

## Radhasoami Dayal Ki Daya Radhasoami Sahai

# AIR QUALITY MONITORING REPORT – Dated: 20.07.2021

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

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					
		$PM_{10}$ [ $\mu\text{g}/\text{m}^3$ ]		$PM_{2.5}$ [ $\mu\text{g}/\text{m}^3$ ]		Meteorological Parameters			$PM_{10}$ [ $\mu\text{g}/\text{m}^3$ ] Calculated on the basis of $PM_{10}/PM_{2.5}$ ratio at Dayalbagh		$PM_{2.5}$ [ $\mu\text{g}/\text{m}^3$ ] @ 40 feet		Meteorological Parameters			DAYALBAGH @ 40 feet		SANJAY PLACE @ 40 feet		
		Today 20.7.21- 19.7.21	Yesterday 19.7.21- 18.7.21	Today 20.7.21- 19.7.21	Yesterday 19.7.21- 18.7.21	RH %	WS m/s	WD	Today 20.7.21- 19.7.21	Yesterday 19.7.21- 18.7.21	Today 20.7.21- 19.7.21	Yesterday 19.7.21- 18.7.21	RH %	WS m/s	WD	Today 20.7.21- 19.7.21	Yesterday 19.7.21- 18.7.21	Today 20.7.21- 19.7.21	Yesterday 19.7.21- 18.7.21	
4/97 @ 40 feet	12:00- 12:00 noon	✓+22↑	32	✓+17↑ ↑	30	90	3.6	SW									61 Satisfactory	89 Satisfactory		
3/34 @ 40 feet	12:00- 12:00 noon	✓+23↑	31	✓+15↑ ↑	26	90	3.6	SW	+17↓	12	+13	11	91	1.5	SW		57 Satisfactory	80 Satisfactory	53 Satisfactory	
Science Faculty @ 40 feet	12:00- 12:00 noon	✓+23↑	32	✓+15↑ ↑	26	90	3.6	SW									57 Satisfactory	80 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 ( $PM_{2.5}$ ),  $C_{\text{low}}$ =Concentration Breakpoint  $\leq C$ ,  $C_{\text{high}}$ =Concentration Breakpoint  $\geq C$ ,  $I_{\text{low}}$ =Index Break point corresponding to  $C_{\text{low}}$ ,  $I_{\text{high}}$ =Index Breakpoint corresponding to  $C_{\text{high}}$

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.