



Report on Ambient Air Quality & Noise Level Survey on Deepavali 2022



Tamil Nadu Pollution Control Board

76, Mount Salai, Guindy - 600 032

Deepavali Monitoring

TNPCB has carried out Ambient Air Quality and Noise Level Monitoring as per the directions of the CPCB vide Lr.No LB-11/5/2021-AIR LAB-HO-CPCB-HO dated 27.09.2022 based on this TNPCB has carried out the Ambient Air Quality monitoring at 11 Location (7 Manually operated Stations viz.,Besant Nagar, T.Nagar, Nungambakkam, Triplicane, Sowcarpet, Valasaravakkam, Tiruvottiyur and at 4 Continuous Ambient Air Quality Monitoring stations viz., Kodungaiyur, Koyambedu, Perungudi and Royapuram), Manually Operated Noise Level Survey was conducted in 7 Locations viz.,Besant Nagar, T.Nagar, Nungambakkam, Triplicane, Sowcapet, Valasaravakkam, and Tiruvottiyur like previous year.

This year, the festival of Deepavali fell on 24thOctober, 2022 (Monday), therefore it was instructed to conduct the noise level monitoring on Pre-Deepavali day i.e. 18th October, 2022 (Tuesday) & Deepavali day on 24th October, 2022 (Monday) and ambient air quality monitoring for consecutive 15 days commencing from 17th October, 2022 to 31st October, 2022(i.e. 7 days before and after Deepavali).

To maintain the uniformity in the sampling and data management throughout the country, The CPCB has issued the guidelines for sampling and data management protocol. Based on the direction Tamil Nadu Pollution Control Board has conducted the Survey for the year 2022 for ambient noise and air quality during Deepavali.

Results and Discussion: Noise Level

(A) Manual Monitoring Data 18.00 Hrs to 24.00 Hrs

For the year 2022 - Deepavali, Tamil Nadu Pollution Control Board, Advanced Environmental Laboratory, Chennai has carried out Ambient Noise Level Survey for Pre-Deepavali day 18.10.2022 (Normal Day) which was almost a week before Deepavali to capture the impact of the festival as a reference. The Location wise comparative Pre- Deepavali noise level data for the past three years (2020 to 2022) is given in table-1, the Pre-Deepavali values are only an indicative background noise while noise making activities (Firework) are not affecting Ambient Noise Level. The Noise Level are measured as Leq dB (A), (Decibels), by using Noise level meter which are all NABL calibrated.

This year two more locations viz. Valsaravakkam and Tiruvottiyur were added for Noise level monitoring in Chennai in addition to the previous year's five monitoring stations viz., Besant Nagar, T.Nagar, Nungambakkam, Triplicane and Sowcarpet. The highest noise level was recorded at Valasaravakkam on Pre Deepavali day (18.10.2022) and on Deepavali day (24.10.2022) the highest value was recorded at Tiruvottiyur as given in the following table t- 1.

Table 1: Pre Deepavali and Deepavali Noise Levels recorded in Chennai City

Sl. No.	Locations (Latitude, Longitude)	Pre-Deepavali	Deepavali
		(18.10.2022)	(24.10.2022)
		Leq dB(A)	Leq dB(A)
1	Besant Nagar (R) 12°59'52"N / 80°15'40"E	54.8	66.0 ↑
2	T. Nagar (C) 13°02'22"N / 80°14'17"E	63.7	77.7 ↑
3	Nungambakkam (R) 13°03'17"N / 80°14'21"E	55.8	78.6 ↑
4	Triplicane (R) 13°03'04"N / 80°16'39"E	57.6	73.3 ↑
5	Sowcarpet (C) 13°06'17"N / 80°16'27"E	58.6	71.1 ↑
6	Valasaravakkam (R) 13°02'27"N / 80°10'19"E	64.5	77.0 ↑
7	Tiruvottiyur (C) 13°09'22"N / 80°18'06"E	58.5	79.7 ↑

Note: All Values are in Leq dB(A)

The Values reported in Table- 1, should not be compared with prescribed noise level standards for designated areas as the time period of measurement (18.00Hrs to 24.00Hrs(Mid night)) do not match with the period specified in the prescribed standards (Day time: 6.00 Hrs to 22.00 Hrs and night time 22.00 Hrs to 6.00 Hrs).

National Air Quality Index

Air Quality Index is a tool for effective communication of air quality status to people in terms of health impacts and which are easy to understand. It transforms complex air quality data of various pollutants into a single number (index value), nomenclature and colour.

There are six AQI categories, namely Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe, which are illustrated in the following table.

AQI Value	Remarks/Colour Code	Possible Health Impacts
0-50	Good	Minimal impact
51-100	Satisfactory	Minor breathing discomfort to sensitive people
101-200	Moderate	Breathing discomfort to the people with lungs, asthma and heart diseases
201-300	Poor	Breathing discomfort to the most people on prolonged exposure
301-400	Very Poor	Respiratory illness on prolonged exposure
401-500	Severe	Affects healthy people and seriously impacts those with existing diseases

(B) Ambient Air Quality Data of manual monitoring: 6.00 Hrs to 6.00 Hrs.

The Ambient Air Quality Survey for manually operated station was conducted by using Respirable Dust Sampler as prescribed by CPCB, which are all NABL calibrated.

The station wise data for comparison of air quality on Pre-Deepavali and Deepavali days for the year 2022 are presented in the following tables.

Table 2: Ambient Air Quality Status at Besant Nagar during Deepavali days in 2022

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
Date	17.10.22 - 24.10.22	24.10.2022	25.10.22- 01.11.22	
PM₁₀	66.3	268	71	100µg/m ³
PM_{2.5}	28.4	178	28.4	60µg/m ³
SO₂	9.8	20	8.1	80µg/m ³
NO₂	17.4	26	17.3	80µg/m ³
AQI	41	345	71	

Table 3: Ambient Air Quality Status at T.Nagar during Deepavali days in 2022

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
Date	17.10.22 - 24.10.22	24.10.2022	25.10.22- 01.11.22	
PM₁₀	81.9	379	104.7	100µg/m ³
PM_{2.5}	40.4	213	38.1	60µg/m ³
SO₂	12.1	22	11.6	80µg/m ³
NO₂	20.9	18	20.1	80µg/m ³
AQI	78	372	102	

Table 4: Ambient Air Quality Status at Nungambakkam during Deepavali days in 2022

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
Date	17.10.22 - 24.10.22	24.10.2022	25.10.22- 01.11.22	
PM₁₀	59.9	560	84.1	100µg/m ³
PM_{2.5}	26.9	432	38.3	60µg/m ³
SO₂	10.7	26	10.9	80µg/m ³
NO₂	20.3	22	19.7	80µg/m ³
AQI	59	563	88	

Table 5: Ambient Air Quality Status at Triplicane during Deepavali days in 2022

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
Date	17.10.22 - 24.10.22	24.10.2022	25.10.22- 01.11.22	
PM ₁₀	74.9	512	86.4	100µg/m ³
PM _{2.5}	27.3	311	26.4	60µg/m ³
SO ₂	9.1	20	10.0	80µg/m ³
NO ₂	18.6	28	20.3	80µg/m ³
AQI	72	503	85	

Table 6: Ambient Air Quality Status at Sowcarpet during Deepavali days in 2022

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
Date	17.10.22 - 24.10.22	24.10.2022	25.10.22- 01.11.22	
PM ₁₀	87.7	739	103.9	100µg/m ³
PM _{2.5}	33.1	528	31.1	60µg/m ³
SO ₂	13.3	28	11.0	80µg/m ³
NO ₂	23.1	36	22.0	80µg/m ³
AQI	84	786	100	

Table 7: Ambient Air Quality Status at Valasaravakkam during Deepavali days in 2022

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
Date	17.10.22 - 24.10.22	24.10.2022	25.10.22- 01.11.22	
PM ₁₀	86.1	546	100.3	100µg/m ³
PM _{2.5}	37.6	296	29.0	60µg/m ³
SO ₂	13.1	16	11.7	80µg/m ³
NO ₂	21.7	24	21.0	80µg/m ³
AQI	87	545	96	

Table 8: Ambient Air Quality Status at Tiruvottiyur during Deepavali days in 2022

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
Date	17.10.22 - 24.10.22	24.10.2022	25.10.22- 01.11.22	
PM ₁₀	67.1	459	83.3	100µg/m ³
PM _{2.5}	27.6	245	37.4	60µg/m ³
SO ₂	13.3	19	12.6	80µg/m ³
NO ₂	22.4	32	22.3	80µg/m ³
AQI	67	436	83	

Comparison of Meteorology

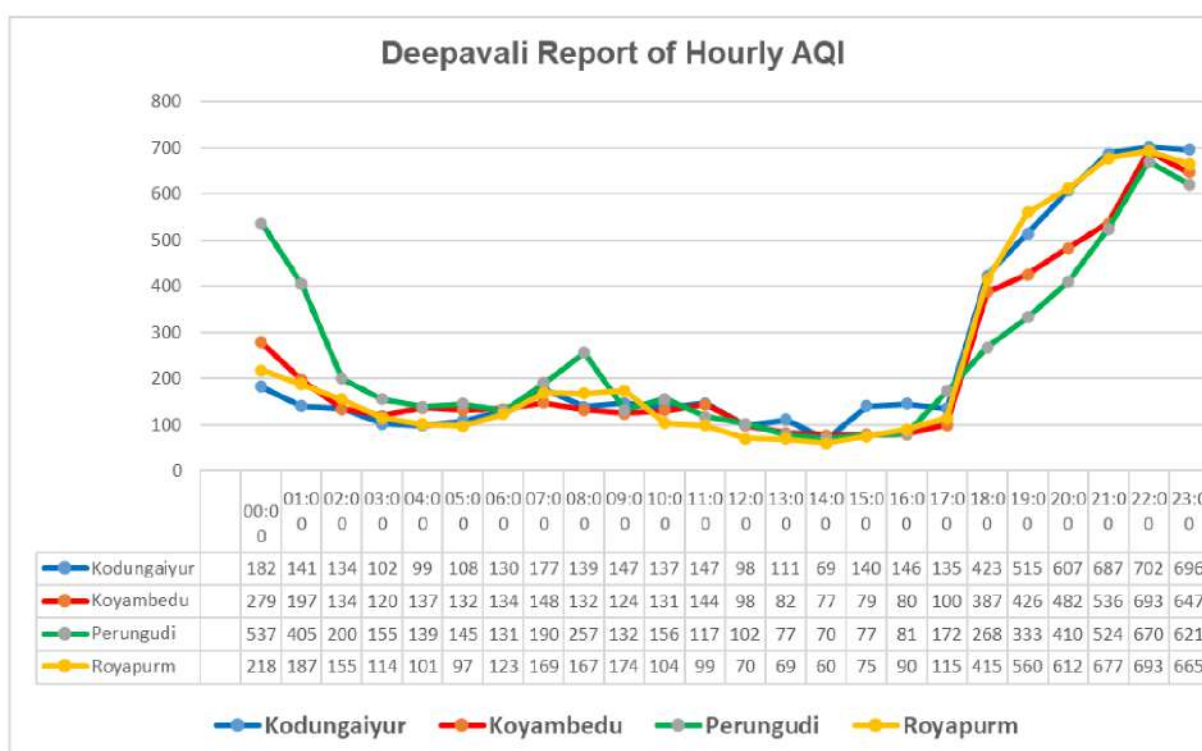
Comparative meteorology on Pre-Deepavali day and Deepavali day observed during last three years (2020, 2021 and 2022) is provided in below Table. Mean wind speed on Deepavali day which is lowest in the last three years creating unfavorable dispersion condition.

Table 9: Average meteorological parameter recorded in Chennai on Deepavali day

Parameters	2020		2021		2022	
	Pre-Deepavali	Deepavali	Pre-Deepavali	Deepavali	Pre-Deepavali	Deepavali
Date	7.11.20	14.11.20	28.10.21	04.11.21	17.10.22	24.10.22
Wind Speed in m/s	4.5	7.5	6.3	4.4	4.3	4.0
Temperature in °C	27	29	28	26	31	35
Relative Humidity in %	89	82	75	88	77	62


Continuous Ambient Air Quality Monitoring

In Chennai city, Tamil Nadu Pollution Control Board is operating Continuous Ambient Air Quality Monitoring (CAAQM) stations in the following locations viz., Kodungaiyur, Koyambedu, Perungudi, and Royapuram, continuously 24x7 and the hourly AQI values observed on Deepavali day (24.10.2022) is presented as a graphical depiction is given below.



Overall Observation

In Chennai, Highest AQI value on Deepavali day (24.10.2022) was recorded at Sowcarpet (786 - Severe), and the lowest among the monitoring station was recorded at Besant Nagar (345 – Very Poor), other station values are Nungambakkam (563-Severe), Valasaravakkam (545-Severe), Triplicane (503-Severe), Tiruvottiyur (436 - Severe), T.Nagar (372 – Very Poor).



