

# Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 20.1.2022 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean) : PM<sub>10</sub> = 150; PM<sub>2.5</sub> = 35, all units are in µg/m<sup>3</sup> | Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

|                 | Date   | DAYALBAGH<br>(TIME WEIGHTED AVERAGE DATA) |                  |                           |        |     |      |     |                            |          | Date   | SANJAY PLACE<br>(ARITHMETIC MEAN DATA) |                  |                           |        |     |      |     |                        |          |  |  |  |  |  |  |  |  |  |  |
|-----------------|--|---|------------------|---------------------------|--------|-----|------|-----|----------------------------|----------|--|--|------------------|---------------------------|--------|-----|------|-----|------------------------|----------|--|--|--|--|--|--|--|--|--|--|
|                 | Today:   | AQI                                       |                  | Meteorological Parameters |        |     |      |     |                            |          | Today:   | AQI                                    |                  | Meteorological Parameters |        |     |      |     |                        |          |  |  |  |  |  |  |  |  |  |  |
|                 | Jan 20 -19<br><br>Yesterday<br>:<br><br>Jan 19 -18 | PM <sub>2.5</sub>                         | PM <sub>10</sub> | RH %                      | WS m/s | WD  | T °C |     | SR<br>W/<br>m <sup>2</sup> | RF<br>mm | Jan 20 -19<br><br>Yesterday:<br><br>Jan 19 -18 | PM <sub>2.5</sub>                      | PM <sub>10</sub> | RH %                      | WS m/s | WD  | T °C |     | SR<br>W/m <sup>2</sup> | RF<br>mm |  |  |  |  |  |  |  |  |  |  |
|                 |  |   |                  |                           |        |     | Max  | Min |                            |          |  |  |                  |                           |        |     | Max  | Min |                        |          |  |  |  |  |  |  |  |  |  |  |
| 4 / 97          | Today  | 249                                       | 339              | 90                        | 1.0    | S   | 13.3 | 7.6 | 14                         | 0        | Today  | 190                                    | 245              | 86                        | 0.6    | ESE | 11.3 | 6.2 | 32                     | 0        |  |  |  |  |  |  |  |  |  |  |
|                 | Yesterday  | 155                                       | 110              | 91                        | 2.1    | WNW | 11.0 | 5.9 | 14                         | 0        |  |  |                  |                           |        |     |      |     |                        |          |  |  |  |  |  |  |  |  |  |  |
| 3 / 34          | Today  | 282                                       | 410              | 93                        | 1.0    | SSW | 12.7 | 7.1 | 18                         | 0        | Yesterday                                      | 162                                    | 130              | 89                        | 0.9    | SSW | 9.0  | 3.9 | 30                     | 0        |  |  |  |  |  |  |  |  |  |  |
|                 | Yesterday  | 170                                       | 124              | 95                        | 2.1    | WNW | 10.2 | 5.9 | 17                         | 0        |  |  |                  |                           |        |     |      |     |                        |          |  |  |  |  |  |  |  |  |  |  |
| Science Faculty | Today  | 286                                       | 163              | 94                        | 2.0    | SSW | 12.8 | 7.0 | 19                         | 0        |  |  |                  |                           |        |     |      |     |                        |          |  |  |  |  |  |  |  |  |  |  |
|                 | Yesterday  | 185                                       | 108              | 96                        | 2.3    | E   | 10.2 | 5.9 | 17                         | 0        |  |  |                  |                           |        |     |      |     |                        |          |  |  |  |  |  |  |  |  |  |  |

**Views of AQI Research Group:** Decrease in Wind Speed causes drop in dispersal of pollutants thus seems to have caused increase in AQI across locations. Lack of sunlight for over 4 to 5 days has led to increase in wood burning on Dayalbagh Road. PB Gur Prasad confirmed that maximum Addition/Alteration work in houses is happening in Prem Nagar (about 13-14 houses) and paint scraping & re-painting work is being carried out by Mohalla Residents as well. This seems to have added to the temporary spurt. Even in Vidyut Nagar the construction activity is there but lesser. For Science Faculty, PB Vipin Loyal has confirmed that there was no construction activity taking place.

**Remarks of Revered Chairman-ACE:**

**Received: Thursday, 20 January 2022, 12:25 PM**



**Thursday, 20 January 2022, 04:35 PM**

Good -G

Moderate- M

Unhealthy for Sensitive Groups- US

Unhealthy for All-

Very Unhealthy for All-VUH

Hazardous for All- HZ

Hazardous for All-HZ

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>