Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 18.7.2022
(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 18 – 17 Yesterday July 17 – 16	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm	Today: July 18 – 17 Yesterday July 17 – 16	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm
4 / 97	Today	50	19	80	3.3	SSW	38.1	28.6	230	1.5	Today	87	45	61	1.3	WSW	39.9	30.5	249	2.75
	Yesterday	33	13	83	4.1	SSE	37.8	25.8	130	9.75										
3 / 34	Today	70	26	80	3.3	SSW	38.2	28.6	230	1.5										
	Yesterday	57	19	83	4.3	SSE	35.3	25.8	130	9.75										
Science Faculty	Today	63	20	80	3.3	SSW	38.1	28.3	230	1.5	Yesterday	68	28	77	2.0	ESE	36.5	27.2	157	8.75
	Yesterday	50	15	83	4.2	SSE	33.2	25.7	130	9.75										

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, the concentrations of both $PM_{2.5}$ and PM_{10} have marginally increased (despite rainfall) at all three locations of Dayalbagh. This increase may probably be due to the high Relative Humidity, lowering of Wind Speed and change in Wind Direction. The Air Quality Index w.r.t. $PM_{2.5}$ is in the *Good* category at Vidyut Nagar and *Moderate* at Prem Nagar and Science Faculty, while w.r.t. PM_{10} is in the *Good* category at all the three locations of Dayalbagh.

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

The Air Quality Index at Dayalbagh is better than Sanjay Place.

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Subject To Legalise/Legalese/"Laws of the Land".

Tuesday, 19-07-2022, 02:32 AM
Received, Monday, 18-07-2022, 12:43 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

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