Predominant contribution to AQI value was PM10 and PM2.5, which is attributed by the bursting of aerial crackers (Sky shots), night crackers and high decibel making chain crackers like 1000/10000 wallas are cracked, (from the above graph it is evident that the active bursting starts on Deepavali day (24.10.2022) from 17.00Hrs and continues to reach a peak at 22.00 hrs).

The deterioration of Air in Chennai city on the day of Deepavali is mainly due to low wind speed, Mean wind speed on Deepavali day was observed 4.0 m/s, which is lowest in the last three years creating an unfavorable condition for the dispersion of smoke during night hours where the humidity was very high from 17.00 hrs to 20.00 hrs on the day. As per the pre and post Deepavali Air quality monitoring results, there was a spike in Air Quality Index on Deepavali day (24.10.2022). During the entire monitoring period (17.10.2022 to 31.10.2022) except on the Deepavali day most of the AQI values were between 50 and 100 and corresponding criteria was Satisfactory.

The following graphical depiction of AQI for the entire monitoring period i.e. from 17.10.2022 to 31.10.2022 for the all seven manually operated AAQ monitoring stations is given below. The spurt in AQI on Deepavali day can be attributed to the active bursting of night and aerial crackers and the prevalence of a non-conducive meteorological condition for the dispersion to happen. As the time restriction for bursting of crackers (06 .00 Hrs to 7.00Hrs and 19.00 Hrs to 20.00 Hrs) was imposed, people by and large have actively indulged in bursting of crackers during the stipulated time period, (particularly in the evening time) may also be a reason to add.

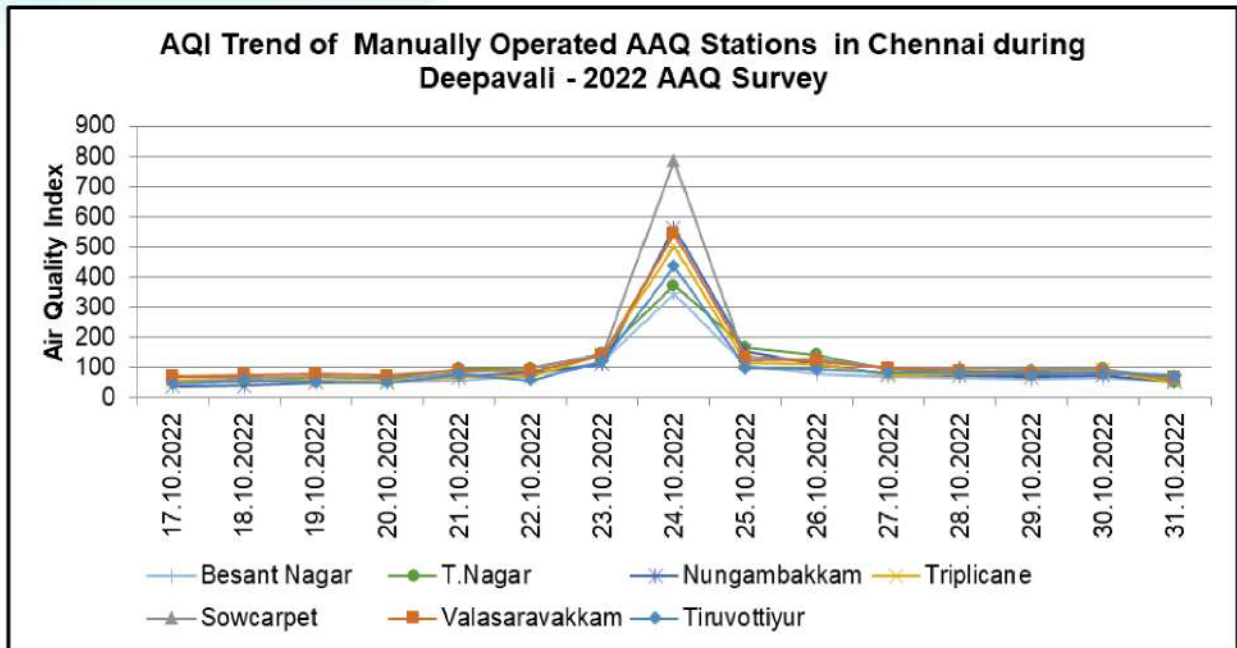


Figure 1: Deepavali 2022 AQI trend values recorded in Chennai City AAQ Stations

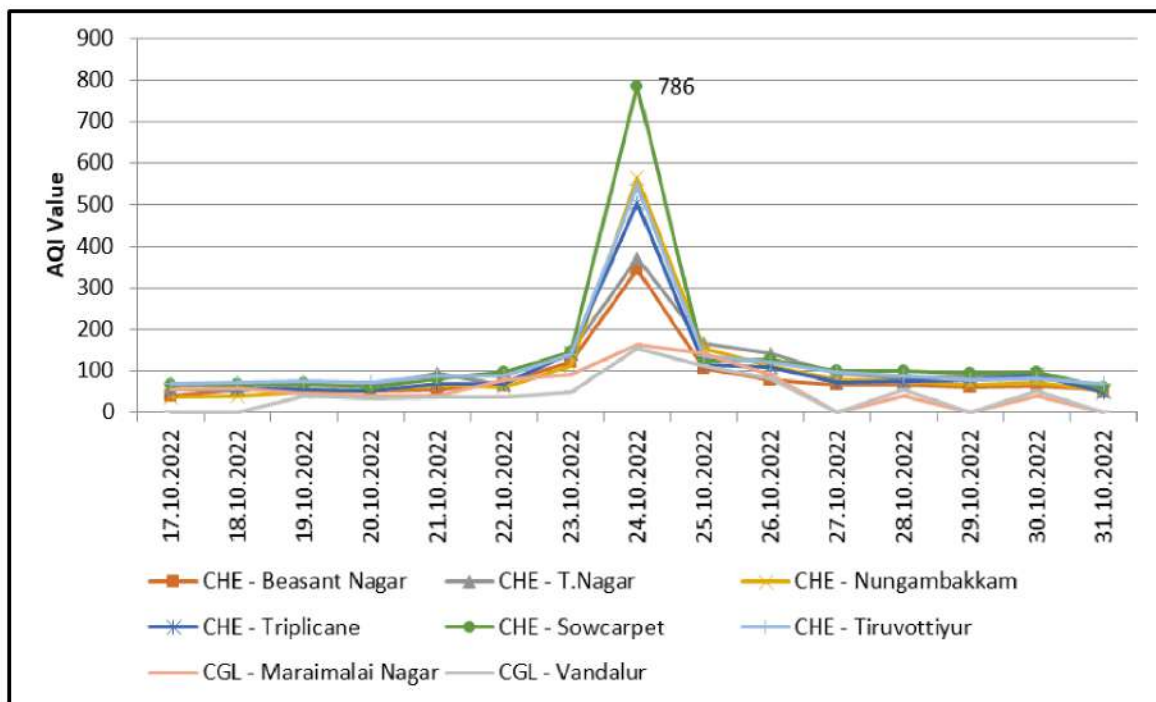


Figure 2: Deepavali 2022 AQI trend values recorded in Chennai Region AAQ Stations (Districts covered Chennai and Chengalpattu)

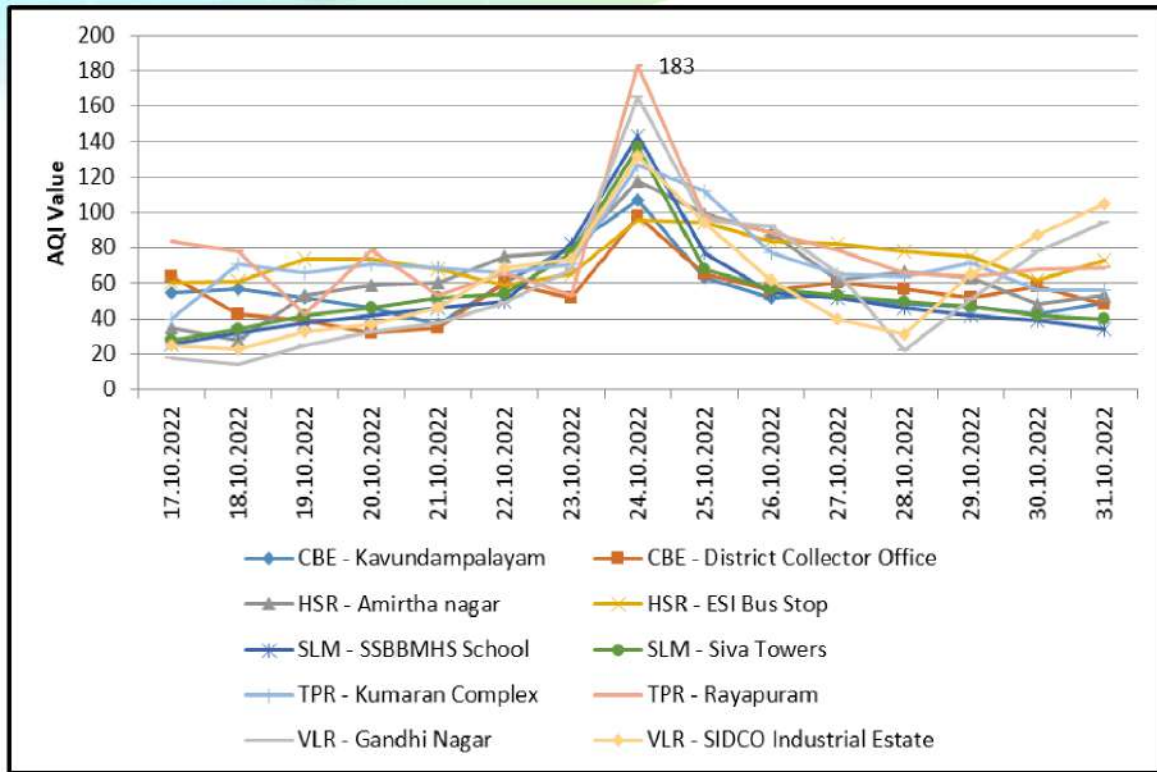


Figure 3: Deepavali 2022 AQI trend values recorded in Salem Region AAQ Stations (Districts covered Coimbatore, Hosur, Salem, Tiruppur, Vellore)

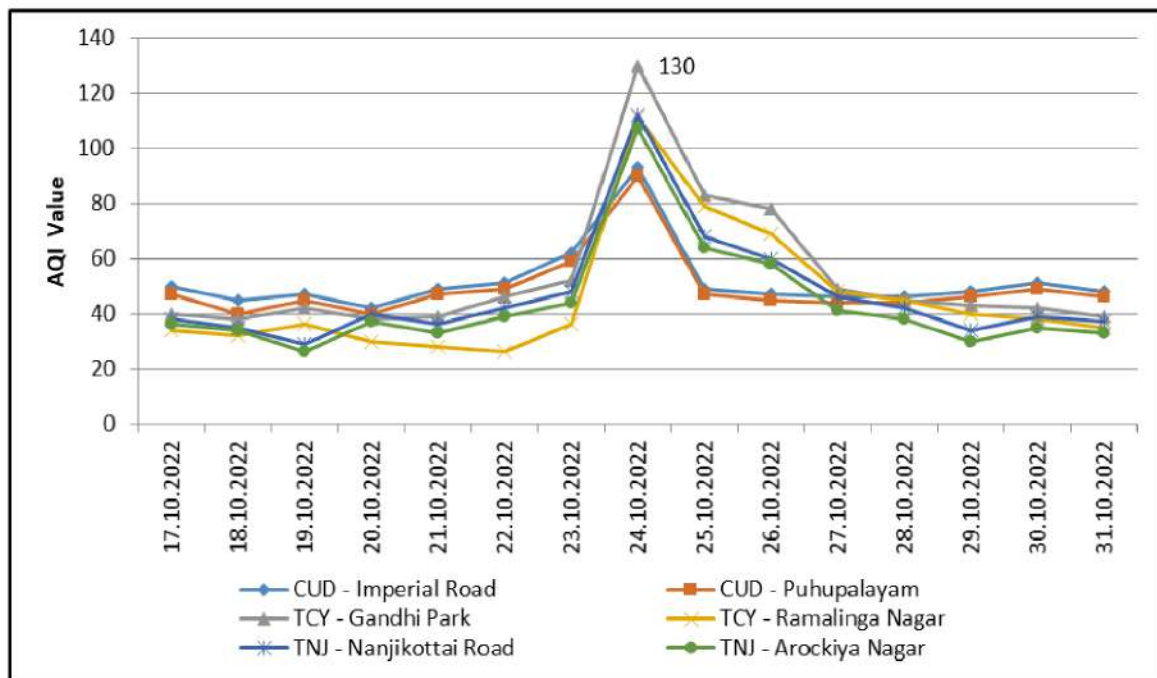


Figure 4: Deepavali 2022 AQI trend values recorded in Trichy Region AAQ Stations (Districts covered Cuddalore, Trichy, Thanjavur)

