



Press Release

Monitoring of Ambient Air & Noise Monitoring conducted by CPCB: 2015

Deepawali Monitoring:

This year, the CPCB has attempted to coordinate monitoring of ambient noise levels at more than 200 locations and ambient air quality at about 170 locations across the country. The compiled data shall be published as CPCB does every year.

In Delhi, Ambient Noise was monitored at 16 locations and Ambient Air Quality at 09 locations. The monitoring was carried out on November 05, 2015 to compare the data of Deepawali day.

Observations:

1. The Noise Level Monitoring (Manual Instrumental Method):

Table-I : Ambient Noise Level (Manual) at various locations in Delhi on Nov. 05 & 11, 2015 in Leq dB(A)						
S.No.	Monitoring Location	Normal Day		Deepawali Day		Standard
		2014	2015	2014	2015	
1	Lajpat Nagar (R)	64	61↓	NM	76	55
2	Mayur Vihar Ph-II(R)	69	60↓	83	79↓	
3	Pitam pura (R)	53	55↑	71	74↑	
4	Kamla Nagar (R)	59	61↑	80	86↑	
5	Janak puri (R)	63	58↓	78	79↑	
6	Okhla (C)	NM	66	NM	86	65



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- In general, there was increase in ambient noise level due to bursting of crackers. The Noise level at Mayur Vihar Phase-II & Kamla Nagar reported 86 Leq dB(A).

2. The Noise Level Monitoring (On-line Instrumental Method):

Table II: Online Ambient Noise Level data on November 05 & 11, 2015 (Leq dB(A))

S.No.	Monitoring Stations	05.11.2015		11.11.2015	
		Day Time	Night Time	Day Time	Night Time
1	Parivesh Bhawan	67	57	67	68
2	ISBT, Anand Vihar	68	63	69	70
3	IBHAS, Dilshad Garden	53	48	65	67
4	Pragati Maidan / ITO	74	68	73	70
5	NSIT, Dwarka	56	52	63	62
6	Mandir Marg	60	46	60	60
7	R.K. Puram	63	52	67	65
8	Civil Lines	62	60	64	66
9	DCE, Bawana	77	80	66	71
10	Punjabi Bagh	60	55	66	71

- There was increase in Noise level at Night time at all locations except Delhi Technological University at Bawana.



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3. The Ambient Air Quality Monitoring (Manual Instrumental Method followed by chemical method):

Table III : Profile of Pollutants in different locations in Delhi on November 05 & 11, 2015 (Conc. in $\mu\text{g}/\text{m}^3$).

Monitoring location	05.11.2015				09.11.2015				11.11.2015			
	PM _{2.5}	PM ₁₀	SO ₂	NO ₂	PM _{2.5}	PM ₁₀	SO ₂	NO ₂	PM _{2.5}	PM ₁₀	SO ₂	NO ₂
East Arjun Nagar	96	166	38	62	220	327	30	67	474	593	36	41
Pragati Maidan	NM	166	14	78	NM	327	13	79	NM	531	22	57
Pitampura	117	161	21	72	197	334	21	77	435	460	19	27
Janakpuri	84	119	12	45	194	403	9	49	459	554	18	25
Standards	60	100	80	80	60	100	80	80	60	100	80	80

- The concentrations of SO₂ & NO₂ were within the prescribed standard limit at all locations.
- The concentration of particulate matter (PM_{2.5} and PM₁₀) exceeded the prescribed limit irrespective of locations.



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4. The Ambient Air Quality Monitoring (On-line Instrumental Method):

