

## **Need to operationalize a smog alert system for Delhi and NCR to combat public health emergency: steps to take**

### **Environment Pollution (Prevention and Control) Authority for National Capital Region (EPCA)**

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Across the world governments take actions based on the quality of air in their city on a particular day. This allows for advisories to the most vulnerable so that they reduce their exposure. It also takes emergency action to reduce emissions on these high pollution days. This is what needs to be done in Delhi.

The Air Quality Index (AQI) is a globally established tool to define how the air pollution level impacts human health. India's National Air Quality Index, developed by CPCB, has been launched.

Under the AQI, depending on the level of pollution, the health risk has been listed. The severe classification means "(the levels) may cause respiratory effects even on healthy people and serious health impacts on people with lung/heart diseases. The health impacts may be experienced even during light physical activity". In other words, this quality of air is severely bad for human health.

While the AQI has provided broad health advisories it does not entail what urgent measures need to be taken by people to avoid exposure and what needs to be done to improve levels. This is what is done across the world.

#### **Other countries take actions based on the level of pollution as follows:**

##### **Beijing: Pollution emergency measures on red alert days:**

- Kindergartens, primary and middle schools will close;
- About 80 per cent of government-owned cars have to be taken off the roads;
- Private cars will be allowed on alternate days according to numbers plates;
- Freight vehicles and those transporting material for construction sites will be barred;

- Polluting factories have to cut emissions or shut down when the orange warning signal is issued;
- Construction sites will have to halt excavation and demolition operations;
- Ban on barbeques and fireworks on heavily polluted days.

**US cities: Rule 701 of air pollution emergency contingency actions (for PM and ozone):**

- Industrial units reduce combined emissions by at least 20 per cent of normal weekday operations.
- For vehicles, it asks to reduce fleet vehicle miles;
- Promotes ridesharing and telecommuting.
- Liquid or solid fossil fuels cannot be burned in electric power generating systems unless a force majeure natural gas curtailment is in effect.
- It also recommends all non-emergency driving be discontinued.

**Paris: red alert day**

- Restricts vehicle entry into the city
- Does not allow diesel cars inside the city during smoggy days

**Delhi should also use the index to inform people of the dangers of exposure and also to take steps to reduce pollution. We would suggest the following**

**Actions to be taken on days that air pollution levels are toxic for human health**

<b>Level</b>	<b>Protective measure</b>	<b>Control measure</b>
<b>Very poor (actual levels or forecasted levels)</b>	Issue health alerts and advisory in newspapers/TV to advise people with respiratory problems, cardiac patients, children and senior citizen to avoid polluted areas and restrict non essential outdoor movement	Enforcement of existing rules and guidelines to be stringently done and compliance ensured with all directions of the judiciary/government
<b>Severe (over 2 days or forecast as severe)</b>	All schools to be closed	Public transport services to be intensified and to be made free of charge
		Parking charges to be doubled

		Private non transport diesel vehicles to be banned
		Shut down of construction activities
		Zero tolerance for waste burning
		Shut down coal power plants and all visibly polluting factories
		Bring in odd-even (with minimal exemptions and for extended hours)
		Ban on all fireworks
<b>Very severe (8 times above standard and more present or forecast) for three consecutive days</b>	Schools and colleges to be closed	All private cars to be taken off road (other than emergency vehicles)
		Only public transport to be allowed and made free
		All commercial vehicle except those carrying essential commodities entry to be banned in city

Note: All actions are cumulative – that is being conditions are very severe then, not only what is done during severe is followed but also more is done recognizing that this is not enough.

All actions must be taken for the airshed – in this case, NCR wide actions