

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 15.8.2022 (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 | AVAS VIKAS (SIKANDRA) (ARITHMETIC MEAN DATA) | | | | | | | | | |
|-----------------|----------------|---|------------------|------|---------------------------|-----|------|------|---------------------|-------|----------------|---|------------------|------|---------------------------|-----|------|------|---------------------|-------|--|
| | Today: | Air Quality Index | | | Meteorological Parameters | | | | | | Today: | AQI | | | Meteorological Parameters | | | | | | |
| | August 15 – 14 | | | | | | | | | | August 15 – 14 | | | | | | | | | | |
| | 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 | |
| | August 14 – 13 | | | | | | Max | Min | | | August 14 – 13 | | | | | | Max | Min | | | |
| 4 / 97 | Today | 42 | 14 | 84 | 1.3 | ESE | 35.0 | 27.1 | 94 | 26 | Today | 33 | 12 | 87 | 0.7 | ESE | 34.8 | 27.1 | 62 | NA | |
| | Yesterday | 25 | 10 | 76 | 0.8 | ENE | 38.0 | 26.9 | 144 | 2.0 | | | | | | | | | | | |
| 3 / 34 | Today | 59 | 19 | 84 | 1.3 | ESE | 35.0 | 27.1 | 94 | 26 | Yesterday | 29 | 14 | 82 | 0.5 | SSE | 37.5 | 26.7 | 109 | 0 | |
| | Yesterday | 42 | 13 | 76 | 0.8 | ENE | 38.0 | 26.9 | 144 | 2.0 | | | | | | | | | | | |
| Science Faculty | Today | 59 | 19 | 84 | 1.3 | ESE | 35.0 | 27.1 | 94 | 26 | | | | | | | | | | | |
| | Yesterday | 33 | 10 | 76 | 0.8 | ENE | 38.0 | 26.9 | 144 | 2.0 | | | | | | | | | | | |

| | | | | | | |
|----------------|----------------------|---|--------------------------------|-------------------------------------|--------------------------------|--------------------------------|
| Good 0 - 50 | Moderate 51 - 100 | Unhealthy for Sensitive Groups 101 - 150 | Unhealthy for All 151 - 200 | Very Unhealthy for All 201 - 300 | Hazardous for All 301 - 400 | Hazardous for All 401 - 500 |
|----------------|----------------------|---|--------------------------------|-------------------------------------|--------------------------------|--------------------------------|

Views of AQI Research Group: In comparison to yesterday, concentrations of both PM_{2.5} and PM₁₀ have marginally increased at all locations of Dayalbagh. The levels of PM_{2.5} and PM₁₀ remained < 15 and 25 µg/m³ respectively till midnight when the Relative Humidity was < 90% and increased to 40 and 50 µg/m³ respectively after midnight when the Relative Humidity was > 90%. The Air Quality Index w.r.t. PM_{2.5} is in the *Good* category at Vidyut Nagar and in the *Moderate* category at Prem Nagar and Science Faculty, while w.r.t. PM₁₀ it remains in the *Good* category at all three locations of Dayalbagh.

At Avas Vikas, the concentrations of both PM_{2.5} and PM₁₀ have marginally changed. The Air Quality Index w.r.t. both PM_{2.5} and PM₁₀ is in the *Good* category.

Data is not available for Sanjay Place.

NOTE: 1 A continuing 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}; *Multiplication Sign