

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 7.5.2022 (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						
	May 7 – 6										May 7 – 6									
	Yesterday	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	
	May 6 – 5						Max	Min								Max	Min			
4 / 97	Today	72	57	49	3.0	NNE	41.1	27.4	113	Trace	Today	152	102	45	2.6	SE	42.8	28.8	152	Trace
	Yesterday	76	61	50	2.7	ENE	38.5	28.9	159	0										
3 / 34	Today	93	45	50	2.8	NNE	41.2	27.0	146	Trace	Yesterday	153	107	45	2.1	ESE	40.2	30.5	187	0
	Yesterday	93	48	51	2.7	ENE	38.3	28.8	172	0										
Science Faculty	Today	91	45	51	2.8	NNE	40.9	26.5	134	Trace	Yesterday	153	107	45	2.1	ESE	40.2	30.5	187	0
	Yesterday	87	48	52	2.7	ENE	38.2	28.6	161	0										

Views of AQI Research Group: The Air Quality at Dayalbagh remained within US-EPA 24-hour-average Permissible Limit. Across locations the AQI reduced for both the micron Particulate Matter (PM_{2.5} at Science Faculty being the only exception possibly due to Under-Graduate practical lab exams conducted on May 6th which had 3-4 times students vis-a-vis Post-Graduate exams held on May 5th). Reduction in AQI could be probably due to change in Wind Direction, increased Wind Speed, increased Maximum Temperature, marginally reduced Relative Humidity and Trace Rainfall. AQI at Sanjay Place remained in the *Unhealthy for All* category w.r.t PM_{2.5} and *Unhealthy for Sensitive Groups* w.r.t PM_{10.0}.

Remarks of Revered Chairman-ACE:

Received: Saturday, 7 May 2022, 11:14 AM
Perused: Subject to Legalese / Legalise / "Laws of the Land"

Saturday, 7 May 2022, 5:35 PM

Good -G

Moderate- M

Unhealthy for Sensitive Groups- UHS

Unhealthy for All- UHA

Very Unhealthy for All-VUHA

Hazardous for All- HZA

Hazardous for All-HZA

NOTE: 1 A continuous 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}