#### HARYANA STATE POLLUTION CONTROL BOARD C-11, SECTOR-6, PANCHKULA

Website – www.hspcb.org.in E-mail: hspcbmisc@gmail.com Phone No. 0172-2577870-873

HSPCB/Misc.Cell/2025/I/269159/2025

Dated:07-04-2025

Τo

The Member Secretary, Central Pollution Control Board, East Arjun Nagar, Parivesh Bhawan, New Delhi -110032

Sub: Special Monitoring of Ambient Air and Noise levels during Deepawali Festival 2024 in the State of Haryana from 24.10.2024 to 07.11.2024.

Ref: letter no. 5297-5332 dated 03.10.2024

Kindly refer to the subject cited above.

In this connection, please find enclosed herewith the report of Special Monitoring of Ambient Air Quality and Noise during Deepawali Festival 2024 carried out in the State of Haryana from 24.10.2024 to 07.11.2024.

This is for your information and further necessary action please.

D.A./ As above

Env. Engineer (Misc. Cell)

For Chairman

CC:

A copy of above is forwarded to the following for information please.

1. Chief Env.Engineer-I & II ,HSPCB.

- 2. Env. Engineer (IT Cell), HSPCB. He is requested to upload the Deepawali Monitoring Report for the year 2024 on website of the Board.
- 3. PS to Chairman/PA to Member SecretaryDA/ As above

# Report on

# Monitoring of Ambient Air and Noise During Deepawali Festival in the State of Haryana Duration

24th October 2024 to 07th November 2024



# HARYANA STATE POLLUTION CONTROL BOARD C-11, SECTOR -6, PANCHKULA E-mail- hspcbmisc@gmail.com Website- www.hspcb.org.in

#### MONITORING OF AMBIENT AIR AND NOISE MONITORING

#### **DURING DEEPAWALI SEASON 2024**

#### **IN THE STATE OF HARYANA**

Haryana State Pollution Control Board has organized a monitoring program to assess and identify the pollution levels in terms of Noise and Ambient Air quality in the state of Haryana. The program is chartered to gauge the pollution in the districts of Haryana during the Deepawali season especially contaminated due to use of fire crackers and increased vehicular movement. The Hon'ble Supreme Court of India vide order dated 23.10.2018 passed in WP(Civil) No. 728 of 2015 directed the Central Pollution Control Board (CPCB) and respective State Pollution Control Boards / Pollution Control Committees (SPCBs/PCCs) of the States and Union Territories to carry out short-term monitoring in their cities for 15 days, for proposed parameters namely, Aluminum, Barium, Iron apart from the regulatory parameters against the short-term Ambient Air Quality Criteria values (AAQCVs) as proposed by CPCB.

#### **MONITORING PLAN**

With the persuasion of CPCB direction (reference letter no. 5297-5332 dated 03.10.24), Haryana Sate Pollution control Board (HSPCB) has conducted Noise level Monitoring and Ambient Air Monitoring programme for the Deepawali Festival 2024.

#### **Part-I: Noise Monitoring**

The festival of Deepawali was on  $31^{\rm st}$  October, 2024 (Thursday), as per CPCB directions Noise monitoring should be conducted on Pre-Deepawali day i.e. on 24.10.2024 (Thursday), and Post-Deepawali day 31.10.2024 (Thursday).

#### Part-II: Ambient Air Quality Monitoring

In addition to the general parameters like  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_2$  and metals (Pb, Ni & As in  $PM_{10}$ ), new parameters (Al, Ba, Fe in  $PM_{2.5}$ ) are required to be monitored to assess the impact of firecracker bursting during Deepawali festival and for analysis of regulatory parameters like  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_2$  and metals (Pb, Ni & As in  $PM_{10}$ ) the CPCB Guidelines Volume I may be adopted and for Metal/Elements analysis in  $PM_{2.5}$  (Al, Ba, Fe) (PTFE Filter), EDXRF is the best option; however, other suitable method (ICP-MS/ICP-AES) may also be adopted.

#### MONITORING SCHEDULE

According to the Hon'ble Supreme Court and the instructions issued by CPCB, the HSPCB has decided that the Board will collect samples and conduct the noise monitoring on Pre-Deepawali day i.e. 24" October, 2024 (Thursday) & Deepawali day on 31st October, 2024 (Thursday) and ambient air quality monitoring for consecutive 15 days commencing from 24th October, 2024 to 07th November, 2024 (i.e. 7 days before and after Deepawali).

#### **RESULTS OF AMBIENT AIR AND NOISE MONITORING**

# **DURING DEEPAWALI SEASON IN**

# **THE STATE OF HARYANA**

#### 1. AMBALA

- Latitude -30.3420 & Longitude-76.8468
- Climate /Meteorology: The climate of Ambala over most of the year is a pronounced continental in character. It is very hot in summers and markedly cold in winters.
- Population: As per 2011 India census, Ambala had population of 207,937 consisting of 112,840 Males and 95,094 Females.
- Major Land use: Major portion of the land is being used for agriculture purpose.

#### **Monitoring Locations:**

- Map showing all monitoring location of the city.
- Description of monitoring site: Area/Zone: Industrial (I), Residential (R), Commercial.
- Activities around the monitoring location/Source of Noise Pollution:- Industrial,
   Domestic and commercial activities

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1.	Industrial Area, Ambala Cantt	Industrial	30.334667	76.884001
2.	SamtaVihar, Ambala Cantt	Residential	30.327623	76.880898
3.	Mahesh Nagar Market, Ambala	Commercial	30.337898	76.760339

# Ambient Noise Level during Deepawali festival, 2024:-

Ambient Noise Level during Deepawa	111 1680	vai, 20	74					
Location: Area/Zone: Industrial Site:-Industrial Area, Ambala Cantt City:-Ambala (Latitude:-30.334667, Longitude:-76.884001)	Pre	e- Deepa (24.10.2	wali Day 2024)		Deepawali Day 31.10.2024)			
Time Duration	Lmin	Lmix	Leq (dB(A	i i mii	n Lmix	Leq (dB(A)		
18:00 to 19:00 Hr	62.0	83.4	64.7	60.2	86.4	65.5		
19:00 to 20:00 Hr	58.7	92.4	68.0	66.3	114	89.1		
20:00 to 21:00 Hr	63.3	88.8	69.6	54.2	109.1	78.8		
21:00 to 22:00 Hr	57.3	79.1	64.6	62.9	97.9	79.9		
22:00 to 23:00 Hr	55.3	70.4	57.4	63.6	92.9	73.5		
23:00 to 24:00 Hr	53	65.7	56.1	63.6	91.3	71.1		
Location: Area/Zone: Residential: - Site:-SamtaVihar, Ambala Cantt City:-Ambala (Latitude:-30.327623, Longitude:-76.880898)	Pre- Deepawali Day (24.10.2024)				Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmix	Leq (dB(A)	Lmin	Lmix	Leq (dB(A)		
18:00 to 19:00 Hr	45.7	85.3	63.4	44.8	85.5	62.9		
19:00 to 20:00 Hr	44.9	82.6	64.4	49.6	92.7	68.0		
20:00 to 21:00 Hr	44	82.7	60.9	52.0	102.2	73.1		
21:00 to 22:00 Hr	46.9	116.6	94.0	56.7	110	79.5		
22:00 to 23:00 Hr	63.9	71.2	68.6	47.1	95.0	65.8		
23:00 to 24:00 Hr	42.1	84.6	57.6	45.9	100.8	70.2		

Location: Area/Zone: Commercial: - Site:-Mahesh Nagar Market City:-Ambala (Latitude:-30.337898, Longitude:-76.760339)		Deepawa 24.10.202	•	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmix	Leq (dB(A)	Lmin	Lmix	Leq (dB(A)	
18:00 to 19:00 Hr	66.7	96.1	76.8	65.2	95.7	77.8	
19:00 to 20:00 Hr	63.9	101.8	79.6	61.9	119.4	88	
20:00 to 21:00 Hr	63.2	93.3	75.0	64.4	92.8	76.7	
21:00 to 22:00 Hr	58.4	92.8	75	65.4	109.2	85.8	
22:00 to 23:00 Hr	57.2	86.7	71.2	61.5	117	91.2	
23:00 to 24:00 Hr	50.6	91.8	72.1	64	107.7	90.0	

Name of the location	HSPCB	Office Bu	ilding, An	nbala City	7					
			Additi	onal Para	meters					
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> ) (	NO <sub>2</sub> (μg/m <sup>3</sup> )	Me	Metals in PM <sub>10</sub>			Elements i	in PM <sub>2.5</sub>
	, ,	, ,	, ,		Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)
24.10.2024	109.34	25.25	4.312	10.376	0.42	2.53	0	-	-	-
25.10.2024	116.93	25.25	4.433	10.664	0.05	5.38	0	-	-	-
26.10.2024	112.30	29.46	4.526	10.992	0.03	3.49	0	-	-	-
27.10.2024	113.24	29.46	4.498	11.019	0.03	4.00	0	-	-	-
28.10.2024	131.12	33.67	4.660	11.361	0.06	3.92	0	-	-	-
29.10.2024	122.34	29.46	4.688	11.347	0.07	2.41	0	-	-	-
30.10.2024	142.32	37.88	5.012	12.104	0.12	4.62	0	-	-	-
31.10.2024	232.09	58.92	6.220	14.858	0.16	10.58	0	-	-	-
01.11.2024	245.57	63.13	6.304	15.085	0.13	8.08	0	-	-	-
02.11.2024	174.88	37.88	5.295	13.076	0.08	7.74	0	-	-	-
03.11.2024	124.59	33.67	5.134	12.627	0.04	4.21	0	-	-	-
04.11.2024	121.37	29.46	4.713	11.743	0.02	5.33	0	-	-	-
05.11.2024	110.02	25.25	4.685	11.542	0.07	4.62	0	-	-	-
06.11.2024	110.90	25.25	4.620	11.495	0.06	3.92	0	-	-	-
07.11.2024	105.58	21.04	4.558	11.314	0.08	1.92	0	-	-	-

# 2. BHIWANI

Latitude: 28.816299 & Longitude: 76.376284
 Climate / Meteorology : Semiarid climate

Population : 196,057Major Land use : Agriculture

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Sector-13, HUDA, Bhiwani	Residential	28.8181201	76.1346243
2	SCF-32, Sector-13, HSVP, Bhiwani,	Commercial	28.816299	76.376284

# <u>Ambient Noise Level during Deepawali festival, 2024:</u>

Location: Area/Zone: I/R/C/S:-R Site: - Sector 13, Residential Area, Huda, Bhiwani. Latitude:28.819313 Longitude:76.139379		-Deepawal (24.10.202	•	Deepa (31.3		
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)
18:00 to 19:00Hr	31.5	41.7	36.60	35.9	48.3	42.1
19:00 to 20:00Hr	29.3	57.8	43.05	27.8	57.8	42.8
20:00 to 21:00Hr	29.3	57.6	44.45	30.1	59.8	44.9
21:00 to 22:00Hr	31.0	54.2	42.80	26.9	63.4	45.1
22:00 to 23:00Hr	27.6	59.8	38.70	27.5	61.6	44.5
23:00 to 24:00Hr	26.9	43.40	35.10	25.3	54.5	39.9

Location :Area/Zone :I/R/C/S:-C Site:-Commercial, SCF-32, Sector-13, HSVP, Bhiwani. (Latitude:-28.816379, Longitude:76.138574)		re-Deepawa ay (24.10.20)		Deepaw (31.10		
Time Duration	Lmin	Lmax	Leq (dB (A)	Lmin	Lmax	Leq (dB (A)
18:00 to 19:00Hr	33.4	47.2	40.3	37.7	61.6	49.6
19:00 to 20:00Hr	29.6	57.6	43.6	38.7	61.7	50.2
20:00 to 21:00Hr	32.6	49.6	41.1	40.1	65.6	52.8
21:00 to 22:00Hr	30.7	59.7	45.2	26.6	71.9	49.2
22:00 to 23:00Hr	31.9	56.3	44.0	41.2	71.5	56.3
23:00 to 24:00Hr	35.6	45.6	40.6	37.3	59.6	48.4

Name of the location	Sector 13, I	Residential A	Area, Huda,								
			Regulat	ory Parame	ters			Additional Parameters			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )			NO <sub>2</sub> (μg/m <sup>3</sup> )	M	Metals in PM <sub>10</sub>			Metal/Elements in		
	, ,		, ,	,	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)	
24.10.2024	129.3	82.6	7.220	7.182	0.07	5.07	BDL	-	-	-	
25.10.2024	141.1	85.2	6.495	6.540	0.08	4.54	BDL	-	-	-	
26.10.2024	144.9	82.2	12.759	7.137	0.09	4.44	BDL	-	-	-	
27.10.2024	151.1	93.7	11.794	8.099	0.09	4.21	BDL	-	-	-	
28.10.2024	120.6	92.9	9.091	6.784	0.10	4.26	BDL	-	-	-	
29.10.2024	121.6	97.9	7.375	8.498	0.10	5.28	BDL	-	-	-	
30.10.2024	163.8	104.0	5.258	7.475	0.10	6.97	BDL	=	-	=	
31.10.2024	166.9	95.0	31.570	6.762	0.11	7.49	BDL	-	-	-	
01.11.2024	148.43	119.9	5.425	6.470	0.11	6.51	BDL	=	-	-	
02.11.2024	165.46	100.9	4.930	5.827	0.08	6.73	BDL	=	-	-	
03.11.2024	170.2	91.9	4.992	6.001	0.08	6.90	BDL	-	-	-	
04.11.2024	275.3	155.9	9.575	5.870	0.08	7.75	BDL	-	-	-	
05.11.2024	167.5	71.9	5.151	7.067	0.10	6.65	BDL	-	-	-	
06.11.2024	213.73	97.9	7.990	6.440	0.09	7.03	BDL	-	-	-	
07.11.2024	246.56	136.9	5.669	6.165	0.09	7.15	BDL	-	-	-	

