## Radhasoami Dayal Ki Daya Radhasoami Sahai

## **AIR QUALITY MONITORING REPORT – Dated: 15.06.2021**

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 <sub>2.5</sub> CONCENTRATION			
		PM <sub>10</sub> [μg/m <sup>3</sup> ]		PM <sub>2.5</sub> [μg/m <sup>3</sup> ]		$\begin{array}{c} PM_{10} \left[\mu g/m^3\right] \\ \text{Calculated on the basis} \\ \text{of } PM_{10}/PM_{2.5} \text{ ratio at} \\ \text{Dayalbagh} \end{array}$		PM <sub>2.5</sub> [μg/m³] @ 40 feet		DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet	
		Today 15.6.2021- 14.6.2021	Yesterday 14.6.2021- 13.6.2021	Today 15.6.2021- 14.6.2021	Yesterday 14.6.2021- 13.6.2021	Today 15.6.2021- 14.6.2021	Yesterday 14.6.2021- 13.6.2021	Today 15.6.2021- 14.6.2021	Yesterday 14.6.2021- 13.6.2021	Today 15.6.2021- 14.6.2021	Yesterday 14.6.2021- 13.6.2021	Today 15.6.2021- 14.6.2021	Yesterday 14.6.2021- 13.6.2021
4/97 @ 40 feet	12:00-12:00 noon	<b>√</b> +22↑	26	<b>√</b> +19↑	22					66 Satisfactory	72 Satisfactory		
3/34 @ 40 feet	12:00-12:00 noon	<b>✓+14</b> ↑	19	<b>✓+10</b> ↑	14	+24↑	29	+20↑	24	42 GOOD	55 Satisfactory	68 Satisfactory	87 Satisfactory
Science Faculty @ 40 feet	12:00-12:00 noon	<b>√</b> +16↑	19	<b>√</b> +12↑	14					50 GOOD	55 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  $\geq C$ ,  $C_{low}$ =Index Break point corresponding to  $C_{low}$ ,  $C_{low}$ =Index Breakpoint corresponding to  $C_{high}$ =Concentration Breakpoint  $\leq C$ ,  $C_{high}$ =Concentration Bre

- 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