

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 13.11.2022

(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: 12-11-2022 to 13-11-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 11-11-2022 to 12-11-2022 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 _{2.5}		PM ₁₀		RH %	WS m/s	WD	T °C		SR W/m ²	RF mm		PM _{2.5}		PM ₁₀		RH %	WS m/s	WD	T °C		SR W/m ²	RF mm
								Max	Min											Max	Min		
	Today	Yesterday	Today	Yesterday										Today	Yesterday	Today	Yesterday						
4 / 97	122	153	60	70	63	0.8	WNW	29.6	14.9	142	0	Sanjay Place	144	161	82	93	52	1.4	WNW	30	17.3	144	0
3 / 34	139	158	59	72	63	0.8	WNW	29.6	14.9	142	0	Avas Vikas	152	161	68	76	61	0.7	NE	29.4	16.1	79	0
Science Faculty	144	166	60	74	63	0.8	WNW	29.6	14.9	142	0												

Views of AQI Research Group: Concentrations of Particulate matter have decreased due to increase in Solar Radiation and moderate Relative Humidity favouring dispersal of pollutants. The Air Quality Index w.r.t. PM_{2.5} has improved to the *Unhealthy for Sensitive Groups* category, while w.r.t. PM₁₀ it remains in the *Moderate* category at all sites of Dayalbagh.

At Sanjay Place and Avas Vikas, Bodla also concentrations of Particulate matter have decreased. The Air Quality Index w.r.t. PM_{2.5} has improved to the *Unhealthy for Sensitive Groups* category while w.r.t. PM₁₀ it remains in the *Moderate* category. At Avas Vikas, Bodla, the Air Quality Index w.r.t. PM_{2.5} remains in the *Unhealthy for All* category and w.r.t. PM₁₀ it remains in the *Moderate* category.

Avas Vikas appears to be more reliable model for RS Sabha, Dayalbagh Hqs.

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

Sunday, 13-11-2022, 04:30 PM
Received, Sunday, 13-11-2022, 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_{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