

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 20.9.2022

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

Permissible Limits (24 Hour Mean): PM₁₀ = 150; PM_{2.5} = 35, all units are in µg/m³ **Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)**

Today: 19-09-2022 to 20-09-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 18-09-2022 to 19-09-2022 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 _{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
								Max	Min										Max	Min		
	Today	Yesterday	Today	Yesterday								Today	Yesterday	Today	Yesterday							
4 / 97	78	59	37	25	77	0.3	NE	34.1	27.5	136	5.5	105	93	58	58	73	1.5	NE	34	27.5	142	4.0
3 / 34	84*	76*	39	32	77	0.3	NE	34.1	27.5	136	5.5											
Science Faculty	99	78	42	34	77	0.3	NE	34.1	27.5	136	5.5											

Views of AQI Research Group: Low wind speeds and moderate humidity have likely facilitated agglomeration of particulate matter and limited their dispersion resulting in further increase in particulate matter concentrations. However, at all Dayalbagh locations, the Air Quality Index remains in the *Moderate* category w.r.t. PM_{2.5} and in the *Good* category w.r.t. PM₁₀.

At Sanjay Place also the particulate levels have increased with Air Quality Index values rising to the *Unhealthy for Sensitive Groups* category w.r.t. PM_{2.5}.

* At Prem Nagar, due to network issue, data is not available after 4:00 pm yesterday.

NOTE: AQI is calculated based on the study conducted by the Central Pollution Control Board, India.	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
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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