AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 26.11.2022
(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 µg/m³ Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today: 25-11-2022 to 26-11-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 24-11-2022 to 25-11-2022 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
	Today	Yesterday	Today	Yesterday				Max	Min				Today	Yesterday	Today	Yesterday				Max	Min		
4 / 97	95	91	50	49	57	0.6	WNW	29.6	12.7	140	0	Sanjay Place	147	155	88	111	48	1.6	NW	28.4	14.6	137	0
3 / 34	93	93	41	40	57	0.6	WNW	29.6	12.7	140	0	Avas Vikas	157	171	77	100	56	0.6	ENE	29.5	13.0	75	0
Science Faculty	117	107	45	39	57	0.6	WNW	29.6	12.7	140	0												

Views of AQI Research Group: Particulate matter concentrations have marginally changed at all sites of Dayalbagh. 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. $PM_{2.5}$ and in the *Good* category w.r.t. PM_{10} at all sites of Dayalbagh.

At Sanjay Place and Avas Vikas, Bodla concentrations of Particulate matter have decreased, the Air Quality Index w.r.t $PM_{2.5}$ has changed to the *Unhealthy for Sensitive Groups* category at Sanjay Place but remains in the *Unhealthy for All* category at Avas Vikas, Bodla while w.r.t. PM_{10} it is in the *Moderate* category at both the sites.

Good 0-50	Mode rate 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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