## Radhasoami Dayal Ki Daya Radhasoami Sahai

## **AIR QUALITY MONITORING REPORT – Dated: 8.06.2021**

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

| Sampling<br>Site and<br>Height  | Duration of<br>Sampling | DAYALBAGH<br>(Time Weighted Average)  |                                    |  |                                    | SANJAY PLACE  @ 40 feet  (Arithmetic Mean)   |                                    |  |                                    | AIR QUALITY INDEX (AQI) ON THE BASIS OF PM <sub>2.5</sub><br>CONCENTRATION |                                |                            |                                |
|---------------------------------|-------------------------|---------------------------------------|------------------------------------|--|------------------------------------|--|------------------------------------|--|------------------------------------|--|--------------------------------|----------------------------|--------------------------------|
|                                 |                         | PM <sub>10</sub> [μg/m <sup>3</sup> ] |                                    | PM <sub>2.5</sub> [μg/m <sup>3</sup> ] |                                    | PM <sub>10</sub> [µg/m <sup>3</sup> ]<br>Calculated on the<br>basis of PM <sub>10</sub> /PM <sub>2.5</sub><br>ratio at Dayalbagh |                                    | PM <sub>2.5</sub> [μg/m³]<br>@ 40 feet |                                    | DAYALBAGH<br>@ 40 feet   |                                | SANJAY PLACE<br>@ 40 feet  |                                |
|                                 |                         | Today<br>8.6.2021-<br>7.6.2021        | Yesterday<br>7.6.2021-<br>6.6.2021 | Today<br>8.6.2021-<br>7.6.2021         | Yesterday<br>7.6.2021-<br>6.6.2021 | Today<br>8.6.2021-<br>7.6.2021   | Yesterday<br>7.6.2021-<br>6.6.2021 | Today<br>8.6.2021-<br>7.6.2021         | Yesterday<br>7.6.2021-<br>6.6.2021 | Today<br>8.6.2021-7.6.2021   | Yesterday<br>7.6.2021-6.6.2021 | Today<br>8.6.2021-7.6.2021 | Yesterday<br>7.6.2021-6.6.2021 |
| 4/97<br>@ 40 feet               | 12:00-12:00<br>noon     | <b>√</b> +57↑                         | 62                                 | <b>√</b> +21                           | 23                                 | 143  | 140                                | +53                                    | 56                                 | 70<br>Satisfactory   | 74<br>Satisfactory             | 144<br>MODERATE            | 151<br>MODERATE                |
| 3/34<br>@ 40 feet               | 12:00-12:00<br>noon     | <b>√+29</b> ↑                         | 32                                 | <b>√</b> +12                           | 13                                 |  |                                    |  |                                    | 50<br>GOOD   | 53<br>Satisfactory             |                            |                                |
| Science<br>Faculty<br>@ 40 feet | 12:00-12:00<br>noon     | <b>√</b> +33↑                         | 37                                 | <b>√</b> +12                           | 14                                 |  |                                    |  |                                    | 50<br>GOOD   | 55<br>Satisfactory             |                            |                                |

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 -

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

where, I = Air Quality Index, C=Pollutant Concentration (**PM**<sub>2.5</sub>),  $C_{low}$ =Concentration Breakpoint  $\leq C$ ,  $C_{high}$ =Concentration Breakpoint  $\geq C$ ,  $C_{high}$ =Concentration Breakpoint  $\leq C$ ,

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