

Mumbai's Dec air cleaner than in past four years

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Mumbai: The air in Mumbai this December has been cleaner than in the previous four Decembers. A look at carcinogenic PM 2.5 levels this November and December against the corresponding months of 2022 suggested 2023 has been better, and against the December of 2019 this year's numbers have been far better, according to a statistical analysis of pollution data by Respirer Living Sciences, a climate-tech platform.

The data has been sourced from the Central Pollution Control Board (CPCB), with the number of active air quality monitoring stations in the city having gone up from 10 in 2019 to 29 in 2023.

Particulate matter PM 2.5 is fine particulate matter which is less than 1/30th the width of a strand of human hair; it can directly get injected into the human bloodstream upon respiration. In November 2023, noted the analysis, a marginal rise was visible in PM2.5 against November 2019, thanks to weather patterns and Diwali crackers in addition to smoke and dust from vehicles and construction sites.

CHANGE IN PM 2.5 LEVELS

(In percentage, from 2019 to 2023)

| Month | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2019-23 |
|----------|---------|---------|---------|---------|---------|
| November | 14.3 | -3.2 | 10.9 | -17.4 | 1.3 |
| December | -3.4 | -1 | 48.4 | -46.4 | -23.9 |



Meanwhile, Mumbai's average air quality index (AQI) – 174 – remained at the higher end of the moderate category on Wednesday, with major suburbs, those mostly on the eastern coast such as Sewri, Govandi, Kherwadi (Bandra East), BKC, Chembur, Navy Nagar in Colaba and Malad West showing AQI in poor category. According to experts, due to the sudden decline in wind speed from across the shores, the city was seen layered with a thick smog.

The two most polluted areas in the city in November and December have been BKC and Govandi respectively. In No-

vember BKC had PM 2.5 of 86.2 ug/m³ (over 17 times the WHO safe limit of 5ug/m³), and in December (till the 25th), Shivaji Nagar in Govandi had a PM 2.5 of 93.6 ug/m³ (more than 18 times the WHO safe limit). PM 2.5 is measured in ug/m³ that stands for microgram (one millionth of a gram) per cubic meter of air.

A separate study by IIT-B and International Society of Exposure Sciences (ISES), USA, has pointed out that PM 2.5 levels on Diwali night in November this year were 2.8 times higher than on non-Diwali nights and 2.1 times higher over Diwali day.