## Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 14.5.2022 (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	9:0	0 AM	n
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	Date		(11)	H				Date												
	Today:	(TIME WEIGHTED AVERAGE DATA)  Air Quality Index Meteorological Parameters							Today:	A	(ARITHMETIC MEAN DATA) AQI Meteorological Parameters									
May 14 – 13  Yesterday  May 13 – 12	PM <sub>2.5</sub> PM <sub>10</sub>	PM <sub>10</sub>	RH %	WS	WD	T °C		SR	RF	May 14 – 13  Yesterday	PM <sub>2.5</sub>	$PM_{10}$	RH	WS	WD	T °C		SR	RF	
	May 13 – 12			70	m/s		Max	Min	W/m <sup>2</sup> m	mm	May 13 – 12			%	m/s		Max	Min	W/m <sup>2</sup> mm	mm
4 / 97	Today	76	66	39	3.7	SSE	44.8	32.4	137	0										
	Yesterday	70	45	50	2.9	SE	44.9	29.3	139	0	Today	156	137	36	2.2	ENE	47.9	33.6	207	0
3/34	Today	99	52	40	3.7	SSE	44.5	31.9	156	0										
3734	Yesterday	91	37	50	2.9	SE	44.6	29.2	163	0										
Science	Today	93	52	40	3.7	SSE	44.5	31.4	157	0	Yesterday	139	101	45	3.4	N	46	30.6	195	0
Faculty	Yesterday	93	39	50	2.9	SE	44.6	29.3	156	0										

**Views of AQI Research Group**: Both PM<sub>2.5</sub> and PM<sub>10</sub> concentrations have increased at the three Dayalbagh sites as well as at Sanjay Place. This increase is greater for the PM<sub>10</sub> particles. The increase might be attributable to change in Wind Direction and increase in Wind Speed resulting in resuspension of soil particles. AQI w.r.t to both PM<sub>2.5</sub> and PM<sub>10</sub> at the Dayalbagh sites is in the *Moderate* category. Air Quality at Sanjay Place w.r.t PM<sub>2.5</sub> is in the *Unhealthy for All* category and in the Unhealthy for Sensitive Groups Category w.r.t PM<sub>10</sub>.

**Remarks of Revered Chairman-ACE:** 

**Received:** Saturday, 14-05-2022, 12:22 PM

Perused: Subject to Legalese / Legalise / "Laws of the Land"

Saturday, 14-05-2022, 02:06 PM

Good -G

Moderate- M

Unhealthy for Sensitive Groups- UHS

Unhealthy for All- UHA

Very Unhealthy for All-VUHA

**Hazardous for All- HZA** 

Hazardous for All-HZA

NOTE: 1 A continuous 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 -

$$I = \frac{I_{\text{high}} - I_{\text{low}}}{C_{\text{high}} - C_{\text{low}}} * (C - C_{\text{low}}) + I_{\text{low}}$$

 $where, I = Air\ Quality\ Index,\ C=Pollutant\ Concentration\ (PM2.5),\ Clow=Concentration\ Breakpoint\ \le C,\ Chigh=Concentration\ Breakpoint\ \ge C,\ Ilow=Index\ Breakpoint\ corresponding\ to\ Clow,\ Ihigh=Index\ Breakpoint\ corresponding\ to\ Chigh$