Name of the location	SCF-32, Se	ctor-13, HS	SVP, Bhiwa	nni.						
		Reg	gulatory P	A	dditiona	Paramet	ers			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )		SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Metals	in PM <sub>10</sub>	Metal/Elements in PM			2.5
						Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)
24.10.2024	135.7	78.0	7.582	7.359	0.07	5.54	BDL	-	-	-
25.10.2024	141.8	89.5	6.959	6.700	0.08	5.15	BDL	-	-	-
26.10.2024	147.7	83.5	13.744	7.563	0.09	5.04	BDL	-	-	-
27.10.2024	153.3	94.0	12.388	8.206	0.09	4.92	BDL	-	-	-
28.10.2024	120.3	93.8	9.620	7.256	0.10	5.72	BDL	-	-	-
29.10.2024	130.6	100.4	7.944	9.104	0.10	5.46	BDL	-	-	-
30.10.2024	168.93	106.5	5.754	7.648	0.09	7.26	BDL	-	-	-
31.10.2024	156.0	95.8	36.424	7.332	0.10	8.12	BDL	-	-	-

01.11.2024	150.4	122.7	5.754	6.647	0.11	7.23	BDL	-	-	-
02.11.2024	169.9	100.7	5.357	6.147	0.08	5.52	BDL	-	-	-
03.11.2024	169.8	92.2	5.196	6.004	0.08	7.21	BDL	-	-	-
04.11.2024	284.86	157.7	10.098	5.861	0.08	7.97	BDL	-	-	
05.11.2024	168.7	72.4	5.683	7.094	0.10	7.11	BDL	1	-	•
06.11.2024	215.43	98.4	8.723	6.546	0.09	7.49	BDL	-	-	-
07.11.2024	243.8	78.4	6.167	6.619	0.09	7.39	BDL	-	-	-

#### 3. CHARKHI DADRI

• **Latitude & Longitude :** 28.5921° N, 76.2653° E

• Climate /Meteorology:Located at an elevation of 217.53 meters (713.68 feet) above sea level, Charkhi Dadri has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 30.25°C (86.45°F) and it is 4.28% higher than India's averages. Charkhi Dadri typically receives about 14.14 millimeters (0.56 inches) of precipitation and has 18.73 rainy days (5.13% of the time) annually.

• **Population:** 502276

• Major Land use : Agriculture

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Regional office Building ,Charkhi Dadri	Commercial	28.594141	76.26425
2	Partap Hospital, Charkhi Dadri	Residential	28.595294	76.256696

Location:Area/Zone:I/R/C/S:-R Site:-Residential Regional Office, HSPCB, Charkhi Dadri. (Latitude:-28.545443, Longitude:76.241579		pawali Day 0.2024)	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)
18:00 to 19:00Hr	30.5	40.7	35.60	36.7	49.3	43.00
19:00 to 20:00Hr	30.3	55.8	43.05	28.8	56.8	42.80
20:00 to 21:00Hr	28.3	60.6	44.45	29.1	60.4	44.75
21:00 to 22:00Hr	30.4	55.2	42.80	27.3	62.9	45.10
22:00 to 23:00Hr	27.4	50.8	39.10	26.2	60.6	43.40
23:00 to 24:00Hr	27.9	42.50	35.20	25.30	53.90	39.60

Location:Area/Zone:I/R/C/S:-C Site: - Commercial Partap Hospital, Charkhi Dadri. (Latitude:-28.594883, Longitude:- 76.144371)	Pre-Deepawali Day (24.10.2024)			Deepawali Day (31.10.2024)		
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)
18:00 to19:00Hr	34.50	48.1	41.3	38.6	62.5	50.55

19:00 to 20:00Hr	29.6	56.5	43.50	39.8	62.9	51.35
20:00 to 21:00Hr	31.4	50.8	41.1	38.9	66.3	52.6
21:00 to 22:00Hr	31.9	58.1	45.00	27.5	72.9	50.2
22:00 to 23:00Hr	30.7	57.3	44.0	40.1	70.6	55.35
23:00 to 24:00Hr	34.9	44.5	39.7	38.2	58.7	48.45

Name of the location	Regional (	Office, HSP	CB, Charkh	i Dadri.								
	Regulatory Parameters								Additional Parameters			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO2 (μg/m3)	NO2 (μg/m3)	Metals in PM <sub>10</sub>			Metal/Elements in		in PM <sub>2.5</sub>		
		, ,			Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24.10.2024	163.33	96.4	12.590	11.213	0.06	7.33	BDL	-	-	-		
25.10.2024	118.7	76.1	12.590	14.590	0.06	7.54	BDL	-	-	-		
26.10.2024	119.6	81.2	14.608	13.987	0.03	7.67	BDL	-	-	-		
27.10.2024	127.16	87.9	14.122	13.947	0.06	7.93	BDL	-	-	-		
28.10.2024	158.56	98.9	7.434	10.691	0.07	8.20	BDL	-	-	-		
29.10.2024	144.13	98.9	12.515	12.620	0.07	8.56	BDL	-	-	-		
30.10.2024	193.56	152.7	6.874	13.223	0.07	8.96	BDL	-	-	-		
31.10.2024	175.26	127.4	15.205	12.057	0.06	8.93	BDL	-	-	-		
01.11.2024	182.16	137.6	11.806	13.344	0.05	8.68	BDL	-	-	-		
02.11.2024	172.16	130.5	11.507	15.795	0.07	8.45	BDL	-	-	-		
03.11.2024	102.7	52.1	14.100	12.855	0.07	8.03	BDL	-	-	-		
04.11.2024	99.53	64.5	11.247	13.790	0.08	8.03	BDL	-	-	-		
05.11.2024	95.56	61.0	9.880	12.423	0.07	6.28	BDL	-	-	-		
06.11.2024	116.06	62.4	8.760	14.761	0.08	8.06	BDL	-	-	-		
07.11.2024	124.36	63.7	12.963	12.328	0.07	7.94	BDL	-	-	-		

Name of the location	Partap 1	Hospital,	Charkhi	Dadri.							
			Regula	tory Paran	neters			Additional Parameters			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )			NO <sub>2</sub> (μg/m <sup>3</sup> )	Metals in PM <sub>10</sub>			Metal/Elements in P			
			(μg/m <sup>3</sup> )		Pb (μg/m³)	Ni (ng/m³)	As (ng/m <sup>3</sup> )	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³	
24.10.2024	162.83	96.1	12.478	14.951	0.06	7.50	BDL	-	-	-	
25.10.2024	134.7	74.8	12.4038	14.630	0.06	7.67	BDL	-	-	-	
26.10.2024	118.5	80.2	12.205	14.992	0.06	7.82	BDL	-	-	-	
27.10.2024	125.93	86.8	14.197	15.192	0.06	8.14	BDL	-	-	-	
28.10.2024	161.23	97.5	9.639	11.455	0.07	8.40	BDL	-	-	-	
29.10.2024	145.56	99.3	12.217	12.299	0.07	8.68	BDL	-	-	-	
30.10.2024	193.5	146.3	9.228	12.781	0.07	9.04	BDL	-	-	-	
31.10.2024	175.5	123.7	16.065	13.545	0.06	9.34	BDL	-	-	-	
01.11.2024	185.66	138	12.254	13.906	0.05	9.44	BDL	-	-	-	
02.11.2024	173.6	136.4	11.170	14.911	0.07	9.18	BDL	-	-	-	
03.11.2024	173.6	136.4	14.115	13.957	0.07	9.18	BDL	-	-	-	
04.11.2024	255.96	130.1	12.504	14.539	0.09	8.82	BDL	-	-	-	
05.11.2024	160.13	132.0	11.454	13.957	0.08	8.60	BDL	-	-	-	
06.11.2024	192.4	85.9	10.979	14.761	0.08	8.38	BDL	-	-	-	
07.11.2024	187.1	8.4	13.885	13.957	0.07	8.11	BDL	-	-	-	

#### 4. <u>FARIDABAD</u>

- **Latitude & Longitude:** 28.4089° N, 77.3178° E
- Climate: Faridabad has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 30.99°C (87.78°F) and it is 5.02% higher than India's averages. Faridabad typically receives about 18.54 millimeters (0.73 inches) of precipitation and has 23.18 rainy days (6.35% of the time) annually.
- **Population:** 18,09,733
- Land Use: The major portion of Land is covered under Agriculture which is 76.71%. The forest cover is 2.77%. Faridabad is accommodating 7.18 % of the total Built up of Haryana Sub region.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1.	RTNMS installed at HSPCB	Residential	28.40792	77.31757
	Building, Sector-16, Faridabad			

Location:Area/Zone/I/R/C/S:-R (RTNMS installed at HSPCB Building, Sector-16, Faridabad) Latitude 28.40792 N Longitude-77.31757 E	Pr	e-Deepawal (24.10.202	-	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq dB (A)	Lmin	Lmax	Leq dB (A)	
18:00 to 19:00 hr.	49.1	91.3	65.9	50.8	100	70.3	
19:00 to 20:00 hr	49.2	93.9	64.1	54.3	105.9	72.2	
20:00 to 21:00 hr.	47.5	95.9	62.3	57.8	103.1	74.8	
21:00 to 22:00 hr	45.2	87.3	60.6	58.8	104.5	74.5	
22:00 to 23:00 hr.	44.8	82.7	54.4	52.1	99.7	72.7	
23:00 to 24:00 hr	44.1	89.2	54.8	46.6	93.2	66.5	

Name of the location										
	Regulatory Parameters							Addi	tional Par	ameters
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	$NO_2$ (µg/m <sup>3</sup> )	Me	tals in PN	<b>1</b> 10	Metal	/Elements	in PM <sub>2.5</sub>
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (µg/m³)
25-10-2024	129.7	79.1	9.3	18.86	0.052	4.25	ND	-	-	-
26-10-2024	151.8	95.8	9.72	18.04	ND	ND	ND	-	-	-
27-10-2024	149	104.1	8.36	47.54	ND	ND	ND	-	-	-
28-10-2024	165.6	91.6	10.00	16.50	ND	ND	ND	-	-	-
29-10-2024	166.6	87.5	9.64	17.97	ND	ND	ND	-	-	-
30-10-2024	175.2	79.1	8.59	22.88	ND	ND	ND	-	-	-
31-10-2024	198.1	120.8	9.41	27.66	ND	ND	ND	-	-	-
01-11-2024	203.4	104.1	5.20	12.21	0.045	ND	ND	-	-	-
02-11-2024	243.2	141.6	10.02	5.68	0.037	ND	ND	-	-	-
03-11-2024	186.5	129.1	8.55	26.72	0.047	4	ND	-	-	-
04-11-2024	185.8	129.1	8.83	40.82	ND	ND	ND	-	-	-
05-11-2024	175.0	91.6	10.76	36.00	0.168	6	ND	-	-	-
06-11-2024	227.1	116.6	10.78	36.63	0.203	7.5	ND	-	-	-
07-11-2024	195.7	133.3	10.22	36.19	0.335	15	ND	-	-	-

#### 5. <u>Fatehabad</u>

• **Latitude & Longitude :** 29.5132° N, 75.4510° E

• Climate: Fatehabad has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 29.75°C (85.55°F) and it is 3.78% higher than India's averages. Fatehabad typically receives about 10.83 millimeters (0.43 inches) of precipitation and has 15.46 rainy days (4.24% of the time) annually.

