AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 12.11.2022 (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: 11-11-2022 to 12-11-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 10-11-2022 to 11-11-2022 from 9:00 a.m. to 9:00 a.m.

г о	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)												SANJAY PLACE AND AVAS VIKAS (ARITHMETIC MEAN DATA) AQI Meteorological Parameters										
C A T	PM _{2.5}		PM ₁₀		Met	teorolo		Paran °C	neters		A T	PM _{2.5}		QI PM ₁₀			Me	teorolo		Param °C	eters		
0 N	Today	Yesterday	Today	Yesterday	RH %	WS m/s	WD	Max	Min	SR W/m²	RF mm	O N	Today	Yesterday	Today	Yesterday	RH %	WS m/s	WD	Max	Min	SR W/m²	RF mm
4 / 97	153	162	70	85	64	0.9	WNW	30.9	16.1	131	0	Sanjay Place	161	183	93	134	53	1.3	WNW	31.2	17.8	139	0
3/34	158	156	72	78	64	0.9	WNW	30.9	16.1	131	0	Avas Vikas	161	161 166	76	80	62	0.0	ENE	20.5	15.7	78	
Science Faculty	166	165	74	79	64	0.9	WNW	30.9	16.1	131	0		161					0.8		30.5			0

Views of AQI Research Group: Concentrations of Particulate matter have slightly changed probably due to change in Relative Humidity and Wind Direction. The Air Quality Index w.r.t. PM_{2.5} remains in the *Unhealthy for All* category, while w.r.t. PM₁₀ it remains in the *Moderate* category at all sites of Dayalbagh.

At Sanjay Place, concentrations of Particulate matter have decreased probably due to lower Relative Humidity. 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 *Moderate* category. At Avas Vikas, Bodla also there is a marginal change in the particulate matter concentrations, the Air Quality Index w.r.t $PM_{2.5}$ remains in the *Unhealthy for All* category and w.r.t. PM_{10} it remains in the *Moderate* category.

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

Saturday, 12-11-2022, 04:00 PM

Received, Saturday, 12-11-2022, 12:28 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_{low} = Index Breakpoint corresponding to C_{low} ; C_{low} ; C_{low} ; C_{low} = Index Breakpoint corresponding to C_{high} ; *Multiplication Sign