## Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 3.8.2022 (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			D	AYAI	LBAG	H				Date	SANJAY PLACE								
	Today:		(TIME	RAGE	DAT	'A)		Todow	(ARITHMETIC MEAN DATA)											
		Air Qua	lity Index	Meteorological Parameters							Today:	AQI		Meteorological Parameters						
	August 3 – 2  Yesterday  August 2 – 1	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C		SR RF W/m² mm	DE	August 3 – 2	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C		SR W/m²	RF
											Yesterday									
							Max	Min	VV/III-	mm	August 2 – 1						Max	Min	VV/111	mm
4 / 97	Today	29	16	68	1.9	NNE	39.2	28.3	198	0	Today	66	36	66	2.2	SE	37.9	29.6	215	0
	Yesterday	13	10	68	1.4	N	37.8	27.3	216	0										
3/34	Today	50	18	68	1.9	NNE	39.1	28.1	198	0										
	Yesterday	33	11	68	1.4	N	37.8	27.3	216	0										
Science	Today	50	16	68	1.9	NNE	39.3	28.5	198	0	Yesterday	38	26	68	2.9	SSW	36.6	28.5	233	0
Faculty	Yesterday	25	08	68	1.4	N	37.8	27.3	216	0										

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  $PM_{2.5}$  and  $PM_{10}$  have marginally increased. This increase might have resulted due to change in wind direction from N to NNE. However, the Air Quality Index w.r.t. both  $PM_{2.5}$  and  $PM_{10}$  remains in the *Good* category at all the three locations of Dayalbagh.

At Sanjay Place also, the concentrations of both PM<sub>2.5</sub> and PM<sub>10</sub> have increased. The Air Quality Index has changed from Good to *Moderate* category w.r.t PM<sub>2.5</sub> but remains in the *Good* category w.r.t. PM<sub>10</sub>.

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  $C_{low}$ ;  $C_{l$