

# Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 5.5.2022 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean) :  $PM_{10} = 150$ ;  $PM_{2.5} = 35$ , all units are in  $\mu g/m^3$  | 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:                 |   |           |                           |        |     |              |      |            |       | Today:                 |  |           |                           |        |     |              |      |            |       |
|                 | May 5 – 4              | Air Quality Index                         |           | Meteorological Parameters |        |     |              |      |            |       | May 5 – 4              | AQI                                    |           | Meteorological Parameters |        |     |              |      |            |       |
|                 | Yesterday<br>May 4 – 3 | $PM_{2.5}$                                | $PM_{10}$ | RH %                      | WS m/s | WD  | $T^{\circ}C$ |      | SR $W/m^2$ | RF mm | Yesterday<br>May 4 – 3 | $PM_{2.5}$                             | $PM_{10}$ | RH %                      | WS m/s | WD  | $T^{\circ}C$ |      | SR $W/m^2$ | RF mm |
|                 |                        |   |           |                           |        |     | Max          | Min  |            |       |                        |  |           |                           |        |     | Max          | Min  |            |       |
| 4 / 97          | Today                  | 57  | 52        | 54                        | 3.0    | SSE | 41.3         | 25.3 | 142        | 0     | Today                  | 124                                    | 115       | 47                        | 3.6    | ENE | 44.8         | 26.2 | 171        | 0     |
|                 | Yesterday              | 82  | 80        | 50                        | 3.6    | W   | 41.1         | 30.5 | 131        | 0     |                        |  |           |                           |        |     |              |      |            |       |
| 3 / 34          | Today                  | 72  | 35        | 54                        | 3.0    | SSE | 41.0         | 25.3 | 148        | 0     | Yesterday              | 164                                    | 196       | 45                        | 2.7    | NNE | 42.4         | 32.4 | 157        | 0     |
|                 | Yesterday              | 110                                       | 60        | 52                        | 3.7    | W   | 40.1         | 30.4 | 122        | 0     |                        |  |           |                           |        |     |              |      |            |       |
| Science Faculty | Today                  | 70  | 35        | 55                        | 3.0    | SSE | 41.3         | 25.1 | 135        | 0     | Yesterday              |  |           |                           |        |     |              |      |            |       |
|                 | Yesterday              | 107                                       | 60        | 52                        | 3.7    | W   | 40.1         | 30.3 | 125        | 0     |                        |  |           |                           |        |     |              |      |            |       |

**Views of AQI Research Group:** Concentration levels of both the micron Particulate Pollutants decreased across all locations probably due to change in Wind Direction, increase in Solar Radiation and Maximum Temperature. The  $PM_{10.0}$  AQI at Prem Nagar and Science Faculty got restored to the *Good Category*. The Air Quality at Sanjay Place also improved to *Unhealthy for Sensitive Groups Category* w.r.t both  $PM_{2.5}$  and  $PM_{10.0}$ .

**Remarks of Revered Chairman-ACE:**

**Received: Thursday, 5 May 2022, 10:47 AM**  
**Perused: Subject to Legalese / Legalise / "Laws of the Land"**

**Thursday, 5 May 2022, 5:15 PM**

Good -G

Moderate- M

Unhealthy for Sensitive Groups- UHS

Unhealthy for All- UHA

Very Unhealthy for All- VUHA

Hazardous for All- HZA

Hazardous for All- HZA

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  $PM_{2.5}$  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 ( $PM_{2.5}$ ),  $C_{low}$ =Concentration Breakpoint  $\leq C$ ,  $C_{high}$ =Concentration Breakpoint  $\geq C$ ,  $I_{low}$ =Index Break point corresponding to  $C_{low}$ ,  $I_{high}$ =Index Breakpoint corresponding to  $C_{high}$