## Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING REPORT – Dated: 27.05.2021

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 PM2.5 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/m <sup>3</sup> ] Calculated on the basis of PM <sub>10</sub> /PM <sub>2.5</sub> ratio at Dayalbagh		PM <sub>2.5</sub> [μg/m <sup>3</sup> ] @ 40 feet		DAYALBAGH		SANJAY PLACE @ 40 feet	
		Today 27.05.2021	Yesterday 26.05.2021	Today 27.05.2021	Yesterday 26.05.2021	Today 27.05.2021	Yesterday 26.05.2021	Today 27.05.2021	Yesterday 26.05.2021	Today 27.05.2021	Yesterday 26.05.2021	Today 27.05.2021	Yesterday 26.05.2021
4/95 @ 20 feet	7:15 –8:15 AM	227↓↓	144	105↓↓	66	201↓↓	126	93↓↓	58	177 MODERATE	156 MODERATE	170 MODERATE	152 MODERATE
3/34 @ 40 feet	8:30 – 9: 30AM	√188↓	116	103↓↓	45	201↓	150	93↓↓	58	176 MODERATE	124 MODERATE	170 MODERATE	152 MODERATE
Science Faculty @ 20 feet	10:00 – 11:00AM	<b>√</b> +93↓	63	<b>√</b> +30↓	21	174↓↓	93	+56↓↓	31	89 SATISFACTORY	70 satisfactory	151 MODERATE	91 SATISFACTORY
Dairy @ 6 feet	12:00 – 1:00 PM	<b>√</b> +81	83	<b>√</b> +21↑	25	+95↓	113	+53↓	34	70 satisfactory	78 satisfactory	144 MODERATE	97 SATISFACTORY
Control Room @ 6 feet	1:15 – 2:15 PM	<b>√</b> +75↑	82	<b>√</b> +17↑	24	+92个	109	+51↓	32	61 SATISFACTORY	76 SATISFACTORY	139 MODERATE	93 SATISFACTORY

Sampling was performed on 27.05.2021.

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<sub>2.5</sub> concentration readings are fed in USEPA online calculator for AQI calculation.

3 Formula for AQI calculation for a Pollutant –

$$I = \frac{I_{high} - I_{low}}{C_{high} - C_{low}} * (C - C_{low}) + I_{low}$$
where, I = Air Quality Index, C=Pollutant Concentration (PM<sub>2.5</sub>), C<sub>low</sub>=Concentration Breakpoint  $\leq C$ , C<sub>high</sub>=Concentration Breakpoint  $\geq C$ ,  $I_{low}$ =Index Break point corresponding to C<sub>low</sub>, I<sub>high</sub>=Index Breakpoint corresponding to C<sub>high</sub>

4  $\uparrow$  Denotes improvement in quality ( $\downarrow$  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: 27.05.2021

Location:SikandarpurTime:3:30 - 4:30 PMWind Speed :5.4 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 PM2.5 CONCENTRATION		
Field Data (TWA) @6feet	<b>√</b> +108	<b>√</b> +26	80 – SATISFACTORY		
Sanjay Place @ 40feet	125	+ 30	89 – SATISFACTORY		

Sampling was performed on 26.05.2021.

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<sub>2.5</sub> concentration readings are fed in USEPA online calculator for AQI calculation.

3 Formula for AQI calculation for a Pollutant –

$$I = \frac{I_{high} - I_{low}}{C_{high} - C_{low}} * (C - C_{low}) + I_{low}$$
where, I = Air Quality Index, C=Pollutant Concentration (PM2.5), Clow=Concentration Breakpoint  $\leq C$ , Chigh=Concentration Breakpoint  $\geq C$ ,  $I_{low}$ =Index Break point corresponding to Clow, Ihigh=Index Breakpoint corresponding to Chigh

4  $\uparrow$  Denotes improvement in quality ( $\downarrow$  Inverse)

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✓ Denotes Dayalbagh readings are better than or equivalent to Sanjay Place

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