Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 23.8.2022 (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 23 – 22 Yesterday August 22 – 21	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)									Date	SANJAY PLACE (ARITHMETIC MEAN DATA)								
		Air Qua	lity Index	Meteorological Parameters							Today:	AQI		Meteorological Parameters						
		PM2.5	PM10	RH %	WS m/s	WD	°C		SR	RF	August 23 – 22 Yesterday	PM2.5	PM10	RH	ws	WD	°C		SR	RF
							Max	Min	W/m ²	mm	August 22 – 21	P 1012.5		%	m/s	VV D	Max	Min	W/m ² m	mm
4 / 97	Today	46	16	75	2.3	SSE	34.1	26.2	163	2.8	Today	76	37	69	4.2	NNE	35.3	28.1	182	5.0
	Yesterday	42	19	79	0.9	ESE	37.1	26.7	179	0.7										
3 / 34	Today	57	19	75	2.3	SSE	34.1	26.2	163	2.8										
	Yesterday	59	21	79	0.9	ESE	37.1	26.7	179	0.7	Yesterday	76	44	66	2.5	ENE	37.1	28.7	173	1.6
Science	Today	55	15	75	2.3	SSE	34.1	26.2	163	2.8										
Faculty	Yesterday	53	18	79	0.9	ESE	37.1	26.7	179	0.7										

151 - 200

Views of AQI Research Group: In comparison to yesterday, concentrations of both PM_{2.5} and PM₁₀ have marginally decreased at all locations of Dayalbagh. The Air Quality Index w.r.t. PM_{2.5} remains in the *Moderate* category at Vidyut Nagar and 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.

101 - 150

At Sanjay Place, the concentrations of PM_{2.5} have remained constant while PM₁₀ have decreased. The Air Quality Index w.r.t. PM_{2.5} remains in the *Moderate* category, while w.r.t. PM₁₀ it remains in the *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 -

51 - 100

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

0 - 50

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

201 - 300

301 - 400

401 - 500