## Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 19.7.2022 (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	e DAYALBAGH							Date											
	Today: July 19 – 18 Yesterday July 18 – 17	(TIME WEIGHTED AVERAGE DATA)								Today:	(ARITHMETIC MEAN DATA)									
		Air Quality Index		Meteorological Parameters					Today.	A	QI	Meteorological Parameters								
		PM2.5	5 PM10	RH %	WS m/s	WD	T °C		SR RF	July 19 – 18						Т		SR	RF	
											Yesterday	PM2.5	<b>PM</b> <sub>10</sub>	RH %	WS m/s	WD	°C			
							Max	Min	W/m <sup>2</sup>	mm	July 18 – 17						Max	Min	W/m <sup>2</sup>	mm
4 / 97	Today	66	23	71	2.9	S	38.1	30.1	220	1.0	Today	93	59	60	1.9	S	40.7	32.0	248	0
4/9/	Yesterday	50	19	80	3.3	SSW	38.1	28.6	230	1.5										
3/34	Today	66	23	72	2.9	S	38.0	29.8	220	1.0	)									
5754	Yesterday	70	26	80	3.3	SSW	38.2	28.6	230	1.5										
Science	Today	70	31	74	2.8	S	38.0	29.4	220	1.0 Yesterday	87	45	61	1.3	WSW	39.9	30.5	249	2.75	
Faculty	Yesterday	63	20	80	3.3	SSW	38.1	28.3	230	1.5										

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, the concentrations of both PM<sub>2.5</sub> and PM<sub>10</sub> have increased at Vidyut Nagar and Science Faculty, but marginally decreased at Prem Nagar. This change may be attributed to lowering of Wind Speed and change in Wind Direction. The Air Quality Index is in *Moderate* category w.r.t. PM<sub>2.5</sub> and in *Good* category w.r.t. PM<sub>10</sub> at all the three locations of Dayalbagh.

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

Perused <u>By Way of Information Only,</u> <u>Subject To</u> Legalise/Lega/ése/"Laws of the Land".

Tuesday, 19-07-2022, 05:38 PM Received, Tuesday, 19-07-2022, 12:34 PM

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