AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 6.11.2022
(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)
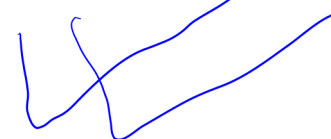
Today: 5-11-2022 to 6-11-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 4-11-2022 to 5-11-2022 from 9:00 a.m. to 9:00 a.m.

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	170	193	98	130	68	0.8	SSE	33.6	20.5	114	0												
3 / 34	171	197	99	131	68	0.8	SSE	33.6	20.5	114	0		154	158	105	121	64	0.2	SE	34.4	21.8	125	0
Science Faculty	189	240	106	144	68	0.8	SSE	33.6	20.5	114	0												

Views of AQI Research Group: Concentrations of Particulate matter have decreased in comparison to yesterday due to improvement in meteorological conditions associated with increase in Solar Radiation. The Air Quality Index w.r.t. PM$_{2.5}$ remains in the *Unhealthy for All* category at Vidyut Nagar and Prem Nagar and has improved to the *Unhealthy for All* category at Science Faculty, while w.r.t. PM$_{10}$ it has improved to the *Moderate* category at Vidyut Nagar and Prem Nagar and remains in the *Unhealthy for Sensitive Groups* category at Science Faculty.

At Sanjay Place concentrations of particulate matter have marginally decreased, but the Air Quality Index w.r.t. to PM$_{2.5}$ remains in the *Unhealthy for All* category and w.r.t. PM$_{10}$ remains in the *Unhealthy for Sensitive Groups* category.

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

Sunday, 06-11-2022, 05:27 PM
Received, Sunday, 06-11-2022, 01:34 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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