

# Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 14.12.2021 (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>

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)										SANJAY PLACE (ARITHMETIC MEAN DATA)									
		AQI				Meteorological Parameters @ Dayalbagh						AQI				Meteorological Parameters @ Sanjay Place					
		PM <sub>2.5</sub>		PM <sub>10</sub>		Today ----- Yesterday						PM <sub>2.5</sub>		PM <sub>10</sub>		Today ----- Yesterday					
		Today Dec 14 – Dec 13	Yesterday Dec 13 – Dec 12	Today Dec 14 – Dec 13	Yesterday Dec 13 – Dec 12	RH %	WS m/s	WD	T °C	SR W/m <sup>2</sup>	RF mm	Today Dec 14 – Dec 13	Yesterday Dec 13 – Dec 12	Today Dec 14 – Dec 13	Yesterday Dec 13 – Dec 12	RH %	WS m/s	WD	T °C	SR W/m <sup>2</sup>	RF mm
4 / 97	09:00 am – 09:00am	171 UH	151 UH	100 M	104 US	69 66	1.3 0.9	E ESE	17 16	50 50	0 0	176 UH	158 UH	114 US	89 M	62 62	0.8 0.6	SSE SSE	14 13	103 105	0 0
3 / 34	09:00 am – 09:00am	161 UH	154 UH	147 US	119 US	72 70	1.3 0.9	E ESE	16 16	51 56	0 0										
Science Faculty	09:00 am – 09:00 am	189 UH	156 UH	111 US	118 US	75 73	2.0 2.4	SSE NE	16 15	48 43	0 0										

**Views of AQI Group:** Out of 6 AQI data points of Dayalbagh for today (3 of PM<sub>2.5</sub> and 3 of PM<sub>10.0</sub>), for 4 AQI data points, Dayalbagh is better than Sanjay Place. PM<sub>2.5</sub> of Science Faculty @ DEI and PM<sub>10.0</sub> of Prem Nagar are higher compared to Sanjay Place. Relative Humidity at Dayalbagh remains higher compared to Sanjay Place.

esday, 14 December 2021, 12:20 PM

**Remarks of Chairman-ACE:** Calibration of the Science Faculty metering-device for Wind Speed vis -a vis the other two sites may be carried out.

December 2021,

Good -G

Moderate- M

Sensitive Groups- US

Unhealthy for All-UH

Very Unhealthy for All-VUH

Hazardous for All- H

Hazardous for All-H

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 –

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>

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