Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING REPORT - Dated: 23.07.2021

Permissible Limits: $PM_{10} = 100$; $PM_{2.5} = 60$, all units are in $\mu g/m^3$

| Sampling Site and Height | Duration of Sampling | DAYALBAGH (Time Weighted Average) | | | | | | | | SANJAY PLACE @ 40 feet (Arithmetic Mean) | | | | | | | | | | AIR QUALITY INDEX (AQI) ON THE BASIS OF PM _{2.5} CONCENTRATION | | | | | |
|---------------------------------|----------------------------|-----------------------------------|----------------------------------|------------------------------|----------------------------------|---------|---------------------------|--------|---------|---|---|------------------------------|--|------------------------------|----------------------------------|---------|-----------|----|---------|--|----------|------------------------------|----------------------------------|------------------------------|----------------------------------|
| | | PM ₁₀ [μg/m³] | | PM _{2.5} [µg/m³] | | | Meteorological Parameters | | | | $PM_{10}[\mu g/m^3]$ Calculated on the basis of $PM_{10}/PM_{2.5}$ ratio at Dayalbagh | | PM _{2.5} [μg/m³] @ 40 feet | | Meteorological Parameters | | | | 'S | DAYALBAGH @ 40 feet | | SANJAY PLACE @ 40 feet | | | |
| | | Today 23.7.21- 22.7.21 | Yesterday 22.7.21- 21.7.21 | Today 23.7.21- 22.7.21 | Yesterday 22.7.21- 21.7.21 | RH % | WS m/s | WD | T °C | SR W/m² | RF mm | Today 23.7.21- 22.7.21 | Yesterday 22.7.21- 21.7.21 | Today 23.7.21- 22.7.21 | Yesterday 22.7.21- 21.7.21 | RH % | WS m/s | WD | T °C | SR W/m² | RF mm | Today 23.7.21- 22.7.21 | Yesterday 22.7.21- 21.7.21 | Today 23.7.21- 22.7.21 | Yesterday 22.7.21- 21.7.21 |
| 4/97 @ 40 feet | 12:00-12:00 noon | √+35↓ | 23 | √+26↓ | 17 | 84 | 1.9 | SSE 29 | 29 | 85 | NA | | 26 | +21 | 19 | 82 | | | 29 | 145 | | 80 Satisfactory | 61 Satisfactory | 70 | 66 Satisfactory |
| 3/34 @ 40 feet | 12:00-12:00 noon | √+28 ↓ | 19 | √+18↓ | 12 | 85 | 1.9 | SSE | 29 | 82 | NA | +29↓ | | | | | 1.3 | E | | | | 63 Satisfactory | 50 Good | | |
| Science Faculty @ 40 feet | 12:00-12:00 noon | √+32 ↓ | 18 | √+20 ↓ | 12 | 85 | 3.5 | SSE | ≣ 29 | 85 | NA | | | | | | | | | | | 68 Satisfactory | 50 Good | | |

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 PM₂₅ 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 (PM2.5), Clow=Concentration Breakpoint ≤C, Chigh=Concentration Breakpoint ≥C, Ilow=Index Break point corresponding to Clow, Ihigh=Index Breakpoint corresponding to Chigh

- 4 ↑ Denotes improvement in quality (↓ Inverse)
- ↑↑ Denotes significant improvement in quality (↓↓ Inverse)
- ✔ Denotes Dayalbagh readings are better than or equivalent to Sanjay Place
- +Denotes values are near or within permissible limits.