

# Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 30.8.2022 (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:	Air Quality Index			Meteorological Parameters						Today:	AQI			Meteorological Parameters					
	August 30 – 29	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C		SR W/m <sup>2</sup>	RF mm	August 30 – 29	PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C		SR W/m <sup>2</sup>	RF mm
							Max	Min									Max	Min		
August 29 – 28	Yesterday										August 29 – 28									
4 / 97	Today	46	34	74	0.8	E	39.8	27.0	140	2.0	Today	82	93*	73	1.2	NNE	37.9	28	148	14.75
	Yesterday	42	50	62	1.1	N	38.0	27.6	164	00										
3 / 34	Today	59	29	74	0.8	E	39.8	27.0	140	2.0	Yesterday	87	81	62	2.2	S	36.6	28.8	178	0
	Yesterday	50	33	62	1.1	N	38.0	27.6	164	00										
Science Faculty	Today	57	26	74	0.8	E	39.8	27.0	140	2.0										
	Yesterday	50	33	62	1.1	N	38.0	27.6	164	00										

Good  
0 - 50

Moderate  
51 - 100

Unhealthy for Sensitive Groups  
101 - 150

Unhealthy for All  
151 - 200

Very Unhealthy for All  
201 - 300

Hazardous for All  
301 - 400

Hazardous for All  
401 - 500

**Views of AQI Research Group:** At Dayalbagh sites, the increase in concentrations of PM<sub>2.5</sub> relative to yesterday might be ascribed to increase in Relative Humidity, lowering of Wind Speed and change in Wind Direction, while the decrease in PM<sub>10</sub> may have occurred due to wash-out of these coarse particles by rain shower in the evening. The Air Quality Index w.r.t. PM<sub>2.5</sub> remains in the *Good* category at Vidyut Nagar and has changed to *Moderate* category at Science Faculty and Prem Nagar, while w.r.t to PM<sub>10</sub> it remains in the *Good* category at all three locations of Dayalbagh.

At Sanjay Place, PM<sub>10</sub> values were available only till 2:00 am today morning. The Air Quality Index w.r.t. both PM<sub>2.5</sub> and PM<sub>10</sub> (on the basis of available data) remains in the *Moderate* category.

NOTE: 1 A continuing 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>; \*Multiplication Sign