AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 4.10.2022 (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)

Today: 3-10-2022 to 4-10-2022 from 9:00 a.m. to 9:00 a.m. Yesterday: 2-10-2022 to 3-10-2022 from 9:00 a.m. to 9:00 a.m.

| L | DAYALBAGH (TIME WEIGHTED AVERAGE DATA) | | | | | | | | | | | | SANJAY PLACE (ARITHMETIC MEAN DATA) | | | | | | | | | | |
|--------------------|--|-----------|------------------|-----------|---------|-----------|--------|---------------|------|----------------------------|----------|-------------------|-------------------------------------|------------------|-----------|---------|-----------|--------|-------------------------|------|----------------|--------------|--|
| O C A T | PM2.5 | | PM ₁₀ | | | Meto | eorolo | ogical Parame | | eters | | PM _{2.5} | | PM ₁₀ | | | Meto | eorol | ogical Paran T °C | | ters | | |
| O N | Today | Yesterday | Today | Yesterday | RH % | WS m/s | W D | Max | Min | SR W/ m ² | RF mm | Today | Yesterday | Today | Yesterday | RH % | WS m/s | W D | Max | Min | SR W/ m² | RF m m | |
| 4 / 97 | 55 | 70 | 39 | 45 | 56 | 3.2 | NW | 36.6 | 26.0 | 176 | 0 | 93 | 124 | 83 | 84 | 53 | 3.8 | N | | 27.8 | 201 | 0 | |
| 3/34 | 72 | 95 | 31 | 40 | 56 | 3.2 | NW | 36.6 | 26.0 | 176 | 0 | | | | | | | | 37.9 | | | | |
| Science Faculty | 80 | 97 | 36 | 44 | 56 | 3.2 | NW | 36.6 | 26.0 | 176 | 0 | | | | | | | | | | | | |

Views of AQI Research Group: Particulate matter concentrations have further decreased due to the dispersal of pollutants on account of the decrease in Relative Humidity, increase in Wind Speed and Change in Wind Direction. The Air Quality Index values remain in the *Moderate* category w.r.t. PM_{2.5} and *Good* category w.r.t PM₁₀ at Dayalbagh.

At Sanjay Place also, the Air Quality Index has improved to *Moderate* category from *Unhealthy for Sensitive Groups* w.r.t. PM_{2.5} while, w.r.t. PM₁₀ it remains in the *Moderate* category.

Perused <u>By Way of Information Only,</u> Subject To Legalise/Legalese/"Laws of the Land".

Tuesday, 04-10-2022, 04:59 PM Received, Tuesday, 04-10-2022, 12:53 PM

Good 0 - 50

Moderate 51 - 100 Unhealthy for Sensitive Groups 101 - 150 Unhealthy for All 151 - 200 Very Unhealthy for All 201 - 300

Hazardous for All 301 - 400 Hazardous for All 401 - 500

NOTE: 1 A continuing 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 -

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

where: I = Air Quality Index; C = Pollutant Concentration (PM_{2.5}); C_{low} = Concentration Breakpoint \leq C; C_{high} = Concentration Breakpoint \geq C; L_{low} = Index Breakpoint corresponding to C_{high} ; *Multiplication Sign