

# AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 30.9.2022

## (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

**Permissible Limits (24 Hour Mean):** PM<sub>10</sub> = 150; PM<sub>2.5</sub> = 35, all units are in µg/m<sup>3</sup> Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

**Today:** 29-09-2022 to 30-09-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 28-09-2022 to 29-09-2022 from 9:00 a.m. to 9:00 a.m.

L O C A T I O N	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)											SANJAY PLACE (ARITHMETIC MEAN DATA)										
	AQI				Meteorological Parameters							AQI				Meteorological Parameters						
	PM <sub>2.5</sub>		PM <sub>10</sub>		RH %	WS m/s	W D	T °C		SR W/ m²	RF mm	PM <sub>2.5</sub>		PM <sub>10</sub>		RH %	WS m/s	W D	T °C		SR W/ m²	RF m m
								Max	Min										Max	Min		
	Today	Yesterday	Today	Yesterday								Today	Yesterday	Today	Yesterday							
4 / 97	110	72	62	49	71	2.1	E	37.7	25.5	170	0	156	132	99	90	65	0.6	ESE	37	27.7	184	0
3 / 34	142	91	60	44	71	2.1	E	37.7	25.5	170	0											
Science Faculty	149	97	58	47	71	2.1	E	37.7	25.5	170	0											

**Views of AQI Research Group:** All meteorological parameters have remained nearly constant, except the Wind Direction has changed which may have enhanced the Air Quality Index values at all sites. The Air quality Index w.r.t. PM<sub>2.5</sub> is in the *Unhealthy for Sensitive Groups* category at Dayalbagh, although at Sanjay Place it has deteriorated to *Unhealthy for All* category.

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

Friday, 30-09-2022, 05:34 PM  
Received, Friday, 30-09-2022, 01:16 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<sub>2.5</sub> 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<sub>2.5</sub>); C<sub>low</sub> = Concentration Breakpoint ≤C; C<sub>high</sub> = Concentration Breakpoint ≥C; I<sub>low</sub> = Index Break point corresponding to C<sub>low</sub>; I<sub>high</sub> = Index Breakpoint corresponding to C<sub>high</sub>; \*Multiplication Sign