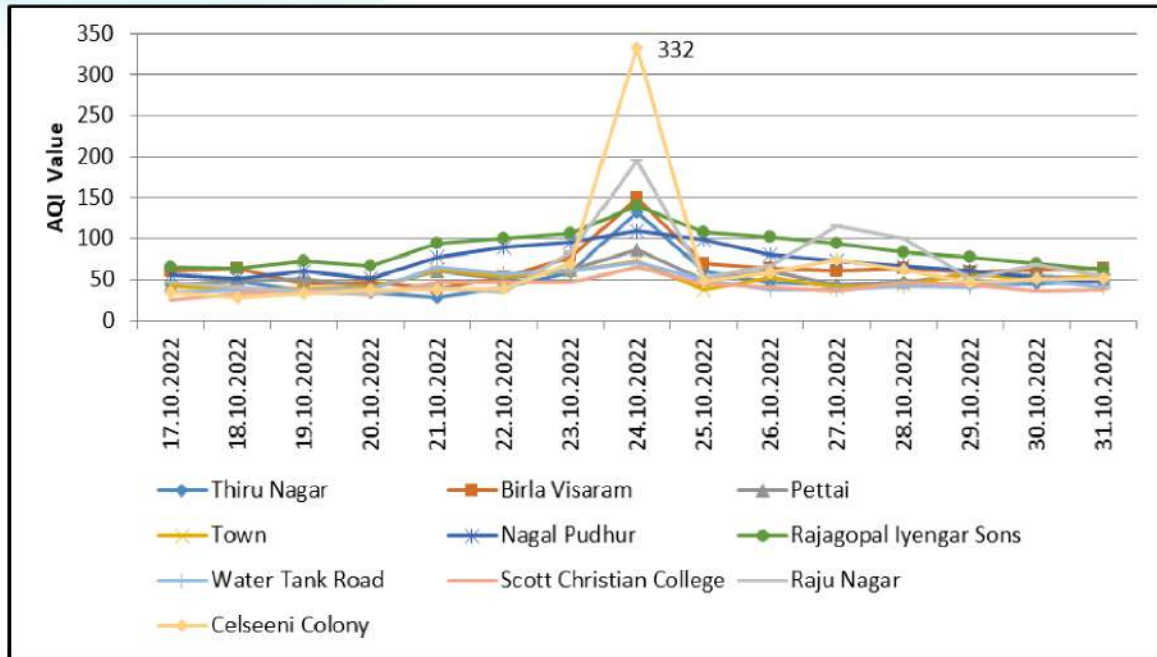


Figure 5: Deepavali 2022 AQI trend values recorded in Madurai Region AAQ Stations (Districts covered Madurai, Tirunelveli, Nagercoil, Thoothukudi)

DEEPAVALI NOISE LEVEL MONITORING STATION IN TAMIL NADU

Sl. No.	Locations	Station	Pre-Deepavali	Deepavali
			(17.10.22)	(24.10.22)
			L _{eq} dB(A)	Leq dB(A)
1	Chennai	Besant Nagar	55	66 ↑
2	Chennai	T.Nagar	64	78 ↑
3	Chennai	Nungambakkam	56	79 ↑
4	Chennai	Triplicane	58	73 ↑
5	Chennai	Sowcarpet	59	71 ↑
6	Chennai	Valasaravakkam	65	77 ↑
7	Chennai	Tiruvottiyur	59	80 ↑
8	Chengalpattu	Tambaram	-	-
9	Coimbatore	Kavundampalayam	59	77 ↑
10	Coimbatore	District Collectorate	58	63 ↑
11	Cuddalore	Imperial Road	64	67 ↑
12	Cuddalore	Pudupalayam	72	82 ↑
13	Dindigul	Nagal Pudur	53	81 ↑
14	Dindigul	Near Rajagopal Iyyangar & Sons	85	86 ↑
15	Hosur	ESI Hospital	58	67 ↑
16	Hosur	INEL Transit House	59	73 ↑
17	Madurai	Thirunagar	52	70 ↑
18	Madurai	Birla Vishram	57	80 ↑
19	Nagercoil	Water Tank Road	48	53 ↑
20	Salem	Sri Saradha Balamandhir Boys Matric Hr Sec School	52	75 ↑
21	Salem	Siva Towers	60	72 ↑
22	Tirunelveli	Vannarapettai	59	71 ↑
23	Tirunelveli	Pettai	52	61 ↑
24	Trichy	Thillai Nagar	63	75 ↑
25	Thanjavur	A.Arulanandhammal Nagar	57	71 ↑
26	Tiruppur	Kumaran Complex	56	56 =
27	Tiruppur	Rayapuram	48	64 ↑
28	Thoothukudi	Raju Nagar	56	78 ↑
29	Vellore	Gandhi Nagar	51	62 ↑
30	Vellore	SIDCO Industrial Estate	53	61 ↑

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENNAI

Name of the location: Besant Nagar (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI Value	
17.10.2022	7.0	14.0	41.0	18.0	41	Good
18.10.2022	6.3	16.0	55.0	19.0	55	Satisfactory
19.10.2022	8.0	17.0	56.0	23.0	56	Satisfactory
20.10.2022	10.0	19.0	52.0	22.0	52	Satisfactory
21.10.2022	9.0	14.0	56.0	31.0	56	Satisfactory
22.10.2022	12.0	18.0	73.0	38.0	73	Satisfactory
23.10.2022	16.0	24.0	131.0	48.0	121	Moderate
Avg	9.8	17.4	66.3	28.4		
24.10.2022	20.0	26.0	268.0	178.0	345.0	Very Poor
25.10.2022	9.0	20.0	107.0	58.0	105	Moderate
26.10.2022	8.0	18.0	79.0	24.0	79	Satisfactory
27.10.2022	9.0	19.0	68.0	24.0	68	Satisfactory
28.10.2022	7.0	17.0	66.0	26.0	66	Satisfactory
29.10.2022	9.0	16.0	60.0	22.0	60	Satisfactory
30.10.2022	7.0	15.0	63.0	26.0	63	Satisfactory
31.10.2022	8.0	16.0	54.0	19.0	54	Satisfactory
Avg	8.1	17.3	71.0	28.4	70.7	
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENNAI

Name of the location: T. Nagar (C)						AQI Remarks
Date	Regulatory Parameters					
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	12.0	16.0	37.0	35.0	58	Satisfactory
18.10.2022	11.0	20.0	51.0	22.0	51	Satisfactory
19.10.2022	12.0	22.0	68.0	36.0	68	Satisfactory
20.10.2022	11.0	20.0	64.0	29.0	64	Satisfactory
21.10.2022	13.0	22.0	94.0	51.0	94	Satisfactory
22.10.2022	11.0	23.0	91.0	58.0	67	Satisfactory
23.10.2022	15.0	23.0	168.0	52.0	145	Moderate
Avg	12.1	20.9	81.9	40.4		
24.10.2022	18.0	24.0	379.0	213.0	372.0	Very Poor
25.10.2022	13.0	21.0	162.0	80.0	167	Moderate
26.10.2022	12.0	22.0	162.0	37.0	141	Moderate
27.10.2022	11.0	20.0	93.0	31.0	93	Satisfactory
28.10.2022	14.0	21.0	81.0	27.0	81	Satisfactory
29.10.2022	10.0	23.0	89.0	34.0	89	Satisfactory
30.10.2022	12.0	18.0	94.0	32.0	94	Satisfactory
31.10.2022	9.0	16.0	52.0	26.0	52	Satisfactory
Avg	11.6	20.1	104.7	38.1	102.4	
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENNAI

Name of the location: Nungambakkam (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	10.0	18.0	36.0	22.0	37	Good
18.10.2022	10.0	19.0	39.0	19.0	39	Good
19.10.2022	11.0	21.0	47.0	29.0	48	Good
20.10.2022	9.0	22.0	51.0	22.0	51	Satisfactory
21.10.2022	8.0	16.0	68.0	26.0	68	Satisfactory
22.10.2022	13.0	22.0	61.0	28.0	61	Satisfactory
23.10.2022	14.0	24.0	117.0	42.0	111	Moderate
Avg	10.7	20.3	59.9	26.9		
24.10.2022	22.0	26.0	560.0	432.0	563.0	Severe
25.10.2022	13.0	21.0	123.0	76.0	153	Moderate
26.10.2022	12.0	20.0	119.0	34.0	113	Moderate
27.10.2022	10.0	22.0	78.0	35.0	78	Satisfactory
28.10.2022	11.0	19.0	75.0	34.0	75	Satisfactory
29.10.2022	12.0	21.0	67.0	33.0	67	Satisfactory
30.10.2022	10.0	20.0	74.0	32.0	74	Satisfactory
31.10.2022	8.0	15.0	53.0	24.0	53	Satisfactory
Avg	10.9	19.7	84.1	38.3		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENNAI

Name of the location: Triplicane (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	11.0	16.0	56.0	27.0	56	Satisfactory
18.10.2022	9.0	18.0	58.0	17.0	58	Satisfactory
19.10.2022	10.0	17.0	55.0	16.0	55	Satisfactory
20.10.2022	9.0	18.0	53.0	24.0	53	Satisfactory
21.10.2022	6.0	22.0	69.0	28.0	69	Satisfactory
22.10.2022	7.0	18.0	69.0	32.0	69	Satisfactory
23.10.2022	12.0	21.0	164.0	47.0	143	Moderate
Avg	9.1	18.6	74.9	27.3		
24.10.2022	20.0	28.0	512.0	311.0	503.0	Severe
25.10.2022	19.0	24.0	124.0	12.0	116	Moderate
26.10.2022	10.0	24.0	114.0	32.0	109	Moderate
27.10.2022	8.0	20.0	73.0	28.0	73	Satisfactory
28.10.2022	9.0	18.0	76.0	31.0	76	Satisfactory
29.10.2022	7.0	17.0	78.0	28.0	78	Satisfactory
30.10.2022	10.0	22.0	90.0	32.0	90	Satisfactory
31.10.2022	7.0	17.0	50.0	22.0	50	Good
Avg	10.0	20.3	86.4	26.4		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENNAI

Name of the location: Sowcarpet (C)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	13.0	18.0	68.0	30.0	68	Satisfactory
18.10.2022	12.0	19.0	66.0	23.0	66	Satisfactory
19.10.2022	13.0	22.0	70.0	28.0	70	Satisfactory
20.10.2022	14.0	23.0	62.0	11.0	62	Satisfactory
21.10.2022	8.0	20.0	82.0	28.0	82	Satisfactory
22.10.2022	11.0	28.0	98.0	54.0	98	Satisfactory
23.10.2022	22.0	32.0	168.0	58.0	145	Moderate
Avg	13.3	23.1	87.7	33.1		
24.10.2022	28.0	36.0	739.0	528.0	786	Severe
25.10.2022	10.0	22.0	137.0	32.0	125	Moderate
26.10.2022	11.0	22.0	141.0	34.0	127	Moderate
27.10.2022	12.0	20.0	100.0	29.0	100	Satisfactory
28.10.2022	10.0	21.0	99.0	34.0	99	Satisfactory
29.10.2022	13.0	26.0	93.0	31.0	93	Satisfactory
30.10.2022	12.0	25.0	96.0	33.0	96	Satisfactory
31.10.2022	9.0	18.0	61.0	25.0	61	Satisfactory
Avg	11.0	22.0	103.9	31.1		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENNAI

Name of the location: Valasaravakkam (C)						AQI Remarks
Date	Regulatory Parameters					
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	12.0	21.0	71.0	23.0	71	Satisfactory
18.10.2022	11.0	22.0	74.0	27.0	74	Satisfactory
19.10.2022	14.0	23.0	76.0	30.0	76	Satisfactory
20.10.2022	13.0	23.0	72.0	30.0	72	Satisfactory
21.10.2022	12.0	19.0	89.0	48.0	89	Satisfactory
22.10.2022	14.0	20.0	64.0	52.0	87	Satisfactory
23.10.2022	16.0	24.0	157.0	53.0	138	Moderate
Avg	13.1	21.7	86.1	37.6		
24.10.2022	20.0	26.0	546.0	296.0	545	Severe
25.10.2022	15.0	19.0	153.0	27.0	135	Moderate
26.10.2022	12.0	20.0	131.0	29.0	121	Moderate
27.10.2022	12.0	21.0	98.0	26.0	98	Satisfactory
28.10.2022	13.0	25.0	89.0	33.0	89	Satisfactory
29.10.2022	10.0	24.0	80.0	28.0	80	Satisfactory
30.10.2022	11.0	21.0	82.0	34.0	82	Satisfactory
31.10.2022	9.0	17.0	69.0	26.0	69	Satisfactory
Avg	11.7	21.0	100.3	29.0		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENNAI

