

**CENTRAL POLLUTION CONTROL BOARD, DELHI**  
**AMBIENT AIR QUALITY OF DELHI**  
**DATA SHEET FOR PARTICULATE MATTER**

Annexure -1

Station : Jai Stambh Chowk, Yatayat Thana, Raipur

Date : 03.11.2010

Shift :

1st Shift

2nd Shift

3rd Shift

Monitoring Period : Dhanteras

06:00 AM -02:00 PM

02:00 PM -10:00 PM

10:00 PM -06:00 AM

Parameter : SPM RSPM

SPM RSPM

SPM RSPM

SPM RSPM

Filter Paper No.

27

28

29

Hourly Flow Rate (m<sup>3</sup>/minute)

	1.30	1.30	1.30	1.30	1.30	1.30
	1.28	1.28	1.28	1.28	1.28	1.28
	1.25	1.25	1.26	1.26	1.25	1.25
	1.22	1.22	1.24	1.24	1.20	1.20
	1.20	1.20	1.22	1.22	1.18	1.18
	1.18	1.18	1.20	1.20	1.16	1.16
	1.15	1.15	1.18	1.18	1.14	1.14
	1.12	1.12	1.15	1.15	1.12	1.12
	1.10	1.10	1.10	1.10	1.10	1.10
Average Flow Rate (m <sup>3</sup> /minute)	1.2	1.2	1.21	1.21	1.19	1.19
Total Operation Time (Minutes)	480	480	480	480	480	480
Initial Weight of Filter Paper (gms.)	2.54796	17.35565	2.56439	17.28517	2.56484	17.72518
Final Weight of Filter Paper (gms.)	2.79161	17.47085	2.82453	17.41005	2.79217	17.83370
Dust Contents (gms.)	0.24365	0.11520	0.26014	0.12488	0.22733	0.10852
Total Volume of Air Sampled (m <sup>3</sup> )	576.0	576.0	580.8	580.3	571.2	571.2
Concentration (µg/m <sup>3</sup> )	423.0	200.0	447.89	215.01	397.98	189.98
24 Hourly Average SPM (µg/m <sup>3</sup> )			422.95	201.66		

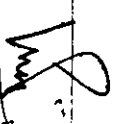
Remarks :

24 Hourly Average RSPM (µg/m<sup>3</sup>)

Name & Signature of Official on Duty :



(A.S. Mishra)



(J.P. Singh)






(A.S. Mishra)





**CENTRAL POLLUTION CONTROL BOARD, DELHI**  
**AMBIENT AIR QUALITY OF DELHI**  
**DATA SHEET FOR PARTICULATE MATTER**

Annexure - I

Station : City Kotwali, Raipur		Date : 03.11.2010					
Shift :	Ist Shift			IInd Shift		IIIrd Shift	
	Monitoring Period : Dhanteras	06:00 AM -02:00 PM	02:00 PM -10:00 PM	10:00 PM -06:00 AM	SPM	RSPM	
Parameter : SPM	RSPM	SPM	RSPM	SPM	RSPM	SPM	RSPM
Filter Paper No.	24		25		26		
Hourly Flow Rate (m <sup>3</sup> /minute)	1.35	1.35	1.35	1.35	1.35	1.35	1.35
	1.33	1.33	1.33	1.33	1.30	1.30	1.30
	1.30	1.30	1.28	1.28	1.28	1.28	1.28
	1.28	1.28	1.25	1.25	1.25	1.25	1.25
	1.25	1.25	1.20	1.20	1.23	1.23	1.23
	1.20	1.20	1.16	1.16	1.20	1.20	1.20
	1.18	1.18	1.14	1.14	1.18	1.18	1.18
	1.15	1.15	1.12	1.12	1.15	1.15	1.15
	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Average Flow Rate (m <sup>3</sup> /minute)	1.23	1.23	1.21	1.21	1.22	1.22	1.22
Total Operation Time (Minutes)	480	480	480	480	480	480	480
Initial Weight of Filter Paper (gms.)	2.62122	17.93517	2.62312	17.43751	2.54985	17.57201	
Final Weight of Filter Paper (gms.)	2.87865	18.05557	2.89532	17.56552	2.78999	17.68799	
Dust Contents (gms.)	0.25743	0.12040	0.27220	0.12801	0.24014	0.11598	
Total Volume of Air Sampled (m <sup>3</sup> )	590.4	590.4	580.8	580.8	585.6	585.6	
Concentration (µg/m <sup>3</sup> )	436.02	203.92	468.66	220.40	410.07	198.05	
24 Hourly Average SPM (µg/m <sup>3</sup> )			24 Hourly Average RSPM (µg/m <sup>3</sup> )				
Remarks :			438.25	207.45			
Name & Signature of Official on Duty :							


