

# AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 25.11.2022

## (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: 24-11-2022 to 25-11-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 23-11-2022 to 24-11-2022 from 9:00 a.m. to 9:00 a.m.

L O C A T I O N	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)											L O C A T I O N	SANJAY PLACE AND AVAS VIKAS (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
								Max	Min											Max	Min		
	Today	Yesterday	Today	Yesterday										Today	Yesterday	Today	Yesterday						
4 / 97	91	97	49	50	61	0.6	WNW	28.7	10.9	137	0	Sanjay Place	155	110	111	78	50	1.2	WNW	28.2	14.3	144	0
3 / 34	93	95	40	44	61	0.6	WNW	28.7	10.9	137	0	Avas Vikas	171	137	100	69	59	0.5	NE	28.5	12.4	77	0
Science Faculty	107	112	39	47	61	0.6	WNW	28.7	10.9	137	0												

**Views of AQI Research Group:** Particulate matter concentrations have decreased at all sites of Dayalbagh due to meteorological conditions favouring dispersion of pollutants. The Air Quality Index remains in the *Moderate* category at Vidyut Nagar and Prem Nagar and in the *Unhealthy for Sensitive Groups* category at Science Faculty w.r.t. PM<sub>2.5</sub> and in the *Good* category w.r.t. PM<sub>10</sub> at all sites of Dayalbagh.

At Sanjay Place and Avas Vikas, Bodla concentrations of Particulate matter have increased, the Air Quality Index has changed to the *Unhealthy for All* category w.r.t PM<sub>2.5</sub> while w.r.t. PM<sub>10</sub> it remains in the *Moderate* category at Avas Vikas and has changed to the *Unhealthy for Sensitive Groups* category at Sanjay Place.

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

Friday, 25-11-2022, 04:34 PM  
Received, Friday, 25-11-2022, 01:08 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