

## Tracking Winter Pollution in Delhi 2010

Time to breath easy is over, air pollution is reaching critical levels again this winter. Centre for Science and Environment has reviewed the daily air quality data generated by the Central Pollution Control Board as well as the Delhi Pollution Control Committee and the public information system developed by the CPCB and Aria technologies. Officially now air pollution in Delhi is classified into broad bands of healthy, moderate, unhealthy for sensitive groups, unhealthy, harmful, and hazardous. This is based on air quality index. This public information system is expected to guide action on a daily. The review of the air pollution data exposes:

Very rapid build up of air pollution since the month of October and several times higher than the rainy months of August.

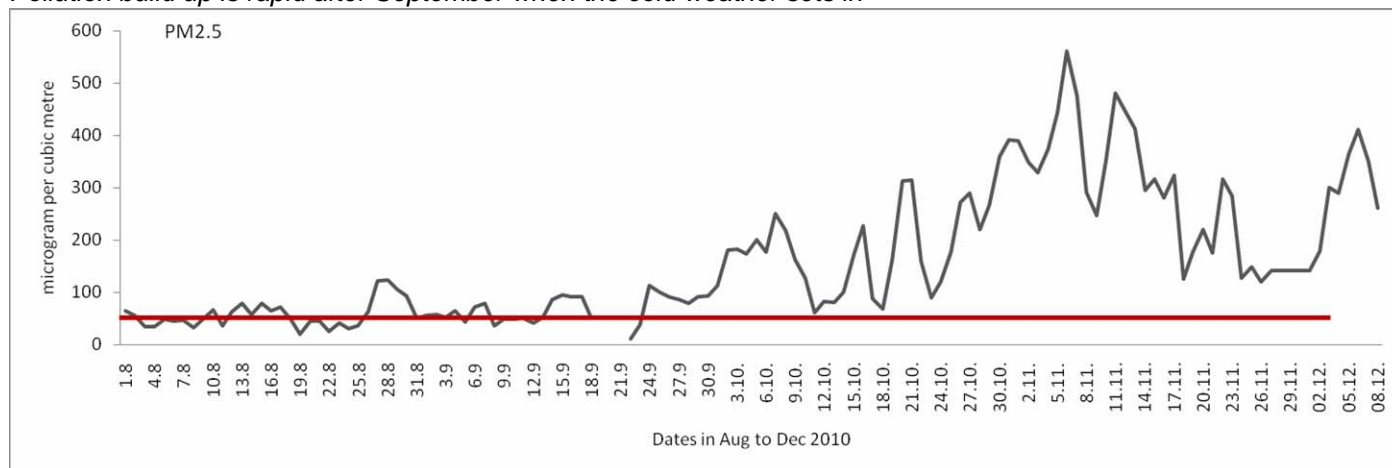
In addition to the high level of tiny particles of PM2.5, other pollutants are also rising, with daily peaks hitting unacceptable levels.

Traffic woes further aggravates the pollution crisis. The daily air pollution levels double up during peak traffic time of the day

Here are some snapshots:

**Graph 1: Sharp increase in PM2.5 levels at ITO Traffic Intersection (24-hourly levels during 01 August to 08 December 2010):**

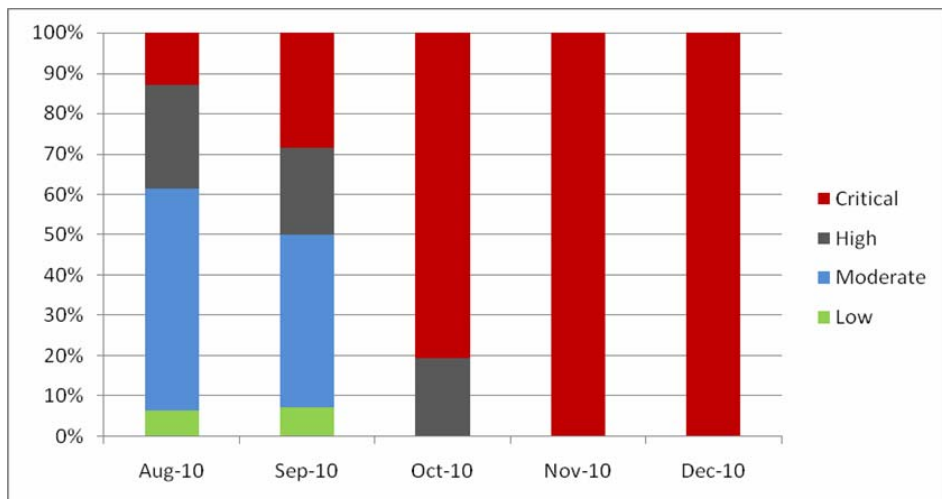
*Pollution build up is rapid after September when the cold weather sets in*



