

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 17.7.2022 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean): PM₁₀ = 150; PM_{2.5} = 35, all units are in µg/m³ Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

	Date	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)									Date	SANJAY PLACE (ARITHMETIC MEAN DATA)								
	Today:	Air Quality Index			Meteorological Parameters						Today:	AQI			Meteorological Parameters					
	July 17 – 16										July 17 – 16									
	Yesterday	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		SR W/m ²	RF mm	Yesterday	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		SR W/m ²	RF mm
	July 16 – 15						Max	Min									Max	Min		
4 / 97	Today	33	13	83	4.1	SSE	37.8	25.8	130	9.75	Today	68	28	77	2.0	ESE	36.5	27.2	157	8.75
	Yesterday	21	14	56	4.8	SSE	39.0	26.2	205	12.5										
3 / 34	Today	57	19	83	4.3	SSE	35.3	25.8	130	9.75	Yesterday	63	57	60	3.9	WNW	41.8	27.5	233	11
	Yesterday	33	11	57	4.9	SSE	38.2	26.3	205	12.5										
Science Faculty	Today	50	15	83	4.2	SSE	33.2	25.7	130	9.75										
	Yesterday	33	10	57	4.7	SSE	38.7	26.5	205	12.5										

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
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Views of AQI Research Group: In comparison to yesterday, the concentrations of both PM_{2.5} and PM₁₀ have marginally increased (despite rainfall) at all three locations of Dayalbagh. This increase may probably be due to significant increase in Relative Humidity and lowering of Wind Speed. The Air Quality Index w.r.t. PM_{2.5} is in the *Good* category at Vidyut Nagar and Science Faculty and *Moderate* at Prem Nagar, while w.r.t. PM₁₀ is in the *Good* category at all the three locations of Dayalbagh.

At Sanjay Place, the concentrations of PM_{2.5} and PM₁₀ have decreased. The increase in Relative Humidity here is less as compared to Dayalbagh. The Air Quality Index still remains in the *Moderate* category w.r.t. PM_{2.5} and has improved to the *Good* category w.r.t. PM₁₀.

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

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

Sunday, 17-07-2022, 04:36 PM
Received, Sunday, 17-07-2022, 01:05 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 ≤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