• **Population:** 942,011

• Major Land use: Agriculture & Residential

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1.	Alpha City, Hisar Road, Fatehabad	Residential	29°30'30.6349"	75°27'27.6476"

Nois	e Level dur	ing Deepa	wali Festival,2	024		
Location: Residence area of Alpha City, Hisar Road,	D D	מיי	24/10/2024	n	l' D	21/10/2024
Fatehabad		î.	y 24/10/2024	Deepa		
	L min	L max	L eq Db (A)	L min	L max	L eq Db (A)
06:00 PM to 07:00 PM	31.2	41	36.1	36.5	49.4	42.95
07:00 PM to 08:00 PM	29.4	54.5	41.95	27.6	57.8	42.7
08:00 PM to 09:00 PM	27.8	59.9	43.85	25.9	61.5	43.7
09:00 PM to 10:00 PM	30.7	56.4	43.55	26.5	63.4	44.95
10:00 PM to 11:00 PM	27.9	51.3	39.6	26.2	59.5	42.85
11:00 PM to 11:59 PM	26.6	43.9	35.25	24.5	54.8	39.65

#### 5. **GURUGRAM**

- **Latitude & Longitude:** 28.4595° N, 77.0266° E
- Climate /Meteorology: Located at an elevation of 224.6 meters (736.88 feet) above sea level, Gurugram has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 31.2°C (88.16°F) and it is 5.23% higher than India's averages. Gurugram typically receives about 20.73 millimeters (0.82 inches) of precipitation and has 21.81 rainy days (5.98% of the time) annually.
- **Population**:1514085
- **Major Land use:** Gurugram has maximum area under built up area i.e. 18% of the total area of the district which is much higher than any district of the sub-region. It indicates the urbanization and industrialization in the district is maximum.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	ResidentialThe Vilas Condominium, Sec-25, Phase-2, Gurugram	Residential	28.40792	77.31757
2	Commercial Regional Office, Opp- Mini Sect. Gurugram Region (N).	Commercial	-	-

# AmbientNoiseLevelduringDeepawalifestival,2024:-

Location: Area/Zone:I/R/C/S:-R Site:- ResidentialThe Vilas Condominium, Sec-25, Phase-2, Gurugram		Deepawali (24.10.2024	•	Deepawali Day (31.10.2024)		
Time Duration	Lmin	Lmax	Leq (dB)(A)	Lmin	Lmax	Leq (dB)(A)
18:00 to 19:00Hr	42.5	52.2	47.5	47.8	53.3	50.55
19:00 to 20:00Hr	41.6	54.2	47.9	52.8	58.6	55.7
20:00 to 21:00Hr	37.2	58.6	47.9	56.3	70.2	63.25
21:00 to 22:00Hr	32.8	41.6	37.2	47.8	74.8	61.30
22:00 to 23:00Hr	31.2	52.8	42.0	46.2	76.2	61.20
23:00 to 24:00Hr	33.3	46.8	40.05	28.6	26.6	27.6

Location: Area/Zone:I/R/C/S:-C Site:-Commercial Regional Office, Opp- Mini Sect. Gurugram Region (N).		Deepawa 24.10.202	•	Deepawali Day (31.10.2024)		
Time Duration	Lmin	Lmax	Leq (dB)(A)	Lmin	Lmax	Leq (dB)(A)
18:00 to 19:00Hr	41.7	51.7	46.7	42.2	51.1	46.65
19:00 to 20:00Hr	42.3	53.5	47.4	50.2	50.9	50.55
20:00 to 21:00Hr	39.2	56.4	47.8	53.2	69.1	61.15
21:00 to 22:00Hr	31.7	40.3	36	45.4	72.3	58.85
22:00 to 23:00Hr	32.8	51.2	42	43.1	74.5	58.8
23:00 to 24:00Hr	35.1	44.2	39.65	29.5	28.3	28.9

Name of the location	The Vila	s Condon	ninium, S	ec-25, Pha	se-2, Gur	ugram						
			Regulat	ory Paran	neters			Additional Parameters				
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	10						nts in				
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24-10-2024	299	219	23.6	43.4	-	-	-	-	-	-		
25-10-2024	313	227	26.2	53.9	-	-	-	-	-	-		
26-10-2024	302	219	4.9	27.1	-	-	-	-	-	-		
27-10-2024	307	224	9	25	-	-	-	-	-	-		
28-10-2024	329	245	26.8	41.5	-	-	-	-	-	-		
29-10-2024	298	188	25.6	45.7	-	-	-	-	-	-		
30-10-2024	396	294	24	63	-	-	-	-	-	-		
31-10-2024	378	281	24.6	62.1	-	-	-	-	-	-		
01-11-2024	563	403	23.3	65	-	-	-	-	-	-		
02-11-2024	367	252	10	46	-	-	-	-	-	-		
03-11-2024	310	215	9	36.7	-	-	-	-	-	-		
04-11-2024	345	229	10	45	-	-	-	-	-	-		
05-11-2024	351	243	14	32	-	-	-	-	-	-		
06-11-2024	358	256	9.8	35.6	-	-	-	-	-	-		
07-11-2024	334	202	12	21	-	-	-	-	-	-		

#### 6.<u>HISAR</u>

- **Latitude &Longitude :**29.1492° N, 75.7217° E
- Climate /Meteorology: Very hot summers and very cold winters. The maximum day temperature during the summer varies between 40 to 46 degree Celsius. During winter its ranges between 1.5 degree to 4 degree Celsius. The winds are strong and frequent during May to July. Normally the South Westerly current of summer monsoon brings the rains during July to September period. Intermittent dust storms are also common.
- **Population :**1,743,931
- **Major Land use:** The major portion of land is covered under agriculture which is 76%.

# **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Arogya Hospital, Near Viswas School, U.E. Hisar, Haryana	Residential	29.13836	75.74441
2	Saini Sweets, Hisar Delhi Road, Hisar, Haryana	Commercial	29.08463	75.44704

Location: (Aarogya Hospital, Near Viswas School, UE-II, Hisar) Lat:29.13836 Long:75.74441		Pre-Deepaw (24.10.20	•	Deepawali Day (31.10.2024)		
Time duration	Lmin	Lmax	Leq dB(A)	Lmin	Lmax	Leq dB(A)
18:00 to19:00 Hr	45.7	58.4	52.05	46.3	64.2	55.25
19:00 to 20:00 Hr	42.1	69.3	55.7	44.4	77.1	60.75
20:00 to 21:00 Hr	40.5	72.5	56.5	41.9	81.8	61.85
21:00 to 22:00 Hr	42.8	71.4	57.1	43.2	88.2	65.7
22:00 to 23:00 Hr	40.7	67.2	53.95	41.5	78.8	60.15
23:00 to 24:00 Hr	37.5	56.9	47.2	39.4	74.1	56.75

Location: (Saini Sweets, Delhi Road, Hisar) Lat:29.08463 Long:75.44704	Pı	re-Deepaw (24.10.20	•	Deepawali Day (31.10.2024)		
Time duration	Lmin	Lmax	Leq dB(A)	Lmin	Lmax	Leq dB(A)
18:00 to 19:00 Hr	47.5	61.1	60.7	48.5	101.3	74.9
19:00 to 20:00 Hr	45.6	72.5	60.5	46.5	95.1	70.8
20:00 to 21:00 Hr	41.4	74.8	64.3	51.3	99.6	75.45
21:00 to 22:00 Hr	43.9	72.1	58.1	44.1	102.3	73.2
22:00 to 23:00 Hr	42.7	69.3	55.3	46.2	97.9	72.05
23:00 to 24:00Hr	39.9	57.5	58.1	43.4	95.4	69.4

Name of the location	Roof top of HSVP office, Urban Estate-II, Hisar.											
Date	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$								Additional Parameters  Metal/Elements in  PM <sub>2.5</sub>			
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24-10-2024	130.63	81.5	21.771	7.843	0.12	4.26	BDL	-	-	-		
25-10-2024	125.76	43	25.000	9.819	0.10	4.11	BDL	-	-	-		
26-10-2024	148.9	61.6	20.692	9.287	0.10	4.15	BDL	-	-	-		
27-10-2024	135.23	104.0	21.525	8.763	0.15	4.33	BDL	-	-	-		
28-10-2024	157.2	81.6	9.198	8.982	0.08	4.48	BDL	-	-	-		

Name of the location	Roof to	p of Flem	iingo Ma	rket, Car	np Chow	k, Hisar.					
			Regula	tory Para	meters			Additional Parameters			
Date	PM10 (μg/m3)	PM2.5 (μg/m3)	SO2 (μg/m3)	NO2 (μg/m3)	Mo	etals in PN	$M_{10}$	Metal/Elements in PM <sub>2.</sub>			
					Pb (μg/m3)	Ni (ng/m3)	As (ng/m3)	Al (μg/m3)	Ba (μg/m3)	Fe (μg/m3)	
24-10-2024	135.76	83.7	22.198	8.927	0.12	3.76	BDL	-	-	-	
25-10-2024	127.7	43.5	25.323	10.477	0.10	3.90	BDL	-	-	-	
26-10-2024	150.76	50.6	20.523	8.714	0.10	4.07	BDL	-	-	-	
27-10-2024	137.56	105.7	20.775	8.236	0.15	4.08	BDL	-	-	-	
28-10-2024	159.33	84.1	21.918	7.843	0.09	4.28	BDL	-	-	-	
29-10-2024	231.63	96.9	24.199	8.921	0.10	4.79	BDL	-	-	-	
30-10-2024	278.43	145.2	10.2601	8.493	0.15	4.86	BDL	-	-	-	
31-10-2024	280.93	178.9	22.113	8.343	0.16	5.23	BDL	-	-	-	
01-11-2024	171.4	120.9	32.535	9.649	0.10	5.33	BDL	-	-	-	
02-11-2024	189.66	126.3	6.702	7.554	0.08	5.02	BDL	-	-	-	
03-11-2024	269.66	320.4	9.425	8.495	0.15	4.79	BDL	-	-	-	
04-11-2024	228.83	236.1	48.144	6.330	0.05	5.27	BDL	-	-	-	
05-11-2024	169.86	125.9	46.658	7.502	0.06	5.40	BDL	-	-	-	
06-11-2024	146.86	76.9	57.428	20.812	0.06	5.12	BDL	-	-	-	
07-11-2024	144.83	88.9	9.320	21.290	0.06	4.84	BDL	-	-	-	

- **Latitude &Longitude :**28.6055° N, 76.6538° E
- Climate /Meteorology:Located at an elevation of 214.17 meters (702.66 feet) above sea level, Jhajjar has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 31.06°C (87.91°F) and it is 5.09% higher than India's averages. Jhajjar typically receives about 14.23 millimeters (0.56 inches) of precipitation and has 19.65 rainy days (5.38% of the time) annually.
- **Population**: 958,405
- **Major Land use:** Residential and Industrial are the major land use in the built-up area in Haryana region.

#### **Description of Air Monitoring Site**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Roof top of Regional Office ,HSPCB, SCF 42 & 43, Sector-6, Huda Market ,Bahadurgarh.	Commercial		

Name of the location	Roof top	of Region	nal Office	,HSPCB,	SCF 42 &	& 43, Sec	tor-6, Hu	da Marke	et ,Bahadu	rgarh.
			Additi	onal Para	meters					
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Me	tals in PI	$M_{10}$	Metal/l	Metal/Elements in P	
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)
24-10-2024	184.00	128.9	7.989	27.418	4.84	BDL	0.08	-	-	-
25-10-2024	243.07	60.9	6.332	26.473	4.94	BDL	0.09	-	-	-
26-10-2024	222.03	69.9	6.531	27.297	5.10	BDL	0.09	-	-	-
27-10-2024	263.27	131.9	6.488	27.331	5.20	BDL	0.09	-	-	-
28-10-2024	244.03	101.9	6.326	27.130	5.43	BDL	0.09	-	-	-
29-10-2024	199.69	79.9	6.488	26.56	5.77	BDL	0.10	-	-	-
30-10-2024	214.70	142.9	9.433	26.976	6.43	BDL	0.08	-	-	-
31-10-2024	206.77	141.9	10.336	30.104	6.81	BDL	0.07	-	-	-
01-11-2024	176.37	97.9	8.997	41.137	7.03	BDL	0.08	-	-	-
02-11-2024	239.87	145.0	9.309	42.564	7.17	BDL	0.09	-	-	-
03-11-2024	244.07	148.9	8.898	43.281	6.67	BDL	0.08	-	-	-
04-11-2024	233.60	140.8	8.593	44.346	6.31	BDL	0.08	-	-	-
05-11-2024	201.07	80.0	8.437	44.272	6.12	BDL	0.08	-	-	-
06-11-2024	276.10	95.9	7.403	44.641	5.51	BDL	0.08	-	-	-
07-11-2024	313.77	227.9	7.708	31.317	5.15	BDL	0.08	-	-	-

# 8. <u>JIND</u>

- **Latitude &Longitude :**29.3255° N, 76.2998° E
- Climate /Meteorology: The climate of this district is on the whole dry, hot in summer and cold in winter. The year may be divided into four seasons. The cold season from November to march is followed by hot season which lasts till the onset of the south-west monsoon. The monsoon withdraws by 15 September and is followed by the Post-monsoon or the transition period.
- **Population**:13,34,152
- **Major Land use:** Agriculture land covers the highest area of Jind district followed by settlements, wasteland, water bodies, and forest.

