## Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 19.12.2021 (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  $\mu g/m^3$ 

Site Location	Sampling Time (24 hrs)	<b>DAYALBAGH</b> (TIME WEIGHTED AVERAGE DATA)										SANJAY PLACE (ARITHMETIC MEAN DATA)										
		AQI				Meteorological Parameters @ Dayalbagh Today					AQI				Meteorological Parameters @ Sanjay Place Today							
		PM <sub>2.5</sub>		PM10		Yesterday					PM <sub>2.5</sub>		PM10		Yesterday							
		Today Dec 19 – Dec 18	Yesterday Dec 18 – Dec 17	Today Dec 19 – Dec 18	Yesterday Dec 18 – Dec 17	RH %	WS m/s	WD	T °C	SR W/ m <sup>2</sup>	RF mm	Today Dec 19 – Dec 18	Yesterday Dec 18 – Dec 17	Today Dec 19 – Dec 18	Yesterday Dec 18 – Dec 17	RH %	WS m/s	WD	°C	SR W/m <sup>2</sup>	RF mm	
4 / 97	09:00 am  09:00am	161 UH	165 UH	103 US	103 US 134 US	61  65	$\frac{3.6}{3.5}$	WNW  NW	$\frac{12}{13}$	47  46	0  0			76 M	76 M	<u>52</u> <u>59</u>	$\frac{3.7}{3.6}$	NE  ENE	<u>10</u> <u>10</u>	114  104	<u>0</u> 0	
3 / 34	09:00 am _ 09:00am	162 UH	165 UH	98 M	98 M 122 US   91 M 115 US	63 65	3.5 <u></u> 3.5	WNW  NW	12 <u>13</u>	62 55	0  0	129 US	154 UH									
Science Faculty	09:00 am  09:00 am	165 UH	158 UH	91 M		65 	3.8 <u></u> 3.6	NE  NNE	$\frac{12}{13}$	47  46	0  0											

Views of AQI Research Group: Higher Relative Humidity(RH) at Dayalbagh vis-à-vis Sanjay Place provides explanation for relatively higher readings at Dayalbagh. Decrease in RH over yesterday has contributed to dispersal of pollutants resulting in improvement of Air Quality at all sites. Cleaning of Solar Sensors at Dayalbagh stations has not resulted in higher readings. We will now use independent measurement device at Dayalbagh and Sanjay Place to conclude the analysis.

nday, 19 December 2021, 12:23 PM



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Good - G Moderate- M iensitive 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.

**Remarks of Revered Chairman-ACE:** 

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 (PM2.5), Clow=Concentration Breakpoint <C, Chigh=Concentration Breakpoint <C, Ilow=Index Break point corresponding to Clow, Ihigh=Index Breakpoint corresponding to Clow, Ihigh=Index Breakpoint corresponding to Clow, Inigh=Index Breakpoint cor