Central Pollution Control Board South Zonal Office Bengaluru

A brief report on the status of CAAQMS at Chennai as on 23.12.2015

Location	Description of Status
At Manali	HC analyser was not working due to unavailability of H ₂ Cylinder, now
	cylinder is refilled and analyser put in operation.
	The SO_2 and $PM_{2.5}$ analysers were always shown zero for which zero
	reference cycle increased and PM2.5 recalibrated.
	All other analyser are working.
Alandur	Ozone Analyser is fluctuating and need some maintenance. Since the
	trees grown up around the monitoring station, solar radiation values are
	always less. Hence trimming of trees are required for which a discussion
	with depot manager is required. During the visit depot manager was not
	in seat.
	During heavy rain, little leak of water was observed inside the station
	which could be the frequent hit of monitoring station by MTC bus.
	Ups is running through bypass and 3 nos of PCB is sent to Delhi for repair
IITM	The condition of VOC analyser is alright but could not be put in operation
	due to scarcity of N2 gas supply.
	Since the old air conditioners gone out of order beyond repair, a blue star
	air conditioner replaced with LG make of the same capacity and now the
	AC is working.
	Sampling probe heater wires are melted due over range set of
	temperature. Requested to replace and regulate the temperature
	properly.
	There was no communication from PC to display board due to
	communication port is damaged. Presently, communication is established
	through an ancillary serial port additionally connected.
	It is observed that during the flood some of the electronic boards (PCB)
	of UPS have damaged due to high voltage fluctuation in raw power and

also PC got corrupted. Though it has been rectified, the slow response of booting process observed. Presently the Hard disk is replaced with new and process of loading Envidos software is in progress and the data availability from 25.12.2015 is missing till date.

There are lot of trees grown up around the monitoring station which need to be trimmed and same has been informed to the official of IITM Chennai.

Some of the photos are attached here with indicating the status of monitoring station



Lot of trees grown up around the CAAQMS at IITM, Chennai and obstructing the free flow of air which resulting in non-representative of the concentration measured



The floor of the inside monitoring station at IITM, Chennai is further damaged due to heavy rain and more humidity during the flood in the city



Trees grown up around the monitoring station at Alandur because of which the measurement of met parameters are non-representative. Due to frequent hit by the MTC bus and continuous heavy rain in the area, water leak from roof is observed. The condition of the entire station structure is damaged which require replacement or reconditioning.



Though there was heavy rain and flood in the area of Manali, the monitoring station is not effected since it is placed at elevated area. This monitoring station is also experiences lot of fluctuations of power supply.

It may also be kindly noted that the raw data generated during warm up period, every start up on power failure and fluctuations and also data generated during calibration all are stored in single file. Frequent power failure in the city almost on every day become a normal practice. The data from this file is automatically exported for calculating AQI without filtering all erratic or unrealistic values which reflects wrong information or very high AQI level because of that public and media become panic.

It had happened many times that media is focussing these values and interpreting as an actual scenario of the environment in that area. There has been panel discussion also in the popular channels like NDTV about the AQI level displayed. Followed by these office

has prepared brief reports after through validation of data many times and explained to the media and to the public about the actual situation.

Therefore, it is suggested that the data to be taken for AQI calculation should be of only the actual and reliable values which can be obtained by auto filtering of all other unreliable and acceptable values.

It is also informed that the Helpchat mobile phone app provides pollution alert in all over 40 Indian cities in the country where the app users will be given two basic information one about the air quality index (AQI) in the area and; secondly warning about at least two highly-polluted places.

The AMC offered to M/s Environment Sa for operation and maintenance is already expired on 30.12.2015.

Therefore, it is requested to impose a strict condition to filter all these above said values and to store in a separate file during the actual measurement in normal operation of the analyser and the environment condition, then to transfer the data for AQI calculation. All other data generated are to be stored in a separate file for track record purpose.

K.Karunagaran Sr.Technical Supervisor

Tech/75/CAAQMS/BENGALURU & CHENNAI/SZOB/2015-16

05 January 2016

To

The Member Secretary Central Pollution Control Board Parivesh Bhawan East Arjun Nagar Delhi-110 032

Kind Attn.: Incharge, Air Laboratory, CPCB, Delhi

Sub: Inspection Report of CAAQMS located at Chennai and requirement of filtering of data & storage on different files

Sir,

With reference to above, Sh K. Karunagaran, STS of this office inspected three continuous ambient air quality monitoring stations (CAAQMS) operating at Chennai during 21st to

23rd December, 2015.

The inspection report along with the stringent conditions to be imposed on M/s Environment SA

for renewal of the contract is submitted for kind perusal pls.

Yours faithfully

(S. Suresh)

Zonal Officer

Encls: As above