# **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Sector-10, HUDA, Jind	Residential	29.31287654	76.33722485
2	Sector-10, HUDA Jind	Commercial	29.3135538	76.3403656
3	Civil Hospital Jind	Silent Zone	29.31208548	76.33025497

Location: Sector-10, HUDA (Residential Area), Jind	]	Pre-Deepaw (24/10/20	ū	Deepawali Day (31/10/2024)			
Time duration	Lmin	Lmax	Leq db(A)	Lmin	Lmax	Leq db(A)	
18:00 to 19:00 Hr	64.1	68.2	66.15	75.1	77.2	76.15	
19:00 to 20:00 Hr	65.5	67.1	66.3	77.6	78.2	77.9	
20:00 to 21:00 Hr	67.2	68.9	68.05	80.1	80.9	80.5	
21:00 to 22:00 Hr	70.1	72.2	71.15	82.3	84.5	83.4	
22:00 to 23:00 Hr	72.9	73.8	73.35	85.9	88.7	87.3	
23:00 to 24:00 Hr	73.6	74.8	74.2	87.1	87.6	87.35	
			69.6			82.1	

Location: Sector-10, HUDA (Commercial Area Market), Jind	I	Pre-Deepaw (24/10/20	•	Deepawali Day (31/10/2024)			
Time duration	Lmin	Lmax	Leq db(A)	Lmin	Lmax	Leq db(A)	
18:00 to 19:00 Hr	74.6	75.9	75.25	73.1	74.9	74	
19:00 to 20:00 Hr	76.3	78.2	77.25	76.1	77.6	76.85	
20:00 to 21:00 Hr	80.1	80.8	80.45	79.3	81.2	80.25	
21:00 to 22:00 Hr	82.5	84.6	83.55	83.5	85.1	84.3	
22:00 to 23:00 Hr	86.4	89.1	87.75	85.9	88.9	87.4	

23:00 to 24:00 Hr	87.5	88.6	88.05	88.1	89.1	88.6
			82.05			81.9

Location: Civil Hospital, (Silent Zone) Jind	]	Pre-Deepav (24/10/2	•	Deepawali Day (31/10/2024)			
Time duration	Lmin	Lmax	Leqdb(A)	Lmin	Lmax	Leqdb(A)	
18:00 to 19:00 Hr	56.1	60.9	58.5	61.2	63.2	62.2	
19:00 to 20:00 Hr	56.9	60.8	58.85	61.9	63.5	62.7	
20:00 to 21:00 Hr	57.1	61.8	59.45	60.8	62.8	61.8	
21:00 to 22:00 Hr	58.1	60.2	59.15	59.1	61.9	60.5	
22:00 to 23:00 Hr	56.8	60.5	58.65	57.5	58.6	58.05	
23:00 to 24:00 Hr	56.7	62.7	59.7	55.6	59.9	57.75	
			59.05			60.5	

Name of the location	SCO 23-	-24, LIC B	Building, D	SC, Urba	n Estate,	Sector-1	0, Jind			
			Additional Parameters							
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Metals in PM <sub>10</sub>			Metal/Elements in PM		
		, ,	, 0		Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)
24-10-2024	165.2	90.9	-	-	0.09	9.53	BDL	-	-	-
25-10-2024	160.2	84.9	-	-	0.08	9.36	BDL	-	-	-
26-10-2024	150.9	88.2	-	-	0.09	9.22	BDL	-	-	-
27-10-2024	162.7	90.1	-	-	0.07	10.32	BDL	-	-	-
28-10-2024	-	-	-	-	-	-		-	-	-
29-10-2024	150.8	86	-	-	0.1	9.54	BDL	-	-	-
30-10-2024	210.2	134.9	-	-	0.09	9.6	BDL	-	-	-
31-10-2024	305	209.9	-	-	0.11	9.76	BDL	-	-	-
01-11-2024	-	-	-	-	-	-		-	-	-
02-11-2024	-	-	-	-	-	-		-	-	-
03-11-2024	265.9	111.9	-	-	0.09	9.85	BDL	-	-	-
04-11-2024	231.5	122.5	-	-	0.07	9.56	BDL	-	-	-
05-11-2024	211.7	118.9	-	-	0.08	9.41	BDL	-	-	-
06-11-2024	-	-	-	-	-	-	-	-	-	-
07-11-2024	-	-	-	-	-	-	-	-	-	-

Name of the location	HSIIDC	Office, Inc	dustrial A	rea, Jind								
			Regulato	ory Param	eters			Additi	Additional Parameters			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	$\begin{array}{c c} PM_{10} & PM_{2.5} \\ (\mu g/m^3) & (\mu g/m^3) \end{array}$		NO <sub>2</sub> (μg/m <sup>3</sup> )	Me	etals in P	$\overline{\mathrm{M}_{10}}$	Metal/I	Elements i	n PM <sub>2.5</sub>		
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24-10-2024	-	_	-	-	-	-	-	-	-	-		
25-10-2024	-	-	-	-	-	-	-	-	-	-		
26-10-2024	-	-	-	-	-	-	-	-	-	-		
27-10-2024	-	-	-	-	-	-	-	-	-	-		
28-10-2024	166.9	96.8	-	-	0.09	10.55	BDL	-	-	-		
29-10-2024	-	-	-	-	-	-	-	-	-	-		
30-10-2024	-	-	-	-	-	-	-	-	-	-		
31-10-2024	-	-	-	-	-	-	-	-	-	-		
01-11-2024	227.2	189.9	-	-	0.09	10.8	BDL	-	-	-		
02-11-2024	232.9	129.9	-	-	0.1	11.01	BDL	-	-	-		
03-11-2024	-	-	-	-	-	-	-	-	-	-		
04-11-2024	-	-	-	-	-	-	-	-	-	-		
05-11-2024	-	-	-	-	-	-	-	-	-	-		
06-11-2024	232	89.9	-	-	0.08	10.47	BDL	-	-	-		
07-11-2024	229	135.9	-	-	0.09	9.87	BDL	-	-	-		

# 9. KAITHAL

- **Latitude &Longitude :**29.8043° N, 76.4039° E
- Climate /Meteorology: Kaithal has a Humid subtropical, dry winter climate (Classification: Cwa). The district's yearly temperature is 29.12°C (84.42°F) and it is 3.15% higher than India's averages. Kaithal typically receives about 18.31 millimeters (0.72 inches) of precipitation and has 22.81 rainy days (6.25% of the time) annually.
- **Population**:10,72,861
- Major Land use: Agriculture & Residential.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Sector-19, HUDA ,Kaithal	Residential Area	29.809172	76.418806
2	Sector-19, HUDA, Kaithal	Commercial Area Market	29.806921	76.419507
3	Civil Hospital, Kaithal	Silent Zone	29.792353	76.423542

Location: Sector-19, HUDA (Residential Area), Kaithal	P	re-Deepaw (24/10/20	•	Deepawali Day (31/10/2024)			
Time duration	Lmin	Lmax	Leqdb(A)	Lmin	Lmax	Leqdb(A)	
18:00 to 19:00 Hr	65.2	65.5	65.35	76.9	78.5	77.7	
19:00 to 20:00 Hr	62.5	64.5	63.5	77.8	79.3	78.55	
20:00 to 21:00 Hr	63.5	64.4	63.95	79.5	82.1	80.8	
21:00 to 22:00 Hr	61.2	62.5	61.85	82.2	89.8	86	
22:00 to 23:00 Hr	64.2	67.5	65.85	89.6	92.4	91	
23:00 to 24:00 Hr	62.5	63.2	62.85	92.8	95.3	94.05	
			63.89			84.68	

Location:Sector-19, HUDA (Commercial Area Market), Kaithal		Pre-Deepawali Day (24/10/2024)			Deepawali Day (31/10/2024)			
Time duration	Lmin	Lmax Leqdb(A)		Lmin	Lmax	Leqdb(A)		
18:00 to 19:00 Hr	65.2	70.5	67.85	71.8	76.5	74.15		
19:00 to 20:00 Hr	66	72.5	69.25	70.4	72.3	71.35		
20:00 to 21:00 Hr	65.2	71.6	68.4	66.5	71.2	68.85		
21:00 to 22:00 Hr	63.5	71	67.25	65.8	75.2	70.5		
22:00 to 23:00 Hr	62.6	68.2	65.4	66.2	72.2	69.2		
23:00 to 24:00 Hr	61.8	61.8 66.2 64		64.2	71.2	67.7		
			67.02			70.29		

Location:Civil	I	Pre-Deepav	vali Day		Deepawali D	ay		
Hospital, (Silent Zone)		(24/10/2	024)	(31/10/2024)				
Kaithal								
Time duration	Lmin	Lmax	Leqdb(A)	Lmin	Lmax	Leqdb(A)		
18:00 to 19:00 Hr	55.2	60.5	57.85	62.1	64.5	63.3		
19:00 to 20:00 Hr	59.2	62.5	60.85	61.8	63.7	62.75		
20:00 to 21:00 Hr	58.3	62.1	60.2	60.5	62.4	61.45		
21:00 to 22:00 Hr	54.5	60.5	57.5	56.2	59.4	57.8		
22:00 to 23:00 Hr	56.2	60.1	58.15	55.1	59.1	57.1		
23:00 to 24:00 Hr	53.4	59.3	56.35	52.1	55.8	53.95		
			58.48			59.39		

Name of the location	Regional	Office , HS	SPCB, Sect	or 20 Hud	a Market	,Kaithal.				
			Additio	onal Para	ameters					
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )		NO <sub>2</sub> (μg/m <sup>3</sup> )	M	etals in PI	$M_{10}$	Meta	al/Elemen	nts in
					Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)	
24-10-2024	209.9	109.4	43.662	17.343	0.05	3.29	BDL	-	-	-
25-10-2024	136.03	79.3	23.319	18.884	0.05	3.47	BDL	-	-	-
26-10-2024	174.23	100.2	26.295	18.495	0.05	3.51	BDL	-	-	-
27-10-2024	129.7	91.5	24.957	17.336	0.05	3.61	BDL	-	-	-
28-10-2024	159.06	87.7	34.926	16.559	0.05	3.76	BDL	-	-	-
29-10-2024	232.73	72.2	16.607	9.298	0.05	3.99	BDL	-	-	-
30-10-2024	234.63	70.6	16.930	9.498	0.06	4.22	BDL	-	-	-
31-10-2024	370.96	102.1	36.377	11.387	0.09	4.50	BDL	-	-	-
01-11-2024	188.76	48.9	40.038	14.141	0.09	5.09	BDL	-	-	-
02-11-2024	210.03	75.9	29.596	13.196	0.08	4.95	BDL	-	-	-
03-11-2024	176.46	107.9	30.274	12.734	0.06	4.75	BDL	-	-	-
04-11-2024	156.63	131.9	35.511	13.123	0.08	4.48	BDL	-	-	-
05-11-2024	85.16	76.9	25.872	12.513	0.06	4.31	BDL	-	-	-
06-11-2024	128.46	100.9	26.731	13.384	0.05	4.08	BDL	-	-	-
07-11-2024	109.03	64.9	25.885	13.263	0.05	64.9	BDL	-	-	-

# 10. KARNAL

- **Latitude &Longitude :**29.7820° N, 76.9182° E
- Climate /Meteorology: In Karnal, the climate is warm and temperate. During the winter season, there is a significant decrease in precipitation levels within Karnal as compared to the summer months. In Karnal, the mean yearly temperature amounts to 23.8 °C | 74.8 °F. The precipitation level on a yearly basis amounts to 828 mm | 32.6 inch as per the meteorological records.
- **Population :**1,505,324
- **Major Land use:** The major portion of land is covered under Agriculture which is 81.96%. he forest cover us 0.41%. Karnal is accommodating 5.69% of the total built up of Haryana sub region.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	3rd floor, SCO 80-81, Above Punjab National Bank, Namastey Chowk, Karnal,	Residential	29.67065	76.99188
2	Model Town,DayanandColony,Karnal,	Residential	29.70327	77.00415

3	Bus Stand, Karnal	Commercial	29.68795	76.99026

Location: 3rd floor, SCO- 80-81, Above Punjab National Bank, Namastey Chowk, Karnal	F	Pre-Deepawa (24.10.20)	•	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leg dB(A)	Lmin	Lmax	Leg dB(A)	
18:00 to 19:00 Hr	37.5	49.0	43	44.0	59.0	51.5	
19:00 to 20:00 Hr	42.5	48.5	45.5	49.0	58.0	53.5	
20:00 to 21:00 Hr	38.0	49.0	43.5	50.0	58.5	53.25	
21:00 to 22:00 Hr	36.0	46.5	41.25	53.5	58.0	55.75	
22:00 to 23:00 Hr	36.0	45.5	40.75	53.0	56.5	54.75	
23:00 to 24:00 Hr	38.0	42.5	39.25	51.5	53.5	52.5	
Average			42.20	Ave	rage	53.54	

Location: Model Town, Dayanand C Karnal	Pre-Deepawali Day (24.10.2024)			Deepawali Day (31.10.2024)			
Time Duration		Lmin	Lmax	Leg dB(A)	Lmin	Lmax	Leg dB(A)
18:30 to 19:00 Hr	39.5	46.5	41	42.5	50.0		41
19:00 to 20:00 Hr	42.5	48.5	43.50	42.5	57.5		43.50
20:00 to 21:00 Hr	42.8	48.0	45.4	49.5	63.5		45.4
21:00 to 22:00 Hr	42.5	49.5	46	48.5	63.5		46
22:00 to 23:00Hr	39.5	49.5	44	51.0	60.5		44
23:00 to 24:00 Hr	37.0	45.0	39	45.9	59.5		39
Av			43.15	Aver	rage	43.15	

Location: Bus Stand, Karnal	Pr	re-Deepawali (24.10.2024)	•	]	Deepawali Da (31.10.2024)		
Time Duration	Lmin	Lmax	Leg dB(A)	Lmin	Lmax	Leg dB(A)	
18:00 to 19:00 Hr	39.5	48.5	42.55	47.5	57.5	54.5	
19:00 to 20:00 Hr	36.5	49.5	44.5	50.0	60.0	54.50	
20:00 to 21:00 Hr	37.9	48.5	42.20	51.5	60.5	57.15	
21:00 to 22:00 Hr	36.8	46.5	41.65	55.5	62.8	59.15	
22:00 to 23:00 Hr	39.2	47.0	40.80	53.1	59.5	57.15	
23:00 to 24:00 Hr	38.5	47.5	43	49.5	54.5	52.55	
Av	erage	1	42.45	Average		55.83	

Name of the location	10 ML	D STP at	Gogripu	ır Karnal	(Latitud	le:- 29.6	612968,	Longitud	le :- 76.95	710964)	
			Regulat	ory Paran	neters			Additional Parameters			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Metals in PM <sub>10</sub>			Metal	/Elements	in PM <sub>2.5</sub>	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 0	, 0	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)	
24-10-2024	-	-	-	-	-	-	-	-	-	-	
25.10.2024	113.13	33.30	4.58	10.63	0.07	2.19	BDL	-	-	-	
26.10.2024	117.55	33.30	4.61	10.74	0.04	4.02	BDL	-	-	-	
27.10.2024	128.22	38.05	4.71	10.90	0.17	4.43	BDL	-	-	-	
28.10.2024	119.44	33.30	4.49	10.51	0.12	4.71	BDL	-	-	-	
29.10.2024	149.62	42.81	4.71	10.99	0.13	3.22	BDL	-	-	-	
30.10.2024	192.30	71.35	4.90	11.35	0.11	3.76	BDL	-	-	-	
31.10.2024	187.75	52.32	5.57	12.62	0.42	7.74	BDL	-	-	-	
01.11.2024	165.66	52.32	4.91	11.26	0.18	7.45	BDL	-	-	-	
02.11.2024	145.11	47.56	4.84	11.07	0.07	4.54	BDL	-	-	-	
03.11.2024	130.56	38.05	4.86	11.31	0.08	2.92	BDL	-	-	-	
04.11.2024	122.73	33.30	4.50	10.33	0.06	3.62	BDL	-	-	-	
05.11.2024	120.64	38.05	4.28	9.71	0.03	2.86	BDL	-	-	-	
06-11-2024	126.33	42.81	4.38	9.88	0.12	2.05	BDL	-	-	-	
07-11-2024	113.64	38.05	4.52	10.52	0.03	1.41	BDL	-	-	-	

