Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 24.09.2021

Permissible Limits (24h Mean) : PM_{10} = 100; $PM_{2.5}$ = 60 (NAAQS, India), all units are in µg/m³

PM_{10} = 45; $PM_{2.5}$ = 15 (WHO, 2021), all units are in µg/m³

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)										SANJAY PLACE (ARITHMETIC MEAN DATA)								
		AQI				Meteorological Parameters @ Dayalbagh						AQI				Meteorological Parameters @ Sanjay Place				
		PM₂.₅		PM₁₀								PM₂.₅		PM₁₀							
		Today Sep 24-Sep 23	Yesterday Sep 23-Sep 22	Today Sep 24-Sep 23	Yesterday Sep 23-Sep 22	RH %	WS m/s	WD	T °C	SR W/m²	RF mm	Today Sep 24-Sep 23	Yesterday Sep 23-Sep 22	Today Sep 24-Sep 23	Yesterday Sep 23-Sep 22	RH %	WS m/s	WD	T °C	SR W/m²	RF mm
4 / 97	12:00 noon – 12:00 noon	59 S	59 S	30 G	24 G	78	3.3	ENE	30	129	0										
3 / 34	12:00 noon – 12:00 noon	66 S	61 S	24 G	23 G	79	3.3	ENE	30	120	0	80 S	68 S	52 S	44 G	70	1.6	SE	NA	193	0
Science Faculty	12:00 noon – 12:00 noon	NA	NA	NA	NA	NA	NA	NA	NA	NA	0										

Good- G	Satisfactory – S	Moderate- M	Poor- P	Very Poor- VP	Severe - Sv

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 -

where, I = Air Quality Index, C=Pollutant Concentration (PM2.5), Clow=Concentration Breakpoint ≤C, Chigh=Concentration Breakpoint ≥C, Ilow=Index Break point corresponding to Clow, Ihigh=Index Breakpoint corresponding to Chigh

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