Name of the location: Tiruvottiyur (C)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	12.0	20.0	43.0	28.0	43	Good
18.10.2022	13.0	21.0	57.0	22.0	57	Satisfactory
19.10.2022	12.0	22.0	52.0	24.0	52	Satisfactory
20.10.2022	13.0	20.0	50.0	24.0	50	Satisfactory
21.10.2022	11.0	26.0	79.0	21.0	79	Satisfactory
22.10.2022	16.0	24.0	58.0	32.0	58	Satisfactory
23.10.2022	16.0	24.0	131.0	42.0	131	Moderate
Avg	13.3	22.4	67.1	27.6		
24.10.2022	19.0	32.0	459.0	245.0	436	Very Poor
25.10.2022	14.0	28.0	98.0	53.0	98	Satisfactory
26.10.2022	12.0	24.0	92.0	40.0	92	Satisfactory
27.10.2022	13.0	21.0	82.0	39.0	82	Satisfactory
28.10.2022	14.0	23.0	80.0	37.0	80	Satisfactory
29.10.2022	13.0	20.0	77.0	30.0	77	Satisfactory
30.10.2022	12.0	22.0	81.0	38.0	81	Satisfactory
31.10.2022	10.0	18.0	73.0	25.0	73	Satisfactory
Avg	12.6	22.3	83.3	37.4		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENGALPET

Name of the location: MM Nagar (R)							
Date	Regulatory Parameters					AQI	AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI		
17.10.2022	7.0	14.0	55.0	14.0	55	Satisfactory	
18.10.2022	9.0	13.0	59.0	16.0	59	Satisfactory	
19.10.2022	8.0	14.0	45.0	18.0	45	Good	
20.10.2022	6.0	12.0	40.0	19.0	40	Good	
21.10.2022	7.0	13.0	39.0	16.0	39	Good	
22.10.2022	10.0	15.0	80.0	18.0	80	Satisfactory	
23.10.2022	12.0	18.0	92.0	25.0	92	Satisfactory	
Avg	8.4	14.1	58.6	18.0			
24.10.2022	22.0	28.0	193.0	72.0	162	Moderate	
25.10.2022	19.0	26.0	161.0	68.0	141	Moderate	
26.10.2022	10.0	15.0	90.0	24.0	90	Satisfactory	
27.10.2022	Rain	Rain	Rain	Rain	-	-	
28.10.2022	6.0	12.0	40.0	14.0	40	Good	
29.10.2022	Rain	Rain	Rain	Rain	-	-	
30.10.2022	60.0	12.0	39.0	13.0	39	Good	
31.10.2022	Rain	Rain	Rain	Rain	-	-	
Avg	23.8	16.3	82.5	29.8			
* All Values (24 hourly Average) are in (µg/m ³)							

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CHENGALPET

Name of the location: Vandalur (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	-	-	-	-	-	-
18.10.2022	-	-	-	-	-	-
19.10.2022	6.0	17.0	41.0	12.0	41.0	Good
20.10.2022	7.0	15.0	35.0	10.0	35.0	Good
21.10.2022	6.0	12.0	36.0	11.0	36.0	Good
22.10.2022	7.0	13.0	38.0	9.0	38.0	Good
23.10.2022	9.0	18.0	48.0	18.0	48.0	Good
Avg	7.0	15.0	39.6	12.0		
24.10.2022	18.0	24.0	181.0	65.0	154.0	Moderate
25.10.2022	14.0	20.0	112.0	62.0	112.0	Moderate
26.10.2022	11.0	19.0	82.0	49.0	82.0	Satisfactory
27.10.2022	Rain	Rain	Rain	Rain	-	-
28.10.2022	7.0	17.0	55.0	27.0	55.0	Satisfactory
29.10.2022	Rain	Rain	Rain	Rain	-	-
30.10.2022	7.0	18.0	53.0	25.0	53.0	Satisfactory
31.10.2022	Rain	Rain	Rain	Rain	-	-
Avg	9.8	18.5	75.5	40.8		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

COIMBATORE

Name of the location: Kavundampalayam (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	7.7	17.2	55.0	16.0	55	Satisfactory
18.10.2022	8.3	17.4	57.0	16.0	57	Satisfactory
19.10.2022	7.4	16.0	52.0	24.0	52	Satisfactory
20.10.2022	5.8	15.9	46.0	30.0	46	Good
21.10.2022	5.4	15.3	37.0	23.0	37	Good
22.10.2022	7.6	19.0	60.0	27.0	60	Satisfactory
23.10.2022	11.5	24.6	81.0	45.0	81	Satisfactory
Avg	7.7	17.9	55.4	25.9		
24.10.2022	15.5	32.0	110.0	54.0	107	Moderate
25.10.2022	6.7	16.6	63.0	27.0	63	Satisfactory
26.10.2022	5.6	16.1	52.0	23.0	52	Satisfactory
27.10.2022	7.3	17.7	53.0	22.0	53	Satisfactory
28.10.2022	6.3	14.8	48.0	25.0	48	Good
29.10.2022	5.1	16.7	47.0	28.0	47	Good
30.10.2022	7.5	17.6	43.0	18.0	43	Good
31.10.2022	6.0	15.2	49.0	30.0	49	Good
Avg	6.4	16.4	50.7	24.7		

* All Values (24 hourly Average) are in (µg/m³)

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

COIMBATORE

Name of the location: District Collector Office (M)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	8.1	17.2	64.0	16.0	64	Satisfactory
18.10.2022	6.4	15.6	43.0	22.0	43	Good
19.10.2022	6.3	13.2	39.0	19.0	39	Good
20.10.2022	6.8	16.5	32.0	14.0	32	Good
21.10.2022	5.6	15.1	35.0	17.0	35	Good
22.10.2022	7.2	18.7	60.0	24.0	60	Satisfactory
23.10.2022	11.1	29.5	52.0	36.0	52	Satisfactory
Avg	7.4	18.0	46.4	21.1		
24.10.2022	15.0	29.4	98.0	48.0	98	Satisfactory
25.10.2022	6.6	16.1	65.0	34.0	65	Satisfactory
26.10.2022	6.4	16.8	56.0	29.0	56	Satisfactory
27.10.2022	7.3	17.4	60.0	34.0	60	Satisfactory
28.10.2022	7.7	17.2	57.0	29.0	57	Satisfactory
29.10.2022	7.0	16.4	52.0	20.0	52	Satisfactory
30.10.2022	6.7	16.6	56.0	25.0	58	Satisfactory
31.10.2022	7.5	17.7	48.0	21.0	48	Good
Avg	7.0	16.9	56.3	27.4		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CUDDALORE

Name of the location: Imperial Road (C)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	17.9	21.6	49.8	18.0	50	Good
18.10.2022	13.5	15.3	45.0	16.0	45	Good
19.10.2022	16.4	19.3	47.0	17.0	47	Good
20.10.2022	13.7	16.2	42.0	14.0	42	Good
21.10.2022	18.4	21.1	49.0	19.0	49	Good
22.10.2022	21.3	25.7	51.0	21.0	51	Satisfactory
23.10.2022	29.3	32.7	62.0	24.0	62	Satisfactory
Avg	18.6	21.7	49.4	18.4		
24.10.2022	38.2	41.2	93.0	40.0	93	Satisfactory
25.10.2022	21.7	24.1	49.0	19.0	49	Good
26.10.2022	20.8	23.2	47.0	18.0	47	Good
27.10.2022	20.7	23.2	46.0	17.0	46	Good
28.10.2022	17.8	20.1	46.0	17	46	Good
29.10.2022	16.6	19.1	48.0	19	48	Good
30.10.2022	20.6	23.8	51.0	22	51	Satisfactory
31.10.2022	17.7	19.5	48.0	20	48	Good
Avg	19.4	21.9	47.9	18.9		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

CUDDALORE

Name of the location: Pudupalayam (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	15.2	18.5	47.4	16.0	47	Good
18.10.2022	10.8	13.5	40.0	12.0	40	Good
19.10.2022	14.1	17.3	45.0	15.0	45	Good
20.10.2022	12.3	14.2	40.0	13.0	40	Good
21.10.2022	16.7	19.1	47.0	17.0	47	Good
22.10.2022	19.7	22.4	49.0	19.0	49	Good
23.10.2022	26.6	29.8	59.0	22.0	59	Satisfactory
Avg	16.5	19.3	46.8	16.3		
24.10.2022	36.5	38.3	90.0	38.0	90	Satisfactory
25.10.2022	19.1	22.6	47.0	18.0	47	Good
26.10.2022	18.4	21.2	45.0	17.0	45	Good
27.10.2022	18.1	22.2	44.0	16.0	44	Good
28.10.2022	16.4	19.2	44.0	15	44	Good
29.10.2022	15.9	18.6	46.0	17.0	46	Good
30.10.2022	18.7	21.8	49.0	19.0	49	Good
31.10.2022	15.8	17.5	46.0	18.0	46	Good
Avg	17.5	20.4	45.9	17.1		
* All Values (24 hourly Average) are in (µg/m ³)						

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MADURAI

Name of the location: Thiru Nagar (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	11.0	16.0	44.0	19.0	44	Good
18.10.2022	13.0	18.0	48.0	21.0	48	Good
19.10.2022	10.0	15.0	36.0	16.0	36	Good
20.10.2022	8.0	13.0	34.0	14.0	34	Good
21.10.2022	7.0	11.0	29.0	12.0	29	Good
22.10.2022	11.0	17.0	41.0	17.0	41	Good
23.10.2022	22.0	31.0	59.0	26.0	59	Satisfactory
Avg	11.7	17.3	41.6	17.9		
24.10.2022	31.0	40.0	148.0	42.0	132	Moderate
25.10.2022	21.0	28.0	61.0	25.0	61	Satisfactory
26.10.2022	15.0	21.0	46.0	20.0	46	Good
27.10.2022	12.0	17.0	44.0	22.0	44	Good
28.10.2022	14.0	19.0	47.0	19.0	47	Good
29.10.2022	15.0	21.0	43.0	18.0	43	Good
30.10.2022	11.0	16.0	45.0	21.0	45	Good
31.10.2022	13.0	19.0	48.0	23.0	48	Good
Avg	14.4	20.1	47.7	21.1		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

MADURAI

Name of the location: Birla Visram (M)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	16.0	22.0	61.0	25.0	61	Satisfactory
18.10.2022	18.0	23.0	64.0	26.0	64	Satisfactory
19.10.2022	14.0	18.0	45.0	19.0	45	Good
20.10.2022	9.0	15.0	47.0	18.0	47	Good
21.10.2022	8.0	12.0	39.0	15.0	39	Good
22.10.2022	12.0	19.0	53.0	24.0	53	Satisfactory
23.10.2022	28.0	39.0	77.0	30.0	77	Satisfactory
Avg	15.0	21.1	55.1	22.4		
24.10.2022	38.0	47.0	174.0	49.0	149	Moderate
25.10.2022	24.0	31.0	69.0	27.0	69	Satisfactory
26.10.2022	19.0	26.0	63.0	24.0	63	Satisfactory
27.10.2022	15.0	20.0	61.0	23.0	61	Satisfactory
28.10.2022	18.0	23.0	64.0	25.0	64	Satisfactory
29.10.2022	17.0	22.0	59.0	22.0	59	Satisfactory
30.10.2022	16.0	21.0	62.0	24.0	62	Satisfactory
31.10.2022	15.0	21.0	64.0	23.0	64	Satisfactory
Avg	17.7	23.4	63.1	24.0		
* All Values (24 hourly Average) are in (µg/m ³)						

Salem - Sri Saradha Balamandhir Boys Metric Higher Secondary School

Tamil Nadu Pollution Control Board
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SALEM

Name of the location: Sri Saradha Balamandhir Boys Metric Higher Second School (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	4.8	9.8	26.0	12.0	26	Good
18.10.2022	6.2	11.1	32.0	15.0	32	Good
19.10.2022	8.0	12.7	38.0	16.0	38	Good
20.10.2022	9.6	16.2	42.0	18.0	42	Good
21.10.2022	10.4	18.6	46.0	20.0	46	Good
22.10.2022	12.0	20.0	50.0	22.0	50	Good
23.10.2022	23.0	30.0	82.0	35.0	82	Satisfactory
Avg	10.6	16.9	45.1	19.7		
24.10.2022	30.0	50.0	164.0	34.0	143	Moderate
25.10.2022	21.0	27.0	77.0	34.0	77	Satisfactory
26.10.2022	17.0	25.0	55.0	26.0	55	Satisfactory
27.10.2022	15.0	21.2	52.0	24.0	52	Satisfactory
28.10.2022	11.0	13.1	46.0	22.0	46	Good
29.10.2022	10.0	12.0	42.0	21.0	42	Good
30.10.2022	6.4	11.0	39.0	18.0	39	Good
31.10.2022	5.5	10.3	34.0	14.0	34	Good
Avg	12.3	17.1	49.3	22.7		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