Name of the location	SCO 78-	SCO 78-79, Namastey Chowk, Karnal (Latitude:-29.670517, Longitude :- 76.991770										
			Regulato		Addi	tional Para	meters					
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )					/Elements	in PM <sub>2.5</sub>		
	, 0	, ,	, 0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24-10-2024	-	-	-	-	-	-	-	-	-	-		
25.10.2024	120.33	28.54	4.60	10.72	0.30	2.20	BDL	-	-			
26.10.2024	128.09	28.54	4.61	10.81	0.07	4.26	BDL	-	-			
27.10.2024	120.39	33.30	4.59	10.64	0.07	5.04	BDL	-	-	-		
28.10.2024	118.18	28.54	4.48	10.36	0.11	4.28	BDL	-	-	-		
29.10.2024	134.41	42.81	4.63	10.74	0.12	2.6	BDL	-	-	-		

30.10.2024	190.53	66.59	4.91	11.27	0.09	3.40	BDL	-	-	-
31.10.2024	203.22	85.62	5.56	12.48	0.35	8.41	BDL	-	-	-
01.11.2024	175.82	61.83	4.91	11.18	0.23	8.94	BDL	-	-	-
02.11.2024	132.83	42.81	4.91	11.18	0.06	4.50	BDL	-	-	-
03.11.2024	144.76	57.08	4.93	11.27	0.09	2.88	BDL	-	-	-
04.11.2024	147.22	66.59	5.00	11.34	0.08	3.99	BDL	-	-	-
05.11.2024	137.12	47.56	4.87	10.99	0.04	2.83	BDL	-	-	-
06-11-2024	123.93	33.30	4.26	9.60	0.14	1.73	BDL	-	-	-
07-11-2024	134.41	33.30	4.81	10.99	0.04	2.83	BDL	-	-	-

#### 11. KURUKSHETRA

- **Latitude &Longitude :**29.9953° N, 76.7798° E
- Climate /Meteorology: The climate here is considered warm and temperate. When compared with winter, the summers have much more rainfall. In Kurukshetra, the mean yearly temperature amounts to 23.9 °C | 75.0 °F. Precipitation here is about 808 mm | 31.8 inch per year.
- **Population** :9,64,655
- Major Land use: Agriculture.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Sec-7	Residential	29.97166	76.87536
2	Sec-17, Near LIC Building, Kurukshetra	Commercial	29.97043	76.83844
3	PipliRoad, Opp. New Bus Stand Kurukshetra	Commercial	29.97415	76.86490

# Ambient Noise Level during Deepawali festival, 2024:-

Location: Area/Zone: I/R/C/S: -Sec-7 (Residential) Site:- Sec-7 City:- Kurukshetra (Latitude:-29.97306, Longitude:-76.87684)	Pre	- Deepav (24.10.20	•	I	Deepawali (31.10.20	•
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)
18:00 to 19:00 Hr	42.8	87.6	58.4	43.8	52.9	61.3
19:00 to 20:00 Hr	42.7	75.2	52.3	43.2	96.5	64.4
20:00 to 21:00 Hr	44.3	73.3	51.5	51.7	117.6	84.8
21:00 to 22:00 Hr	43.1	68.0	49.6	53.4	93.7	67.6
22:00 to 23:00 Hr	40.6	73.8	47.3	42.8	96.3	62.4
23:00 to 24:00 Hr	41.8	68.8	49.6	42.4	94.7	64.3
Average			51.45			67.47

Location: Area/Zone: I/R/C/S: - Sec-17 (Commercial) Site:- Near LIC Building City:- Kurukshetra (Latitude:-29.97014, Longitude:- 76.83868)	Pre	- Deepav (24.10.20	•	I	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)		
18:00 to 19:00 Hr	52.1	90.2	68.8	53.3	84.7	66.5		
19:00 to 20:00 Hr	53.5	97.2	70.8	55.1	96.8	76.4		
20:00 to 21:00 Hr	55.0	94.1	69.3	54.3	92.9	71.9		
21:00 to 22:00 Hr	52.4	81.2	62.1	53.3	98.7	67.9		
22:00 to 23:00 Hr	52.7	88.4	63.9	53.9	92.7	71.2		
23:00 to 24:00 Hr	49.3	81.2	66.3	48.9	101.8	68.9		
Average			66.87			70.47		

Location: Area/Zone: I/R/C/S: - Pipli Road, (Commercial) Site:- Opp. New Bus Stand City:- Kurukshetra (Latitude:-29.97403, Longitude:- 76.86491)	Pre	Pre- Deepawali Day (24.10.2024)			Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)		
18:00 to 19:00 Hr	58.0	98.9	73.8	59.6	92.3	77.6		
19:00 to 20:00 Hr	58.2	107.8	75.1	55.3	99.7	85.9		
20:00 to 21:00 Hr	56.2	98.9	73.1	59.2	99.4	75.2		
21:00 to 22:00 Hr	61.4	95.0	74.9	63.0	100.6	77.8		
22:00 to 23:00 Hr	58.2	90.2	73.1	59.4	91.7	72.5		
23:00 to 24:00 Hr	57.4	106.6	77.4	59.6	95.5	72.5		
Average			74.57			76.92		

Name of the location	DDA off	ice sector	-7 Kuruks	hetra								
			Regulato	ory Param	eters			Addit	Additional Parameters			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Me	tals in P	M <sub>10</sub>	Metal/Elements in PM2.5				
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m <sup>3</sup> )	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24-10-2024	161.69	95.55	17.03	14.92	-	-	-	-	-	-		
25.10.2024	195.03	100.80	20.98	15.11	-	-	-	-	-	-		
26.10.2024	196.21	94.03	11.47	14.93	-	-	-	-	-	-		
27.10.2024	167.55	93.77	7.96	15.03	-	-	-	-	-	-		
28.10.2024	151.71	88.13	8.08	15.12	-	-	-	-	-	-		
29.10.2024	126.90	73.62	6.98	14.90	-	-	-	-	-	-		
30.10.2024	202.02	107.16	7.52	15.51	-	-	-	-	-	-		
31.10.2024	377.45	213.81	17.80	22.96	-	-	-	-	-	-		
01.11.2024	277.89	147.94	22.59	20.36	-	-	-	-	-	-		

02.11.2024	206.34	111.96	16.33	15.10	-	-	-	-	-	-
03.11.2024	215.06	95.70	11.53	15.08	-	-	-	-	-	-
04.11.2024	183.23	97.32	11.77	15.06	-	-	-	-	-	-
05.11.2024	154.89	92.34	11.91	15.00	-	-	-	-	-	-
06-11-2024	195.05	83.54	5.22	14.98	-	-	-	-	-	-
07-11-2024	245.95	99.30	1.98	14.88	-	-	-	-	-	-

# 12. MAHENDERGARH

• **Latitude &Longitude:** 28.2734° N, 76.1401° E

• Climate /Meteorology:Mahendragarh has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 29.88°C (85.78°F) and it is 3.91% higher than India's averages. Mahendragarh typically receives about 14.08 millimeters (0.55 inches) of precipitation and has 18.0 rainy days (4.93% of the time) annually.

• **Population:** 9,22,088

• Major Land use : Agriculture.

#### **Description of Air Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Station located at Sinchai Bhawan, Singhana Road, Narnaul	Residential		
2	STP Huda, Narnaul, Distt. Mahendragarh	Commercial		

Name of the location	Station Ic	ocated at S	inchai Bh	awan, Sir	ighana R	oad, Nar	naul			
			Regulato	ry Param	eters			Additional Parameters		
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Metals in PM <sub>10</sub>		Metal/	Metal/Elements in PM <sub>2.5</sub>		
	, 0		, 0		Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)
24-10-2024	21.5	61.0	293	216	-	-	-	-	-	-
25.10.2024	25.3	41.5	247	152	-	-	-	-	-	-
26.10.2024	13	31	218	152	-	-	-	-	-	-
27.10.2024	13.1	41.9	232	160	-	-	-	-	-	-
28.10.2024	25	52	242	166	-	-	-	-	-	-
29.10.2024	14	66	272	182	-	-	-	-	-	-
30.10.2024	17.8	67.8	313	221	-	-	-	-	-	-
31.10.2024	19	66.4	363	272	-	-	-	-	-	-

01.11.2024	14.1	65.0	306	201	-	-	-	-	-	-
02.11.2024	15.0	31.3	275	163	-	-	-	-	-	-
03.11.2024	11	37	265	149	-	-	-	-	-	-
04.11.2024	9.2	24.7	252	149	-	-	-	ı	-	-
05.11.2024	16.7	29.0	261	170	-	-	-	ı	-	-
06-11-2024	12	21	196	114	-	-	-	ı	-	-
07-11-2024	-	-	-	-	-	-	-	-	-	_

Name of the location	STP Huda	, Narnaul,	Distt. Mah	endragarh							
			Regulato	ry Param	eters			Additional Parameters			
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Metals in PM <sub>10</sub>			Metal/Elements in PM			
	(μg/)	(µg/)	(µg/)	7 4.8	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)	
24-10-2024	31.7	71.1	277	168	-	-	-	-	-	-	
25.10.2024	13	33	260	145	-	-	-	-	-	-	
26.10.2024	11.5	21.9	253	153	-	-	-	-	-	-	
27.10.2024	12.9	24.08	257	153	-	-	-	-	-	-	
28.10.2024	25.2	27.8	271	162	-	-	-	-	-	-	
29.10.2024	14.5	47.2	299	176	-	-	-	-	-	-	
30.10.2024	41.4	58.3	320	199	-	-	-	-	-	-	
31.10.2024	43.2	71.9	375	254	-	-	-	-	-	-	
01.11.2024	18	40.5	331	199	-	-	-	-	-	-	
02.11.2024	14.6	25.4	276	164	-	-	-	-	-	-	
03.11.2024	5.5	23.0	263	158	-	-	-	-	-	-	
04.11.2024	7.7	16.3	257	142	-	-	-	-	-	-	
05.11.2024	5	21	276	194	_	-	-	-	-	-	
06-11-2024	13	18	223	142	-	-	-	-	-	-	
07-11-2024	-	-	-	-	-	-	-	-	-	-	

# 13. <u>NUH</u>

- **Latitude &Longitude:**28.1024° N, 76.9931° E
- Climate /Meteorology:In Nuh, the wet season is sweltering, oppressive, and partly cloudy and the dry season is hot and mostly clear. Over the course of the year, the temperature typically varies from 47°F to 106°F and is rarely below 42°F or above 112°F.
- **Population**: 10,89,406

• Major Land use: Agriculture.

# **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Near MC Office Nuh	Commercial	28.2135684	76.9536022
2	Qureshi Mohalla, Nuh	Residential	28.1070923	77.0085419
3	SHKM Hospital, Nuh	Silent zone	28.08984	76.97349

# Ambient Noise Level during Deepawali festival, 2024:-

Location :Area/Zone:I/R/C/S:-R Site:- Near MC Office, Nuh Commercial Area, District Nuh (Latitude:- 28.10204, Longitude: 77.00455	Pr	e-Deepaw (24.10.20		Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq(d B(A)	Lmin	Lmax	Leq(d B(A)	
18:00 to 19:00Hr	49.8	66.9	54.3	50.4	74.2	59.3	
19:00 to 20:00Hr	53.5	73.2	59.3	48.9	88.1	64.5	
20:00 to 21:00Hr	55.1	75.6	62.7	48.7	88.9	64.7	
21:00 to 22:00Hr	50.6	70.6	58.4	51.8	87.4	65.6	
22:00 to 23:00Hr	47.8	72.9	57.1	49.2	78.0	59.6	
23:00 to 24:00Hr	44.0	68.3	52.9	46.1	71.3	56.7	

Location : Area/Zone:I/R/C/S:-R Site:-Quareshi Mohalla (Residential Zone), District Nuh. (Latitude:- 28.1070923, Longitude: 77.0085419	I	_	nwali Day 0.2024)	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)	
18:00 to 19:00Hr	47.5	63.0	51.1	53.8	75.6	62.4	
19:00 to 20:00Hr	46.4	77.1	52.4	46.6	73.6	56.3	
20:00 to 21:00Hr	46.0	77.2	53.2	48.4	85.5	67.7	
21:00 to 22:00Hr	43.2	71.8	51.9	46.8	85.8	69.1	
22:00 to 23:00Hr	46.1	82.6	63.8	54.1	87.9	65.6	
23:00 to 24:00Hr	45.6	64.6	49.2	44.6	84.4	65.8	

