## Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 25.8.2022 (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			LBAG			Date	SANJAY PLACE												
	Today:	(TIME WEIGHTED AVERAGE DATA)									Tadam	(ARITHMETIC MEAN DATA)								
		Air Qua	ality Index	Meteorological Parameters							Today:	AQI Meteorological Parameters								
	August 25 – 24  Yesterday  August 24 – 23	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C		SR	RF	August 25 – 24 Yesterday	PM <sub>2.5</sub>	PM <sub>10</sub>	RH	ws	WD	°C		SR	RF
							Max	Min	W/m <sup>2</sup>	mm	August 24 –	1 1/12.5	1 1/110	%	m/s	<b>44.</b>	Max	Min	W/m²	mm
4/97	Today	29	19	71	1.2	E	36.5	25.3	175	00		66	38	69	2.2	NNE	35.5	26.2	188	00
	Yesterday	25	16	69	1.6	ESE	32.6	27.1	170	00										
3 / 34	Today	50	18	71	1.2	E	36.5	25.3	175	00										
	Yesterday	38	15	69	1.6	ESE	32.6	27.1	170	00										
Science	Today	42	16	71	1.2	E	36.5	25.3	175	00	Yesterday	46	23	70	3.2	SSE	33.5	28.3	182	00
Faculty	Yesterday	38	15	69	1.6	ESE	32.6	27.1	170	00	00									

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 marginally changed at all locations of Dayalbagh. The Air Quality Index w.r.t. both PM<sub>2.5</sub> and PM<sub>10</sub> is in the *Good* category at all three locations of Dayalbagh.

At Sanjay Place, the concentrations of both PM<sub>2.5</sub> and PM<sub>10</sub> have increased. The Air Quality Index w.r.t. PM<sub>2.5</sub> has changed to *Moderate* category from *Good* category, while w.r.t. PM<sub>10</sub> 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 Breakpoint corresponding to  $C_{low}$ ;  $C_{low}$ ;  $C_{low}$ ;  $C_{low}$  = Index Breakpoint corresponding to  $C_{high}$ ; \*Multiplication Sign