

# Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 18.1.2022 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean) : PM<sub>10</sub> = 150; PM<sub>2.5</sub> = 35, all units are in µg/m<sup>3</sup> | Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

	Date	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)								Date	SANJAY PLACE (ARITHMETIC MEAN DATA)							
	Today:	AQI				Meteorological Parameters				Today:	AQI				Meteorological Parameters			
	Jan 18 -17  Yesterday: Jan 17 - 16	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C	SR W/m <sup>2</sup>	RF mm	Jan 18 -17  Yesterday: Jan 17 - 16	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C	SR W/m <sup>2</sup>	RF mm
4 / 97	Today	165	141	87	1.0	W	9	19	0	Today	160	134	85	1.3	WSW	7.3	33	0
	Yesterday	167	132	85	0.7	WSW	10	23	0									
3 / 34	Today	167	115	91	1.0	W	9	21	0	Yesterday	155	120	81	0.9	W	9	55	0
	Yesterday	173	118	87	0.7	WSW	10	36	0									
Science Faculty	Today	186	100	92	2.1	ENE	9	22	0	Yesterday								
	Yesterday	190	126	89	2.9	NE	10	32	0									

Views of AQI Research Group: At Dayalbagh the PM<sub>10.0</sub> AQI and PM<sub>2.5</sub> AQI have reduced over yesterday (a bit of exception being Vidyut Nagar for PM<sub>2.5</sub>). At Sanjay Place there has been an increase in the AQI of both the particulate pollutants. At Dayalbagh and Sanjay Place the change seems to be largely driven by change in Wind Direction.

Remarks of Revered Chairman-ACE: The concerned Research Groups in DEI may investigate why there is a marked change in trend as well as magnitude between Science Faculty on one hand and two residential areas on the other which may be due to fault in meters at one or more locations as well as maintenance operations in progress at these locations.

Received: Tuesday, 18 January 2022, 11:51 AM

Tuesday, 18 January 2022, 04:56 PM

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<sub>2.5</sub> 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 (PM<sub>2.5</sub>), C<sub>low</sub>=Concentration Breakpoint ≤C, C<sub>high</sub>=Concentration Breakpoint ≥C, I<sub>low</sub>=Index Break point corresponding to C<sub>low</sub>, I<sub>high</sub>=Index Breakpoint corresponding to C<sub>high</sub>