Source: CSE, based on Central Pollution Control Board's real time air quality monitoring data

**Graph2 : Month-wise status of PM2.5 levels at ITO Traffic Intersections (24-hourly levels during 01 August to 08 December 2010)**

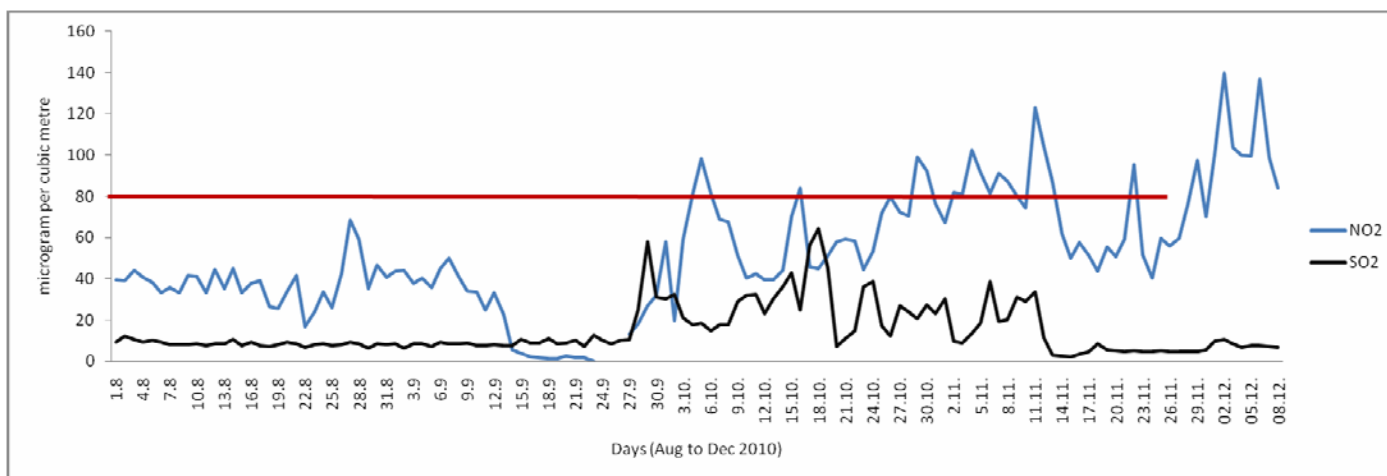
*In August only few days had critical levels. In November and December all days have critical levels*



Source: CSE, based on Central Pollution Control Board's real time air quality monitoring data

### Graph 3: Nitrogen dioxide levels at ITO Traffic Intersections (24-hourly levels during 01 August to 08 December 2010)

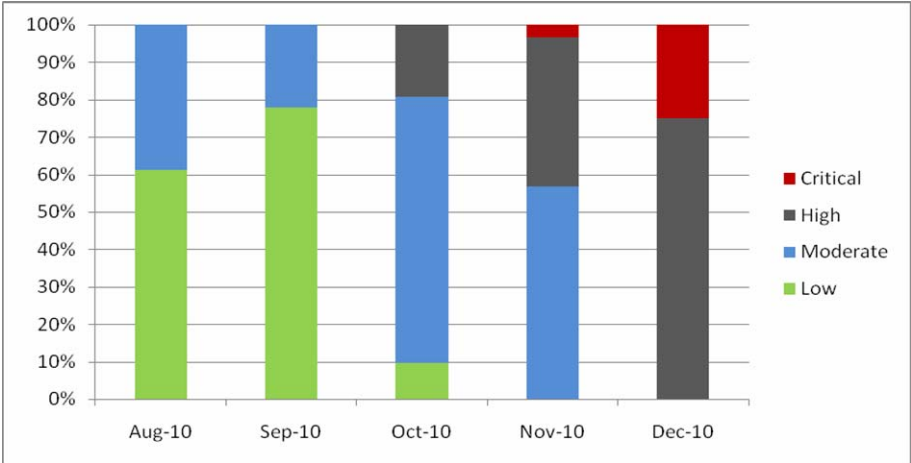
*Similar phenomenon is noticed in the case of nitrogen dioxide: Rapid build up since October*



Source: CSE, based on Central Pollution Control Board's real time air quality monitoring data

