

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 28.7.2022 (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)									
		Air Quality Index		Meteorological Parameters							AQI		Meteorological Parameters							
		PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		SR W/m ²		RF mm	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	T °C		SR W/m ²	RF mm
Max	Min						Max	Min												
	Today: July 28– 27										Today: July 28– 27									
	Yesterday July 27 – 26										Yesterday July 27 – 26									
4 / 97	Today	42	15	85	2.1	E	35.2	26.1	106	28	Today	53	23	78	1.0	NNE	36	27	150	26
	Yesterday	38	13	88	3.2	ENE	31.5	26.9	96	12										
3 / 34	Today	55	19	86	2.1	E	34.1	26.0	106	28										
	Yesterday	46	17	89	3.2	ENE	30.2	26.9	96	12										
Science Faculty	Today	59	20	87	2.1	E	35.2	26.1	106	28	Yesterday	50	19	79	1.2	NNW	33.5	27.8	149	19.5
	Yesterday	50	17	89	3.2	ENE	32.0	26.9	96	12										

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, there is a marginal increase in the concentrations of both PM_{2.5} and PM₁₀ at all locations of Dayalbagh. This has resulted probably due to increase in concentrations of both PM_{2.5} and PM₁₀ from the early morning hours (4:00 - 8:00 am today), when the Relative Humidity was > 95%. The Air Quality Index w.r.t. PM_{2.5} remains in the *Good* category at Vidyut Nagar and has changed to *Moderate* category at Prem Nagar and Science Faculty, while w.r.t. PM₁₀ is in the *Good* category at all the three locations of Dayalbagh.

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

Prem Nagar particularly, as well as Science Faculty, should be worthwhile subject matter of relevant Serious Research Investigations, rather expeditiously!

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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