## Radhasoami Dayal Ki Daya Radhasoami Sahai

## **AIR QUALITY MONITORING REPORT – Dated: 14.04.2021**

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 PM2.5 CONCENTRATION			
Sampling Site and Height		PM <sub>10</sub> [μg/m <sup>3</sup> ]		PM <sub>2.5</sub> [μg/m³]		$PM_{10} \left[\mu g/m^3\right]$ Calculated on the basis of $PM_{10}/PM_{2.5}$ ratio at Dayalbagh		PM <sub>2.5</sub> [μg/m <sup>3</sup> ] @ 40 feet		DAYALBAGH		SANJAY PLACE @ 40 feet	
		Today 14.04.2021	Yesterday 13.04.2021	Today 14.04.2021	Yesterday 13.04.2021	Today 14.04.2021	Yesterday 13.04.2021	Today 14.04.2021	Yesterday 13.04.2021	Today 14.04.2021	Yesterday 13.04.2021	Today 14.04.2021	Yesterday 13.04.2021
4/97 @ 20 feet	7:15 – 8:15 AM	✓213↑↑	472	<b>√128</b> ↑	175	233↑↑	510	140↑	189	188 MODERATE	225 POOR	195 MODERATE	239 POOR
3/34 @ 40 feet	8:30 – 9: 30AM	✓217↑↑	440	<b>√</b> 97↑	140	324↑↑	688	145↑↑	219	172 MODERATE	195 MODERATE	197 MODERATE	269 POOR
Science Faculty @ 20 feet	10:00 – 11:00AM	<b>√</b> 144↑	199	<b>√</b> +48↑	71	222↑	266	74↑	95	132 MODERATE	159 MODERATE	161 MODERATE	171 MODERATE
Dairy @ 6 feet	12:00 – 1:00 PM	<b>√140</b> ↑	151	<b>√</b> +38	40	206↑	257	+56↑	68	107 MODERATE	112 MODERATE	151 MODERATE	157 MODERATE
Control Room @ 6 feet	1:15 – 2:15 PM	✓120↑	139	<b>√</b> +37	37	208↑	233	+64	62	105 MODERATE	105 MODERATE	155 MODERATE	154 MODERATE

Sampling was performed on 14.04.2021.

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<sub>2.5</sub> 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**<sub>2.5</sub>),  $C_{low}$ =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

## Radhasoami Dayal Ki Daya Radhasoami Sahai

## **AIR QUALITY MONITORING REPORT – Dated: 14.04.2021**

Location : Sikandarpur

Time : 4:00-5:00 PM

Wind Speed: 1.8 km/h

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

Data Type	PM <sub>10</sub> [μg/m <sup>3</sup> ]	PM <sub>2.5</sub> [μg/m <sup>3</sup> ]	AIR QUALITY INDEX (AQI) ON THE BASIS OF PM <sub>2.5</sub> CONCENTRATION
Field Data (TWA) @6feet	342	√ + 52	142 – MODERATE
Sanjay Place @ 40feet	165	+ 55	149 – MODERATE

Sampling was performed on 13.04.2021.

NOTE: 1 A continuous study conducted as part of Dayalbagh Sigma Six Qualities and Values Model implementation.

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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**<sub>2.5</sub>),  $C_{low}$ =Concentration Breakpoint  $\leq$ C,  $C_{high}$ =Concentration Breakpoint  $\geq$ C,  $C_{high}$ =Concentration Breakpoint  $\leq$ C,  $C_$ 

- 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