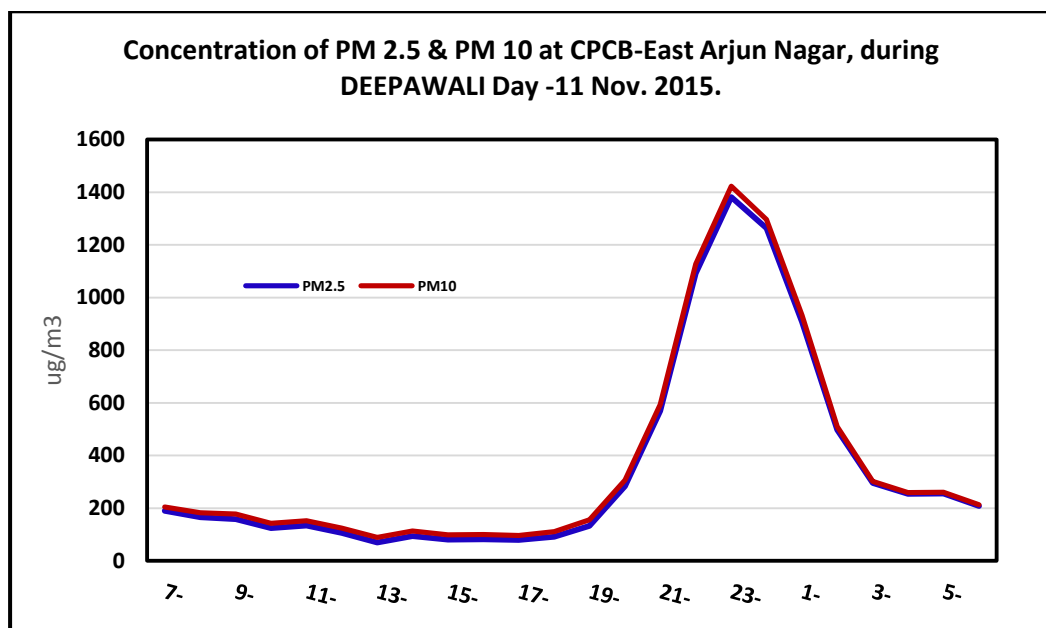
Table IV: Air Pollutants Profile (Online) at various locations								
Monitoring Location	Dates	Pollutants (Conc. in $\mu\text{g}/\text{m}^3$) [Note:* parameter not monitored]						
		PM _{2.5}	SO ₂	NO ₂	CO	Ozone	Ammonia	Benzene
IHBAS Dilshad Garden	05.11.2015	78.2	4.9	63.0	223.3	*	36.8	*
	06.11.2015	136.2	8.3	72.3	177.4	*	31.9	*
	07.11.2015	226.4	7.6	72.7	324.4	*	46.4	*
	08.11.2015	143.2	9.2	62.8	317.1	*	38.7	*
	09.11.2015	136.2	7.4	77.3	934.1	*	41.3	*
	10.11.2015	159.9	7.7	72.0	1022.2	*	33.7	*
	11.11.2015	192.0	9.1	64.1	735.9	*	33.4	*
DMS Shadipur	05.11.2015	108.1	2.5	60.2	333.4	5.3	*	0.3
	06.11.2015	117.8	5.6	70.3	795.5	35.0	*	0.8
	07.11.2015	143.8	5.8	89.3	585.5	40.4	*	0.6
	08.11.2015	107.8	7.3	60.0	506.6	34.6	*	0.5
	09.11.2015	118.7	12.3	78.7	1945.1	20.8	*	4.1
	10.11.2015	138.7	9.3	85.1	516.8	39.4	*	3.8
	11.11.2015	121.1	25.2	48.7	993.4	38.5	*	4.7
NSIT Dwarka	05.11.2015	191.4	8.7	26.7	980.1	13.5	*	1.1
	06.11.2015	176.0	20.7	37.3	1166.7	7.2	*	1.5
	07.11.2015	262.9	16.4	63.2	778.7	7.1	*	1.0
	08.11.2015	105.3	10.2	79.8	844.8	20.5	*	1.1
	09.11.2015	132.1	6.6	79.8	756.9	33.7	*	4.0
	10.11.2015	101.3	10.8	50.9	831.3	20.8	*	4.1
	11.11.2015	99.0	29.9	32.8	697.6	16.1	*	0.8
East Arjun Nagar	05.11.2015	*	45.0	32.4	*	27.0	*	3.3
	06.11.2015	*	8.5	33.1	*	51.5	*	7.2
	07.11.2015	*	23.6	35.5	*	63.0	*	4.7
	08.11.2015	*	40.0	30.9	*	46.0	*	3.5
	09.11.2015	*	21.9	41.3	*	47.0	*	11.4
	10.11.2015		23.8	36.4	*	66.7	*	7.8
	11.11.2015		53.7	25.9		66.4	*	4.4
Pragati Maidan	05.11.2015	*	10.0	44.0	*	29.0	11.0	*
	06.11.2015	*	11.0	70.0	*	19.0	21.0	*
	07.11.2015	*	12.0	53.0	*	20.0	13.0	*
	08.11.2015	*	31.0	61.0	*	29.0	20.0	*
	09.11.2015	*	54.0	89.0	*	32.0	42.0	*
	10.11.2015	*	27.0	75.0	*	25.0	25.0	*
	11.11.2015	*	18.0	40.0	*	25.0	11.0	*

- The concentrations of SO₂ & NO₂ were within the prescribed standard at all locations on the festival day.
- The concentration of particulate matter (PM_{2.5}) exceeded the prescribed limit irrespective of locations.



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- No other increase was observed in other parameter.
- The following graph shows the incremental rise and fall of particulate matter profile (PM_{2.5} and PM₁₀) during the celebration of festival.



5. The Meteorological Quality Monitoring (On-line Instrumental Method):

Table V: Meteorological Profile at East Arjun Nagar, Delhi November 05-11, 2015.

Date	WS m/Sec.	WD	Temperature (°C)			RH (%)			Mixing Height (m)			Pressure (mb)		
			Min.	Max.	Avg.	Min.	Max.	Avg.	Avg.	Day Avg.	Night Avg.	Min.	Max.	Avg.
05.11.2015	2.2		19	25.6	21	57	84	75	445	528	363	985	988	986
06.11.2015	1.8	NW	19.2	29.4	23.9	42	81	62	585	939	232	984	988	987
07.11.2015	1.8	N	19.7	27.1	23.4	45	83	63	571	887	254	986	990	988
08.11.2015	1.9	NE,N	20.4	27.3	22.9	45	71	60	584	997	171	988	992	989
09.11.2015	1.4	NE	20.7	28.5	24.2	38	70	56	529	967	91	986	992	988
10.11.2015	1.9	NW,N	20.9	28.8	24.7	39	67	53	491	751	231	985	990	987
11.11.2015	3.4	NW,W	20	28.3	23.7	33	60	47	590	855	324	986	990	988

Day Time : 06.00 a.m. to 06.00 p.m. Night Time : 06.00 p.m. to 06.00 a.m.



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The data reveals that there was a significant shift in wind direction (from W & NW) on the festival day, which resulted less humidity profile (moving around 42%) besides increase in wind speed from 1.9 m/sec to 3.4 m/sec attributed to dispersion of pollutants. Normal atmospheric pressure of 988mb coupled with increased atmospheric mixing height to the level of 855 meter has resulted easy dispersion of air pollutants.

For further details, contact:

Dr. Dipankar Saha
Scientist `E & In-charge, Air Lab
dsaha.cpcb@nic.in / mailcpcb@gmail.com
Cell#97171 66653