Location :Area/Zone:I/R/C/S:-R Site:- SHKM Hospital (Silent Zone), District Nuh. (Latitude:- 28.08984, Longitude: 76.97349	Pre-Deepawali Day (24.10.2024)	Deepawali Day (31.10.2024)	
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Name of the location	PHED office, Ward No.01, Hamid Colony, Nuh											
			Regulato	ory Param	eters			Additional Parameters				
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Me	Metals in PM <sub>10</sub>			l/Elements	in PM <sub>2.5</sub>		
	, 0		, 0		Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24-10-2024	121.43	87.5	29.716	18.82	ND	ND	ND	0.0045	0.0003	0.0010		
25.10.2024	98.85	62.5	28.586	17.736	ND	ND	ND	0.0046	0.0006	0.0010		
26.10.2024	97.16	7.8	28.603	17.826	ND	ND	ND	0.0053	0.0002	0.0096		
27.10.2024	117.86	104.1	27.496	17.646	0.0456	3.75	ND	0.0048	0.0242	0.0015		
28.10.2024	132.66	91.6	27.53	16.976	ND	ND	ND	0.0040	0.0006	0.0015		
29.10.2024	84.99	50	27.523	17.403	0.171	5.9	ND	0.0040	0.0002	0.0016		
30.10.2024	96.83	58.3	27.776	19.7	0.084	8.58	ND	0.0044	0.0003	0.0012		
31.10.2024	128.22	58.3	27.883	24.77	0.227	21.25	ND	0.0015	0.0019	0.0038		
01.11.2024	121.5	50	28.783	18.97	0.194	19	ND	0.0014	ND	0.0039		
02.11.2024	131.76	58.3	28.616	17.776	0.418	44.75	ND	0.0101	ND	0.013		
03.11.2024	148.5	75	26.326	17.756	0.640	71.66	ND	0.0136	0.0004	0.0105		
04.11.2024	219.96	108.3	28.28	19.553	0.908	112.25	ND	0.0257	ND	0.0105		
05.11.2024	164.16	129.1	26.496	17.693	0.690	83.25	ND	0.0083	ND	0.0010		
06-11-2024	112.63	91.6	28.016	19.05	0.457	37.5	ND	0.0089	ND	0.0015		
07-11-2024	121.66	87.5	28.996	17.383	0.373	24.41	ND	0.0053	ND	0.0012		

#### 14. PANCHKULA

- **Latitude &Longitude :**30.6942° N, 76.8606° E
- Climate /Meteorology: Panchkula has a humid subtropical, dry winter climate (Classification: Cwa). The district's yearly temperature is 26.3°C (79.34°F) and it is 0.33% higher than India's averages. Panchkula typically receives about 29.3 millimeters (1.15 inches) of precipitation and has 31.0 rainy days (8.49% of the time) annually.
- **Population :**5,61,293
- **Major Land use :**The major portion of land is covered under Forest which is 46.97%. The agriculture land is 36%. Panchkula is accommodating 3.23% of the total built up of Haryana Sub region.

# **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	SCO-115-116, 3 <sup>rd</sup> Floor, Sector-25, Panchklua,	Commercial	30.6698	76.886644
2	Plot No. 86, Phase-1, Industrial Area, Panchkula,	Industrial	30.67514	76.83496

# Ambient Noise Level during Deepawali Festival, 2024:-

Location: A Site:-SCO-115-116, 3 <sup>rd</sup> Floor, Sec-25, Panchkula City:- Panchkula (Latitude:- 30.66980, Longitude:- 76.88661)	Pre- Deepawali Day (24.10.2024 to 30.10.2024)				epawali E 31.10.2024		Post Deepawali (01.11.2024 to 08.11.2024)			
Time Duration	Lmin	Lmix	Leq (dB(A)	Lmin	Lmix	Leq (dB(A)	Lmin	Lmix	Leq (dB(A)	
18:00 to 19:00 Hr	25.6	80.5	51.57	34.1	88.2	75.1	29.7	83.1	70.1	
19:00 to 20:00 Hr	27.0	77.5	48.74	29.2	80.2	50.4	25.2	66.3	45.2	
20:00 to 21:00 Hr	32.5	90.9	60.88	47.8	94.6	64.1	43.0	72.1	60.4	
21:00 to 22:00 Hr	31.6	95.8	64.61	48.8	97.3	72.2	43.4	88.4	65.3	
22:00 to 23:00 Hr	20.2	81.8	51.1	45.2	87.2	67.1	40.0	81.4	61.9	
59.323:00 to 24:00 Hr	20.5	80.4	50.4	46.1	85.4	62.8	38.4	82.6	59.3	
Location: B Area/Zone: I/R/C/S: - Site:- Plot No. 86, Industrial Area, Phase- 1, Panchkula City:- Panchkula (Latitude:- 30.6737655, Longitude	(24	Deepawal 1.10.2024 0.10.2024	to		epawali D 1.10.2024		Post Deepawali (01.11.2024 to 08.11.2024)		4 to	
<b>:-</b> 76.8341325)										
:- 76.8341325)  Time Duration	Lmin	Lmix	Leq (dB(A)	Lmin	Lmix	Leq (dB(A)	Lmin	Lmix	Leq (dB(A)	
,	<b>Lmin</b> 50.2	<b>Lmix</b> 81.9		<b>Lmin</b> 53.3	<b>Lmix</b> 90.1	_	<b>Lmin</b> 50.4	<b>Lmix</b> 87.3	_	
Time Duration 18:00 to 19:00 Hr 19:00 to 20:00 Hr	50.2 47.8		(dB(A)	53.3 41.3	90.1 95.1	(dB(A)) 69.6 73.6	50.4	87.3 91.0	(dB(A) 65.4 67.2	
Time Duration 18:00 to 19:00 Hr	50.2	81.9 77.2 93.1	(dB(A)) 62.2	53.3	90.1	(dB(Å) 69.6 73.6 85.6	50.4	87.3	(dB(A) 65.4	
Time Duration  18:00 to 19:00 Hr  19:00 to 20:00 Hr  20:00 to 21:00 Hr  21:00 to 22:00 Hr	50.2 47.8 47.9 34.8	81.9 77.2 93.1 88.2	(dB(A) 62.2 57.9 69.2 62.4	53.3 41.3 54.4 48.1	90.1 95.1 102.2 104.2	(dB(A) 69.6 73.6 85.6 87.9	50.4 40.2 51.5 44.1	87.3 91.0 99.2 100.6	(dB(A)) 65.4 67.2 77.2 80.8	
Time Duration  18:00 to 19:00 Hr  19:00 to 20:00 Hr  20:00 to 21:00 Hr	50.2 47.8 47.9	81.9 77.2 93.1	(dB(A)) 62.2 57.9 69.2	53.3 41.3 54.4	90.1 95.1 102.2	(dB(Å) 69.6 73.6 85.6	50.4 40.2 51.5	87.3 91.0 99.2	(dB(A)) 65.4 67.2 77.2	

Name of the location	SCO - 115-116, 3rd Floor, Sector - 25, Panchkula										
			Regulato	ry Param	eters			Additio	nal Para	meters	
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Me	etals in P	$M_{10}$	Metal/E	lements i	in PM <sub>2.5</sub>	
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)	
25.10.2024	96.59	19.03	4.63	10.50	0.049	1.853	BDL	-	-	-	
26.10.2024	108.46	19.03	4.62	10.47	0.03	2.78	BDL	-	-	-	
27.10.2024	109.22	23.78	4.58	10.45	0.083	2.107	BDL	-	-	-	
28.10.2024	112.25	23.78	4.68	10.88	0.07	2.267	BDL	-	_	-	
29.10.2024	135.23	28.54	4.87	11.22	0.087	4.307	BDL	-	-	-	
30.10.2024	142.68	33.30	4.94	11.67	0.09	2.64	BDL	-	-	-	
31.10.2024	221.91	47.56	5.23	12.02	0.113	5.063	BDL	-	-	-	
01.11.2024	204.10	42.81	5.11	11.96	0.107	5.99	BDL	-	-	-	
02.11.2024	173.86	38.05	4.96	11.86	0.05	4.31	BDL	-	-	-	
03.11.2024	143.18	33.30	4.78	10.96	0.01	2.11	BDL	-	-	-	
04.11.2024	128.72	28.54	4.78	10.87	0.03	2.27	BDL	-	-	-	
05.11.2024	122.54	23.78	4.79	10.85	0.07	1.85	BDL	-	-	-	
06.11.2024	117.87	23.78	4.63	10.78	0.09	3.83	BDL	-	-	-	
07.11.2024	113.95	23.78	4.68	10.71	0.047	2.78	BDL	-	-	-	

Name of the location	Plot No.	86, Indus	trial Area	, Phase -	1, Panch	ıkula					
			Addit	tional Par	ameters						
Date	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						$\mathbf{M}_{10}$	Metal/Elements in PM <sub>2.5</sub>			
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)	
25.10.2024	107.13	19.03	4.65	10.72	0.047	2.11	BDL	-	-	-	
26.10.2024	108.14	19.03	4.66	10.69	0.027	2.27	BDL	-	-	-	
27.10.2024	107.39	23.78	4.64	10.67	0.037	4.307	BDL	-	-	-	
28.10.2024	120.52	28.54	4.77	11.09	0.037	2.64	BDL	-	-	-	
29.10.2024	140.27	33.30	4.80	11.12	0.07	5.06	BDL	-	-	-	
30.10.2024	144.19	33.30	4.83	11.18	0.087	5.99	BDL	-	-	-	
31.10.2024	220.33	52.32	5.32	12.18	0.137	6.83	BDL	-	-	-	
01.11.2024	202.46	47.56	5.18	11.97	0.18	2.11	BDL	-	-	-	
02.11.2024	172.47	42.81	5.10	11.83	0.14	8.61	BDL	-	-	-	

03.11.2024	160.80	33.30	4.83	11.21	0.09	7.7	BDL	-	-	-
04.11.2024	145.01	28.54	4.81	11.14	0.047	3.83	BDL	-	-	-
05.11.2024	132.32	28.54	4.82	11.12	0.027	2.78	BDL	-	-	-
06.11.2024	122.66	23.78	4.66	10.75	0.09	1.5	BDL	-	-	-
07.11.2024	126.45	23.78	4.64	10.68	0.113	2.067	BDL	-	-	-

#### **15. PANIPAT**

- **Latitude &Longitude :**29.3909° N, 76.9635° E
- Climate /Meteorology: Panipat has a Humid subtropical, dry winter climate (Classification: Cwa). The district's yearly temperature is 29.16°C (84.49°F) and it is 3.19% higher than India's averages. Panipat typically receives about 19.71 millimeters (0.78 inches) of precipitation and has 23.72 rainy days (6.5% of the time) annually.
- **Population :**1,205,437
- **Major Land use :**The major portion of land is covered under Agriculture which is 83.61%. The forest cover is 3.29%. Panipat is accommodating 6.61% of the total built up of Haryana sub region.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Sector-11, HUDA, Panipat	Residential	29.381354	76.979919
2	Sector-12, HUDA, Panipat	Commercial	29.382636	76.990135
3	Civil Hospital Panipat	Silent Zone	29.400652	76.970484

# Ambient Noise Level during Deepawali festival, 2024:-

Location: A Area/Zone: I/R/C/S: - Site:-Sector-11, HUDA (Residential Area), City:- Panipat (Latitude:-29.381354,Longitude:- 76.979919)		Deepawali 31.10.2024	•		epawali D 1.11.2024	•
Time Duration	Lmin	mix	Leq (dB(A)	Lmin	mix	Leq (dB(A)
18:00 to 19:00 Hr	63.4	67.0	65.2	72.2	76.0	74.1
19:00 to 20:00 Hr	65.1	65.5	65.3	75.5	77.5	76.5
20:00 to 21:00 Hr	62.5	64.4	63.45	77.5	79.4	78.25
21:00 to 22:00 Hr	61.4	63.1	62.25	80.1	83.5	81.8
22:00 to 23:00 Hr	61.3	64.5	62.9	81.3	85.5	83.4
23:00 to 24:00 Hr	61.0	62.5	61.75	72.2	76.5	74.35

Location: Area/Zone: I/R/C/S: - Site:-Sector-12, HUDA (Commercial Area Market),	Pre- Deepawali Day (31.10.2024)	Deepawali Day (01.11.2024)
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Panipat City:- (Latitude:29.382636,Longitude:- 76.990135)						
Time Duration	Lmin	mix	Leq (dB(A)	Lmin	mix	Leq (dB(A)
18:00 to 19:00 Hr	65.2	70.5	67.85	71.3	74.5	72.9
19:00 to 20:00 Hr	64.6	71.7	68.15	71.2	74.3	72.75
20:00 to 21:00 Hr	63.5	70.9	67.2	69.5	73.2	71.35
21:00 to 22:00 Hr	62.7	70.2	66.45	68.8	73.0	70.9
22:00 to 23:00 Hr	62.4	69.2	65.8	66.2	71.2	68.7
23:00 to 24:00 Hr	61.2	65.2	63.2	64.3	70.2	67.25

Location: Area/Zone: I/R/C/S: - Site:-Civil Hospital (Silent Zone), Panipat City:- (Latitude:-29.400652,Longitude:- 76.970484)		Deepawali 31.10.2024		Deepawali Day (01.11.2024)			
Time Duration	Lmin	mix	Leq (dB(A)	Lmin	mix	Leq (dB(A)	
18:00 to 19:00 Hr	55.2	60.5	57.85	60.1	62.5	61.3	
19:00 to 20:00 Hr	55.1	60.5	62.5	60.0	62.7	61.35	
20:00 to 21:00 Hr	54.2	60.0	57.1	58.3	60.4	59.35	
21:00 to 22:00 Hr	53.5	59.0	56.25	57.5	60.2	58.85	
22:00 to 23:00 Hr	53.0	57.5	55.25	56.1	58.1	57.1	
23:00 to 24:00 Hr	52.1	57.0	54.55	54.1	57.5	55.8	