SALEM

Name of the location: Siva Tower (C&I)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	5.2	10.6	28.0	13.0	28	Good
18.10.2022	6.6	11.3	34.0	16.0	34	Good
19.10.2022	10.4	12.5	42.0	20.0	42	Good
20.10.2022	11.0	13.2	46.0	22.0	46	Good
21.10.2022	12.6	15.5	52.0	24.0	52	Satisfactory
22.10.2022	13.0	17.0	54.0	25.0	54	Satisfactory
23.10.2022	20.0	28.0	77.0	33.0	77	Satisfactory
Avg	11.3	15.4	47.6	21.9		
24.10.2022	26.0	48.0	156.0	42.0	137	Moderate
25.10.2022	18.2	26.0	68.0	30.0	68	Satisfactory
26.10.2022	15.0	17.6	57.0	28.0	57	Satisfactory
27.10.2022	12.0	15.0	53.0	24.0	53	Satisfactory
28.10.2022	11.0	13.6	50.0	22.0	50	Good
29.10.2022	10.0	12.9	47.0	21.0	47	Good
30.10.2022	9.0	11.5	42.0	20.0	42	Good
31.10.2022	6.0	10.5	40.0	16.0	40	Good
Avg	11.6	15.3	51.0	23.0		
* All Values (24 hourly Average) are in (µg/m ³)						

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Ambient Air Quality data during Deepavali festival from
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TIRUNELVELI

Name of the location: Pettai(S)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	5.8	16.5	43.0	25.0	43	Good
18.10.2022	8.5	15.9	47.9	21.0	48	Good
19.10.2022	7.9	15.0	51.0	28.0	51	Satisfactory
20.10.2022	7.0	12.8	39.6	27.8	40	Good
21.10.2022	6.1	16.5	60.9	19.4	61	Satisfactory
22.10.2022	7.2	21.0	51.3	32.6	51	Satisfactory
23.10.2022	7.0	26.0	61.5	8.2	62	Satisfactory
Avg	7.1	17.7	50.7	23.1		
24.10.2022	9.9	28.3	86.9	14.9	87	Satisfactory
25.10.2022	9.2	19.9	49.9	11.3	50	Good
26.10.2022	10.8	12.2	61.2	14.7	61	Satisfactory
27.10.2022	10.9	16.2	44.0	12.5	44	Good
28.10.2022	5.4	12.4	46.5	12.5	47	Good
29.10.2022	6.2	13.3	57.0	23.5	57	Satisfactory
30.10.2022	7.2	12.9	55.0	12.1	55	Satisfactory
31.10.2022	7.4	15.2	50.9	13.2	51	Satisfactory
Avg	8.1	14.6	52.1	14.3		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
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THIRUNELVELI

Name of the location: Town (R)							
Date	Regulatory Parameters					AQI	AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI		
17.10.2022	3.5	15.0	42.0	IF	42	Good	
18.10.2022	4.5	10.8	37.4	IF	37	Good	
19.10.2022	4.2	11.0	39.0	20.5	39	Good	
20.10.2022	3.8	10.7	40.0	28.0	40	Good	
21.10.2022	4.9	12.8	61.5	34.0	62	Satisfactory	
22.10.2022	4.2	12.4	53.7	28.0	54	Satisfactory	
23.10.2022	7.4	18.8	60.5	32.5	61	Satisfactory	
Avg	4.6	13.1	47.7	28.6			
24.10.2022	9.0	19.7	73.0	37.5	73	Satisfactory	
25.10.2022	6.4	14.3	36.8	28.8	37	Good	
26.10.2022	5.5	10.8	52.9	35.0	53	Satisfactory	
27.10.2022	6.9	11.0	41.4	18.7	41	Good	
28.10.2022	6.7	8.5	43.0	35.8	43	Good	
29.10.2022	6.4	8.5	58.0	30.2	58	Satisfactory	
30.10.2022	6.9	9.8	49.4	34.0	49	Good	
31.10.2022	4.2	8.9	56.4	6.0	56	Satisfactory	
Avg	6.1	10.3	48.3	26.9			
* All Values (24 hourly Average) are in (µg/m ³)							

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

TIRUNELVELI - Nagercoil

Name of the location: Water Tank Road (M)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	6.8	8.9	34.0	12.1	34	Good
18.10.2022	3.8	9.0	37.0	13.9	37	Good
19.10.2022	6.5	7.9	38.0	10.0	38	Good
20.10.2022	5.7	8.6	38.0	11.2	38	Good
21.10.2022	4.5	8.2	64.7	18.5	65	Satisfactory
22.10.2022	5.2	10.7	57.0	15.1	57	Satisfactory
23.10.2022	11.2	11.6	60.7	20.4	61	Satisfactory
Avg	6.2	9.3	47.1	14.5		
24.10.2022	9.7	13.9	71.0	22.6	71	Satisfactory
25.10.2022	6.4	14.2	49.6	23.0	50	Good
26.10.2022	8.0	15.5	38.4	10.4	38	Good
27.10.2022	5.9	14.5	36.9	11.0	37	Good
28.10.2022	4.8	7.3	41.5	12.1	42	Good
29.10.2022	7.9	9.3	40.4	15.6	40	Good
30.10.2022	5.5	8.2	49.4	16.0	49	Good
31.10.2022	5.0	10.8	40.4	14.6	40	Good
Avg	6.2	11.4	42.4	14.7		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
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TIRUNELVELI - Nagercoil

Name of the location: Nagercoil Scott Christian College (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	3.5	6.4	26.0	8.3	26	Good
18.10.2022	5.0	9.6	33.0	9.1	33	Good
19.10.2022	6.2	6.1	37.0	10.5	37	Good
20.10.2022	5.5	5.6	32.0	9.4	32	Good
21.10.2022	3.7	5.5	46.0	12.5	46	Good
22.10.2022	4.8	7.2	46.2	13.5	46	Good
23.10.2022	9.9	10.4	47.0	17.3	47	Good
Avg	5.5	7.3	38.2	11.5		
24.10.2022	9.2	12.0	64.9	23.9	65	Satisfactory
25.10.2022	6.5	11.7	44.9	23.6	45	Good
26.10.2022	9.9	13.1	40.8	12.0	41	Good
27.10.2022	7.7	15.1	36.3	12.4	36	Good
28.10.2022	4.5	7.8	46.8	20.5	47	Good
29.10.2022	5.8	5.8	43.5	18.6	44	Good
30.10.2022	4.8	6.8	36.0	9.7	36	Good
31.10.2022	4.2	9.9	37.6	10.3	38	Good
Avg	6.2	10.0	40.8	15.3		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
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TRICHY

Name of the location: Gandhi Park(C)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	12.7	15.4	40.0	15.0	40	Good
18.10.2022	10.3	13.6	36.0	12.0	38	Good
19.10.2022	13.3	16.8	42.0	16.0	42	Good
20.10.2022	16.9	19.6	38.0	13.0	38	Good
21.10.2022	15.8	18.6	39.0	12.0	39	Good
22.10.2022	16.4	20.8	46.0	15.0	46	Good
23.10.2022	17.2	18.8	52.0	21.0	52	Satisfactory
Avg	14.7	17.7	41.9	14.9		
24.10.2022	21.7	26.8	128.0	69.0	130	Moderate
25.10.2022	18.6	22.8	79.0	38.0	83	Satisfactory
26.10.2022	19.8	24.8	78.0	32.0	78	Satisfactory
27.10.2022	11.4	14.8	49.0	18.0	49	Good
28.10.2022	10.6	13.6	45.0	15.0	45	Good
29.10.2022	13.4	16.2	43.0	13.0	43	Good
30.10.2022	12.2	15.5	42.0	13.0	42	Good
31.10.2022	10.3	14.6	39.0	10.0	39	Good
Avg	13.8	17.5	53.6	19.9		
* All Values (24 hourly Average) are in (µg/m ³)						

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17.10.2022 to 01.11.2022

TRICHY

Name of the location: Ramalinga Nagar (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	8.7	11.4	34.0	11.0	34	Good
18.10.2022	7.6	10.2	32.0	9.0	32	Good
19.10.2022	8.5	12.4	36.0	13.0	36	Good
20.10.2022	9.3	13.6	30.0	8.0	30	Good
21.10.2022	9.7	14.4	28.0	9.0	28	Good
22.10.2022	12.4	16.8	26.0	11.0	26	Good
23.10.2022	13.8	16.4	36.0	14.0	36	Good
Avg	10.0	13.6	31.7	10.7		
24.10.2022	18.8	23.6	116.0	58.0	111	Moderate
25.10.2022	16.6	20.8	79.0	35.0	79	Satisfactory
26.10.2022	14.6	19.2	68.0	28.0	69	Satisfactory
27.10.2022	12.5	16.6	48.0	20.0	48	Good
28.10.2022	10.2	14.3	45.0	19.0	45	Good
29.10.2022	8.7	12.4	40.0	12.0	40	Good
30.10.2022	9.1	13.0	35.0	10.0	38	Good
31.10.2022	9.5	13.5	35.0	8.0	35	Good
Avg	11.6	15.7	50.0	18.9		
* All Values (24 hourly Average) are in (µg/m ³)						

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TRICHY - THANJAVUR

Name of the location: Nanjikottai Road (M)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	8.2	11.3	38.0	10.0	38	Good
18.10.2022	7.9	10.6	35.0	9.0	35	Good
19.10.2022	7.3	9.4	29.0	7.0	29	Good
20.10.2022	13.7	16.3	40.0	15.0	40	Good
21.10.2022	10.6	13.4	36.0	12.0	36	Good
22.10.2022	12.6	16.6	42.0	16.0	42	Good
23.10.2022	13.7	15.4	48.0	17.0	48	Good
Avg	10.6	13.3	38.3	12.3		
24.10.2022	18.3	21.4	118.0	58.0	112	Moderate
25.10.2022	13.3	17.6	68.0	32.0	68	Satisfactory
26.10.2022	12.9	16.7	58.0	25.0	60	Satisfactory
27.10.2022	11.4	14.8	45.0	14.0	46	Good
28.10.2022	10.7	13.2	42.0	13.0	42	Good
29.10.2022	8.7	12.0	34.0	10.0	34	Good
30.10.2022	9.7	14.0	39.0	14.0	39	Good
31.10.2022	11.8	15.2	37.0	12.0	37	Good
Avg	11.2	14.8	46.1	17.1	47	
* All Values (24 hourly Average) are in (µg/m ³)						

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TRICHY - THANJAVUR

Name of the location: Arokkiya Nagar (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	9.3	13.2	36.0	11.0	36	Good
18.10.2022	8.6	12.4	34.0	10.0	34	Good
19.10.2022	6.8	8.8	26.0	6.0	26	Good
20.10.2022	9.1	11.5	37.0	13.0	37	Good
21.10.2022	8.9	14.0	33.0	9.0	33	Good
22.10.2022	10.6	14.8	39.0	11.0	39	Good
23.10.2022	11.4	13.5	44.0	14.0	44	Good
Avg	9.2	12.6	35.6	10.6		
24.10.2022	17.5	20.2	110.0	52.0	107	Moderate
25.10.2022	14.5	18.2	64.0	29.0	64	Satisfactory
26.10.2022	12.2	15.2	60.0	27.0	58	Satisfactory
27.10.2022	10.1	14.0	41.0	12.0	41	Good
28.10.2022	9.9	12.8	38.0	10.0	38	Good
29.10.2022	7.7	10.8	30.0	9.0	30	Good
30.10.2022	8.4	11.6	35.0	11.0	35	Good
31.10.2022	7.8	11.2	33.0	8.0	33	Good
Avg	10.1	13.4	43.0	15.1		
* All Values (24 hourly Average) are in (µg/m ³)						

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VELLORE

Name of the location: Gandhi Nagar (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	3.9	10.8	18.0	7.0	18	Good
18.10.2022	3.5	10.7	14.0	6.0	14	Good
19.10.2022	4.2	11.1	25.0	11.0	25	Good
20.10.2022	4.7	12.1	33.0	12.0	33	Good
21.10.2022	6.0	12.7	38.0	14.0	38	Good
22.10.2022	6.8	13.9	49.0	21.0	49	Good
23.10.2022	7.9	16.4	68.0	24.0	68	Satisfactory
Avg	5.3	12.5	35.0	13.6		
24.10.2022	16.2	33.4	198.0	66.0	165	Moderate
25.10.2022	11.3	23.2	96.0	36.0	96	Satisfactory
26.10.2022	10.8	21.1	92.0	34.0	92	Satisfactory
27.10.2022	7.7	15.4	66.0	23.0	66	Satisfactory
28.10.2022	4.9	11.4	22.0	10.0	22	Good
29.10.2022	6.9	14.1	51.0	20.0	51	Satisfactory
30.10.2022	8.7	17.5	78.0	29.0	78	Satisfactory
31.10.2022	11.4	23.3	94.0	32.0	94	Satisfactory
Avg	8.8	18.0	71.3	26.3		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
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VELLORE

