## Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 24.8.2022 (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  $\mu g/m^3$  Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

	Date											SANJAY PLACE									
	Today:	Air Qua	(11IVIE	WEIGHTED AVERAGE DATA)  Meteorological Parameters							Today:	AQI				ETIC MEAN DATA)  Meteorological Parameters					
	August 24 – 23  Yesterday  August 23 – 22	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C		SR	RF	August 24 – 23 Yesterday	PM <sub>2.5</sub>	$PM_{10}$	RH	ws	WD	°C		SR	RF	
							Max	Min	W/m <sup>2</sup>	mm	August 23 –	1 1/12.5	1 14110	%	m/s	****	Max	Min	W/m <sup>2</sup> m	mm	
4/97	Today	25	16	69	1.6	ESE	32.6	27.1	170	00											
	Yesterday	46	16	75	2.3	SSE	34.1	26.2	163	2.8	Today	46	23	70	3.2	SSE	33.5	28.3	182	00	
3/34	Today	38	15	69	1.6	ESE	32.6	27.1	170	00											
	Yesterday	57	19	75	2.3	SSE	34.1	26.2	163	2.8											
Science	Today	38	15	69	1.6	ESE	32.6	27.1	170	00	Yesterday	76	37	69	4.2	NNE	35.3	28.1	182	5.0	
Faculty	Yesterday	55	15	75	2.3	SSE	34.1	26.2	163	2.8											

Good 0 - 50 Moderate 51 - 100

Unhealthy for Sensitive Groups 101 - 150

Unhealthy for All 151 - 200 Very Unhealthy for All 201 - 300 Hazardous for All 301 - 400 Hazardous for All 401 - 500

Views of AQI Research Group: In comparison to yesterday, concentrations of both PM<sub>2.5</sub> and PM<sub>10</sub> have further decreased at all locations of Dayalbagh. The Air Quality Index w.r.t. PM<sub>2.5</sub> has improved to the *Good* category, while w.r.t. PM<sub>10</sub>, it remains in the *Good* category at all three locations of Dayalbagh.

At Sanjay Place also, the concentrations of both  $PM_{2.5}$  and  $PM_{10}$  have decreased. The Air Quality Index w.r.t.  $PM_{2.5}$  has improved from the *Moderate* to the *Good* category, while w.r.t.  $PM_{10}$  it remains in the *Good* category.

NOTE: 1 A continuing 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;  $C_{high}$  = Index Break point corresponding to  $C_{low}$ ;  $C_{low}$ ;  $C_{low}$ ;  $C_{low}$  = Index Breakpoint corresponding to  $C_{high}$ ; \*Multiplication Sign