

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 16.5.2022 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean): PM₁₀ = 150; PM_{2.5} = 35, all units are in µg/m³ Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

| | Date | DAYALBAGH (TIME WEIGHTED AVERAGE DATA) | | | | | | | | | Date | SANJAY PLACE (ARITHMETIC MEAN DATA) | | | | | | | | |
|-----------------|-------------|---|------------------|------|---------------------------|-----|------|------|---------------------|-------------|-------------|--|------------------|------|---------------------------|-----|------|------|---------------------|-------|
| | Today: | Air Quality Index | | | Meteorological Parameters | | | | | | Today: | AQI | | | Meteorological Parameters | | | | | |
| | May 16 – 15 | | | | | | | | | | May 16 – 15 | | | | | | | | | |
| | Yesterday | PM _{2.5} | PM ₁₀ | RH % | WS m/s | WD | T °C | | SR W/m ² | RF mm | Yesterday | PM _{2.5} | PM ₁₀ | RH % | WS m/s | WD | T °C | | SR W/m ² | RF mm |
| May 15 – 14 | | | | | | Max | Min | | | May 15 – 14 | | | | | | Max | Min | | | |
| 4 / 97 | Today | 38 | 56 | 25 | 3.9 | SSE | 48.2 | 34.6 | 155 | 0 | Today | 112 | 123 | 27 | 3.8 | SE | 49.9 | 36.5 | 195 | 0 |
| | Yesterday | 80 | 74 | 33 | 3.2 | S | 46.7 | 32.5 | 167 | 0 | | | | | | | | | | |
| 3 / 34 | Today | 50 | 34 | 26 | 3.9 | SSE | 47.2 | 34.4 | 154 | 0 | Yesterday | 166 | 157 | 31 | 2.2 | E | 49.0 | 34.7 | 206 | 0 |
| | Yesterday | 99 | 55 | 34 | 3.3 | S | 46.0 | 32.0 | 182 | 0 | | | | | | | | | | |
| Science Faculty | Today | 46 | 31 | 26 | 4.0 | SSE | 46.5 | 34.3 | 156 | 0 | Yesterday | | | | | | | | | |
| | Yesterday | 97 | 56 | 34 | 3.2 | S | 46.2 | 31.9 | 168 | 0 | | | | | | | | | | |

Views of AQI Research Group: Both PM_{2.5} and PM₁₀ levels have significantly decreased in comparison to yesterday at all the sites. The levels of PM_{2.5} at Vidyut Nagar, Prem Nagar and Science Faculty are within the WHO limits while PM₁₀ levels at Prem Nagar and Science Faculty lie within the WHO standards. This might probably be associated to increase in Wind Speed, decrease in Relative Humidity and change in Wind Direction. Air Quality has improved to the *Good* category at all the Dayalbagh sites w.r.t to PM_{2.5} while w.r.t PM₁₀ it is in the *Good* category at Prem Nagar and Science Faculty. AQI at Sanjay Place w.r.t both PM_{2.5} and PM₁₀ is in the *Unhealthy for Sensitive Groups*.
and Moderate at Vidyut Nagar (apparently, due to taking up pending construction activity by SNC)

Remarks of Revered Chairman-ACE:

Received: Monday, 16-05-2022, 12:23 PM

Perused: Subject to Legalese / Legalise / "Laws of the Land"



Monday, 16-05-2022, 01:09 PM

Good -G

Moderate- M

Unhealthy for Sensitive Groups- UHS

Unhealthy for All- UHA

Very Unhealthy for All- VUHA

Hazardous for All- HZA

Hazardous for All- HZA

NOTE: 1 A continuous study conducted as part of Dayalbagh Sigma Six Qualities and Values Model implementation.

2 DEI is using United States Environmental Protection Agency (USEPA) methodology and online calculators to calculate AQI. For fair comparison with UPPCB Sanjay Place Weather Station readings, their PM_{2.5} concentration readings are fed in USEPA online calculator for AQI calculation.

3 Formula for AQI calculation for a Pollutant –

$$I = \frac{I_{\text{high}} - I_{\text{low}}}{C_{\text{high}} - C_{\text{low}}} * (C - C_{\text{low}}) + I_{\text{low}}$$

where, I = Air Quality Index, C=Pollutant Concentration (PM_{2.5}), C_{low}=Concentration Breakpoint ≤C, C_{high}=Concentration Breakpoint ≥C, I_{low}=Index Break point corresponding to C_{low}, I_{high}=Index Breakpoint corresponding to C_{high}

Communicated by Dr. Anita Lakhani, Associate Professor, Department of Chemistry, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra.