Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING REPORT – Dated: 10.06.2021

		DAYALBAGH				SANJAY PLACE				AIR QUALITY INDEX (AQI) ON THE BASIS OF PM _{2.5} CONCENTRATION			
Sampling Site and Height	Duration of Sampling	(Time Weighted Average)				@ 40 feet (Arithmetic Mean)							
		PM ₁₀ [μg/m ³]		PM _{2.5} [μg/m ³]		$\begin{array}{c} PM_{10}\left[\mu g/m^{3}\right] \\ Calculated on the basis \\ of PM_{10}/PM_{2.5} \ ratio \ at \\ Dayalbagh \end{array}$		PM _{2.5} [μg/m ³] @ 40 feet		DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet	
		Today 10.6.2021- 9.6.2021	Yesterday 9.6.2021- 8.6.2021	Today 10.6.2021- 9.6.2021	Yesterday 9.6.2021- 8.6.2021	Today 10.6.2021- 9.6.2021	Yesterday 9.6.2021- 8.6.2021	Today 10.6.2021- 9.6.2021	Yesterday 9.6.2021- 8.6.2021	Today 10.6.2021-9.6.2021	Yesterday 9.6.2021-8.6.2021	Today 10.6.2021-9.6.2021	Yesterday 9.6.2021-8.6.2021
4/97 @ 40 feet	12:00-12:00 noon	√133↓	81	√ +34↓	22	296↓↓	165	102↓↓	66	97 Satisfactory	72 Satisfactory	175 MODERATE	156 MODERATE
3/34 @ 40 feet	12:00-12:00 noon	√ +57↓	37	√ +20↓	11					68 Satisfactory	46 GOOD		
Science Faculty @ 40 feet	12:00-12:00 noon	√ +71↓	41	√ +22↓	10					72 Satisfactory	42 GOOD		

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

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 $\geq C$, I_{low} =Index Break point corresponding to C_{low} , I_{high} =Index Breakpoint corresponding to C_{high}

4 \uparrow Denotes improvement in quality (\downarrow 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