

# Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 29.8.2022 (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)								
		Air Quality Index		Meteorological Parameters								AQI		Meteorological Parameters						
		PM <sub>2.5</sub>	PM <sub>10</sub>	RH %	WS m/s	WD	T °C		SR W/m <sup>2</sup>	RF mm		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												
	Today: August 29 – 28																			
	Yesterday August 28 – 27																			
4 / 97	Today	42	50	62	1.1	N	38.0	27.6	164	00	Today	87	81	62	2.2	S	36.6	28.8	178	00
	Yesterday	38	40	67	1.6	S	37.1	27.3	184	Trace										
3 / 34	Today	50	33	62	1.1	N	38.0	27.6	164	00	Yesterday	76	68	68	3.0	S	36.8	28.5	192	8.5
	Yesterday	50	30	67	1.6	S	37.1	27.3	184	Trace										
Science Faculty	Today	50	33	62	1.1	N	38.0	27.6	164	00										
	Yesterday	50	28	67	1.6	S	37.1	27.3	184	Trace										

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:** Concentrations of PM<sub>2.5</sub> remain nearly constant while PM<sub>10</sub> have marginally increased at all locations of Dayalbagh, while at Sanjay Place concentrations of PM have increased appreciably. At Dayalbagh, it appears that change in Wind Direction from S to N and lowering of wind speed has resulted in the increase of particulate matter concentrations. However, the Air Quality Index w.r.t. both PM<sub>2.5</sub> and PM<sub>10</sub> remains in the *Good* category at all three locations of Dayalbagh while at Sanjay Place it remains in the *Moderate* category.

In response to the Gracious Remarks on the AQI Report of 28.8.2022, we humbly submit that probably the change in the AQI from *Moderate* to the *Good* category at Dayalbagh may be due to wider coverage of spraying area as implemented by SNC during organic spraying.

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