## Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING REPORT – Dated: 13.06.2021

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> ]		$\frac{PM_{10} \left[ \mu g/m^3 \right]}{\text{Calculated on the basis}}$ of PM_{10}/PM_{2.5} ratio at Dayalbagh		PM <sub>2.5</sub> [μg/m <sup>3</sup> ] @ 40 feet		DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet	
		Today 13.6.2021- 12.6.2021	Yesterday 12.6.2021- 11.6.2021	Today 13.6.2021- 12.6.2021	Yesterday 12.6.2021- 11.6.2021	Today 13.6.2021- 12.6.2021	Yesterday 12.6.2021- 11.6.2021	Today 13.6.2021- 12.6.2021	Yesterday 12.6.2021- 11.6.2021	Today 13.6.2021- 12.6.2021	Yesterday 12.6.2021- 11.6.2021	Today 13.6.2021- 12.6.2021	Yesterday 12.6.2021- 11.6.2021
4/97 @ 40 feet	12:00-12:00 noon	<b>√</b> +42↑	64	<b>√</b> +29↓	26	+45个个	127	+32个	53	87 Satisfactory	80 Satisfactory	93 Satisfactory	144 MODERATE
3/34 @ 40 feet	12:00-12:00 noon	<b>√</b> +28↑	32	<b>√</b> +21↓	15					70 Satisfactory	57 Satisfactory		
Science Faculty @ 40 feet	12:00-12:00 noon	<b>√</b> +31↑	38	<b>√</b> +28↓	16					84 Satisfactory	59 Satisfactory		

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

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 –

$$I = \frac{I_{high} - I_{low}}{C_{high} - C_{low}} * (C - C_{low}) + I_{low} \qquad where, I = A$$

$$I_{low} = Index B$$

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,  $I_{low}$ =Index Break point corresponding to  $C_{low}$ ,  $I_{high}$ =Index Breakpoint corresponding to  $C_{high}$ 

4  $\uparrow$  Denotes improvement in quality ( $\downarrow$  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