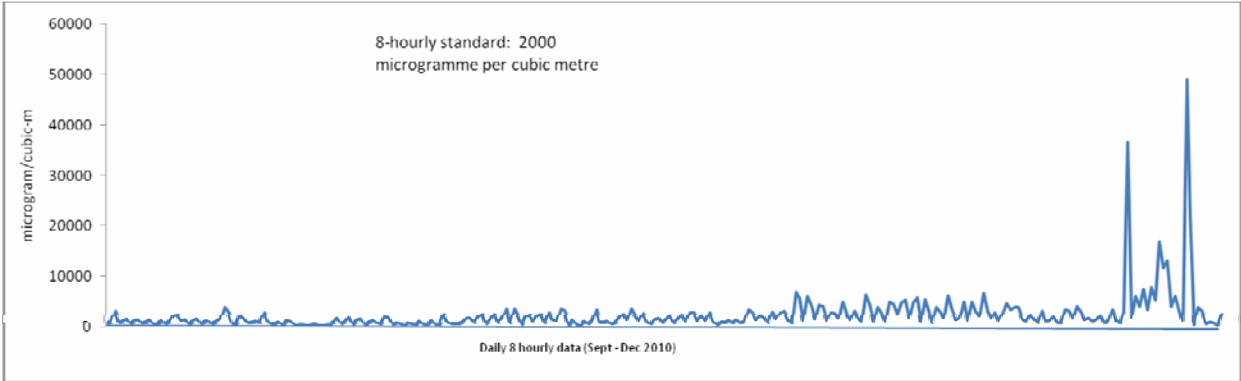
### Graph 4: Month-wise status of NO2 levels at ITO Traffic Intersections (24-hourly levels during 01 August to 08 December 2010)

*August did not have a single day with critical or even high levels of NO2. But all days in November and December have high levels and some have critical levels*



Source: CSE, based on Central Pollution Control Board's real time air quality monitoring data

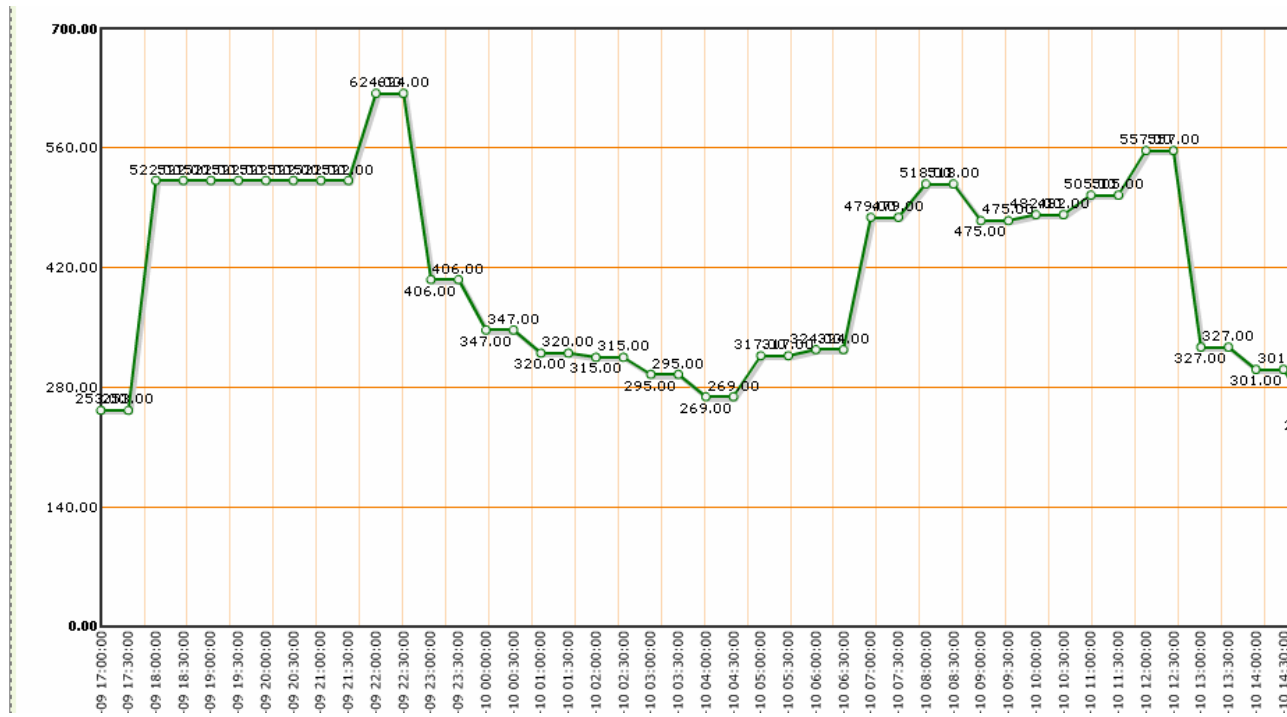
**Graph 5: Carbon monoxide levels at ITO Traffic Intersections (8-hourly levels during 01 September to 08 December 2010): *Winter peaks are worrying***



