AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 9.12.2022 (BASED ON US-EPA AOI STANDARDS AND THE DAYALBAGH AOI COLOUR CODE)

Permissible Limits (24 Hour Mean): $PM_{10} = 150$; $PM_{2.5} = 35$, all units are in $\mu g/m^3$ Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today: 8-12-2022 to 9-12-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 7-12-2022 to 8-12-2022 from 9:00 a.m. to 9:00 a.m.

	DAYALBAGH L														SANJAY PLACE AND AVAS VIKAS									
L	(TIME WEIGHTED AVERAGE DATA)													(ARITHMETIC MEAN DATA)										
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Α	PM _{2.5}		PM ₁₀					°C				\mathbf{T}	PM _{2.5}		PM_{10}					°C		 		
T												Ι												
					•			3.6			R	O												
0	Today	Yesterday	Today	Yesterday	RH	WS	WD	Ma x	Min	SR	F	N	Today	Yesterday	Today	Yesterday	RH	WS	W	Max	Min	SR	RF	
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											111											1111	1111	
4 / 97	127 (18%↑)	110	64 (17%↑)	58	67	1.1	WNW	27.	10.5	126	0	Sanjay	151	134	84	78	Ε0	2.5	WN	26.0	12.0	124		
												Place	(14%↑)	154	(10%↑	78	59	2.5	W	26.0	13.0	124	0	
3/34	93	84	(00(4)	40	67	1.1	WNW	27.	10.5	126	0													
G - •	(14%↑)		(9%↑)					27				Avas	78	72	42	38	67	0.8	NE	26.2	12.4	67	0	
Science Faculty	134 (14%↑)	119	50 (12%↑)	44	67	1.1	WNW	27. 1	10.5	126	0	Vikas	(14%↑)	72	(10%↑)	38	6/	0.8	INE	26.2	12.4	67	"	
Faculty	(14/0)		(12/0)																			<u> </u>		

Views of AQI Research Group: Concentrations of Particulate matter have increased at all sites of Dayalbagh. The Air Quality Index w.r.t. PM25 remains in the Moderate category at Prem Nagar and in the Unhealthy for Sensitive Groups category at Vidyut Nagar and Science Faculty, while w.r.t. PM₁₀ it remains in the Good category at Prem Nagar and Science Faculty and in the Moderate category at Vidyut

Concentrations of Particulate Matter have also increased at Sanjay Place and Avas Vikas, Bodla. The Air Quality Index w.r.t PM_{2.5} at Sanjay Place has changed to the Unhealthy for All category while at Avas Vikas, Bodla it remains in the Moderate category, w.r.t. PM₁₀ it remains in the Moderate category at Sanjay Place and in the Good category at Avas Vikas, Bodla.

Values in parentheses indicate the percentage change in the pollutant concentrations with respect to yesterday. ↑indicates increase while ↓ indicates decrease in pollutant concentrations. Percentage change has not been shown w.r.t. AQI values as the breakpoints for the different categories are not evenly distributed.

An opportune time for invoking subtler/higher degrees of freedom to further lower the concerned measures w.r.t. earlier measurements!

Perused By Way of Information Only,

Subject To Legalise/Legalese/"Laws of the Land".

201 - 300

Friday, 09-12-2022, 04:32 PM

Received, Friday, 09-12-2022, 12:38 PM

Unhealthy for All Very Unhealthy for All

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.

Moderate

51 - 100

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

151 - 200

3 Formula for AQI calculation for a Pollutant -

Good

$$I = \frac{I_{\text{high}} - I_{\text{low}}}{C_{\text{high}} - C_{\text{low}}} * (C - C_{\text{low}}) + I_{\text{low}}$$

where: I = Air Quality Index; C = Pollutant Concentration (PM_{2.5}); C_{low} = Concentration Breakpoint $\leq C$; C_{high} = Concentration Breakpoint $\leq C$; I_{low} = Index Break point corresponding to C_{low}; I_{high} = Index Breakpoint corresponding to C_{high}; *Multiplication Sign