Name of the location	Station-A installed at the roof of The HSPCB Office SCO No-55 Sec-25 Panipat.											
			Regula	tory Paran	neters			Additional Parameters				
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Metals in PM <sub>10</sub>			Metal/Elements in PM <sub>2.5</sub>				
					Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)		
24.10.2024	179.64	33.38	5.4	12.23	-	-	-	-	-	-		
25.10.2024	186.42	23.84	5.42	12.29	-	-	-	-	-	-		
26.10.2024	184.59	23.84	5.43	12.32	-	-	-	-	-	-		
27.10.2024	186.42	28.61	5.43	12.3	-	-	-	-	-	-		
28.10.2024	191.35	28.61	5.43	12.33	-	-	-	-	-	-		
29.10.2024	191.40	33.38	5.43	12.5	-	-	-	-	-	-		
30.10.2024	200.79	38.15	5.62	13.29	-	-	-	-	-	-		
31.10.2024	171.19	47.69	6.01	17.67	-	-	-	-	-	-		
01.11.2024	333.96	61.99	7.53	13.12	-	-	-	-	-	-		
02.11.2024	223.05	52.46	5.94	12.76	-	-	-	-	-	-		

Name of the location	Station-B	Manual AA	Q Monitori	ng Report (	Of NFL G	uest House	e GT Road	l Panipat.		
			Regulato	ry Paramo	eters			Addit	ional Par	ameters
Date	PM <sub>10</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> PM <sub>2.5</sub> (μg/m <sup>3</sup> ) (μg/m <sup>3</sup> )	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )	Me	Metals in PM <sub>10</sub>			Elements	in PM <sub>2.5</sub>
	, 0		, 0	(Fg/)	Pb (μg/m³)	Ni (ng/m³)	As (ng/m³)	Al (μg/m³)	Ba (μg/m³)	Fe (μg/m³)
25.10.2024	192.82	38.15	5.47	12.28	-	-	-	-	=	-
26.10.2024	180.69	23.84	5.4	12.17	-	-	-	-	-	-
27.10.2024	184.02	23.84	5.4	12.13	-	-	-	-	-	-
28.10.2024	190.95	28.61	5.44	12.41	-	-	-	-	-	-
29.10.2024	189.24	28.61	5.44	12.3	-	-	-	-	-	-
30.10.2024	193.47	33.38	5.45	12.31	-	-	-	-	-	-
31.10.2024	206.41	42.92	5.65	12.57	-	-	-	-	-	-
01.11.2024	299.94	57.22	6.02	13.31	-	-	-	-	-	-
02.11.2024	341.18	66.76	7.57	17.77	-	-	-	-	-	-
03.11.2024	231.26	57.22	5.97	13.23	-	-	-	-	-	-
04.11.2024	210.89	47.69	5.83	12.89	-	-	-	-	-	-
05.11.2024	191.05	38.15	5.77	12.75	-	-	-	-	-	-
06.11.2024	187.9	33.38	5.7	12.56	-	-	-	-	-	-
07.11.2024	173.16	38.15	5.75	12.6	-	_	-	_	-	-

#### 16. PALWAL

- **Latitude &Longitude :**28.1473° N, 77.3260° E
- Climate /Meteorology:Located at an elevation of 197.03 meters (646.42 feet) above sea level, Palwal has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 30.43°C (86.77°F) and it is 4.46% higher than India's averages. Palwal typically receives about 13.7 millimeters (0.54 inches) of precipitation and has 20.64 rainy days (5.65% of the time) annually.
- **Population**:1042708
- Major Land use : Agriculture.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	HSVP Office Complex, Near Gymkhana Club, Sector -12,	Residential	28.133811	77.315058
	Palwal			

#### **Result of Noise level Monitoring**

Location: HSVP COMPLEX, Near Gymkhana Club, Sector-12, Palwal. Latitude 28.13351, Longitude 77.314664	Pre- Deepawali Day (24.10.2024)				Deepawa (31.10.2	
Time duration	Lmin	Lmax	Leq dB (A)	Lmin	Lmax	Leq dB (A)
18:00 to19:00 Hr	45.7	58.4	52.05	46.3	64.2	55.25
19:00 to 20:00 Hr	42.1	69.3	55.7	44.4	77.1	60.75
20:00 to 21:00 Hr	40.5	72.5	56.5	41.9	81.8	61.85
21:00 to 22:00 Hr	42.8	71.4	57.1	43.2	88.2	65.7
22:00 to 23:00 Hr	40.7 67.2 53.95			41.5	78.8	60.15
23:00 to 24:00 Hr	37.5	56.9	47.2	39.4	74.1	56.75

Name of the location: HSVP COMPLEX, Near Gymkhana Club, Sector-12, Palwal. (Latitude 28.13351, Longitude 77.314664)

Date			Regul	atory parar	neters			Proposed	New Parar	neters
	PM <sub>10</sub> (μg/m3)	PM <sub>2.5</sub> (μg/m3)	SO <sub>2</sub> (μg/m3)	NO <sub>2</sub> (μg/m3)	M	etals in PM	I <sub>10</sub>	Metals/Elements in PM <sub>2.5</sub>		
	(μg/III3)	(μg/III3)	(μg/III3)	(μg/m3)	Pb (μg/m3)	Ni (µg/m3)	As (μg/m3)	Al (µg/m3)	Ba (μg/m3)	Fe (µg/m3)
24-10-2024	145.5	70.8	10.66	22.12	ND	ND	ND			
25-10-2024	105.6	50	11.73	20.75	ND	ND	ND			
26-10-2024	135.5	66.6	11.52	19.74	0.101	3	ND			
27-10-2024	138.6	70.8	11.75	20.55	0.103	ND	ND			
28-10-2024	132.4	62.5	10.09	20.11	0.131	ND	ND			
29-10-2024	95.6	45.8	12.71	21.17	0.095	ND	ND			
30-10-2024	135.5	70.8	11.72	20.82	0.085	ND	ND			
31-10-2024	164.3	79.1	10.08	20.35	0.071	ND	ND			
01-11-2024	113.2	62.5	7.11	21.49	0.767	2.6	ND			
02-11-2024	153.9	70.8	6.29	18.41	0.536	2.08	ND			
03-11-2024	193.5	87.5	6.71	20.92	0.224	21.25	ND			
04-11-2024	222.4	112.5	8.07	20.86	0.160	7.166	ND			
05-11-2024	99.8	83.3	8.76	19.46	0.132	4.083	ND			
06-11-2024	153.0	54.1	8.74	20.53	0.203	6.5	ND			
07-11-2024	145.0	70.8	9.51	19.46	0.221	5.25	ND			

- **Latitude &Longitude :**28.1920° N, 76.6191° E
- Climate /Meteorology:Located at an elevation of 242.99 meters (797.21 feet) above sea level, Rewari has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 30.17°C (86.31°F) and it is 4.2% higher than India's averages. Rewari typically receives about 13.05 millimeters (0.51 inches) of precipitation and has 19.73 rainy days (5.41% of the time) annually.

• **Population**:900,332

• Major Land use: Agriculture & Forest.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1.	Dakah Prajpati chowk Rewari	Residential	28.205616	76.6334
2.	M.C Bawal, Rewari	Commercial	28.07079	76.57677

#### Noise Level during Deepawali festival, 2024

Location: <u>STP, PHED,</u> <u>Nasaiji Road, Rewari</u>	Pre-Deepawali Day (24.10.2024)			Deepawali Day (31.10.2024)			
Time duration	Lmin	Lmax	Leq dB(A)	Lmin	Lmax	Leq dB(A)	
18:00 hrs to 19:00 hrs	45.5	71.2	58.2	43.3	80.2	70.2	
19:00 hrs to 20:00 hrs	44.4	72.4	58.4	41.2	81.2	72.6	
20:00 hrs to 21:00 hrs	43.3	77.2	60.1	39.2	83.4	76.2	
21:00 hrs to 22:00 hrs	42.1	75.6	61.6	32.2	85.2	82.7	
22:00 hrs to 23:00 hrs	40.2	77.2	56.6	27.2	76.2	77.2	
23:00 hrs to 24:00 hrs	38.0	68.2	55.2	26.4	75.2	76.4	
Location: Municipal	Pre	-Deepawali	Day	I	Deepawali I	Day	
Committe, Rewari		(24.10.202	4)		(31.10.202	4)	
Time duration	Lmin	Lmax	Leq	Lmin	Lmax	Leq	
			dB(A)			dB(A)	
18:00 hrs to 19:00 hrs	46.1	88.3	64.9	46.7	87.2	62.1	
19:00 hrs to 20:00 hrs	42.8	105.8	79.9	44.9	100.3	75.0	
20:00 hrs to 21:00 hrs	50.8	48.8	73.3	34.7	93.7	74.0	
21:00 hrs to 22:00 hrs	48.6	96.1	66.1	57.9	95.9	77.4	
22:00 hrs to 23:00 hrs	48.3	82.6	60.6	56.3	92.0	75.1	
23:00 hrs to 24:00 hrs	46.6	90.0	62.4	52.8	91.6	59.9	

01-11-2024

02-11-2024

03-11-2024

04-11-2024

05-11-2024

06-11-2024

07-11-2024

316

235

246

260

266

241

273

202

137

142

159

168

153

165

10

11.2

10.3

16.8

13

11.2

10.7

41

25

20.2

40

25

26

Name of the location: Station located at Rewari- Municipal Council, Rewari

Date			Regul	atory parai	meters			Proposed	<b>Proposed New Parameters</b>			
	PM <sub>10</sub> (μg/m3)	PM <sub>2.5</sub> (μg/m3)	SO <sub>2</sub> (μg/m3)	NO <sub>2</sub> (μg/m3)	Metals in PM <sub>10</sub>			Metals/Elements in PM 2.5				
	(µg/mo)	(μg/πιο)	(μg/1113)	(µg/me)	Pb (μg/m3)	Ni (µg/m3)	As (µg/m3)	Al (μg/m3)	Ba (µg/m3)	Fe (µg/m3)		
24-10-2024	216	135	16	53								
25-10-2024	226	141	24.6	56.6								
26-10-2024	221	134	23	59								
27-10-2024	234	143	12.1	66.5								
28-10-2024	229	140	18.9	61.0								
29-10-2024	244	151	16	62								
30-10-2024	289	170	23.6	38.7								
31-10-2024	376	249	37.1	56.6								

Date			Regul	atory parai	neters			Proposed	New Parai	meters
	PM <sub>10</sub> (μg/m3)	PM <sub>2.5</sub> (μg/m3)	SO <sub>2</sub> (μg/m3)	NO <sub>2</sub> (μg/m3)	M	etals in PM	I <sub>10</sub>	Metals/l	Elements in	PM2.5
					Pb (μg/m3)	Ni (μg/m3)	As (μg/m3)	Al (μg/m3)	Ba (μg/m3)	Fe (μg/m3)
24-10-2024	203	127	11	40.1						
25-10-2024	197	114	11.5	25						
26-10-2024	208	120	14.2	24.6						
27-10-2024	242	149	21	46.8						
28-10-2024	249	154	19.8	32.4						
29-10-2024	242	141	17.3	34.2						
30-10-2024	287	166	13	40.5						

31-10-2024	403	295	24.1	73	 	 	 
01-11-2024	325	207	14.7	35.2	 	 	 
02-11-2024	288	196	12.3	40.3	 	 	 
03-11-2024	265	172	13.4	34.1	 	 	 
04-11-2024	249	164	11.2	24.6	 	 	 
05-11-2024	259	176	12.4	27.2	 	 	 
06-11-2024	243	147	9	22	 	 	 
07-11-2024	260	155	12	25	 	 	 

#### **18. ROHTAK**

- **Latitude &Longitude :**28.8955° N, 76.6066° E
- Climate /Meteorology: Rohtak has a Subtropical steppe climate (Classification: BSh). The district's yearly temperature is 30.2°C (86.36°F) and it is 4.23% higher than India's averages. Rohtak typically receives about 10.3 millimeters (0.41 inches) of precipitation and has 18.18 rainy days (4.98% of the time) annually.
- **Population**:1058683
- **Major Land use :**The major portion of land is covered under agriculture which is 92.26%. The cover is 2.63%. Rohtak is accommodating 3.35% of the total built up of Haryana region.

