

# AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 14.9.2022

## (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:** 13-09-2022 to 14-09-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 12-09-2022 to 13-09-2022 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	WD	T °C		SR W/m <sup>2</sup>	RF mm	PM <sub>2.5</sub>		PM <sub>10</sub>		RH %	WS m/s	WD	T °C		SR W/m <sup>2</sup>	RF mm
	Today	Yesterday	Today	Yesterday				Max	Min			Today	Yesterday	Today	Yesterday				Max	Min		
4 / 97	29	21	12	11	72	5.4	SSE	32.9	26.9	109	0											
3 / 34	46	38	14	11	72	5.4	SSE	32.9	26.9	109	0	55	53	36	44	68	4.3	ESE	34.1	28.3	114	0
Science Faculty	25	21	17	21	72	5.4	SSE	32.9	26.9	109	0											

**Views of AQI Research Group:** The Air Quality Index at all sites of Dayalbagh remains in the *Good* category w.r.t. both PM<sub>2.5</sub> and PM<sub>10</sub> due to dispersal of pollutants resulting from favourable meteorological conditions.  
At Sanjay Place, the Air Quality Index remains in the *Moderate* category w.r.t. PM<sub>2.5</sub> and *Good* category w.r.t. PM<sub>10</sub>.

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