

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 16.10.2022

(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: 15 -10-2022 to 16 -10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 14 -10-2022 to 15 -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		RH %	WS m/s	WD	T °C		SR W/ m ²	RF mm
	Today	Yesterday	Today	Yesterday				Max	Min			Today	Yesterday	Today	Yesterday				Max	Min		
4 / 97	152	142	84	66	70	1.0	ESE and N	34.5	20.5	167	0	180	161	138	109	64	0.2	W and WNW	33.6	23.3	6.1* (106)	0
3 / 34	152	142	76	62	70	1.0	ESE and N	34.5	20.5	167	0											
Science Faculty	157	154	96	65	70	1.0	ESE and N	34.5	20.5	167	0											

Views of AQI Research Group: The concentrations of particulate matter have further increased at all the sites of Dayalbagh due to low Wind Speed resulting in less dispersion. The Air Quality Index is in the *Unhealthy for All* category w.r.t. PM_{2.5}, while w.r.t. PM₁₀ it remains in the *Moderate* category at all sites of Dayalbagh.

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

The rising trend in the concentration of particulate matter observed since the last few days might be due to crop residue burning events taking place predominantly in the states of Punjab and Haryana.

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

Sunday, 16-10-2022, 02:45 PM
Received, Sunday, 16-10-2022, 01:03 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

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