

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 29.7.2022 (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 29– 28										July 29– 28									
	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 28 – 27						Max	Min			July 28 – 27							Max	Min		
4 / 97	Today	38	15	89	3.0	N	33.5	26.9	100	0.25	Today	59	28	80	1.8	SSE	34.3	27.9	117	0.5
	Yesterday	42	15	85	2.1	E	35.2	26.1	106	28										
3 / 34	Today	50	18	89	3.0	N	33.0	26.9	100	0.25	Yesterday	53	23	78	1.0	NNE	36	27	150	26
	Yesterday	55	19	86	2.1	E	34.1	26.0	106	28										
Science Faculty	Today	46	15	89	3.0	N	33.5	27.0	100	0.25	Yesterday	53	23	78	1.0	NNE	36	27	150	26
	Yesterday	59	20	87	2.1	E	35.2	26.1	106	28										

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, concentrations of both PM_{2.5} and PM₁₀ have decreased at all locations of Dayalbagh. This has resulted probably due to change in Wind Direction from E to N and marginal increase in Wind Speed. The Air Quality Index w.r.t. both PM_{2.5} and PM₁₀ is in the *Good* category at all the three locations of Dayalbagh.

At Sanjay Place, the concentrations of both PM_{2.5} and PM₁₀ have marginally increased. The Air Quality Index remains in the *Moderate* category w.r.t. PM_{2.5} and in the *Good* category w.r.t. PM₁₀.

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