## Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 26.11.2021 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean):  $PM_{10} = 150$ ;  $PM_{2.5} = 35$ , all units are in  $\mu g/m^3$ 

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)										SANJAY PLACE (ARITHMETIC MEAN DATA)									
			Meteorological Parameters @					AQI				Meteorological Parameters @									
		PM <sub>2.5</sub>		PM <sub>10</sub>		Dayalbagh					PM <sub>2.5</sub>		PM <sub>10</sub>		Sanjay Place						
		Today Nov 26 – Nov 25	Yesterday Nov 25 – Nov 24	Today Nov 26 – Nov 25	Yesterday Nov 25 – Nov 24	RH %	WS m/s	WD	T °C	SR W/ m²	RF mm	Today Nov 26 – Nov 25	Yesterday Nov 25 – Nov 24	Today Nov 26 – Nov 25	Yesterday Nov 25 – Nov 24	RH %	WS m/s	WD	T °C	SR W/m²	RF mm
4 / 97	09:00 am - 09:00am	200 UH	160 UH	120 US	89 M	61	1.0	SSW	21	55	0										
3 / 34	09:00 am - 09:00am	217 VUH	168 UH	105 US	89 M	66	1.0	SSW	20	57	0	196 UH	183 UH	152 UH	134 US	54	0.5	S	18	112	0
Science Faculty	09:00 am - 09:00 am	252 VUH	173 UH	93 M	105 US	68	2.1	E	19	47	0										

Views of AQI Group: PM10 AQI of Dayalbagh is better than that of Sanjay Place. High RH at Dayalbagh compared to Sanjay Place is the reason for AQI for PM2.5 being higher at Dayalbagh vis-à-vis Sanjay Place.

Remarks of Revered Chairman ACE: Appropriate research at relevant multiple levels may be undertaken for investigating likely causal factors contributing to deterioration in AQI w.r.t. PM2.5 sub-atomic particles.



Good G

Moderate M

Unhealthy for Sensitive Groups US

Unhealthy for All UH

Very Unhealthy for All VUH

Hazardous for All H

Hazardous for All H

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>25</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 (PM2.5), Clow=Concentration Breakpoint ≤C, Chigh=Concentration Breakpoint ≥C, Ilow=Index Break point corresponding to Clow, Ihigh=Index Breakpoint corresponding to Chigh