Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 20.7.2022

(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 µg/m^3 Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

	Date	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)									Date	SANJAY PLACE (ARITHMETIC MEAN DATA)								
		Air Quality Index		Meteorological Parameters								AQI		Meteorological Parameters						
	Today: July 20 – 19 Yesterday July 19 – 18	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm	Today: July 20 – 19 Yesterday July 19 – 18	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm
4 / 97	Today	53	25	68	2.5	S	39.5	30.9	208	0	Today	97	57	59	1.9	SE	41.4	32.3	261	0
	Yesterday	66	23	71	2.9	S	38.1	30.1	220	1.0										
3 / 34	Today	76	28	68	2.5	S	39.4	30.7	208	0										
	Yesterday	66	23	72	2.9	S	38.0	29.8	220	1.0	Yesterday	93	59	60	1.9	S	40.7	32.0	248	0
Science Faculty	Today	68	25	70	2.5	S	39.3	30.7	208	0										
	Yesterday	70	31	74	2.8	S	38.0	29.4	220	1.0										

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 $PM_{2.5}$ and PM_{10} have marginally changed. This variation may be attributed to the variations in the meteorological parameters. The Air Quality Index is in *Moderate* category w.r.t. $PM_{2.5}$ and in *Good* category w.r.t. PM_{10} at all the three locations of Dayalbagh.

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

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

Wednesday, 20-07-2022, 05:09 PM
Received, Wednesday, 20-07-2022, 12:30 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 –

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

where: I = Air Quality Index; C = Pollutant Concentration ($PM_{2.5}$); C_{low} = Concentration Breakpoint ≤C; C_{high} = Concentration Breakpoint ≥C; I_{low} = Index Break point corresponding to C_{low}; I_{high} = Index Breakpoint corresponding to C_{high}; *Multiplication Sign

Communicated by Dr. Anita Lakhani, Professor, Department of Chemistry, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra.