

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 18.10.2022

(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)

Today: 17 -10-2022 to 18 -10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 16 -10-2022 to 17 -10-2022 from 9:00 a.m. to 9:00 a.m.

L O C A T I O N	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)											SANJAY PLACE (ARITHMETIC MEAN DATA)										
	AQI				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		R H %	WS m/s	WD	T °C		SR W/ m ²	R F m m
	Today	Yesterday	Today	Yesterday				Max	Min			Today	Yesterday	Today	Yesterday				Ma x	Min		
4 / 97	147	156	72	79	67	0.4	W	35.7	20.2	169	0											
3 / 34	149	155	68	69	67	0.4	W	35.7	20.2	169	0	166	170	122	134	57	0.2	WNW	34.6	23.2	6.0* (107)	0
Science Faculty	156	161	70	70	67	0.4	W	35.7	20.2	169	0											

Views of AQI Research Group: There is a marginal decrease in concentrations of particulate matter at all the sites of Dayalbagh which may be due to change in Wind Direction. The Air Quality Index w.r.t. PM_{2.5} has improved to *Unhealthy for Sensitive Groups* category at Vidyut Nagar and Prem Nagar but remains in the *Unhealthy for All* category at Science Faculty, while w.r.t. PM₁₀ it remains in the *Moderate* category at all sites of Dayalbagh.

The pollutant concentrations have marginally decreased at Sanjay Place also however, the Air Quality index still remains in the *Unhealthy for All* category w.r.t. PM_{2.5}, and in the *Unhealthy for Sensitive Groups* category w.r.t. PM₁₀. *SR value recorded at Sanjay Place appears to be erroneous. Value in parentheses is the SR value of Avas Vikas, Bodla, Agra.

Perused By Way of Information Only,
Subject To Legalise/Legalese/"Laws of the Land".

Tuesday, 18-10-2022, 04:16 PM
Received, Tuesday, 18-10-2022, 01:32 PM

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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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