AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 22.11.2022
(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: 21-11-2022 to 22-11-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 20-11-2022 to 21-11-2022 from 9:00 a.m. to 9:00 a.m.

LOCATION	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)											LOCATION	SANJAY PLACE AND AVAS VIKAS (ARITHMETIC MEAN DATA)											
	AQI				Meteorological Parameters								AQI				Meteorological Parameters							
	$PM_{2.5}$		PM_{10}		RH %	WS m/s	WD	T ˚C		SR W/m²	RF mm		$PM_{2.5}$		PM_{10}		RH %	WS m/s	WD	T ˚C		SR W/m²	RF mm
								Max	Min											Max	Min		
	Today	Yesterday	Today	Yesterday									Today	Yesterday	Today	Yesterday							
4 / 97	122	155	59	73	61	0.6	WNW	30.0	12.6	145	0	Sanjay Place	152	159	88	96	50	1.9	NW	29.1	16.1	138	0
3 / 34	117	155	51	68	61	0.6	WNW	30.0	12.6	145	0	Avas Vikas	160	167	79	87	60	0.6	NE	29.2	13.9	76	0
Science Faculty	139	156	57	66	61	0.6	WNW	30.0	12.6	145	0												

Views of AQI Research Group: Particulate matter concentrations have decreased at all sites of Dayalbagh probably due to unstable atmosphere favouring dispersion of pollutants. At all Dayalbagh locations, the Air Quality Index has improved to the *Unhealthy for Sensitive Groups* category w.r.t. $PM_{2.5}$ and remains in the *Moderate* category w.r.t. PM_{10}.

At Sanjay Place and Avas Vikas, Bodla also concentrations of Particulate matter have decreased, but the Air Quality Index still remains in the *Unhealthy for All* category w.r.t $PM_{2.5}$ and in the *Moderate* category w.r.t. $PM_{10.}$

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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