AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 14.11.2022

(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/m^3 Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today: 13-11-2022 to 14-11-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 12-11-2022 to 13-11-2022 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}					T °C					$PM_{2.5}$		PM_{10}					T °C			
	Today	Yesterday	Today	Yesterday	RH %	WS m/s	WD	Max	Min	SR W/m^2	RF mm		Today	Yesterday	Today	Yesterday	RH %	WS m/s	WD	Max	Min	SR W/m^2	RF mm
4 / 97	158	122	76	60	65	0.5	ENE	31.0	15.1	136	0	Sanjay Place	163	144	111	82	54	0.7	WSW	30.1	19.7	128	0
3 / 34	159	139	73	59	65	0.5	ENE	31.0	15.1	136	0	Avas Vikas	173	152	98	68	66	0.4	ENE	30.9	16.0	74	0
Science Faculty	163	144	74	60	65	0.5	ENE	31.0	15.1	136	0												

Views of AQI Research Group: Concentrations of Particulate matter have increased at all sites of Dayalbagh probably due to change in Wind Direction. The Air Quality Index w.r.t. $PM_{2.5}$ has changed to the *Unhealthy for All* category, but w.r.t. PM_{10} it remains in the *Moderate* category at all sites of Dayalbagh.

At Sanjay Place and Avas Vikas, Bodla also concentrations of Particulate matter have increased with change in Wind Direction. At Sanjay Place, the Air Quality Index w.r.t $PM_{2.5}$ has changed to the *Unhealthy for All* category while w.r.t. PM_{10} it has changed to *Unhealthy for Sensitive Groups* category. At Avas Vikas, Bodla, the Air Quality Index w.r.t $PM_{2.5}$ remains in the *Unhealthy for All* category and w.r.t. PM_{10} it remains in the *Moderate* category.

Perused By Way of Information Only,
Subject To Legalise/Legalese/"Laws of the Land".

Monday, 14-11-2022, 04:40 PM
Received, Monday, 14-11-2022, 01:41 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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