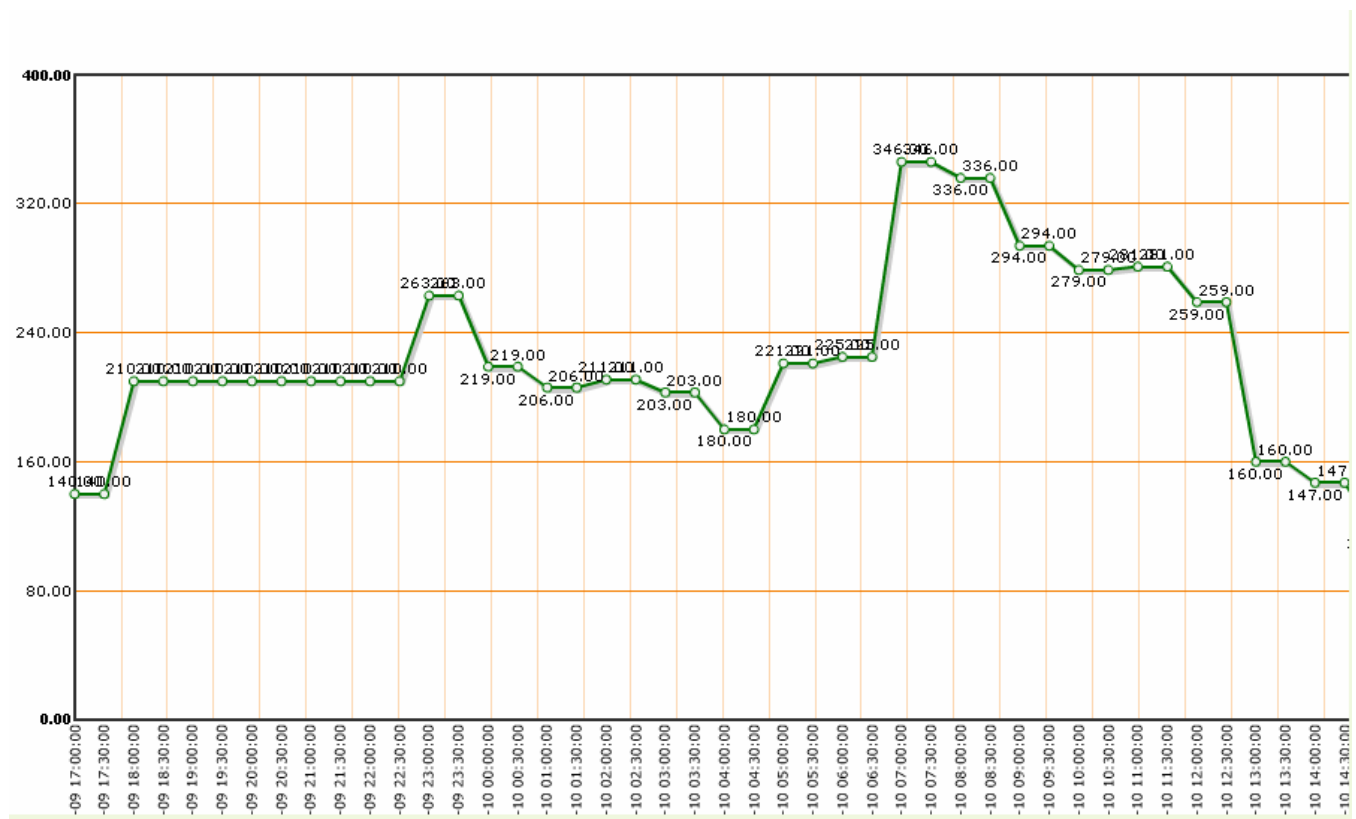
Source: CSE, based on Central Pollution Control Board's real time air quality monitoring data

How pollution levels correlate with traffic?

**Graph 1: PM10 real time data at R K Puram, Delhi from 9<sup>th</sup>-10<sup>th</sup> December 2010: There is a sharp difference between peak and off-peak hours**



**Graph 2: PM2.5 real time data at R K Puram, Delhi from 9<sup>th</sup>-10<sup>th</sup> December 2010: There is a marked difference according to peak and non-peak hours**



Source: Based on Delhi Pollution Control Committee

Graph 3: NO2 real time data at R K Puram, Delhi from 9<sup>th</sup>-10<sup>th</sup> December 2010

