Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING REPORT – Dated: 24.05.2021

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

	Duration of Sampling	DAYALBAGH				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/m³]		PM _{2.5} [μg/m ³]		PM ₁₀ [μg/m ³] Calculated on the basis of PM ₁₀ /PM _{2.5} ratio at Dayalbagh		PM _{2.5} [μg/m ³] @ 40 feet		DAYALBAGH		SANJAY PLACE @ 40 feet	
		Today 24.05.2021	Yesterday 23.05.2021	Today 24.05.2021	Yesterday 23.05.2021	Today 24.05.2021	Yesterday 23.05.2021	Today 24.05.2021	Yesterday 23.05.2021	Today 24.05.2021	Yesterday 23.05.2021	Today 24.05.2021	Yesterday 23.05.2021
4/95 @ 20 feet	7:15 –8:15 AM	√ +95↑↑	425	✓ +36↑↑	56	140↑↑	458	+53↑↑	229	102 MODERATE	151 MODERATE	144 MODERATE	279 POOR
3/34 @ 40 feet	8:30 – 9: 30AM	√ +90↑↑	804	√ +32↑↑	60	135↑↑	1164	+48↑↑	582	93 SATISFACTORY	153 MODERATE	132 MODERATE	_
Science Faculty @ 20 feet	10:00 – 11:00AM	✓+89 ↑↑	1007	√ +26↑↑	75	171↑↑	1654	+50↑↑	827	80 SATISFACTORY	161 MODERATE	137 MODERATE	-
Dairy @ 6 feet	12:00 – 1:00 PM	√113 ↑↑	870	✓+20 ↑↑	67	137↑↑	1418	+52↑↑	709	68 SATISFACTORY	157 MODERATE	142 MODERATE	_
Control Room @ 6 feet	1:15 – 2:15 PM	√ +68↑↑	778	√ +13↑↑	60	133↑↑	1280	+51↑↑	640	53 SATISFACTORY	153 MODERATE	139 MODERATE	_

Sampling was performed on 24.05.2021.

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 $\leq C_{high}$ =Concentration Brea

- 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

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AIR QUALITY MONITORING REPORT – Dated: 24.05.2021

Location : Punjabi Farm

Time : 3:345 - 4:45 PM

Wind Speed: 4. 5 km/h

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

Data Type	PM ₁₀ [μg/m ³]	PM _{2.5} [μg/m ³]	AIR QUALITY INDEX (AQI) ON THE BASIS OF PM _{2.5} CONCENTRATION
Field Data (TWA) @6feet	✓ 470	√ + 44	122 – MODERATE
Sanjay Place @ 40feet	964	482	488 – SEVERE

Sampling was performed on 23.05.2021.

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