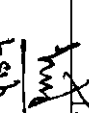
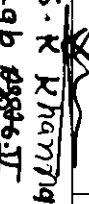
(G.K. Bhaskar)  
Lab Attendant

(H.M. Tiwari)  
Lab Asst. Gr. I

(S.K. Khanna)  
Lab Asst. II

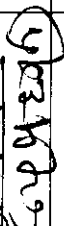

**CENTRAL POLLUTION CONTROL BOARD, DELHI**  
**AMBIENT AIR QUALITY OF DELHI**  
**DATA SHEET FOR PARTICULATE MATTER**

Annexure -I

Station : Jai Stambh Chowk, Yatayat Thana, Raipur		Date : 05.11.2010		Ist Shift		IInd Shift		IIIrd Shift	
Shift :	Monitoring Period : Deepawali	06:00 AM -02:00 PM	02:00 PM -10:00 PM	10:00 PM -06:00 AM					
Parameter :	SPM	RSPM	SPM	RSPM	SPM	RSPM	SPM	RSPM	RSPM
Filter Paper No.	21		22		23				
Hourly Flow Rate (m <sup>3</sup> /minute)	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	1.29	1.29	1.28	1.28	1.28	1.28	1.28	1.28	1.28
	1.27	1.27	1.25	1.25	1.25	1.25	1.25	1.25	1.25
	1.25	1.25	1.20	1.20	1.20	1.23	1.23	1.23	1.23
	1.22	1.22	1.18	1.18	1.18	1.20	1.20	1.20	1.20
	1.19	1.19	1.16	1.16	1.16	1.18	1.18	1.18	1.18
	1.16	1.16	1.14	1.14	1.14	1.15	1.15	1.15	1.15
	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Average Flow Rate (m <sup>3</sup> /minute)	1.21	1.21	1.19	1.19	1.19	1.20	1.20	1.20	1.20
Total Operation Time (Minutes)	480	480	480	480	480	480	480	480	480
Initial Weight of Filter Paper (gms.)	2.54512	17.35565	2.53954	17.28517	2.56187	17.72518			
Final Weight of Filter Paper (gms.)	2.81823	17.5038	2.93824	17.51651	2.77383	17.85766			
Dust Contents (gms.)	0.27311	0.14815	0.39870	0.23154	0.21196	0.13248			
Total Volume of Air Sampled (m <sup>3</sup> )	580.8	580.8	571.2	571.2	576.0	576.0			
Concentration (µg/m <sup>3</sup> )	470.23	255.07	698.0	405.0	367.98	230.0			
24 Hourly Average SPM (µg/m <sup>3</sup> )			24 Hourly Average RSPM (µg/m <sup>3</sup> )	512.07	296.69				
Remarks :									
Name & Signature of Official on Duty :	 S.K. Khosla Lab Attendant		 Lab Asst I (S.M. Puri)		 S.K. Khosla Lab Attendant				


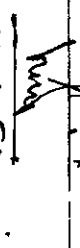
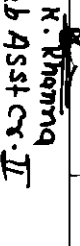
**CENTRAL POLLUTION CONTROL BOARD, DELHI**  
**AMBIENT AIR QUALITY OF DELHI**  
**DATA SHEET FOR PARTICULATE MATTER**

Annexure -1

Station : City Kotwali, Raipur		Date : 05.11.2010				
Shift :	Ist Shift		IInd Shift		IIIrd Shift	
Monitoring Period : Deepawali	06:00 AM -02:00 PM	02:00 PM -10:00 PM	10:00 PM -06:00 AM			
Parameter : SPM	SPM	RSPM	SPM	RSPM	SPM	RSPM
Filter Paper No.	18		19		20	
Hourly Flow Rate (m <sup>3</sup> /minute)						
	1.35	1.35	1.35	1.35	1.35	1.35
	1.32	1.32	1.30	1.30	1.33	1.33
	1.28	1.28	1.25	1.25	1.28	1.28
	1.25	1.25	1.20	1.20	1.24	1.24
	1.20	1.20	1.18	1.18	1.18	1.18
	1.16	1.16	1.14	1.14	1.16	1.16
	1.14	1.14	1.10	1.10	1.12	1.12
	1.11	1.11	1.05	1.05	1.11	1.11
	1.10	1.10	1.0	1.0	1.10	1.10
Average Flow Rate (m <sup>3</sup> /minute)	1.21	1.21	1.17	1.17	1.20	1.20
Total Operation Time (Minutes)	480	480	480	480	480	480
Initial Weight of Filter Paper (gms.)	2.51315	17.93517	2.42118	17.43751	2.54328	17.57201
Final Weight of Filter Paper (gms.)	2.79483	18.08734	2.83116	17.66889	2.76216	17.70836
Dust Contents (gms.)	0.28168	0.15217	0.40998	0.23138	0.21888	0.13635
Total Volume of Air Sampled (m <sup>3</sup> )	580.8	580.8	561.6	561.6	576.0	576.0
Concentration (µg/m <sup>3</sup> )	484.98	262.0	730.02	412.0	380.0	236.71
24 Hourly Average SPM (µg/m <sup>3</sup> )			24 Hourly Average RSPM (µg/m <sup>3</sup> )			
Remarks :		531.66	303.57			
Name & Signature of Official on Duty :	 J.K. Khosla Lab Attendant		 S.K. Khanna Lab Asst I		S.K. Khanna Lab Asst I	

