AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 30.10.2022
(BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean): PM_{10} = 150; $PM_{2.5}$ = 35, all units are in $\mu g/m^3$ Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today: 29 -10-2022 to 30 -10-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 28 -10-2022 to 29 -10-2022 from 9:00 a.m. to 9:00 a.m.

LOCATION	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)												SANJAY PLACE (ARITHMETIC MEAN DATA)										
	AQI				Meteorological Parameters							AQI				Meteorological Parameters						
	$PM_{2.5}$		PM_{10}					T °C				$PM_{2.5}$		PM_{10}					T °C			
	Today	Yesterday	Today	Yesterday	RH %	WS m/s	WD	Max	Min	SR W/m²	RF mm	Today	Yesterday	Today	Yesterday	RH %	WS m/s	WD	Max	Min	SR W/m²	RF mm
4 / 97	162	150	103	111	62	0.3	SSE	36.9	17.4	127	0											
3 / 34	163	155	105	113	62	0.3	SSE	36.9	17.4	127	0	176	181	168	124	53	0.4	WSW	34.4	20.2	6.9* (82)	0
Science Faculty	176	173	117	124	62	0.3	SSE	36.9	17.4	127	0											

Views of AQI Research Group: Concentrations of $PM_{2.5}$ have increased while PM_{10} have decreased at all sites of Dayalbagh probably due to stagnant meteorological conditions associated with slight increase in Relative Humidity, decrease in Temperature and Solar Radiation and low wind speed. The Air Quality Index w.r.t. $PM_{2.5}$ remains in the *Unhealthy for All* category while, w.r.t. PM_{10} it remains in the *Unhealthy for Sensitive Groups* category at all sites of Dayalbagh.

$PM_{2.5}$ and PM_{10} values for Sanjay Place are not available for 2 and 4 hours respectively. The Air Quality Index values have been computed from available data. *SR value recorded at Sanjay Place appears to be erroneous. Value in parentheses is the SR value of Avas Vikas, Bodla, Agra.*

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Subject To Legalise/Legalese/"Laws of the Land".

Sunday, 30-10-2022, 04:40 PM
Received, Sunday, 30-10-2022, 12:56 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

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