AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 5.10.2022 (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: 4-10-2022 to 5-10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 3-10-2022 to 4-10-2022 from 9:00 a.m. to 9:00 a.m.

L	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)												SANJAY PLACE (ARITHMETIC MEAN DATA)										
O C A T	PM _{2.5}			PM ₁₀		Mete	eorolo	ogical Param T °C		eters		PM _{2.5})I PM ₁₀			Meto	eorol	ogical I	Γ	ters		
I O N	Today	Yesterday	Today	Yesterday	RH %	WS m/s	W D	Max	Min	SR W/ m²	RF mm	Today	Yesterday	Today	Yesterday	RH %	WS m/s	W D	Max	Min	SR W/ m²	RF m m	
4 / 97	102	55	54	39	69	0.7	N	38.4	26.1	123	0	153*	93	84*	83	62	0.7	ESE	28.6	37.3	13.3		
3 / 34	127	72	53	31	69	0.7	N	38.4	26.1	123	0											0	
Science Faculty	149	80	59	36	69	0.7	N	38.4	26.1	123	0												

Views of AQI Research Group: Particulate matter concentrations have increased due to increase in Relative Humidity and decrease in Wind Speed and Change in Wind Direction. The Air Quality Index values have enhanced from the *Moderate* category to *Unhealthy for Sensitive Groups* category w.r.t. PM_{2.5} and to *Moderate* category from *Good* category w.r.t PM₁₀ at Dayalbagh. At Sanjay Place the data is not available after 5:00 am today. The SR values also appear to be erroneous here. On the basis of available data, the Air Quality Index has changed to *Unhealthy for All* category from *Moderate* category w.r.t. PM_{2.5} while, w.r.t. PM₁₀ it remains in the *Moderate* category.

It is anticipated that on account of Dusshera today (5.10.2022) in the neighbourhood of Dayalbagh extensive fireworks may happen, hence as a pre-emptive measure we have planned for misting along the Dayalbagh Road boundary and in the Dayalbagh mohallas with the help of DEI and SNC.

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

Wednesday, 05-10-2022, 05:35 PM Received, Wednesday, 05-10-2022, 01:47 PM

> Very Unhealthy for All 201 - 300

Hazardous for All

Hazardous for All 401 - 500

Good 0 - 50

Moderate 51 - 100 Unhealthy for Sensitive Groups 101 - 150 Unhealthy for All 151 - 200

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 -

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

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