

# Millennium City clueless about its air quality

**OUTDATED** Gurgaon doesn't have a fully-functional building monitoring system, records inconsistent data



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**GURGAON:** It may be touted as the Millennium City and home to the high and mighty but Gurgaon still cannot measure its own pollution levels that are at least twice the prescribed limit on most days.

The booming city, a mere stone's throw away from the Capital's power corridor, doesn't even have a fully-functional air quality monitoring system, giving rise to inconsistent data, from which even basic year-to-year comparisons cannot be drawn.

Home to over a million people, Gurgaon's pollution-monitoring mechanism is so outdated that it cannot simultaneously keep track of PM10 and PM2.5 levels, two key air particulate pollution indices.

Data of particulate matter in the same unit is available only for four of the 12 months in 2013 and 2014, making any comparative study or policy formulation difficult.

## DEADLY NEGLIGENCE

Monthly average of particulate matter data for the last two years

| Month     | 2013                  | 2014                  |
|-----------|-----------------------|-----------------------|
| January   | 218                   | 186                   |
| February  | 169                   | PM <sub>2.5</sub> 165 |
| March     | 143                   | 140                   |
| April     | 126                   | PM <sub>2.5</sub> 95  |
| May       | PM <sub>2.5</sub> 49  | 156                   |
| June      | 72                    | PM <sub>2.5</sub> 95  |
| July      | PM <sub>2.5</sub> 39  | 115                   |
| August    | 89                    | PM <sub>2.5</sub> 105 |
| September | 170                   | 101                   |
| October   | 169                   | PM <sub>2.5</sub> 91  |
| November  | 307                   | 149                   |
| December  | PM <sub>2.5</sub> 127 | 114                   |



■ The pollution monitoring machine installed on Vikas Sadan building roof in Gurgaon was not functional on Sunday.  
PARVEEN KUMAR/HT PHOTO

"The machine we have has just one scale for measuring particulate matter. We can set it at either 10 or 2.5 size level. We usually keep it set at PM10 as it is more commonly required to be monitored," said an official from the Haryana State Pollution Control Board (HSPCB).

PM10 and PM2.5 are two categories of particulate matter that comprise pollution-causing elements. The PM2.5 particle is lighter and is therefore considered more dangerous as it can lodge itself in the lungs, causing respiratory problems, aggravated asthma or even

heart attacks.

In spite of these dangers, the data on levels of PM2.5 were not available in Gurgaon for most of the months last year.

Particulate matter is not the only concern for Gurgaon with high-levels of poisonous nitrogen oxide fumes in the air that

are going unmeasured owing to outdated machinery.

"Apart from particulate matter, Gurgaon also has very high levels of NO2 because of diesel-run vehicles and generator sets. The people of Gurgaon should be very worried about such high and unacceptable pollution levels", said Sunita Narain, director general, Centre for Science and Environment (CSE).

According to Narain, CSE recently held a meeting with the HSPCB to push for online updating of pollution data on a regular basis, something not done at present.

The state's system for weather and pollution monitoring is still manual, said Narain.

Gurgaon's air pollution level may be less than that of Delhi but is catching up fast and has already crossed safe limits. Particulate matter in the city's air has remained consistently on the higher side in the past two years and is double the prescribed limit for most of the year.

For a city just 20 years old and with a population that is one-tenth of the Capital, Gurgaon has PM10 levels of more than 100 and PM2.5 level of over 50, says HSPCB data.

## How a city became a dumping ground for construction waste

### METRO MATTERS



SHIVANI SINGH

In Delhi, no matter what time of the year, rain is always welcome. It cleanses the air of pollutants and makes the dust settle on the ground.

It has been part of the Delhi legend. Every summer, the hot, dry wind blowing from the Thar Desert in the west would hit Delhi like a typhoon of dust. This condition would persist till the monsoon rains lashed the city. Until not too long ago, this used to be only a seasonal phenomenon.

Now, you see a shroud of dust covering the skies all year round and long for a surprise shower. No matter how many rounds of dustings, it is just impossible to keep the house dirt-free. It is certainly not the seasonal desert sand we are dealing with.

Already the largest urban sprawl in India, Delhi has developed an amazing appetite for the brick and mortar. The city is an unending construction project with more roads, flyovers, pavements, metro lines, shopping malls, and offices coming up every day. In residential neighbourhoods, if it is not a single storey being converted into multi-storey 'builder' flats, there is always an extra room, an extra floor being added somewhere.

While it loves to build, Delhi doesn't have a plan to deal with construction waste. According to one estimate, Delhi generates at least 4,000 tonnes of construction debris every day but the sole processing plant can deal with only 10% of it — mostly the more visible pieces such as concrete blocks, discarded tiles and hardware. The rest is dumped just anywhere.

