Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 26.7.2022

(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 µg/m^3 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						
	Today: July 26– 25 Yesterday July 25 – 24	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T ˚C Max	T ˚C Min	SR W/m^2	RF mm	Today: July 26– 25 Yesterday July 25 – 24	$PM_{2.5}$	PM_{10}	RH %	WS m/s	WD	T ˚C Max	T ˚C Min	SR W/m^2	RF mm
4 / 97	Today	50	18	86	4.5	SE	32.7	27.0	129	05	Today	57	25	77	3.1	N	35.4	27.8	182	13
	Yesterday	63	25	83	5.6	SSE	33.3	27.4	148	05										
3 / 34	Today	57	21	87	4.6	SE	32.4	26.7	129	05										
	Yesterday	78	31	84	5.6	SSE	32.2	27.2	148	05										
Science Faculty	Today	55	16	86	4.5	SE	33.2	27.2	129	05	Yesterday	89	36	74	2.7	N	35.6	28.4	174	09
	Yesterday	72	29	84	5.6	SSE	33.1	27.3	148	05										

Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy for All	Very Unhealthy for All	Hazardous for All	Hazardous for All
0 - 50	51 - 100	101 - 150	151 - 200	201 - 300	301 - 400	401 - 500

Views of AQI Research Group: In comparison to yesterday, there is a significant decrease in the concentrations of both $PM_{2.5}$ and PM_{10} at all locations of Dayalbagh. This decrease may be associated to the rain showers in the late evening. The Air Quality Index w.r.t. $PM_{2.5}$ has improved to the *Good* category at Vidyut Nagar and remains in the *Moderate* category at Prem Nagar and Science Faculty, while w.r.t. PM_{10} it remains in the *Good* category at all the three locations of Dayalbagh.

At Sanjay Place also, the concentrations of both $PM_{2.5}$ and PM_{10} have significantly decreased. However, the Air Quality Index still remains in the *Moderate* category w.r.t. $PM_{2.5}$ and in the *Good* category w.r.t PM_{10}.

Perused By Way of Information Only,
Subject To Legalise/Legalese/"Laws of the Land".

Tuesday, 26-07-2022, 06:00 PM
Received, Tuesday, 26-07-2022, 12:22 PM

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 $PM_{2.5}$ 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 ($PM_{2.5}$); C_{low} = Concentration Breakpoint ≤C; C_{high} = Concentration Breakpoint ≥C; I_{low} = Index Break point corresponding to C_{low}; I_{high} = Index Breakpoint corresponding to C_{high}; *Multiplication Sign

Communicated by Dr. Anita Lakhani, Professor, Department of Chemistry, Faculty of Science, Dayalbagh Educational Institute, Dayalbagh, Agra.