## Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 11.8.2022 (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	(TIME WEIGHTED AVERAGE DATA)									Date	SANJAY PLACE (ARITHMETIC MEAN DATA)								
	Today: August 11 – 10 Yesterday August 10 – 9	Air Qua	ality Index	Meteorological Parameters						Today:	А	QI		Meteorological Parameters						
		PM2.5	PM10	RH %	WS m/s	WD	°C		SR	RF	August 11 – 10 Yesterday	PM2.5	PM10	RH	ws	WD	°C		SR	RF
			F IVI 10				Max	Min	W/m <sup>2</sup>	mm	August 10 – 9	P 1V12.5	P 1VI 10	%	m/s		Max	Min	W/m <sup>2</sup> m	mm
4/07	Today	38	30	66	2.4	SSE	36.6	28.4	208	0	Today	55	37	54	5.3	NE	38.2	34.4	575	0
4 / 97	Yesterday	50	15	72	1.5	SSE	37.0	28.4	205	0										
2/24	Today	33	29	66	2.4	SSE	36.6	28.4	208	0										
3/34	Yesterday	50	15	72	1.5	SSE	37.0	28.4	205	0		66	31	65	2.7	NE	38.8	30.6	245	0
Science	Today	29	31	66	2.4	SSE	36.6	28.4	208	0	Yesterday									
Faculty	Yesterday	50	15	72	1.5	SSE	37.0	28.4	205	0	1									

Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy for All	Very Unhealthy for All	Hazardous for All	Hazardous for All
0 - 50	51 - 100	101 - 150	151 - 200	201 - 300	301 - 400	401 - 500

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

\*At Sanjay Place data was available only till 5:00 pm yesterday (10.8.2022). On the basis of available data, the Air Quality Index w.r.t  $PM_{2.5}$  is in the *Moderate* category and w.r.t  $PM_{10}$  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;  $I_{low}$  = Index Break point corresponding to  $C_{low}$ ;  $I_{high}$  = Index Breakpoint corresponding to  $C_{high}$ ; \*Multiplication Sign