

# AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 14.9.2022

## (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

**Permissible Limits (24 Hour Mean):** PM<sub>10</sub> = 150; PM<sub>2.5</sub> = 35, all units are in µg/m<sup>3</sup> Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

**Today:** 13-09-2022 to 14-09-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 12-09-2022 to 13-09-2022 from 9:00 a.m. to 9:00 a.m.

| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N | DAYALBAGH<br>(TIME WEIGHTED AVERAGE DATA) |           |                  |           |                           |           |     |         |      |                |          | SANJAY PLACE<br>(ARITHMETIC MEAN DATA) |           |                  |           |                           |           |     |         |      |                |          |
|--------------------------------------|---|-----------|------------------|-----------|---------------------------|-----------|-----|---------|------|----------------|----------|--|-----------|------------------|-----------|---------------------------|-----------|-----|---------|------|----------------|----------|
|                                      | AQI                                       |           |                  |           | Meteorological Parameters |           |     |         |      |                |          | AQI                                    |           |                  |           | Meteorological Parameters |           |     |         |      |                |          |
|                                      | PM <sub>2.5</sub>                         |           | PM <sub>10</sub> |           | RH<br>%                   | WS<br>m/s | WD  | T<br>°C |      | SR<br>W/<br>m² | RF<br>mm | PM <sub>2.5</sub>                      |           | PM <sub>10</sub> |           | RH<br>%                   | WS<br>m/s | WD  | T<br>°C |      | SR<br>W/<br>m² | RF<br>mm |
|                                      |   |           |                  |           |                           |           |     | Max     | Min  |                |          |  |           |                  |           |                           |           |     | Max     | Min  |                |          |
|                                      | Today                                     | Yesterday | Today            | Yesterday |                           |           |     |         |      |                |          | Today                                  | Yesterday | Today            | Yesterday |                           |           |     |         |      |                |          |
| 4 / 97                               | 29  | 21        | 12               | 11        | 72                        | 5.4       | SSE | 32.9    | 26.9 | 109            | 0        | 55                                     | 53        | 36               | 44        | 68                        | 4.3       | ESE | 34.1    | 28.3 | 114            | 0        |
| 3 / 34                               | 46  | 38        | 14               | 11        | 72                        | 5.4       | SSE | 32.9    | 26.9 | 109            | 0        |  |           |                  |           |                           |           |     |         |      |                |          |
| Science Faculty                      | 25  | 21        | 17               | 21        | 72                        | 5.4       | SSE | 32.9    | 26.9 | 109            | 0        |  |           |                  |           |                           |           |     |         |      |                |          |

**Views of AQI Research Group:** The Air Quality Index at all sites of Dayalbagh remains in the *Good* category w.r.t. both PM<sub>2.5</sub> and PM<sub>10</sub> due to dispersal of pollutants resulting from favourable meteorological conditions.  
At Sanjay Place, the Air Quality Index remains in the *Moderate* category w.r.t. PM<sub>2.5</sub> and *Good* category w.r.t. PM<sub>10</sub>.

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

Wednesday, 14-09-2022, 05:32 PM

Received, Wednesday, 14-09-2022, 12:54 PM

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

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<sub>2.5</sub> 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<sub>2.5</sub>); C<sub>low</sub> = Concentration Breakpoint ≤C; C<sub>high</sub> = Concentration Breakpoint ≥C;  
I<sub>low</sub> = Index Break point corresponding to C<sub>low</sub>; I<sub>high</sub> = Index Breakpoint corresponding to C<sub>high</sub>; \*Multiplication Sign