Name of the location: SIDCO Industrial Estate (I)						
Date	Regulatory Parameters					AQI
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	4.5	11.0	25.0	10.0	25	Good
18.10.2022	4.3	11.0	23.0	9.0	23	Good
19.10.2022	5.0	12.4	33.0	13.0	33	Good
20.10.2022	5.2	12.9	37.0	14.0	37	Good
21.10.2022	6.6	13.3	46.0	17.0	46	Good
22.10.2022	7.3	14.8	69.0	27.0	69	Satisfactory
23.10.2022	8.9	19.9	74.0	29.0	74	Satisfactory
Avg	6.0	13.6	43.9	17.0		
24.10.2022	14.4	31.1	148.0	68.0	132	Moderate
25.10.2022	10.9	22.2	94.0	38.0	94	Satisfactory
26.10.2022	6.9	14.6	62.0	25.0	62	Satisfactory
27.10.2022	5.9	13.1	40.0	15.0	40	Good
28.10.2022	5.9	12.2	31.0	13.0	31	Good
29.10.2022	7.1	14.3	65.0	24.0	65	Satisfactory
30.10.2022	9.8	19.6	87.0	34.0	87	Satisfactory
31.10.2022	11.6	23.1	105.0	37.0	105	Moderate
Avg	8.3	17.0	69.1	26.6		
* All Values (24 hourly Average) are in (µg/m ³)						

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DINDIGUL

Name of the location: Nagal Pudur (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	11.8	17.5	50.1	26.2	56	Satisfactory
18.10.2022	11.1	16.7	52.4	24.4	52	Satisfactory
19.10.2022	13.9	19.9	60.7	29.3	61	Satisfactory
20.10.2022	13.6	19.1	51.8	23.2	52	Satisfactory
21.10.2022	15.7	21.1	77.9	31.1	78	Satisfactory
22.10.2022	17.8	23.7	78.4	33.9	89	Satisfactory
23.10.2022	21.6	27.5	95.2	39.3	95	Satisfactory
Avg	15.1	20.8	66.6	29.6		
24.10.2022	24.0	30.5	109.0	42.2	109	Moderate
25.10.2022	22.6	28.0	98.8	37.0	99	Satisfactory
26.10.2022	19.9	25.8	80.6	33.2	81	Satisfactory
27.10.2022	17.9	24.0	71.7	29.1	72	Satisfactory
28.10.2022	15.3	21.3	65.8	26.3	66	Satisfactory
29.10.2022	14.2	20.2	61.2	24.2	61	Satisfactory
30.10.2022	12.9	18.8	52.9	23.4	53	Satisfactory
31.10.2022	11.6	16.7	48.1	21.4	48	Good
Avg	16.3	22.1	68.5	27.8		
* All Values (24 hourly Average) are in (µg/m ³)						

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Ambient Air Quality data during Deepavali festival from
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DINDIGUL

Name of the location: Near Rajagopal Iyyangar & Sons(C)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	15.8	21.5	64.7	30.2	65	Satisfactory
18.10.2022	14.9	21.2	62.5	28.2	63	Satisfactory
19.10.2022	15.5	22.0	72.0	34.0	72	Satisfactory
20.10.2022	14.7	20.7	66.8	28.3	67	Satisfactory
21.10.2022	17.4	23.4	93.7	36.3	94	Satisfactory
22.10.2022	21.1	27.4	100.6	39.2	100	Satisfactory
23.10.2022	25.1	31.2	109.1	45.3	106	Moderate
Avg	17.8	23.9	81.3	34.5		
24.10.2022	27	33.6	140.1	48.3	140	Moderate
25.10.2022	25	30.5	111.5	43.4	108	Moderate
26.10.2022	23	28.9	102.6	39.3	102	Moderate
27.10.2022	19.9	25.9	94.2	35.3	94	Satisfactory
28.10.2022	17.8	23.6	83.3	33.3	83	Satisfactory
29.10.2022	16.2	22.1	77.5	32.3	78	Satisfactory
30.10.2022	14.4	20	69.7	31.4	70	Satisfactory
31.10.2022	13.4	19.2	61.9	28.3	62	Satisfactory
Avg	18.5	24.3	85.8	34.7		
* All Values (24 hourly Average) are in (µg/m ³)						

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HOSUR

Name of the location: Amritha Nagar (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	22.0	26.0	35.0	26.0	35	Good
18.10.2022	26.0	31.0	28.0	17.0	28	Good
19.10.2022	21.0	43.0	53.0	9.0	53	Satisfactory
20.10.2022	29.0	47.0	47.0	14.0	59	Satisfactory
21.10.2022	23.0	48.0	29.0	17.0	60	Satisfactory
22.10.2022	28.0	49.0	75.0	39.0	75	Satisfactory
23.10.2022	32.0	52.0	78.0	43.0	78	Satisfactory
Avg	32.0	42.3	49.3	23.6		
24.10.2022	57.0	71.0	127.0	56.0	118	Moderate
25.10.2022	45.0	69.0	99.0	47.0	99	Satisfactory
26.10.2022	42.0	66.0	89.0	30.0	89	Satisfactory
27.10.2022	29.0	56.0	62.0	30.0	62	Satisfactory
28.10.2022	22.0	49.0	67.0	30.0	67	Satisfactory
29.10.2022	21.0	45.0	63.0	26.0	63	Satisfactory
30.10.2022	15.0	42.0	48.0	17.0	48	Good
31.10.2022	24.0	50.0	53.0	22.0	53	Satisfactory
Avg	28.3	53.9	68.7	28.9		
* All Values (24 hourly Average) are in (µg/m ³)						

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HOSUR

Name of the location: ESI Bus Stop, Bharati Nagar (I)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	32.0	34.0	60.0	31.0	60	Satisfactory
18.10.2022	28.0	38.0	61.0	22.0	61	Satisfactory
19.10.2022	34.0	50.0	74.0	26.0	74	Satisfactory
20.10.2022	41.0	56.0	74.0	28.0	74	Satisfactory
21.10.2022	37.0	54.0	41.0	26.0	68	Satisfactory
22.10.2022	34.0	51.0	59.0	22.0	59	Satisfactory
23.10.2022	40.0	55.0	65.0	26.0	65	Satisfactory
Avg	35.1	48.3	62.0	25.9		
24.10.2022	50.0	69.0	96.0	43.0	96	Satisfactory
25.10.2022	51.0	68.0	94.0	43.0	94	Satisfactory
26.10.2022	39.0	64.0	84.0	26.0	84	Satisfactory
27.10.2022	36.0	64.0	82.0	43.0	82	Satisfactory
28.10.2022	24.0	54.0	78.0	39.0	78	Satisfactory
29.10.2022	20.0	50.0	75.0	34.0	75	Satisfactory
30.10.2022	18.0	48.0	62.0	26.0	62	Satisfactory
31.10.2022	17.0	46.0	73.0	30.0	73	Satisfactory
Avg	29.3	56.3	78.3	34.4		
* All Values (24 hourly Average) are in (µg/m ³)						

Thoothukudi - Raju Nagar

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

THOOTHUKUDI

Name of the location: Raju Nagar (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	9.5	17.5	46.0	10.9	46	Good
18.10.2022	7.9	11.2	40.8	9.8	41	Good
19.10.2022	7.7	11.7	35.0	9.8	35	Good
20.10.2022	9.4	13.5	32.6	8.8	33	Good
21.10.2022	9.8	12.5	41.0	10.1	41	Good
22.10.2022	10.8	12.9	35.0	11.5	35	Good
23.10.2022	14.7	20.2	83.7	15.8	84	Satisfactory
Avg	10.0	14.2	44.9	11.0		
24.10.2022	18.4	22.6	242.7	48.8	195	Moderate
25.10.2022	12.7	14.3	53.4	9.2	53	Satisfactory
26.10.2022	13.9	17.6	66.5	13.8	67	Satisfactory
27.10.2022	16.9	21.6	116.1	16.8	116	Moderate
28.10.2022	13.6	18.0	100.3	7.9	100	Satisfactory
29.10.2022	8.7	13.7	51.1	6.4	51	Satisfactory
30.10.2022	10.9	14.7	68.1	8.2	68	Satisfactory
31.10.2022	9.4	12.4	54.5	6.0	55	Satisfactory
Avg	12.3	16.0	72.8	9.8		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

THOOTHUKUDI

Name of the location: Celseeni Colony (R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	11.0	15.9	33.8	5.1	34	Good
18.10.2022	6.7	9.4	28.8	15.4	29	Good
19.10.2022	8.7	12.0	33.4	17.0	33	Good
20.10.2022	10.0	13.7	37.1	23.9	37	Good
21.10.2022	10.0	13.5	37.2	21.0	37	Good
22.10.2022	11.0	14.9	39.3	22.5	39	Good
23.10.2022	16.0	21.1	69.6	33.7	70	Satisfactory
Avg	10.5	14.3	39.9	19.8		
24.10.2022	19.7	24.0	258.0	161.7	332	Very Poor
25.10.2022	11.0	14.8	48.0	15.6	48	Good
26.10.2022	13.8	18.6	58.9	17.0	59	Satisfactory
27.10.2022	13.9	16.3	73.8	17.5	74	Satisfactory
28.10.2022	12.9	16.5	62.0	12.4	62	Satisfactory
29.10.2022	10.7	14.6	47.3	9.1	47	Good
30.10.2022	9.5	13.0	52.0	11.1	52	Satisfactory
31.10.2022	9.7	11.9	50.7	5.7	51	Satisfactory
Avg	11.6	15.1	56.1	12.6		
* All Values (24 hourly Average) are in (µg/m ³)						

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

TIRUPPUR

Name of the location: Kumaran Complex(C)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	12.8	18.0	40.0	18.0	40	Good
18.10.2022	8.0	19.0	71.0	26.0	71	Satisfactory
19.10.2022	11.0	16.0	66.0	28.0	66	Satisfactory
20.10.2022	13.0	18.0	71.0	32.0	71	Satisfactory
21.10.2022	14.0	14.0	69.0	26.0	69	Satisfactory
22.10.2022	12.0	17.0	66.0	27.0	66	Satisfactory
23.10.2022	17.0	19.0	71.0	29.1	71	Satisfactory
Avg	12.5	17.3	64.9	26.6		
24.10.2022	19.0	36.0	126.0	68.0	127	Moderate
25.10.2022	12.0	32.0	118.0	41.1	112	Moderate
26.10.2022	11.0	28.0	77.0	30.0	77	Satisfactory
27.10.2022	9.0	22.0	65.0	33.0	65	Satisfactory
28.10.2022	8.0	19.0	64.0	26.0	64	Satisfactory
29.10.2022	11.0	18.0	72.0	19.0	72	Satisfactory
30.10.2022	12.0	26.0	56.0	23.0	56	Satisfactory
31.10.2022	13.0	28.0	58.0	24.0	56	Satisfactory
Avg	10.9	<9	72.9	28.0		

* All Values (24 hourly Average) are in (µg/m³)

Tamil Nadu Pollution Control Board
Ambient Air Quality data during Deepavali festival from
17.10.2022 to 01.11.2022

TIRUPPUR

Name of the location: Rayapuram(R)						
Date	Regulatory Parameters					AQI Remarks
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	AQI	
17.10.2022	11.0	19.0	84.0	15.0	84	Satisfactory
18.10.2022	11.1	22.0	78.0	13.0	78	Satisfactory
19.10.2022	10.0	23.0	43.0	13.0	43	Good
20.10.2022	9.0	26.0	79.0	14.0	79	Satisfactory
21.10.2022	12.0	26.0	52.6	38.0	53	Satisfactory
22.10.2022	11.0	24.0	66.0	36.0	66	Satisfactory
23.10.2022	10.0	23.0	53.0	34.0	53	Satisfactory
Avg	10.6	23.3	65.1	23.3		
24.10.2022	19.0	36.0	115.0	85.0	183	Moderate
25.10.2022	12.0	26.0	98.0	36.0	98	Satisfactory
26.10.2022	10.0	22.0	89.0	38.0	89	Satisfactory
27.10.2022	9.0	18.0	79.0	34.0	79	Satisfactory
28.10.2022	8.0	17.0	66.0	33.0	66	Satisfactory
29.10.2022	9.0	19.0	64.0	34.0	64	Satisfactory
30.10.2022	11.0	23.0	68.0	32.0	68	Satisfactory
31.10.2022	10.0	24.0	69.0	31.0	69	Satisfactory
Avg						
* All Values (24 hourly Average) are in (µg/m ³)						



Conclusion:

The ambient air quality monitoring survey and Ambient Noise level survey conducted during Deepavali 2022, it is observed that in pre Deepavali the Ambient Air Quality Index (AQI) are in satisfactory range while on the day of Deepavali AQI was shoot beyond Severe. While in post Deepavali AQI are in satisfactory range.



