## Radhasoami Dayal Ki Daya Radhasoami Sahai

## **AIR QUALITY MONITORING REPORT – Dated:16.07.2021**

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> ]		Meteorological Parameters			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		Meteorological Parameters		DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet		
		Today 16.7.21- 15.7.21	Yesterday 15.7.21- 14.7.21	Today 16.7.21- 15.7.21	Yesterday 15.7.21- 14.7.21	RH %	WS m/s	WD	Today 16.7.21- 15.7.21	Yesterday 15.7.21- 14.7.21	Today 16.7.21- 15.7.21	Yesterday 15.7.21- 14.7.21	RH %	WS m/s	WD	Today 16.7.21- 15.7.21	Yesterday 15.7.21- 14.7.21	Today 16.7.21- 15.7.21	Yesterday 15.7.21- 14.7.21
4/97 @ 40 feet	12:00- 12:00 noon	<b>√</b> +31	34	<b>√</b> +29	33	61	4.5	ESE								87 Satisfactory	95 Satisfactory		
3/34 @ 40 feet	12:00- 12:00 noon	<b>√</b> +26	28	<b>√</b> +23	25	61	4.5	ESE	+33	30	+30	27	54	3.7	SSE	74 Satisfactory	78 Satisfactory	89 Satisfactory	82 Satisfactory
Science Faculty @ 40 feet	12:00- 12:00 noon	√+28	31	<b>√</b> +24	27	61	4.5	ESE								76 Satisfactory	82 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 corresponding to  $C_{low}$ ,  $C_{low}$ =Index Breakpoint corresponding to  $C_{high}$ =Concentration Breakpoint  $\leq$ C,  $C_{high}$ =Concentrat

- 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.