AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 2.10.2022 (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: 1-10-2022 to 2-10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 30-09-2022 to 1-10-2022 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}		PM ₁₀			Meto	eorolo	ogical I	[eters		
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	144	149	69	69	68	0.5	N	37.5	24.8	175	0	161	160	107	98	61	1.1	S	37.4	27.4	189	0	
3/34	155	156	71	70	68	0.5	N	37.5	24.8	175	0												
Science Faculty	158	160	72	74	68	0.5	N	37.5	24.8	175	0												

Views of AQI Research Group: The meteorological parameters are nearly similar to yesterday except with a change in Wind Direction. There is a slight improvement in the Air Quality Index values at Dayalbagh sites. Crop residue burning events have started in the states of Punjab and Haryana, surface winds are mostly from the Northwest Direction and weather conditions are calm with very low Wind Speed (0.5 m/s)

At Sanjay Place however, the Air quality Index w.r.t. $PM_{2.5}$ remains in the *Unhealthy for All* category while, w.r.t. PM_{10} it has changed to the *Unhealthy for Sensitive Groups* category from the *Moderate* category.

Wait & Watch!

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

Sunday, 92-10-2022, 04:13 PM Received, Sunday, 02-10-2022, 01:37 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 -

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

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