

Table I :- Comparative Data of Ambient Air Quality Monitoring in Commercial Area of Cities {24 Hr Average Values of RSPM, SO₂ & NO_x (µg/m³)} during Diwali Days (2011-2015).

Commercial Area of Cities																										
MONITORING DAYS	PARAMETERS	MGG					PATIALA					JALANDHAR					LUDHIANA					AMRITSAR				
		2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
Before Diwali	RSPM	161	152	172	165	172	89	132	123	112	124	239	201	232	167	154	358	364	263	272	210	233	231	223	216	204
Diwali day		285	292	250	241	204	234	238	196	179	132	325	294	270	261	221	489	648	549	546	289	370	358	370	353	296
Before Diwali	SO ₂	11	8	7	6	6	8	5	5	4	6	19	18	17	14	11	19	19	15	9	10	12	10	11	11	14
Diwali day		21	20	18	16	10	14	10	9	4	6	22	24	21	20	17	26	24	18	24	18	22	21	20	19	18
Before Diwali	NO _x	21	20	22	20	30	20	16	14	12	14	28	28	28	27	26	34	41	29	30	23	36	34	34	33	35
Diwali day		29	32	32	34	32	24	22	20	16	12	35	35	34	33	31	60	51	46	50	40	44	43	44	42	40

Permissible Limits :-

Parameter	Time Weighted Average	Concentration in Ambient Air	
		Commercial, Residential Areas	Sensitive Areas
RSPM (µg/m ³)	24 Hours	100	100
SO ₂ (µg/m ³)	24 Hours	80	80
NO _x (µg/m ³)	24 Hours	80	80

Table II :- Comparative Data of Ambient Air Quality Monitoring Residential Area of Cities {24 Hr Average Values of RSPM, SO₂ & NO_x (µg/m³)} during Diwali Days (2011-2015).

RESIDENTIAL AREA OF CITIES																										
MONITORING DAYS	PARA METERS	MGG					PATIALA					JALANDHAR					LUDHIANA					AMRITSAR				
		2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
Before Diwali	RSPM	143	138	154	147	156	98	122	115	104	116	269	192	210	162	160	278	303	240	183	84	210	188	199	177	165
Diwali day		287	284	220	232	214	244	250	244	220	180	245	285	305	285	239	365	390	206	316	148	349	360	345	355	254
Before Diwali	SO₂	10	7	6	6	8	6	4	4	4	4	19	17	16	12	12	21	20	12	9	10	13	9	11	12	12
Diwali day		22	20	18	16	12	14	12	10	6	6	23	26	30	26	19	28	30	22	22	12	20	20	19	19	17
Before Diwali	NO_x	18	20	19	18	32	18	18	15	12	14	31	29	28	29	26	36	35	26	23	25	34	29	33	31	29
Diwali day		31	40	38	34	34	24	24	22	20	15	32	33	34	36	34	46	45	40	38	31	40	39	38	40	35

Table III :- Comparative Data of Ambient Air Quality Monitoring in Sensitive Area of Cities {24 Hr Average Values of RSPM, SO₂ & NO_x (µg/m³)} during Diwali Days (2011-2015).

SENSITIVE AREA OF CITIES																										
MONITORING DAYS	PARA METERS	MGG					PATIALA					JALANDHAR					LUDHIANA					AMRITSAR				
		2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
Before Diwali	RSPM	148	150	120	116	125	90	118	110	90	96	153	160	181	143	128	291	247	229	250	90	184	213	192	190	170
Diwali day		231	222	206	188	147	166	150	142	128	102	200	215	196	201	175	403	321	308	362	179	435	361	350	333	268
Before Diwali	SO ₂	9	6	6	6	6	6	4	4	4	4	18	15	17	10	9	16	13	10	10	8	13	12	12	10	11
Diwali day		17	13	12	8	6	12	6	6	4	4	22	22	20	19	14	18	17	15	20	11	20	21	18	18	16
Before Diwali	NO _x	17	18	14	16	20	14	13	12	10	14	31	27	27	26	24	36	27	25	28	15	33	32	32	28	31
Diwali day		23	26	26	22	24	20	19	18	16	12	32	33	32	30	28	50	36	32	42	27	41	41	39	38	36

Shri Darbar Sahib Amritsar

MONITORING DAYS	PARA METERS	2012	2013	2014	2015
Before Diwali	RSPM	189	202	185	163
Diwali day		390	371	363	244
Before Diwali	SO ₂	9	11	12	12
Diwali day		23	20	21	15
Before Diwali	NO _x	24	32	33	30
Diwali day		43	41	40	34

Table IV :- Comparative Data of Noise Level Monitoring during Diwali Days (2011-2015).

Station	Residential										Sensitive										Commercial									
	2011		2012		2013		2014		2015		2011		2012		2013		2014		2015		2011		2012		2013		2014		2015	
	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur	Bef.	Dur
Jalandhar	66.6	76	56.5	72.7	56	72	55	71	57	60	52.7	54	51.7	57.4	48	51	45	48	52	53	64.7	61.5	71.4	73.6	64	66	60	65	70	71
Ludhiana	71.7	78.3	66.6	74.1	64.2	70.8	68.9	75.4	53.8	66.3	70.4	77.8	69.4	73.4	67.9	72.9	70.4	74.7	54.2	69.1	77.4	84.5	76.8	80.5	78.2	78.6	77.4	78.3	66.8	72.1
Patiala	73.8	85.3	41.1	70.1	69.8	70.7	69.2	69.5	69.3	72.7	71.5	75.1	47.7	63.5	57.2	61.4	57.2	60.6	60.1	64.5	77.5	85.7	59.1	71.4	69.3	71.2	69.9	70.4	73.3	76.2
Amritsar	52	69.1	51	67	51	66	52	65	51	62	53.3	63.1	58	65	53	63	54.6	66	55	65	60.2	69.1	62	73	60	70	60	71	61	67
Mandi Gobindgarh	-	-	55.5	73.1	55.4	74.9	58.2	74.5	56	68	-	-	51.2	73.8	51.7	74.8	55.2	72	54	60	-	-	62.6	73.5	63	73.9	64.4	73.5	62	66
Sri Darbar Sahib																			59	65										