Comparison of Three Years

DEEPAVALI

Noise Level and
Air Quality Data

2020 - 2022

**DEEPAVALI NOISE LEVEL RECORDED IN MONITORING STATIONS,
TAMIL NADU (2020 - 2022)**

Table 1: Noise levels recorded in monitoring stations during Deepavali days (2020 -2022)

Sl. No.	Locations	Station	2020		2021		2022	
			Pre-Deepavali	Deepavali	Pre-Deepavali	Deepavali	Pre-Deepavali	Deepavali
			(07.11.20)	(14.11.20)	(29.10.21)	(04.11.21)	(17.10.22)	(24.10.22)
			Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)
1	Chennai	Besant Nagar	69	78 ↑	55	73 ↑	55	66 ↑
2	Chennai	T.Nagar	62	78 ↑	66	79 ↑	64	78 ↑
3	Chennai	Nungambakkam	58	71 ↑	60	75 ↑	56	79 ↑
4	Chennai	Triplicane	60	75 ↑	56	69 ↑	58	73 ↑
5	Chennai	Sowcarpet	54	76 ↑	60	72 ↑	59	71 ↑
6	Chennai	Valasaravakkam	-	-	-	-	65	77 ↑
7	Chennai	Tiruvottiyur	-	-	-	-	59	80 ↑
8	Chengalpattu	Tambaram	-	-	57	70 ↑	-	-
9	Coimbatore	Kavundampalayam	59	65 ↑	63	74 ↑	59	77 ↑
10	Coimbatore	District Collectorate	57	66 ↑	60	64 ↑	58	63 ↑
11	Cuddalore	Imperial Road	74	79 ↑	57	66 ↑	64	67 ↑
12	Cuddalore	Pudupalayam	68	76 ↑	57	76 ↑	72	82 ↑
13	Dindigul	Nagal Pudur	59	64 ↑	54	74 ↑	53	81 ↑
14	Dindigul	Near Rajagopal Iyyangar & Sons	71	73 ↑	70	71 ↑	85	86 ↑
15	Hosur	ESI Hospital	52	66 ↑	63	64 ↑	58	67 ↑
16	Hosur	INEL Transit House	53	75 ↑	58	70 ↑	59	73 ↑
17	Madurai	Thirunagar	59	70 ↑	61	79 ↑	52	70 ↑
18	Madurai	Birla Vishram	62	82 ↑	63	76 ↑	57	80 ↑

Sl. No.	Locations	Station	2020		2021		2022	
			Pre-Deepavali	Deepavali	Pre-Deepavali	Deepavali	Pre-Deepavali	Deepavali
			(07.11.20)	(14.11.20)	(29.10.21)	(04.11.21)	(17.10.22)	(24.10.22)
			Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)	Leq dB(A)
19	Nagercoil	Water Tank Road	-	-	54	62 ↑	48	53 ↑
20	Salem	Sri Saradha Balamandhir Boys Matric Hr Sec School	48	58 ↑	46	66 ↑	52	75 ↑
21	Salem	Siva Towers	63	73 ↑	62	72 ↑	60	72 ↑
22	Tirunelveli	Vannarapettai	59	88 ↑	60	62 ↑	59	71 ↑
23	Tirunelveli	Pettai	54	90 ↑	47	55 ↑	52	61 ↑
24	Trichy	Thillai Nagar	62	79 ↑	63	72 ↑	63	75 ↑
25	Thanjavur	A.Arulanandhammal Nagar	-	-	58	74 ↑	57	71 ↑
26	Tiruppur	Kumaran Complex	53	82 ↑	59	58 ↓	56	56 =
27	Tiruppur	Rayapuram	49	69 ↑	57	68 ↑	48	64 ↑
28	Thoothukudi	Raju Nagar	54	69 ↑	59	72 ↑	56	78 ↑
29	Vellore	Gandhi Nagar	60	66 ↑	59	69 ↑	51	62 ↑
30	Vellore	SIDCO Industrial Estate	54	64 ↑	57	67 ↑	53	61 ↑

Note: All Values are in Leq dB(A)

The Values reported in Table- 1, should not be compared with prescribed noise level standards for designated areas as the time period of measurement (18.00Hrs to 24.00Hrs(Mid night)) do not match with the period specified in the prescribed standards (Day time: 6.00 Hrs to 22.00 Hrs and night time 22.00 Hrs to 6.00 Hrs).

DEEPAVALI AMBIENT AIR QUALITY VALUES RECORDED IN MONITORING STATIONS, TAMIL NADU (2020 - 2022)

Table 2: Ambient Air Quality recorded at Besant Nagar during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	48.4	52	45.6	44.4	187	49.7	66.3	268	71	100µg/m ³
PM _{2.5}	20	37	20.1	19.3	175	21	28.4	178	28.4	60µg/m ³
SO ₂	9.7	12	10.0	7.7	12	10	9.8	20	8.1	80µg/m ³
NO ₂	20.6	22	19.7	18	26	18	17.4	26	17.3	80µg/m ³
AQI	48	62	46	44	342	50	41	345	71	

Table 3: Ambient Air Quality recorded at T.Nagar during Deepavali days

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	57.1	72	57	55.6	280	42.8	81.9	379	104.7	100µg/m ³
PM _{2.5}	21.3	32	24.4	28.3	231	19	40.4	213	38.1	60µg/m ³
SO ₂	10.6	11	11	20.9	13	8.8	12.1	22	11.6	80µg/m ³
NO ₂	22.4	24	21.3	9.9	28	16.4	20.9	18	20.1	80µg/m ³
AQI	57	72	57	56	385	43	78	372	102	

Table 4: Ambient Air Quality recorded at Nungambakkam during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	48.6	59	51.7	49.4	283	36.6	59.9	560	84.1	100µg/m ³
PM _{2.5}	22.7	34	22.9	22.9	210	18.2	26.9	432	38.3	60µg/m ³
SO ₂	10.7	14	11.3	9	11	8.6	10.7	26	10.9	80µg/m ³
NO ₂	20.6	25	21.3	19.1	26	15.6	20.3	22	19.7	80µg/m ³
AQI	49	59	52	49	369	39	59	563	88	

Table 5: Ambient Air Quality recorded at Triplicane during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	49.7	111	55.9	48.1	267	40	74.9	512	86.4	100µg/m ³
PM _{2.5}	22.4	59	23.9	22.1	222	19	27.3	311	26.4	60µg/m ³
SO ₂	9.7	10	10.1	8.9	14	9.6	9.1	20	10.0	80µg/m ³
NO ₂	20.7	21	20.1	18.4	26	16.4	18.6	28	20.3	80µg/m ³
AQI	50	107	56	48	378	39	72	503	85	

Table 6: Ambient Air Quality recorded at Sowcarpet during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	61.6	100	61	57.9	268	40.4	87.7	739	103.9	100µg/m ³
PM _{2.5}	26	51	27.7	29.3	257	19.2	33.1	528	31.1	60µg/m ³
SO ₂	11.4	13	10.7	22.0	17	10.4	13.3	28	11.0	80µg/m ³
NO ₂	22.1	28	22.7	11.4	31	16.8	23.1	36	22.0	80µg/m ³
AQI	62	100	61	58	371	40	84	786	100	

Table 7: Ambient Air Quality recorded at Valasaravakkam during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	-	-	-	86.1	546	100.3	100µg/m ³
PM _{2.5}	-	-	-	-	-	-	37.6	296	29.0	60µg/m ³
SO ₂	-	-	-	-	-	-	13.1	16	11.7	80µg/m ³
NO ₂	-	-	-	-	-	-	21.7	24	21.0	80µg/m ³
AQI	-	-	-	-	-	-	87	545	96	

Table 8: Ambient Air Quality recorded at Tiruvottiyur during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	-	-	-	67.1	459	83.3	100µg/m ³
PM _{2.5}	-	-	-	-	-	-	27.6	245	37.4	60µg/m ³
SO ₂	-	-	-	-	-	-	13.3	19	12.6	80µg/m ³
NO ₂	-	-	-	-	-	-	22.4	32	22.3	80µg/m ³
AQI	-	-	-	-	-	-	67	436	83	

Table 9: Ambient Air Quality recorded at Tambaram, Chengalpattu during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	56.3	265.9	46.6	-	-	-	100µg/m ³
PM _{2.5}	-	-	-	20.6	85.9	14.7	-	-	-	60µg/m ³
SO ₂	-	-	-	10.0	23.6	8.5	-	-	-	80µg/m ³
NO ₂	-	-	-	12.7	30.2	8.4	-	-	-	80µg/m ³
AQI	-	-	-	56	216	46	-	-	-	

Table 10: Ambient Air Quality recorded at Maraimalai Nagar, Chengalpattu during Deepavali days (2020 – 2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	-	-	-	58.6	193.0	82.5	100µg/m ³
PM _{2.5}	-	-	-	-	-	-	18.0	72.0	29.8	60µg/m ³
SO ₂	-	-	-	-	-	-	8.4	22.0	23.8	80µg/m ³
NO ₂	-	-	-	-	-	-	14.1	28.0	16.3	80µg/m ³
AQI	-	-	-	-	-	-	59	162	94	

Table 11: Ambient Air Quality recorded at Vandalur, Chengalpattu during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	-	-	-	39.6	181.0	75.5	100µg/m ³
PM _{2.5}	-	-	-	-	-	-	12.0	65.0	40.8	60µg/m ³
SO ₂	-	-	-	-	-	-	7.0	18.0	9.8	80µg/m ³
NO ₂	-	-	-	-	-	-	15.0	24.0	18.5	80µg/m ³
AQI	-	-	-	-	-	-	40	154	76	

Table 12: Ambient Air Quality recorded at Kavundampalayam, Coimbatore during Deepavali days (2020 – 2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	37.9	55	25.3	54.4	209	52.1	55.4	110.0	50.7	100µg/m ³
PM _{2.5}	13.7	14	10.2	23.4	78	21.9	25.9	54.0	24.7	60µg/m ³
SO ₂	7.6	11.7	6.9	7.5	13.7	7.5	7.7	15.5	6.4	80µg/m ³
NO ₂	16.8	26.2	17.6	18.4	26.5	18.2	17.9	32.0	16.4	80µg/m ³
AQI	39	55	28	49	173	52	55	107	51	

Table 13: Ambient Air Quality recorded at District Collector Office, Coimbatore during Deepavali days (2020- 2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	73	86	27	56.4	203.0	47.7	46.4	98	56.3	100µg/m ³
PM _{2.5}	15.9	12	12.6	26.1	88.0	21.0	21.1	48	27.4	60µg/m ³
SO ₂	8.5	11.5	6.9	8.5	12.1	7.9	7.4	15	7.0	80µg/m ³
NO ₂	18.8	23.8	16.8	19.7	25.0	19.9	18.0	29.4	16.9	80µg/m ³
AQI	73	86	28	55.7	193	48	46	98	57	

Table 14: Ambient Air Quality recorded at Imperial Road, Cuddalore during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	79.5	89.6	72.8	50.6	92.6	34.8	49.4	93.0	47.9	100µg/m ³
PM _{2.5}	44.7	52	39.3	20.9	41.0	18.0	18.4	40.0	18.9	60µg/m ³
SO ₂	19.3	25.3	18.6	18.2	36.5	16.4	18.6	38.2	19.4	80µg/m ³
NO ₂	24.5	29.6	22.9	23.1	38.1	18.0	21.7	41.2	21.9	80µg/m ³
AQI	80	90	73	50	93	34	49	93	48	

Table 15: Ambient Air Quality recorded at Pudupalayam, Cuddalore during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	67.2	87.3	66.6	48.4	87.1	32.3	46.8	90	45.9	100µg/m ³
PM _{2.5}	43.1	55	41.5	18.4	38.0	16.3	16.3	38	17.1	60µg/m ³
SO ₂	18.6	35.5	19.0	15.9	33.7	14.0	16.5	36.5	17.5	80µg/m ³
NO ₂	23.7	37.3	22.9	20.3	35.1	17.2	19.3	38.3	20.5	80µg/m ³
AQI	72	92	69	48	87	32	47	90	46	

Table 16: Ambient Air Quality recorded at Thiru Nagar, Madurai during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	55	79	30.7	49.1	132	48.7	41.6	148.0	47.7	100µg/m ³
PM _{2.5}	18	28	12.3	15.7	40	20.3	17.9	42.0	21.1	60µg/m ³
SO ₂	11.1	18.9	10.0	10.9	28	15.4	11.7	31.0	14.4	80µg/m ³
NO ₂	14.8	22.8	13.8	13.6	32	17.7	17.3	40.0	20.1	80µg/m ³
AQI	55	79	31	49	121	49	42	132	48	

Table 17: Ambient Air Quality recorded at Birla Visram, Madurai during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	74.7	68.0	55.7	66.0	166.0	55.9	55.1	174.0	63.1	100µg/m ³
PM _{2.5}	26.3	22.0	17.7	22.7	44.0	25.3	22.4	49.0	24.0	60µg/m ³
SO ₂	13.5	21.3	12.0	14.3	36.0	18.0	15.0	38.0	17.7	80µg/m ³
NO ₂	16.9	25.1	15.7	17.4	40.0	19.9	21.1	47.0	23.4	80µg/m ³
AQI	75	68	56	66	144	56	55	149	63	

Table 18: Ambient Air Quality recorded at Sri Saradha Balamandhir Boys Hr Sec School, Salem during Deepavali days (2020 – 2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	40.3	110	43.9	36.4	72.0	54.0	45.1	164.0	49.3	100µg/m ³
PM _{2.5}	24.7	49	23.6	22.6	40.0	29.0	19.7	34.0	22.7	60µg/m ³
SO ₂	7.9	17	8.8	9.1	11.4	9.7	10.6	30.0	12.3	80µg/m ³
NO ₂	17.3	45	17.0	17.0	19.9	18.9	16.9	50.0	17.1	80µg/m ³
AQI	42	107	45	40	72	54	45	143	49	

