Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 21.5.2022

(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 µg/m^3 Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

	Date	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)									Date	SANJAY PLACE (ARITHMETIC MEAN DATA)								
		Air Quality Index		Meteorological Parameters								AQI		Meteorological Parameters						
	Today: May 21 – 20 Yesterday May 20 – 19	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm	Today: May 21 – 20 Yesterday May 20 – 19	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm
4 / 97	Today	63	79	32	3.1	SSE	46.9	33.1	154	0	Today	156	185	32	3.1	E	48.1	34.5	190	0
	Yesterday	68	79	32	2.6	SSE	46.7	33.1	163	0										
3 / 34	Today	70	53	33	3.1	SSE	46.6	32.4	167	0										
	Yesterday	78	55	33	2.5	SSE	45.6	33.1	175	0	Yesterday	160	173	31	2.2	SE	48.2	35.4	203	0
Science Faculty	Today	68	54	33	3.1	SSE	45.9	32.0	162	0										
	Yesterday	76	55	34	2.6	SSE	44.7	32.1	171	0										

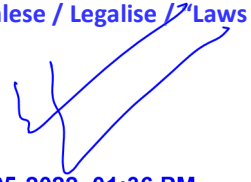
Views of AQI Research Group: $PM_{2.5}$ concentration have marginally decreased in comparison to yesterday at all the Dayalbagh sites while PM_{10} concentration has decreased at Prem Nagar and Science Faculty but remained same at Vidyut Nagar. There is also a slight variation in Wind Speed and Temperature, no change in Wind Direction, Relative Humidity has remained nearly constant, Solar Radiation has decreased. At Sanjay Place $PM_{2.5}$ concentration has decreased marginally while PM_{10} concentration has increased. There is also a slight variation in Relative Humidity, Wind Speed and Temperature while Wind Direction has changed from SE to E and Solar Radiation has decreased. Air Quality Index at all the Dayalbagh sites w.r.t both $PM_{2.5}$ and PM_{10} is in the *Moderate* category while Air Quality Index at Sanjay Place w.r.t both $PM_{2.5}$ and PM_{10} is in the *Unhealthy for All* category.

Remarks of Revered Chairman-ACE:

Received: Saturday, 21-05-2022, 12:16 PM

Perused By Way of Information Only,

Subject to Legalese / Legalise / "Laws of the Land"



Saturday, 21-05-2022, 01:36 PM

Good - G | Moderate - M | Unhealthy for Sensitive Groups - UHS | Unhealthy for All - UHA | Very Unhealthy for All - VUHA | Hazardous for All - HZA | Hazardous for All - HZA

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.
3 Formula for AQI calculation for a Pollutant –

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

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

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