Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING REPORT – Dated:15.07.2021

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

	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				
Sampling Site and Height		PM ₁₀ [μg/m ³]		PM _{2.5} [μg/m ³]		Meteorological Parameters @ Dayalbagh		PM ₁₀ [μg/m ³] Calculated on the basis of PM ₁₀ /PM _{2.5} ratio at Dayalbagh		PM _{2.5} [μg/m³] @ 40 feet		Meteorological Parameters @ Sanjay Place		DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet			
		Today 15.7.21- 14.7.21	Yesterday 14.7.21- 13.7.21	Today 15.7.21- 14.7.21	Yesterday 14.7.21- 13.7.21	RH %	WS m/s	WD	Today 15.7.21- 14.7.21	Yesterday 14.7.21- 13.7.21	Today 15.7.21- 14.7.21	Yesterday 14.7.21- 13.7.21	RH %	WS m/s	WD	Today 15.7.21- 14.7.21	Yesterday 14.7.21- 13.7.21	Today 15.7.21- 14.7.21	Yesterday 14.7.21- 13.7.21
4/97 @ 40 feet	12:00- 12:00 noon	√ +34	30	√ +33	30	68	3.8	ESE								95 Satisfactory	89 Satisfactory		
3/34 @ 40 feet	12:00- 12:00 noon	√ +28	26	√ +25	23	67	3.8	ESE	+30	32	+27	29	61	3.3	SSE	78 Satisfactory	74 Satisfactory	82 Satisfactory	87 Satisfactory
Science Faculty @ 40 feet	12:00- 12:00 noon	√ +31	29	√ +27	25	69	3.8	ESE								82 Satisfactory	78 Satisfactory		

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 -

$$I = \frac{I_{\text{high}} - I_{\text{low}}}{C_{\text{high}} - C_{\text{low}}} * (C - C_{\text{low}}) + I_{\text{low}}$$

where, I = Air Quality Index, C=Pollutant Concentration (PM_{2.5}), C_{low} =Concentration Breakpoint $\leq C$, C_{high} =Concentration Breakpoint $\geq C$, C_{high} =Concentration Breakpoint $\leq C$,

- 4 ↑ Denotes improvement in quality (↓ Inverse)
- $\uparrow \uparrow$ Denotes significant improvement in quality ($\downarrow \downarrow$ Inverse)
- ✔ Denotes Dayalbagh readings are better than or equivalent to Sanjay Place
- +Denotes values are near or within permissible limits.