

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 23.6.2022 (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 to 9:00 AM)

	Date	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)											Date			SANJAY PLACE (ARITHMETIC MEAN DATA)									
	Today: June 23 – 22 Yesterday June 22 – 21	Concentration (µg/m³)		AQI		Meteorological Parameters							Today: June 23 – 22 Yesterday June 22 – 21	Concentration (µg/m³)		AQI		Meteorological Parameters							
		PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		SR W/ m²	RF m m		PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		SR W/ m²	RF m m	
									Max	Min											Max	Min			
4 / 97	Today	29↓↓	75↓↓	87	61	60	2.8	E	40.2	28.7	175	0	Today	58↓↓	150↓↓	152	98	52	3.1	E	41.6	30.5	246	0	
	Yesterday	12	38	50	35	58	1.6	SSE	38.2	29.1	143	0													
3 / 34	Today	41↓↓	62↓↓	115	54	60	2.8	E	39.7	29.0	178	0	Yesterday	35	94	99	70	53	1.8	N NE	40	30.1	233	0	
	Yesterday	15	29	57	27	58	1.6	SSE	38.0	29.2	144	0													
Science Faculty	Today	37↓↓	59↓↓	105	53	61	2.8	E	39.3	28.6	174	0	Yesterday	35	94	99	70	53	1.8	N NE	40	30.1	233	0	
	Yesterday	15	29	57	27	59	1.6	SSE	38.6	28.8	141	0													

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 201 - 300
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Views of AQI Research Group: In comparison to yesterday, the concentrations of PM_{2.5} and PM₁₀ have increased significantly at all the three locations of Dayalbagh. The values may have enhanced probably due to change in Wind Direction from SSE to E. The Air Quality Index w.r.t. PM_{2.5} is in the *Moderate* category at Vidyut Nagar and in the *Unhealthy for Sensitive Groups* category at Prem Nagar and Science Faculty. The Air Quality Index w.r.t. PM₁₀ is in the *Moderate* category at all the three locations of Dayalbagh.

At Sanjay Place also, concentrations of both PM_{2.5} and PM₁₀ have increased significantly. The Wind Direction has also changed from NNE to E. The Air Quality Index w.r.t. PM_{2.5} is in the *Unhealthy for All* category and w.r.t. PM₁₀ it is in the *Moderate* 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 –

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

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