Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 22.8.2022 (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 Today: August 22 – 21 Yesterday August 21 – 20	DAYALBAGH (TIME WEIGHTED AVERAGE DATA) Air Quality Index Meteorological Parameters								Date Today:	SANJAY PLACE (ARITHMETIC MEAN DATA) AQI Meteorological Parameters									
		PM2.5	PM10	RH %	WS m/s	WD	°C		SR	RF	August 22 – 21 Yesterday	PM2.5	PM10	RH	WS	WD	T °C		SR	RF
							Max	Min	W/m ²	mm	August 21 – 20	F 1V12.5	F 1VI 10	%	m/s	VUD	Max	Min	W/m ² mm	mm
4 / 97	Today	42	19	79	0.9	ESE	37.1	26.7	179	0.7										
	Yesterday	66	30	86	0.9	S	31.2	25.2	94	17.5	Today	76	44	66	2.5	ENE	37.1	28.7	173	1.6
3 / 34	Today	59	21	79	0.9	ESE	37.1	26.7	179	0.7										
	Yesterday	80	39	86	0.9	S	31.2	25.2	94	17.5										
Science	Today	53	18	79	0.9	ESE	37.1	26.7	179	0.7		80	52	80	1.8	SE	31.3	28.6	97	17.5
Faculty	Yesterday	74	28	86	0.9	S	31.2	25.2	94	17.5										

Good Me	oderate Unheal	thy for Sensitive Groups Unhealthy	for All Very Unhealthy for	All Hazardous fe	for All Hazardous for All
0 - 50 5:	1 - 100	101 - 150 151 - 2	201 - 300	301 - 40	00

Views of AQI Research Group: In comparison to yesterday, concentrations of both PM_{2.5} and PM₁₀ have decreased at all locations of Dayalbagh. The Air Quality Index w.r.t. PM_{2.5} has changed from *Moderate to Good* category at Vidyut Nagar but remains in the *Moderate* category at Prem Nagar and Science Faculty, while w.r.t. PM₁₀, it remains in the *Good* category at all three locations of Dayalbagh.

At Sanjay Place also, the concentrations of both PM_{2.5} and PM₁₀ have decreased. The Air Quality Index w.r.t. PM_{2.5} remains in the *Moderate* category, while w.r.t. PM₁₀ it has changed from *Moderate* to *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_{2.5} concentration readings are fed in USEPA online calculator for AQI calculation.

3 Formula for AQI calculation for a Pollutant -

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

where: I = Air Quality Index; C = Pollutant Concentration (PM_{2.5}); 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