in 22 state capitals and 76 other cities with a population of more than one million. This index will help the people know about the level of pollution in the ambient air on daily basis. The AQI Display has been increased from the initial 10 cities to currently 24 cities in 10 states of India. At present, total 43 Continuous Ambient Air Quality Monitoring Stations all over the country are connected with NAQI. Attempts are on to add more stations under the purview of NAQI.

Under the current measurement of air quality, 8 parameters are kept for calculating AQI. The proposed AQI will consider eight pollutants (PM10, PM2.5, NO2, SO2, CO, O3, NH3, and Pb) in which one of PM10 or PM2.5parameter is mandatory. There are six AQI categories, namely Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe.

CPCB – Continuous Ambient Air Quality Monitoring Station Network in India

Sl. No.	CAAQMS Installed (16 cities)	Under installation (10 cities during years, 2014-16)	Proposed under CPSUs Project (13 cities during year, 2016-17)	Left over cities (3 cities) (Proposed under GOI Fund)	Coverage in 21 State Capitals including UTs – Phase II (Proposed under GOI Fund)
01.	Mumbai (01)	Nagpur (01)	Vishakhapatnam (01)	Vasai - Virar	Amravati
			Dhanbad (01)	Kalyan-Dombivali	
02.	Pune (01)	Nashik (01)	Ranchi (03)	**(2 Nos.)**	Bhubaneswar (01)
03.	Jodhpur (01)	Aurangabad * (01)	Allahabad (03)		Gandhi Nagar
04.	Jaipur (01)	Ludhiana * (01)	Meerut (03)		Dehradun (01)
05.	Lucknow (03)	Howrah (01)	Bhopal (03)		Panaji
06.	Agra (01)	Coimbatore * (01)	Indore (03)		Shimla
07.	Kanpur (01)	Ghaziabad * (01)	Gwalior (03)		Thiruvananthapuram
08.	Varanasi (01)	Srinagar (01)	Jabalpur (03)		Guwahati
09.	Kolkata (01)	Amritsar (01)	Pimpri-Chinchwad (02)		Itanagar
10.	Patna (01)	Vijayawada (01)	Raipur (03)		Agartala (01)
11.	Ahmedabad (01)	*** Common with CPAs**	Madurai (02)		Shillong (01)
12.	Faridabad (01)		Surat (01)		Gangtok
13.	Bengaluru (03)	**(10 Nos.)**	Rajkot (02)		Imphal
14.	Chennai (03)		Vadodara (02)		Aizawl
15.	Hyderabad (01)		Thane (02)		Kohima
16.	Delhi (6)**		Navi Mumbai (01)		Chandigarh
** All CPCB stations (4 are in operation & 2 stations are under renovation)			Kota (02)		Puducherry
			(18 Nos.)		Daman
					Port Blair
					Silvassa
					Kavaratti
	(16 Nos.)				**(Out of 21 Nos. 04 are proposed next year)**
	Total 46 Million –plus Cities				**State Capitals**

Continuous Ambient Air Quality Monitoring Station being set up in Critically Polluted Areas (CPAs)							
S. No.	***Name of CPA***	***S. No.***	***Name of CPA***	***S. No.***	***Name of CPA***	***S. No.***	***Name of CPA***
01.	*Ludhiana * *	*05.*	*Bhiwadi*	*09.*	*Aurangabad * *	*13.*	*Coimbatore * *
02.	*Mandi Gobind Garh*	*06.*	*Ankleshwar*	*10.*	*Chandra Pur*	*14.*	*Angul Talcher*

03.	*Ghaziabad* *****	*07.*	*Vapi*	*11.*	*Dombivalli*	*15.*	*Jharsuguda (Ib Valley)*
04.	*Noida*	*08.*	*Vatva*	*12.*	*Manali*	*16.*	*Asansol* ******

**** Air Severe** **Stations are likely to be installed by June 2016**