

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 25.5.2022 (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 25 – 24 | | | | | | | | | | May 25 – 24 | | | | | | | | | |
| | 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 24 – 23 | | | | | | Max | Min | | | May 24 – 23 | | | | | | Max | Min | | | |
| 4 / 97 | Today | 68 | 44 | 62 | 2.4 | NNE | 35.4 | 27.5 | 173 | 0 | Today | 115 | 68 | 55 | 2.2 | NNE | 37.1 | 28.7 | 202 | 0 |
| | Yesterday | 42 | 36 | 70 | 5.1 | SE | 29.4 | 21.5 | 63 | 1.0 | | | | | | | | | | |
| 3 / 34 | Today | 80 | 35 | 63 | 2.4 | NNE | 35.0 | 27.3 | 175 | 0 | Yesterday | 78 | 61 | 64 | 4.5 | NE | 30.7 | 22.2 | 113 | 3.6 |
| | Yesterday | 50 | 28 | 70 | 5.1 | SE | 29.1 | 21.8 | 74 | 1.0 | | | | | | | | | | |
| Science Faculty | Today | 78 | 34 | 63 | 2.4 | NNE | 35.3 | 27.4 | 174 | 0 | | | | | | | | | | |
| | Yesterday | 46 | 26 | 70 | 5.1 | SE | 29.3 | 21.7 | 63 | 1.0 | | | | | | | | | | |

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

Views of AQI Research Group: There is significant increase in PM_{2.5} and PM₁₀ concentration^s at all the sites. Relative Humidity and Wind Speed has ^{ve} decreased at all the sites while the Maximum and Minimum Temperature and Solar Radiation have increased. Wind Direction has changed from SE to NNE at the Dayalbagh sites and from NE to NNE at Sanjay Place. At Dayalbagh sites, Air Quality Index w.r.t PM_{2.5} is in the *Moderate* category and w.r.t PM₁₀ it is in the *Good* category while at Sanjay Place, Air Quality Index w.r.t ~~both~~ PM_{2.5} is in the *Unhealthy for Sensitive Groups* category and w.r.t PM₁₀, it is in the *Moderate* category.

Perused By Way of Information Only.
Subject To Legalise/Legalese/"Laws of the Land".

Thursday, 26-05-2022, 03:39 AM
Received, Wednesday, 25-05-2022, 12:39 PM

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 –

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

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.