Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING REPORT – Dated: 21.07.2021

Permissible Limits: PM_{10} = 100; $PM_{2.5}$ = 60, all units are in $\mu g/m^3$

Sampling Site and Height	Duration of Sampling	DAYALBAGH (Time Weighted Average)							SANJAY PLACE @ 40 feet (Arithmetic Mean)							AIR QUALITY INDEX (AQI) ON THE BASIS OF $PM_{2.5}$ CONCENTRATION			
		PM_{10} [$\mu g/m^3$]		$PM_{2.5}$ [$\mu g/m^3$]		Meteorological Parameters			PM_{10} [$\mu g/m^3$] Calculated on the basis of $PM_{10}/PM_{2.5}$ ratio at Dayalbagh		$PM_{2.5}$ [$\mu g/m^3$] @ 40 feet		Meteorological Parameters			DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet	
		Today 21.7.21-20.7.21	Yesterday 20.7.21-19.7.21	Today 21.7.21-20.7.21	Yesterday 20.7.21-19.7.21	RH %	WS m/s	WD	Today 21.7.21-20.7.21	Yesterday 20.7.21-19.7.21	Today 21.7.21-20.7.21	Yesterday 20.7.21-19.7.21	RH %	WS m/s	WD	Today 21.7.21-20.7.21	Yesterday 20.7.21-19.7.21	Today 21.7.21-20.7.21	Yesterday 20.7.21-19.7.21
4/97 @ 40 feet	12:00-12:00 noon	✔+25	22	✔+18	17	82	2.4	SW								63 Satisfactory	61 Satisfactory		
3/34 @ 40 feet	12:00-12:00 noon	✔+20	23	✔+12	15	83	2.3	SW	+30↓↓	17	+19↓	13	82	1.7	SSE	50 Good	57 Satisfactory	66 Satisfactory	53 Satisfactory
Science Faculty @ 40 feet	12:00-12:00 noon	✔+20	23	✔+12	15	85	3.6	SW								50 Good	57 Satisfactory		

Site	Temperature(°C)	Solar Radiation (W/m²)	Rainfall (mm)
Dayalbagh	28.6	106	NA
SanjayPlace	29.5	**180**	0.42

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 $PM_{2.5}$ 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}

4 ↑ Denotes improvement in quality (↓ Inverse)

↑↑ Denotes significant improvement in quality (↓↓ Inverse)

✔ Denotes Dayalbagh readings are better than or equivalent to Sanjay Place

+Denotes values are near or within permissible limits.

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