## Radhasoami Dayal Ki Daya Radhasoami Sahai

## **AIR QUALITY MONITORING REPORT – Dated: 28.04.2021**

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 PM <sub>2.5</sub> CONCENTRATION			
Sampling Site and Height		PM <sub>10</sub> [μg/m <sup>3</sup> ]		PM <sub>2.5</sub> [μg/m <sup>3</sup> ]		PM <sub>10</sub> [μg/m³] Calculated on the basis of PM <sub>10</sub> /PM <sub>2.5</sub> ratio at Dayalbagh		PM <sub>2.5</sub> [μg/m³] @ 40 feet		DAYALBAGH		SANJAY PLACE @ 40 feet	
		Today 28.04.2021	Yesterday 27.04.2021	Today 28.04.2021	Yesterday 27.04.2021	Today 28.04.2021	Yesterday 27.04.2021	Today 28.04.2021	Yesterday 27.04.2021	Today 28.04.2021	Yesterday 27.04.2021	Today 28.04.2021	Yesterday 27.04.2021
4/95 @ 20 feet	7:15 – 8:15 AM	✓203	206	<b>√111</b> ↓↓	67	207	206	113↓↓	67	180 MODERATE	157 MODERATE	181 MODERATE	157 MODERATE
Ladder at PN (Ghodi) @ 12 feet	8:30 – 9: 30AM	✓262↓	195	<b>√104</b> ↓↓	61	292↓	262	116↓	82	176 MODERATE	154 MODERATE	182 MODERATE	165 MODERATE
Science Faculty @ 20 feet	10:00 – 11:00AM	✓248↓	175	<b>√91</b> ↓↓	50	346↓↓	262	127↓↓	75	169 MODERATE	137 MODERATE	188 MODERATE	161 MODERATE
Dairy @ 6 feet	12:00 – 1:00 PM	<b>√</b> 169↓	126	<b>√</b> +52↓	36	286↓	238	88↓	68	142 MODERATE	102 MODERATE	168 MODERATE	157 MODERATE
Control Room @ 6 feet	1:15 – 2:15 PM	✓124↑	134	<b>√</b> +35↓	33	280↓↓	199	79↓	49	99 SATISFACTORY	95 SATISFACTORY	163 MODERATE	134 MODERATE

Sampling was performed on 28.04.2021.

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  $\leq C_{low}$ -Index Breakpoint corresponding to  $C_{high}$ 

- 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: 28.04.2021**

Location : Sikandarpur

Time : 4: 00 - 5:00 PM

Wind Speed: 3.8 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	√150	<b>√+29</b>	87 – SATISFACTORY
Sanjay Place @ 40feet	217	+42	117 – MODERATE

Sampling was performed on 27.04.2021.

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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,  $C_$ 

- 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