

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 28.09.2021

Permissible Limits (24h Mean) - Indian NAAQS : PM<sub>10</sub> = 100; PM<sub>2.5</sub> = 60, all units are in µg/m<sup>3</sup>  
US EPA NAAQS: PM<sub>10</sub> = 150; PM<sub>2.5</sub> = 35 all units are in µg/m<sup>3</sup>

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)										SANJAY PLACE (ARITHMETIC MEAN DATA)									
		AQI				Meteorological Parameters @ Dayalbagh						AQI				Meteorological Parameters @ Sanjay Place					
		PM <sub>2.5</sub>		PM <sub>10</sub>								PM <sub>2.5</sub>		PM <sub>10</sub>							
		Today Sep 28- Sep 27	Yesterday Sep 27- Sep 26	Today Sep 28- Sep 27	Yesterday Sep 27- Sep 26							RH %	WS m/s	WD	T °C						
4 / 97	12:00 noon – 12:00 noon	57 S	78 S	26 G	41 G	77	3.1	ENE	30	124	02	78 S	80 S	52 S	38 G	68	1.5	SSW	NA	182	0
3 / 34	12:00 noon – 12:00 noon	57 S	78 S	24 G	34 G	78	3.1	ENE	30	106	02										
Science Faculty	12:00 noon – 12:00 noon	59 S	78 S	27 G	34 G	81	2.0	S	29	129	02										

Good- G                      Satisfactory - S                      Moderate- M                      Poor- P                      Very Poor- VP                      Severe - Sv

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), 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>

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 28.09.2021

**(Based on WHO 2021 Guidelines)**

Permissible Limits: (WHO, 2021) (24h Mean) : PM<sub>10</sub> = 45; PM<sub>2.5</sub> = 15, all units are in µg/m<sup>3</sup>

Sampling Site and Height	Duration of Sampling	DAYALBAGH@ 40 feet				SANJAY PLACE @ 40 feet			
		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> ]		PM <sub>2.5</sub> [µg/m <sup>3</sup> ] @ 40 feet	
		Today Sep 28- Sep 27	Yesterday Sep 27- Sep 26	Today Sep 28- Sep 27	Yesterday Sep 27- Sep 26	Today Sep 28- Sep 27	Yesterday Sep 27- Sep 26	Today Sep 28- Sep 27	Yesterday Sep 27- Sep 26
4/97	12:00-12:00 noon	✓+28↑	44	✓+15↑	25	+57↓	41	+25	26
3/34	12:00-12:00 noon	✓+26↑	37	✓+15↑	25				
Science Faculty	12:00-12:00 noon	✓+29↑	37	✓+16↑	25				

Concentration Within WHO, 2021 Limits

Concentration Beyond WHO, 2021 Limits