AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 26.10.2022
(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 µg/m³ Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today: 25 -10-2022 to 26 -10-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 24 -10-2022 to 25 -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$_{10}$		RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m²	RF mm	PM$_{2.5}$		PM$_{10}$		RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m²	RF mm
	Today	Yesterday	Today	Yesterday								Today	Yesterday	Today	Yesterday							
4 / 97	153	158	96	99	60	0.6	WNW	34.0	17.8	150	0											
3 / 34	153	160	90	96	60	0.6	WNW	34.0	17.8	150	0	252	232	NA**	132	50	0.7	N	34.0	21.3	6.7* (100)	0
Science Faculty	155	172	109	115	60	0.6	WNW	34.0	17.8	150	0											

Views of AQI Research Group: Though the meteorological parameters have marginally changed, particulate concentrations have decreased at all Dayalbagh sites probably due to drop in visitor traffic inside Dayalbagh. 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 *Moderate* category at Vidyut Nagar and Prem Nagar and in the *Unhealthy for Sensitive Groups* category at Science Faculty.

The PM$_{2.5}$ concentrations have increased at Sanjay Place with the Air Quality index remaining in the *Very Unhealthy for All* category w.r.t. PM$_{2.5}$. **PM$_{10}$ values for Sanjay Place are not available.*SR value recorded at Sanjay Place appears to be erroneous. Value in parentheses is the SR value of Avas Vikas, Bodla, Agra.

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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