## Radhasoami Dayal Ki Daya Radhasoami Sahai

## **AIR QUALITY MONITORING REPORT – Dated: 11.07.2021**

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 <sub>2.5</sub> 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> ] Calculated on the basis of PM <sub>10</sub> /PM <sub>2.5</sub> ratio at Dayalbagh		PM <sub>2.5</sub> [μg/m³] @ 40 feet		DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet	
		Today 11.7.2021- 10.7.2021	Yesterday 10.7.2021- 9.7.2021	Today 11.7.2021- 10.7.2021	Yesterday 10.7.2021- 9.7.2021	Today 11.7.2021- 10.7.2021	Yesterday 10.7.2021- 9.7.2021	Today 11.7.2021- 10.7.2021	Yesterday 10.7.2021- 9.7.2021	Today 11.7.2021- 10.7.2021	Yesterday 10.7.2021-9.7.2021	Today 11.7.2021- 10.7.2021	Yesterday 10.7.2021-9.7.2021
4/97 @ 40 feet	12:00- 12:00 noon	<b>√+49</b> ↓	46	<b>√</b> +44↓	34	+39↑				122 MODERATE	97 SATISFACTORY	99 SATISFACTORY	117 MODERATE
3/34 @ 40 feet	12:00- 12:00 noon	<b>√</b> +39↓	31	<b>√</b> +34↓	24		55	+35↑	42	97 SATISFACTORY	76 SATISFACTORY		
Science Faculty @ 40 feet	12:00- 12:00 noon	<b>√</b> +42↓	34	<b>√</b> +36↓	26					102 MODERATE	80 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  $\leq C_{high}$ =Concentration Breakpoint  $\leq C_{h$ 

- 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.