Growing up in Delhi, I have rarely seen people bothering to remove the building material —



■ Exposure to construction dust affects breathing and respiratory systems and damages lung tissues.  
SUNIL GHOSH/HT PHOTO

sand, cement, mineralised quartzite (popularly known as the red Badarpur soil) or finer concrete — once the construction was over. Today, much of Delhi's earth is made of construction dust. If you pick up a fistful, you'll see how it slips out of your hand. Those who have a green patch at home would know how sandy and gritty the top soil has become. Many just buy sacks of earth to replenish their gardens.

But construction waste is not only in the earth we walk on but also the air we breathe. Last year, the civil engineering department of Jamia Millia Islamia and Central Pollution Control Board released a study on 19 construction sites in Delhi that found that areas where the air pollution index for PM10 was higher; there were more people suffering from respiratory diseases.

Exposure to construction dust affects breathing and respiratory systems, and damages lung tissues. Construction workers are at risk of developing silicosis if they breathe high quantities of concrete and rock dust. Demolition sites may release dust from asbestos that is known to cause Mesothelioma cancer and is banned in more than 50 countries, but not in India.

Last year, Beijing, which competes with Delhi on top of the global pollution chart, made it compulsory for all construc-

tion sites to install cameras so that authorities could assess how it was contributing to the city's smog and punish companies that were using open trucks to ferry material or carried out outdoor construction on heavily polluted days. Contractors were told to place special funds for dust control in government-controlled bank account before construction began. Since last month, Beijing has also started levying construction dust pollution fees.

In Delhi, municipal laws to fine those who dump debris on public land are rarely invoked. There is zero monitoring of construction sites to check pollution. For years, the ecologically-sensitive Ridge forests and the Yamuna floodplains have been the city's favourite dumping grounds.

Two years back, when the National Green Tribunal took up the matter, government agencies, including Delhi Metro and Central Public Works Department, turned out to be the biggest culprits.

Already, Delhi's many ponds and water bodies have died under concrete rubble. The plan to set up more concrete-recycling plants is still gathering dust. The city, in the meantime, is gasping. It can no longer bet on a few drizzles of unseasonal rain to catch its breath.

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## Delhi's pollution monitoring bodies set for revamp

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**NEW DELHI:** Cleaning Delhi's air may not have been high on the manifesto of Aam Aadmi Party (AAP) but its government has decided to revamp its departments dealing with measures to check air pollution and infuse new energy and vigour to take measures to put a check on Delhi's rising air pollution.

Sources said the Delhi Pollution Control Committee (DPCC) mandated to monitor air pollution quality in the city will get a new chief, probably an expert, to replace Sanjiv Kumar, who is also principal secretary department of Environment and Forest.

"There is an inherent conflict of interest in the same person heading the DPCC and the environment department. We want to end this and have a scientific person on environmental matters heading the committee to ensure its independence," a senior Delhi government functionary said. In Delhi, the pollution control

### SOURCES SAY THE DELHI POLLUTION CONTROL COMMITTEE MANDATED TO MONITOR AIR POLLUTION QUALITY WILL GET A NEW CHIEF

committee has been headed by the environment secretary and the state government has never tried to appoint a pollution expert as its chairperson even though a large number of environment engineers work in the committee. This has proved to be a bottleneck in making DPCC a truly scientific environmental arm.

The new government wants to change it and make DPCC a body which can provide it "workable" action plan to reduce air pollution in Delhi which the World Health Organisation has rated as worst in the world.

Apart from the DPCC, government sources said there would be changes in the environment department to streamline its

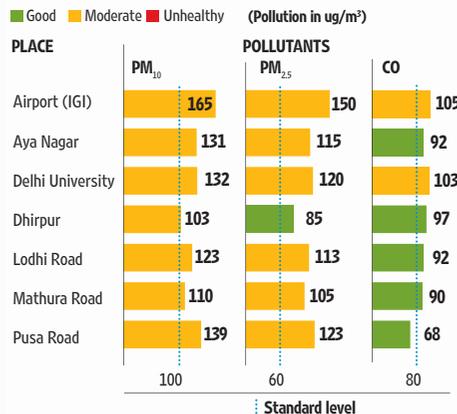
functioning. The government was apparently not happy with the commitment made by Kumar to submit a report on the action plan prepared by the environment ministry to clean Delhi's air by end of March.

Even though the meetings between Kumar and environment ministry officials happened in January and February, the newly-elected Delhi government was not told about the commitment. "We learnt about it only when (Union environment minister) Prakash Javadekar made a statement accusing us of not acting on the ministry's action plan," a Delhi government official said.

The senior ministers were upset that Kumar had provided the BJP-led Central government an opportunity to score brownie points even though environment management is purely a state subject. Sources also said that the ministers were not happy with the response of the Delhi government to the National Green Tribunal order on improving quality of Delhi's air.

## POLLUTION WATCH

Data recorded on Sunday at 7.30pm showed area around Delhi Airport was the most polluted.



AQI (Air Quality Index) is a number that ranges from 1 to 500 and characterises the quality of the air at a given location. Higher the AQI, higher the risk to health.