Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 23.2.2022

(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 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)								
		AQI		Meteorological Parameters								AQI		Meteorological Parameters						
	Today: Feb 23 – 22 / Yesterday: Feb 22 - 21	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm	Today: Feb 23 – 22 / Yesterday: Feb 22 - 21	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T °C Max	T °C Min	SR W/m^2	RF mm
4 / 97	Today	122	68	59	5.0	SSE	28.9	15.5	109	0										
	Yesterday	112	72	46	2.7	NNE	31.4	15.6	88	0	Today	152	100	55	4.6	SSW	30.2	14.8	139	0
3 / 34	Today	115	57	61	5.0	SSE	28.3	15.4	86	0										
	Yesterday	129	59	49	2.7	NNE	28.7	15.4	107	0										
Science Faculty	Today	127	60	61	5.0	SSE	28.9	15.5	91	0	Yesterday	155	112	44	2.4	W	28.9	14.4	144	0
	Yesterday	139	64	49	2.7	NNE	27.7	15.7	90	0										

Views of AQI Research Group: The AQI for both Particulate Pollutants remained better at Dayalbagh in comparison to Sanjay Place. Across the four locations the AQI of both the sub-atomic Particulate Pollutants reduced in comparison to yesterday (PM2.5 at Vidyut Nagar being the only outlier – new construction activity reported at 4/78 & 4/89 by Construction Department). The improvement in AQI across locations seems to be an outcome of high Wind Speed causing dispersal of particles thus reducing the concentration levels.

Remarks of Revered Chairman-ACE:

Received: Wednesday, 23 February 2022, 11:14 AM

Wednesday, 23 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.
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