

# Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 15.10.2021 (BASED ON US-EPA AQI STANDARDS)

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>

| Site Location   | Sampling Time (24 hrs) | DAYALBAGH<br>(TIME WEIGHTED AVERAGE DATA) |                                 |                             |                                 |                                          |     |     |    |     |   | SANJAY PLACE<br>(ARITHMETIC MEAN DATA) |           |                  |         |                                             |     |     |    |     |   |
|-----------------|------------------------|-------------------------------------------|---------------------------------|-----------------------------|---------------------------------|------------------------------------------|-----|-----|----|-----|---|----------------------------------------|-----------|------------------|---------|---------------------------------------------|-----|-----|----|-----|---|
|                 |                        | AQI                                       |                                 |                             |                                 | Meteorological Parameters @<br>Dayalbagh |     |     |    |     |   | AQI                                    |           |                  |         | Meteorological Parameters @<br>Sanjay Place |     |     |    |     |   |
|                 |                        | PM <sub>2.5</sub>                         |                                 | PM <sub>10</sub>            |                                 |                                          |     |     |    |     |   | PM <sub>2.5</sub>                      |           | PM <sub>10</sub> |         |                                             |     |     |    |     |   |
|                 |                        | Today<br>Oct 15 -<br>Oct 14               | Yesterday<br>Oct 14 -<br>Oct 13 | Today<br>Oct 15 -<br>Oct 14 | Yesterday<br>Oct 14 -<br>Oct 13 |                                          |     |     |    |     |   | RH<br>%                                | WS<br>m/s | WD               | T<br>°C |                                             |     |     |    |     |   |
| 4 / 97          | 09:00 am – 09:00am     | 115 US                                    | 117 US                          | 84 M                        | 80 M                            | 49                                       | 2.6 | WNW | 28 | 122 | 0 | 161 UH                                 | 149 US    | 72 M             | 63 M    | 43                                          | 3.1 | SSW | 26 | 187 | 0 |
| 3 / 34          | 09:00 am – 09:00am     | 152 UH                                    | 132 US                          | 63 M                        | 59 M                            | 49                                       | 2.6 | WNW | 28 | 106 | 0 |                                        |           |                  |         |                                             |     |     |    |     |   |
| Science Faculty | 09:00 am – 09:00 am    | 155 UH                                    | 144 US                          | 71 M                        | 66 M                            | 51                                       | 2.1 | NE  | 27 | 95  | 0 |                                        |           |                  |         |                                             |     |     |    |     |   |

Good- G

Moderate- M

Unhealthy for Sensitive Groups -US

Unhealthy- UH

Very Unhealthy - VUH

Hazardous - H

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<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>