# **Description of Air Monitoring Sites**

Name of the Location	Zone	Latitude	Longitude
AAQMS at HSPCB Office	Commercial		
Building, Near Vishal Hotel, Sector-36, Suncity, Rohtak			
4	AQMS at HSPCB Office suilding, Near Vishal Hotel,	AQMS at HSPCB Office Commercial suilding, Near Vishal Hotel,	AQMS at HSPCB Office Commercial suilding, Near Vishal Hotel,

Date			Regula	itory para	meters			Propose		
	PM <sub>10</sub> (μg/m3)	PM <sub>2.5</sub> (μg/m3)	SO <sub>2</sub> (μg/m3)	NO <sub>2</sub> (μg/m3)	Mo	etals in PN	M <sub>10</sub>	Paramet  Metals/l	Elements i	in PM 2.
		,,,,	,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Pb (μg/m3)	Ni (μg/m3)	As (µg/m3)	Al (μg/m3)	Ba (μg/m3)	Fe (μg/m3
24-10-2024	174.00	102.20	1.07	1.07	0.11	4.22	BDL			
25-10-2024	191.1	116.3	1.00	1.00	0.12	4.46	BDL			
26-10-2024	171.7	92.4	1	1	0.09	4.32	BDL			
27-10-2024	126.56	116.2	1.2	1.2	0.12	4.03	BDL			
28-10-2024	163.7	59.2	1.14	1.14	0.06	4.33	BDL			
29-10-2024	74.53	68.8	1.13	1.13	0.07	4.70	BDL			

30-10-2024	94.83	93	1.2	1.2	0.08	4.80	BDL			
31-10-2024	340.6	15	1.06	1.06	0.05	5.53	BDL			
01-11-2024	156.96	90	1.13	1.13	0.07	5.66	BDL		-1-	
02-11-2024	230.03	100	1.06	1.06	0.10	5.56	BDL		-	1
03-11-2024	190.2	111.9	1.2	1.2	0.07	5.38	BDL			
04-11-2024	180.23	97.9	1.13	1.13	0.06	5.25	BDL			
05-11-2024	162.1	100.9	1.3	1.3	0.05	5.18	BDL	-	1	
06-11-2024	162	95.8	1.13	1.13	0.05	5.08	BDL			

#### 19. SONIPAT

- **Latitude &Longitude :**28.9931° N, 77.0151° E
- Climate /Meteorology: Located at an elevation of 225.23 meters (738.94 feet) above sea level, Sonipat has a Humid subtropical, dry winter climate. The district's yearly temperature is 29.05°C (84.29°F) and it is 3.08% higher than India's averages. Sonipat typically receives about 13.04 millimeters (0.51 inches) of precipitation and has 19.09 rainy days (5.23% of the time) annually.
- **Population**:14,50,001
- Major Land use: Agriculture and Industrial.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Plot No. 1, Sector-15, Part-II, Sonipat	Residential	28.994945	77.038006
2	House No. 134, Sector-15, Sonipat	Residential	29.004389	77.037492

#### **Result of Noise level Monitoring**

Location: Area/Zone: I/R/C/S: - Site:- Plot No. 1, Sector-15, Part- II, Sonipat (Latitude:- 28.994945, Longitude :77.038006)	Pr	e- Deepawa (24.10.202	•	D	9eepawali (31.10.20	•
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)
			( ()			(
18:00 to 19:00 Hr	31.5	40.2	35.85	35.7	47.3	41.5
19:00 to 20:00 Hr	30.1	54.8	42.45	29.8	57.2	43.5
20:00 to 21:00 Hr	29.3	58.6	43.95	30.1	59.2	44.65
21:00 to 22:00 Hr	32.4	53.2	42.8	29.3	63.2	46.25
22:00 to 23:00 Hr	28.4	49.8	39.1	25.2	58.2	41.7
23:00 to 24:00 Hr	26.4	41.2	33.8	24.3	54.9	39.6

Location: Area/Zone: I/R/C/S: - Site:- House No. 134, Sector-15, Sonipat (Lat-29.004389 Long-77.037492)	Pr	re- Deepawal (24.10.2024	•		0eepawali (31.10.20	•
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)
18:00 to 19:00 Hr	35.5	50.1	42.8	39.63	62.5	51.065
19:00 to 20:00 Hr	30.6	54.5	42.55	39.8	61.9	50.85
20:00 to 21:00 Hr	32.4	52.8	42.6	37.2	65.1	51.15
21:00 to 22:00 Hr	29.9	59.1	44.5	28.5	70.9	49.7
22:00 to 23:00 Hr	31.2	56.3	43.75	42.1	71.2	56.65
23:00 to 24:00 Hr	35.9	47.5	41.7	39.2	57.2	48.2

Date			Regul	latory para	meters			Proposed	New Para	meters	
	PM <sub>10</sub> (μg/m3)	PM <sub>2.5</sub> (μg/m3)	SO <sub>2</sub> (μg/m3)	NO <sub>2</sub> (μg/m3)	M	Metals in PM <sub>10</sub>			Metals/Elements in PM 2.5		
	(μg/m3)	(µg/m3)	(µg/m3)	(μg/III3)	Pb (μg/m3)	Ni (μg/m3)	As (μg/m3)	Al (μg/m3)	Ba (µg/m3)	Fe (μg/m3)	
24-10-2024	165.54	33.26	5.578	12.898	0.07	3.64	-	-	-	-	
25-10-2024	168.54	31.26	5.604	12.867	0.09	2.23	-	-	-	-	
26-10-2024	173.82	35.73	5.624	13.022	0.07	4.28	-	-	-	_	
27-10-2024	171.21	35.73	5.621	12.979	0.079	5.06	-	-	-	-	
28-10-2024	179.49	40.19	5.647	13.010	0.11	5.7	-	-	-	-	
29-10-2024	176.92	40.19	5.647	13.016	0.14	3.3	-	-	-	_	
30-10-2024	191.51	44.66	6.081	14.011	0.09	3.75	-	-	-	_	
31-10-2024	231.25	62.52	6.400	14.710	0.38	9.44	-	-	-	-	
01-11-2024	258.71	71.45	6.388	14.679	0.27	9.27	-	-	-	-	
02-11-2024	215.54	53.59	6.084	14.134	0.07	4.86	-	-	-	-	
03-11-2024	217.84	49.12	6.078	13.956	0.09	3.07	-	-	-	-	
04-11-2024	192.79	44.66	6.089	13.869	0.09	4.99	-	-	-	-	
05-11-2024	193.48	44.66	5.609	12.997	0.04	3.24	-	-	-	_	
06-11-2024	167.15	49.12	5.563	12.861	0.02	1.78	-	-	-	-	
07-11-2024	165.54	33.26	5.572	12.898	0.07	3.64	-	-	-	-	

Name of the location: CETP, Murthal, Sonipat
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Date			Regul	atory para	meters			Proposed	New Para	meters
	PM <sub>10</sub> (μg/m3)	PM <sub>2.5</sub> (μg/m3)	SO <sub>2</sub> (μg/m3)	NO <sub>2</sub> (μg/m3)	M	letals in PM	110	Metals	s/Elements	in PM 2.5
	(μg/1113)	(μg/1113)	(μg/1113)	(μg/III3)	Pb (μg/m3)	Ni (µg/m3)	As (µg/m3)	Al (µg/m3)	Ba (µg/m3)	Fe (μg/m3)
24-10-2024	182.15	35.58	5.612	12.855	0.04	2.11	-	-	-	-
25-10-2024	188.17	35.67	5.589	12.923	0.02	4.08	-	-	-	-
26-10-2024	195.29	40.19	5.624	13.084	0.04	2.52	-	-	-	-
27-10-2024	182.37	35.73	5.621	13.090	0.02	4.74	-	-	-	-
28-10-2024	192.16	40.29	6.069	13.999	0.18	5.58	-	-	-	-
29-10-2024	204.42	57.87	6.210	14.420	0.15	6.38	-	-	-	-
30-10-2024	225.38	66.77	6.273	14.56	0.06	1.95	-	-	-	-
31-10-2024	292.32	75.68	6.633	15.508	0.17	8.0	-	-	-	-
01-11-2024	283.90	66.77	6.1760	14.147	0.13	7.17	-	-	-	-
02-11-2024	241.39	53.46	5.995	13.77	0.04	3.55	-	-	-	-
03-11-2024	204.64	48.97	5.847	13.535	0.03	2.56	-	-	-	-
04-11-2024	182.64	44.52	5.847	13.535	0.02	1.39	-	-	-	-
05-11-2024	180.90	40.06	5.598	13.325	0.06	1.97	-	-	-	-
06-11-2024	177.70	35.70	5.417	13.158	0.08	2.01	-	-	-	-
07-11-2024	176.81	35.81	5.336	13.127	0.12	1.74	-	-	-	-

#### 20. YAMUNANAGAR

• **Latitude &Longitude :**30.1290° N, 77.2674° E

• Climate /Meteorology: Yamunanagar has a Humid subtropical, dry winter climate (Classification: Cwa). The district's yearly temperature is 28.02°C (82.44°F) and it is 2.05% higher than India's averages. Yamunanagar typically receives about 26.68 millimeters (1.05 inches) of precipitation and has 28.53 rainy days (7.82% of the time) annually.

Population:12,14,162Major Land use: Agriculture.

#### **Description of Noise Monitoring Sites**

Sr. No.	Name of the Location	Zone	Latitude	Longitude
1	Panchayat Bhawan, Yamuna Nagar	Commercial	30.1475553	77.2898228
2	Office Building of Haryana State Pollution Control Board, Yamunanagar Region at SCO-131, Sector-17, Jagadhri	Residential	30.1551430	77.2930402

# Ambient Noise Level during Deepawali festival, 2024:-

Location: Area/Zone: I/R/C/S: - Site:- H.No.84, Shastri Colony, Yamuna Nagar City:-Yamuna Nagar (Latitude:-30.12929, Longitude:-77.29796)		Deepawa (24.10.202	•	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	Leq (dB(A)	
18:00 to 19:00 Hr	46.8	70.0	58.4	54.0	67.3	60.65	
19:00 to 20:00 Hr	38.0	71.2	54.6	58.0	63.1	60.55	
20:00 to 21:00 Hr	39.4	78.0	58.7	55.0	72.0	63.5	
21:00 to 22:00 Hr	47.0	69.8	58.4	56.4	66.7	61.55	
22:00 to 23:00 Hr	45.0	73.6	59.3	58.8	69.4	64.1	
23:00 to 24:00 Hr	39.0	66.4	52.7	50.0	68.0	59	
Location: Area/Zone: I/R/C/S: - C Site:- Office Building of Haryana State Pollution Control Board, Yamunanagar Region at SCO-131, Sector-17, Jagadhri City:- Yamuna Nagar (Latitude:-30.1551430, Longitude:- 77.2930402)		Deepawali 24.10.2024	)	Deepawali Day (31.10.2024)			
Time Duration	Lmin	Lmax	Leq (dB(A)	Lmin	Lmax	<b>Leq</b> ( <b>dB</b> ( <b>A</b> )	
18:00 to 19:00 Hr	36.0	44.6	40.3	37.2	63.0	50.1	
19:00 to 20:00 Hr	29.2	57.8	43.5	42.7	60.5	51.6	
20:00 to 21:00 Hr	34.8	52.0	43.4	31.9	65.3	48.6	
21:00 to 22:00 Hr	31.0	57.8	44.4	24.0	72.0	48.0	
22:00 to 23:00 Hr	38.8	50.2	44.5	44.2	72.6	58.4	
23:00 to 24:00 Hr	30.6	44.4	37.5	39.2	59.8	49.5	

Date			<b>Proposed New Parameters</b>							
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub> (μg/m3)	Metals in PM <sub>10</sub>			Metals/Elements in PM <sub>2.5</sub>		
	(μg/m3)	(μg/m3)	(µg/m3)		Pb (μg/m3)	Ni (μg/m3)	As (μg/m3)	Al (μg/m3)	Ba (μg/m3)	Fe (µg/m3)
24-10-2024	125.90	20.68	4.800	10.922	0.33	5.54	BDL			
25-10-2024	122.67	16.55	4.797	10.87	0.22	3.81	BDL			
26-10-2024	131.73	20.68	4.830	10.975	0.25	6.79	BDL			
27-10-2024	130.52	20.73	4.860	11.030	0.32	8.43	BDL			
28-10-2024	138.54	20.75	4.912	11.125	0.17	9.32	BDL			
29-10-2024	135.07	20.68	4.956	11.318						
30-10-2024	140.84	28.96	5.010	11.672						
31-10-2024	169.53	33.57	5.125	11.97						
01-11-2024	215.93	41.96	4.991	11.55						
02-11-2024	175.55	37.76	4.983	11.52						
03-11-2024	168.52	24.88	4.894	11.43						
04-11-2024	154.22	20.73	4.808	10.90						
05-11-2024	148.61	20.73	4.812	10.87						
06-11-2024	131.24	20.70	4.763	10.73						
07-11-2024	134.52	20.70	4.823	10.93						

	Name of the location: - H.No.84, Shastri Colony, Yamuna Nagar  Date Regulatory parameters Proposed New Parameters										
Date			Regul	atory para	meters			Proposed	<b>Proposed New Parameters</b>		
	PM <sub>10</sub> (μg/m3)	PM <sub>2.5</sub> (μg/m3)	SO <sub>2</sub> (μg/m3)	NO <sub>2</sub> (μg/m3)	Metals in PM <sub>10</sub>			Metals/Elements in PM 2.5			
		(μg/III3)			Pb (μg/m3)	Ni (μg/m3)	As (μg/m3)	Al (μg/m3)	Ba (µg/m3)	Fe (μg/m3)	
24-10-2024	144.77	16.58	4.7485	10.67	0.23	4.34	BDL				
25-10-2024	136.93	16.58	4.860	10.89	0.16	4.34	BDL				
26-10-2024	145.04	20.68	4.812	10.89	0.23	6.34	BDL				
27-10-2024	152.96	20.68	4.811	11.37	0.18	9.68	BDL				
28-10-2024	157.98	20.67	4.954	11.374	0.34	7.76	BDL				
29-10-2024	164.56	24.80	4.871	11.311							
30-10-2024	172.72	28.94	5.047	11.575							
31-10-2024	194.05	33.57	5.010	11.294							
01-11-2024	242.37	41.96	4.9652	11.229							
02-11-2024	190.79	33.17	4.901	11.06							
03-11-2024	183.27	29.02	4.853	10.916							
04-11-2024	191.48	33.09	4.831	10.836							
05-11-2024	170.77	28.96	4.808	10.844							
06-11-2024	168.81	28.96	4.797	10.659							
07-11-2024	158.42	24.82	4.771	10.53							