AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 13.10.2022 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI 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: 12 -10-2022 to 13 -10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 11 -10-2022 to 12 -10-2022 from 9:00 a.m. to 9:00 a.m.

L	DAYALBAGH (TIME WEIGHTED AVERAGE DATA AQI Meteorological H									eters		SANJAY PLACE (ARITHMETIC MEAN DATA) AQI Meteorological Parameter							eters			
C A T	PM2.5		PM10					T °C		-		PM2.5		PM 10					°	r C		
I O N	Today	Yesterday	Today	Yesterday	RH %	WS m/s	W D	Max	Min	SR W/ m ²	RF mm	Today	Yesterday	Today	Yesterday	RH %	WS m/s	W D	Max	Min	SR W/ m ²	R F m
4 / 97	99	84	47	40	80	1.4	NNE	32.0	21.2	145	0	119	87	70	54	72	0.2	sw	32.8	23.3	6.5* (104)	0
3 / 34	99	84	45	43	80	1.4	NNE	32.0	21.2	145	0											
Science Faculty	117	99	46	44	80	1.4	NNE	32.0	21.2	145	0											

Views of AQI Research Group: The concentrations of particulate matter have increased due to decrease in Wind Speed. However, the Air Quality Index remains in the *Moderate* category at Vidyut Nagar and Prem Nagar but has changed to *Unhealthy for Sensitive Groups* category at Science Faculty w.r.t. PM_{2.5}, while w.r.t. PM₁₀ it remains in the *Good* category at all sites of Dayalbagh. Perused <u>By Way of Information Only</u>, Subject To Legalise/Legalese/"Laws of the Land".

The pollutant concentrations have increased at Sanjay Place also. The Air Quality index w.r.t. PM_{2.5} has changed to *Unhealthy for Sensitive Groups* category from *Moderate* category, while w.r.t. PM₁₀ it remains in the *Moderate* category. **SR value recorded at Sanjay Place appears to be erroneous. Value in parentheses is the SR value of Avas Vikas, Bodla, Agra.*

Thursday, 13-10-2022, 02:14 PM Received, Thursday, 13-10-2022, 01:42 PM

Good Moderate Unhealthy for Sensitive Groups Unhealthy for All Very Unhealthy for All Hazardous for All 0-50 study cor 51 - 100 albagh 9 101 - 150 151 - 200 201 - 300 301 - 400	Hazardous for All 401 - 500
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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 -

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

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

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