Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 5.8.2022 (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			H				Date	SANJAY PLACE											
	Today:		(TIME	RAGE	DAT	'A)		Today:	(ARITHMETIC MEAN DATA)											
		Air Qua	ality Index	Meteorological Parameters							roday.	AQI		Meteorological Parameters						
	August 5 – 4 Yesterday	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		ar.	RF mm	August 5 – 4	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		SR W/m²	RF mm
									SR		Yesterday									
									W/m^2											
	August 4 – 3						Max	Min			August 4 – 3						Max	Min		
4 / 97	Today	53	20	79	1.0	SE	36.2	27.2	124	0.75	Today	74	34	73	1.1	S	35.9	28.5	120	0
	Yesterday	70	31	75	0.9	ESE	38.6	27.1	140	0										
3/34	Today	66	25	79	1.0	SE	36.2	27.2	124	0.75										
	Yesterday	89	41	75	0.9	ESE	38.6	27.4	140	0	Yesterday	97	51	73	1.0	N	•	28.7	145	0
Science	Today	66	21	79	1.0	SE	36.2	27.2	124	0.75							37.2			
Faculty	Yesterday	80	30	75	0.9	ESE	38.3	27.4	140	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 PM₁₀ have significantly decreased at all locations of Dayalbagh. However, the Air Quality Index w.r.t. PM_{2.5} remains in the *Moderate* category, while w.r.t. PM₁₀ it still remains in the *Good* category at all three locations of Dayalbagh. The decrease in particulate matter concentrations may probably be ascribed to wash-out effects of mild rain shower and change in Wind Direction.

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

Perused By Way of Information Only, Subject To Legalise/Legalese/"Laws of the Land".

Friday, 05-08-2022, 05:29 PM Received, Friday, 05-08-2022, 12:16 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_{2.5} 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_{2.5}); 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