

## Radhasoami Dayal Ki Daya Radhasoami Sahai

### AIR QUALITY MONITORING REPORT – Dated: 27.04.2021

Permissible Limits: PM<sub>10</sub> = 100; PM<sub>2.5</sub> = 60, all units are in µg/m<sup>3</sup>

| Sampling Site and Height          | Duration of Sampling | DAYALBAGH                             |                         |  |                         | SANJAY PLACE<br>@ 40 feet<br>(Arithmetic Mean)   |                         |   |                         | AIR QUALITY INDEX (AQI) ON THE BASIS OF PM <sub>2.5</sub> CONCENTRATION |                         |                           |                         |
|-----------------------------------|----------------------|---------------------------------------|-------------------------|--|-------------------------|--|-------------------------|---|-------------------------|---|-------------------------|---------------------------|-------------------------|
|                                   |                      | 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> ]<br>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> ]<br>@ 40 feet |                         | DAYALBAGH   |                         | SANJAY PLACE<br>@ 40 feet |                         |
|                                   |                      | Today<br>27.04.2021                   | Yesterday<br>26.04.2021 | Today<br>27.04.2021                    | Yesterday<br>26.04.2021 | Today<br>27.04.2021  | Yesterday<br>26.04.2021 | Today<br>27.04.2021                                 | Yesterday<br>26.04.2021 | Today<br>27.04.2021   | Yesterday<br>26.04.2021 | Today<br>27.04.2021       | Yesterday<br>26.04.2021 |
| 4/95<br>@ 20 feet                 | 7:15 – 8:15 AM       | ✓206↑                                 | 242                     | ✓+67↑↑                                 | 124                     | 206↑   | 236                     | +67↑↑   | 121                     | 157<br>MODERATE   | 186<br>MODERATE         | 157<br>MODERATE           | 185<br>MODERATE         |
| Ladder at PN (Ghodi)<br>@ 12 feet | 8:30 – 9: 30AM       | ✓195                                  | 194                     | ✓+61↑                                  | 96                      | 262↓   | 234                     | +82↑  | 116                     | 154<br>MODERATE   | 172<br>MODERATE         | 165<br>MODERATE           | 182<br>MODERATE         |
| Science Faculty<br>@ 20 feet      | 10:00 – 11:00AM      | ✓175↓                                 | 134                     | ✓+50↓                                  | 55                      | 262↓↓  | 197                     | +75↑  | 81                      | 137<br>MODERATE   | 149<br>MODERATE         | 161<br>MODERATE           | 164<br>MODERATE         |
| Dairy<br>@ 6 feet                 | 12:00 – 1:00 PM      | ✓126↓                                 | 87                      | ✓+36↓                                  | 27                      | 238↓↓  | 155                     | +68↓  | 48                      | 102<br>MODERATE   | 82<br>SATISFACTORY      | 157<br>MODERATE           | 132<br>MODERATE         |
| Control Room<br>@ 6 feet          | 1:15 – 2:15 PM       | ✓134↓                                 | 80                      | ✓+33↓                                  | 26                      | 199↓↓  | 111                     | +49↓  | 36                      | 95<br>SATISFACTORY  | 80<br>SATISFACTORY      | 134<br>MODERATE           | 102<br>MODERATE         |

Sampling was performed on 27.04.2021.

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 –

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

where, I = Air Quality Index, C=Pollutant Concentration (PM<sub>2.5</sub>), C<sub>low</sub>=Concentration Breakpoint ≤C, C<sub>high</sub>=Concentration Breakpoint ≥C, I<sub>low</sub>=Index Break point corresponding to C<sub>low</sub>, I<sub>high</sub>=Index Breakpoint corresponding to C<sub>high</sub>

4 ↑ Denotes improvement in quality (↓ Inverse)

↑↑ Denotes significant improvement in quality (↓↓ 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: 27.04.2021

Location : REI  
 Time : 4: 00 – 5:00 PM  
 Wind Speed : 4.6 km/h

Permissible Limits: PM<sub>10</sub> = 100; PM<sub>2.5</sub> = 60, all units are in µg/m<sup>3</sup>

| 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)<br>@6feet | 116                                   | ✓+36                                   | <b>102 – MODERATE</b>   |
| Sanjay Place<br>@ 40feet   | 119                                   | +37                                    | <b>105 – MODERATE</b>   |

Sampling was performed on 26.04.2021.

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

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where, I = Air Quality Index, C=Pollutant Concentration (**PM<sub>2.5</sub>**), C<sub>low</sub>=Concentration Breakpoint ≤C, C<sub>high</sub>=Concentration Breakpoint ≥C, I<sub>low</sub>=Index Break point corresponding to C<sub>low</sub>, I<sub>high</sub>=Index Breakpoint corresponding to C<sub>high</sub>

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