Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 20.2.2022 (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)

	Date										Date SANJAY PLACE									
	Today:	A	QI	E WEIGHTED AVERAGE DATA) Meteorological Parameters						Today:	AQI		(AKII.	ARITHMETIC MEAN DATA) Meteorological Parameters						
	Feb 20 – 19 Yesterday Feb 19 - 18	PM _{2.5}	PM ₁₀	RH %	WS m/s	WD	°C		SR	RF	Feb 20 – 19 Yesterday	PM _{2.5}	PM ₁₀	RH	WS	WD	T °C		SR	RF
							Max	Min	W/m ² mn	mm	Feb 19-18			%	m/s		Max	Min	W/m ²	mm
4/97	Today	129	66	59	3.0	SE	30.1	14.3	94	0										
	Yesterday	93	56	53	1.9	ENE	31.2	15.2	68	0	Today	93	89	51	3.0	NNE	27.7	13.7	133	0
3 / 34	Today	152	62	61	2.9	SE	27.6	14.6	102	0										
	Yesterday	115	51	55	1.9	ENE	29.1	15.7	99	0	Yesterday	80	87	47	1.5	ENE		15.9	131	0
Science	Today	156	68	63	3.0	SE	26.8	14.2	78	0							29.4			
Faculty	Yesterday	122	54	57	1.9	ENE	28.9	15.1	77	0										

Views of AQI Research Group: It is observed that Solar Radiation increased but the Temperature decreased. This phenomenon can most likely be caused due to the change in Wind Direction. The changed Wind Direction probably brought in air with higher Relative Humidity and cooled the local ambient Temperature mildly. Increased Relative Humidity seems to have increased the AQI of both Particulate Pollutants across all four locations.

Remarks of Revered Chairman-ACE: High-end Research <u>should</u> continue as part of New and Renewable Project (also financed by the Current MNRE Grant).

Received: Sunday, 20 February 2022, 11:32 AM



Sunday, 20 February 2022,

Good -G

Moderate- M

Unhealthy for Sensitive Groups- US

Unhealthy for All-

Very Unhealthy for All-VUH

Hazardous for All- HZ

Hazardous for All-HZ

NOTE: 1 A continuous 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

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

where, I = Air Quality Index, C=Pollutant Concentration (PM2.5), Clow=Concentration Breakpoint ≤C, Chigh=Concentration Breakpoint ≥C, Ilow=Index Break point corresponding to Clow, Ihigh=Index Breakpoint corresponding to Chigh