

# AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 27.10.2022

## (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean): PM<sub>10</sub> = 150; PM<sub>2.5</sub> = 35, all units are in µg/m<sup>3</sup> Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today: 26 -10-2022 to 27 -10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 25 -10-2022 to 26 -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)											AVAS VIKAS, BODLA, AGRA (ARITHMETIC MEAN DATA)										
	AQI				Meteorological Parameters							AQI				Meteorological Parameters						
	PM <sub>2.5</sub>		PM <sub>10</sub>		RH %	WS m/s	WD	T °C		SR W/ m²	RF mm	PM <sub>2.5</sub>		PM <sub>10</sub>		R H %	WS m/s	WD	T °C		SR W/ m²	R F mm
	Today	Yesterday	Today	Yesterday				Max	Min			Today	Yesterday	Today	Yesterday				Ma x	Min		
4 / 97	151	153	100	96	59	0.3	WN W	37.5	18.3	157	0	231	201	127	128	60	0.4	N	36.1	19.1	95	0
3 / 34	156	153	98	90	59	0.3	WN W	37.5	18.3	157	0											
Science Faculty	160	155	118	109	59	0.3	WN W	37.5	18.3	157	0											

**Views of AQI Research Group:** Particulate concentrations have slightly increased at all Dayalbagh sites probably due to stagnant meteorological conditions. The Air Quality Index w.r.t. PM<sub>2.5</sub> remains in the *Unhealthy for All* category while, w.r.t. PM<sub>10</sub> it remains in the *Moderate* category at Vidyut Nagar and Prem Nagar and in the *Unhealthy for Sensitive Groups* category at Science Faculty.

PM<sub>2.5</sub> values have increased at Avas Vikas also. The Air Quality Index w.r.t. PM<sub>2.5</sub> is in the *Very Unhealthy for All* category, while w.r.t. PM<sub>10</sub> it is in the *Unhealthy for Sensitive Groups* category.

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

Thursday, 27-10-2022, 05:40 PM  
Received, Thursday, 27-10-2022, 02:16 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<sub>2.5</sub> 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<sub>2.5</sub>); C<sub>low</sub> = Concentration Breakpoint ≤C; C<sub>high</sub> = Concentration Breakpoint ≥C;  
I<sub>low</sub> = Index Break point corresponding to C<sub>low</sub>; I<sub>high</sub> = Index Breakpoint corresponding to C<sub>high</sub>; \*Multiplication Sign