

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 14.10.2022

(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: 13 -10-2022 to 14 -10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 12 -10-2022 to 13 -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	W D	T °C		SR W/ m²	RF mm	PM _{2.5}		PM ₁₀		RH %	WS m/s	W D	T °C		SR W/ m²	RF mm
								Max	Min										Max	Min		
Today	Yesterday	Today	Yesterday									Today	Yesterday	Today	Yesterday							
4 / 97	95	99	49	47	71	1.7	NN W	32.1	21.2	179	0	152	119	87	70	66	0.2	SSE	32.1	24.2	6.2* (113)	0
3 / 34	97	99	48	45	71	1.7	NN W	32.1	21.2	179	0											
Science Faculty	107	117	42	46	71	1.7	NN W	32.1	21.2	179	0											

Views of AQI Research Group: The concentrations of particulate matter have decreased at the Dayalbagh sites as intense agricultural activity in the vicinity of the sampling sites has reduced, a partial contribution might also be due to change in Wind Direction. The Air Quality Index remains in the *Moderate* category at Vidyut Nagar and Prem Nagar and in the *Unhealthy for Sensitive Groups* category at Science Faculty w.r.t. PM_{2.5}, while w.r.t. PM₁₀ it remains in the *Good* category at all sites of Dayalbagh.

The pollutant concentrations have increased at Sanjay Place, probably the very low Wind Speed is restricting dispersal of pollutants. A change in Wind Direction is also observed here. The Air Quality index w.r.t. PM_{2.5} has changed to *Unhealthy for All* category, while w.r.t. PM₁₀ it remains in the *Moderate* category. *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/Legalise/"Laws of the Land".

Friday, 14-10-2022, 05:28 PM
Received, Friday, 14-10-2022, 01:19 PM

NOTE: 2 DEL calculation.	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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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