Table 19: Ambient Air Quality recorded at Siva Towers, Salem during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	45.9	128.0	44.4	40.9	79.0	63.4	47.6	156.0	51.0	100µg/m ³
PM _{2.5}	18.6	46.0	18.9	18.4	42.0	32.9	21.9	42.0	23.0	60µg/m ³
SO ₂	9.1	23.0	8.5	7.0	11.2	9.6	11.3	26.0	11.6	80µg/m ³
NO ₂	14.1	49.0	14.2	10.7	24.0	18.2	15.4	48.0	15.3	80µg/m ³
AQI	46	119	44	41	79	63	48	137	51	

Table 20: Ambient Air Quality recorded at Pettai, Tirunelveli during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	58.9	70.7	40.9	43.4	62.9	42.5	50.7	86.9	52.1	100µg/m ³
PM _{2.5}	23.5	16.6	16.2	14.1	15.1	9.6	23.1	14.9	14.3	60µg/m ³
SO ₂	6.4	9.0	4.7	7.1	10.2	7.9	7.1	9.9	8.1	80µg/m ³
NO ₂	15.6	21.1	13.3	14.4	20.1	15.7	17.7	28.3	14.6	80µg/m ³
AQI	59	71	41	43	63	42	51	87	52	

Table 21: Ambient Air Quality recorded at Town, Tirunelveli during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	48.1	62	52.4	56.4	65.4	49.9	47.7	73.0	48.3	100µg/m ³
PM _{2.5}	19.1	16.8	9.8	12.7	17.1	9.1	28.6	37.5	26.9	60µg/m ³
SO ₂	6.4	9.3	5.6	7.9	10.0	9.3	4.6	9.0	6.1	80µg/m ³
NO ₂	16.4	22.6	14.8	16.5	18.5	17.8	13.1	19.7	10.3	80µg/m ³
AQI	48	62	53	56	65	50	48	73	48	

Table 22: Ambient Air Quality recorded at Gandhi Market, Trichy during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	75.9	106	80.8	56.7	80.0	51.2	41.9	128.0	53.6	100µg/m ³
PM _{2.5}	33.9	54	34	16.9	29.0	15.5	14.9	69.0	19.9	60µg/m ³
SO ₂	12.8	15.3	13.3	9.5	13.0	9.2	14.7	21.7	13.8	80µg/m ³
NO ₂	16.2	18.9	15.9	14.1	17.0	13.9	17.7	26.8	17.5	80µg/m ³
AQI	76	104	81	57	80	52	42	130	54	

Table 23: Ambient Air Quality recorded at Ramalinga Nagar, Trichy during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21-03.11.21	04.11.2021	05.11.21-11.11.21	17.10.22-24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	62.1	92	61.5	43.4	56.0	47.8	31.7	116.0	50.0	100µg/m ³
PM _{2.5}	28.3	41	25.2	13.7	21.0	15.2	10.7	58.0	18.9	60µg/m ³
SO ₂	11.2	13.8	10.6	7.7	10.0	8.5	10.0	18.8	11.6	80µg/m ³
NO ₂	14.5	15.4	13.2	11.7	15.0	13.2	13.6	23.6	15.7	80µg/m ³
AQI	62	92	62	43	56	48	32	111	51	

Table 24: Ambient Air Quality recorded at Karunavathi Nagar/Nanjikottai Road, Trichy during Deepavali days (2020 - 2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21-03.11.21	04.11.2021	05.11.21-11.11.21	17.10.22-24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	40.3	76.0	35.2	38.3	118.0	46.1	100µg/m ³
PM _{2.5}	-	-	-	16.7	46.0	10.7	12.3	58.0	17.1	60µg/m ³
SO ₂	-	-	-	9.8	16.4	10.4	10.6	18.3	11.2	80µg/m ³
NO ₂	-	-	-	11.3	18.4	12.3	13.3	21.4	14.8	80µg/m ³
AQI	-	-	-	40	77	35	38	112	47	

Table 25: Ambient Air Quality recorded at Arokkiya Nagar, Thanjavur during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21-03.11.21	04.11.2021	05.11.21-11.11.21	17.10.22-24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	30.0	67.0	26.7	35.6	110.0	43.0	100µg/m ³
PM _{2.5}	-	-	-	11.3	40.0	9.0	10.6	52.0	15.1	60µg/m ³
SO ₂	-	-	-	8.4	14.9	7.9	9.2	17.5	10.1	80µg/m ³
NO ₂	-	-	-	10.0	17.1	9.7	12.6	20.2	13.4	80µg/m ³
AQI	-	-	-	30	67	27	36	107	43	

Table 26: Ambient Air Quality recorded at Gandhi Nagar, Vellore during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	121.6	98.0	51.3	107.1	144.0	53.1	35.0	198.0	71.3	100µg/m ³
PM _{2.5}	51.4	35.0	20.0	28.6	43.0	14.9	13.6	66.0	26.3	60µg/m ³
SO ₂	11.0	14.0	7.4	7.6	12.4	6.0	5.3	16.2	8.8	80µg/m ³
NO ₂	25.2	34.2	18.2	15.7	20.5	13.5	12.5	33.4	18.0	80µg/m ³
AQI	112	98	50	115	129	53	35	165	71	

Table 27: Ambient Air Quality recorded at SIDCO Industrial Estate, Vellore during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	92.0	88.0	41.3	95.0	139.0	57.4	43.9	148.0	69.1	100µg/m ³
PM _{2.5}	36.9	27.0	15.0	26.6	58.0	14.6	17.0	68.0	26.6	60µg/m ³
SO ₂	8.9	11.7	7.5	6.4	11.2	6.3	6.0	14.4	8.3	80µg/m ³
NO ₂	21.8	31.6	18.2	14.4	19.4	13.7	13.6	31.1	17.0	80µg/m ³
AQI	89	88.0	41	92	126	57	44	132	69	

Table 28: Ambient Air Quality recorded at Nagal Nagar, Dindigul during Deepavali days (2020 -2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	61.3	108.7	83.2	65.8	117.2	72.7	66.6	109.0	68.5	100µg/m ³
PM _{2.5}	29.3	53.1	40.0	27.8	42.4	27.8	29.6	42.2	27.8	60µg/m ³
SO ₂	12.3	23.7	21.9	13.5	22.4	15.7	15.1	24.0	16.3	80µg/m ³
NO ₂	17.6	29.1	27.6	18.9	28.9	21.6	20.8	30.5	22.1	80µg/m ³
AQI	64	106	83	66	117	73	69	109	69	

Table 29: Ambient Air Quality recorded at Near Rajagopal Iyyengar & Sons during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	77.2	114.1	91.2	78.4	138.0	93.7	81.3	140.1	85.8	100µg/m ³
PM _{2.5}	36.0	56.2	42.9	32.2	48.0	36.2	34.5	48.3	34.7	60µg/m ³
SO ₂	17.0	24.9	24.5	17.1	25.9	18.7	17.8	27.0	18.5	80µg/m ³
NO ₂	23.1	31.3	30.6	23.1	32.2	24.9	23.9	33.6	24.3	80µg/m ³
AQI	77	109	90.4	78	138	92	81	10	85	

Table 30: Ambient Air Quality recorded at INEL Transit House, Hosur during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	41.2	98.6	32.3	40.6	100.1	58.5	49.3	127.0	68.7	100µg/m ³
PM _{2.5}	21.4	53.4	16.9	19.3	41.6	24.3	23.6	56.0	28.9	60µg/m ³
SO ₂	11.6	26.9	9.6	16.2	29.5	9.8	32.0	57.0	28.3	80µg/m ³
NO ₂	15.3	34.8	14.4	22.0	31.6	16.5	42.3	71.0	53.9	80µg/m ³
AQI	42	99	33	41	100	59	55	118	69	

Table 31: Ambient Air Quality recorded at ESI Hospital, Hosur during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	33.3	48.7	32.5	38.0	55.5	45.7	62.0	96.0	78.3	100µg/m ³
PM _{2.5}	16.9	21.7	15.4	18.6	24.2	20.0	25.9	43.0	34.4	60µg/m ³
SO ₂	9.4	12.8	12.5	14.4	19.6	9.9	35.1	50.0	29.3	80µg/m ³
NO ₂	15.0	24.1	14.1	20.8	23.9	16.5	48.3	69.0	56.3	80µg/m ³
AQI	33	49	32	47	56	48	66	96	81	

Table 32: Ambient Air Quality recorded at Raju Nagar, Thoothukudi during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	63.9	139.4	48.5	56.4	189.8	47.1	44.9	242.7	72.8	100µg/m ³
PM _{2.5}	28.9	23.8	13.7	23.2	155.6	16.3	11.0	48.8	9.8	60µg/m ³
SO ₂	3.3	8.6	3.1	2.4	4.2	3.0	10.0	18.4	12.3	80µg/m ³
NO ₂	4.8	9.6	4.7	7.5	10.3	7.3	14.2	22.6	16.0	80µg/m ³
AQI	64	126	49	59	328	47	45	195	73	

Table 33: Ambient Air Quality recorded at Celseeni Colony, Thoothukudi during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	52.2	140.4	43.8	66.9	251.9	55.4	39.9	258.0	56.1	100µg/m ³
PM _{2.5}	29.2	51.7	9.8	17.4	181.1	17.6	19.8	161.7	12.6	60µg/m ³
SO ₂	4.3	10.9	3.2	2.7	4.2	2.8	10.5	19.7	11.6	80µg/m ³
NO ₂	4.6	9.6	4.7	7.0	10.0	7.2	14.3	24.0	15.1	80µg/m ³
AQI	52	127	44	65	347	56	40	332	56	

Table 34: Ambient Air Quality recorded at Kumaran Colony, Tiruppur during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 - 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	225.1	130.0	101.9	178.6	248	128.1	64.9	126.0	72.9	100µg/m ³
PM _{2.5}	65.3	66.0	37.9	62.6	18	17.6	26.6	68.0	28.0	60µg/m ³
SO ₂	9.9	15.5	15.5	25.6	14.6	11.5	12.5	19.0	10.9	80µg/m ³
NO ₂	11.6	18.8	30.6	10.5	<9	<9	17.3	36.0	<9	80µg/m ³
AQI	193	120	100	153	199	129	65	127	72	

Table 35: Ambient Air Quality recorded at Rayapuram, Tiruppur during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	149.9	226.0	99.7	242.4	135	126	65.1	115.0	76.1	100µg/m ³
PM _{2.5}	44.4	60.0	14.5	49.7	40	20.3	23.3	85.0	34.0	60µg/m ³
SO ₂	14.3	25.0	12.9	19.8	16.9	11.0	10.6	19.0	9.9	80µg/m ³
NO ₂	16.8	30.8	16.2	11.6	<9	10.5	23.3	36.0	21.3	80µg/m ³
AQI	133	184	97	209	123	115	65	183	76	

Table 36: Ambient Air Quality recorded at Water Tank Road, Nagercoil during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	76.2	66.0	65.2	33.1	73.7	38.9	47.1	71.0	42.4	100µg/m ³
PM _{2.5}	18.3	31.8	10.9	6.7	17.3	4.9	14.5	22.6	14.7	60µg/m ³
SO ₂	7.8	10.7	5.8	7.4	8.9	7.9	6.2	9.7	6.2	80µg/m ³
NO ₂	18.7	24.8	14.5	14.9	20.4	15.1	9.3	13.9	11.4	80µg/m ³
AQI	76	66	65	33	74	39	47	71	42	

Table 37: Ambient Air Quality recorded at Scott Christian College, Nagercoil during Deepavali days (2020-2022)

Pollutants	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	Pre Deepavali	Deepavali	Post Deepavali	NAAQ Standards
	2020	2020	2020	2021	2021	2021	2022	2022	2022	
Date	07.11.20-13.11.20	14.11.20	15.11.20-21.11.20	28.10.21 – 03.11.21	04.11.2021	05.11.21 - 11.11.21	17.10.22 - 24.10.22	24.10.2022	25.10.22-01.11.22	
PM ₁₀	-	-	-	36.1	59.6	37.6	38.2	64.9	40.8	100µg/m ³
PM _{2.5}	-	-	-	7.3	9.5	4.6	11.5	23.9	15.3	60µg/m ³
SO ₂	-	-	-	5.9	8.2	5.5	5.5	9.2	6.2	80µg/m ³
NO ₂	-	-	-	13.5	15.1	12.6	7.3	12.0	10.0	80µg/m ³
AQI	-	-	-	36	60	38	38	65	41	



CONCLUSION:

Based on the observation for the past 3 years, it is evident that throughout Tamil Nadu in general the AQI is mostly in the range of Satisfactory. During the day of Deepavali the AQI has increased in Chennai but remaining district the AQI has reached only up to Moderate. The increase in the AQI value during Deepavali day is due to Meteorological condition like low wind speed and high humidity.