**CENTRAL POLLUTION CONTROL BOARD, DELHI**  
**AMBIENT AIR QUALITY OF DELHI**  
**DATA SHEET FOR GASEOUS AIR POLLUTIONS**

Annexure -II

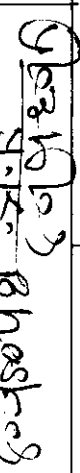
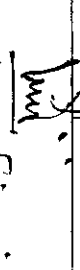

Station : Jai Stambh Chowk, Yatayat Thana, Raipur		Date : 03.11.2010					
Shift :	Ist Shift			IInd Shift		IIIrd Shift	
Monitoring Period : Dhanteras	06:00 AM -10:00 AM	10:00 AM -02:00 PM	02:00 PM -06:00 PM	06:00 PM -10:00 PM	10:00 PM -02:00 AM	02:00 AM -06:00 AM	
Parameter : SO <sub>2</sub> NO <sub>2</sub>	SO <sub>2</sub> NO <sub>2</sub>	SO <sub>2</sub> NO <sub>2</sub>	SO <sub>2</sub> NO <sub>2</sub>	SO <sub>2</sub> NO <sub>2</sub>	SO <sub>2</sub> NO <sub>2</sub>	SO <sub>2</sub> NO <sub>2</sub>	
Average Flow Rate (lpm)							
Total Operation Time (Minutes)							
Initial Volume of Sample (ml)	30	30	30	30	30	30	
Final Volume of Sample (ml)	25	25	24	23	24	23	
Volume Taken For Analysis (ml)	10	10	10	10	10	10	
Total Volume of Air Sampled (lit.)							
Absorbance (Blank)	0.004	0.003	0.004	0.003	0.004	0.003	
Absorbance (Sample)	0.022	0.054	0.025	0.055	0.026	0.058	
Concentration (µg/m <sup>3</sup> )	20.08	37.0	23.43	37.73	23.43	39.90	
24 Hourly Average SO <sub>2</sub> (µg/m <sup>3</sup> )	24 Hourly Average NO <sub>2</sub> (µg/m <sup>3</sup> )						
Remarks :	21.94		37.84				
Name & Signature of Official on Duty :	 <i>S.K. Sharma</i> Lab Asst. Cr. II		 <i>S.K. Sharma</i> Lab Asst. Cr. II		 <i>S.K. Sharma</i> Lab Asst. Cr. II		






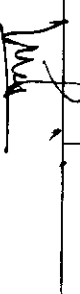
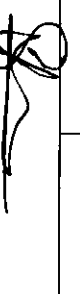
**CENTRAL POLLUTION CONTROL BOARD, DELHI**  
**AMBIENT AIR QUALITY OF DELHI**  
**DATA SHEET FOR GASEOUS AIR POLLUTIONS**

Annexure -II

Station : Jai Stambh Chowk, Yatayat Thana, Raipur		Date : 05.11.2010																
Shift :	Ist Shift						IInd Shift						IIIrd Shift					
Monitoring Period : Deepawali	06:00 AM -10:00 AM		10:00 AM -02:00 PM		02:00 PM -06:00 PM		06:00 PM -10:00 PM		10:00 PM -02:00 AM		02:00 AM -06:00 AM							
Parameter :	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>		
Average Flow Rate (lpm)																		
Total Operation Time (Minutes)																		
Initial Volume of Sample (ml)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30		
Final Volume of Sample (ml)	24	23	23	22	22	24	23	24	25	24	23	23	23	23	23	23		
Volume Taken For Analysis (ml)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
Total Volume of Air Sampled (lit)																		
Absorbance (Blank)	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003		
Absorbance (Sample)	0.024	0.073	0.025	0.074	0.025	0.073	0.028	0.083	0.024	0.072	0.020	0.069	0.024	0.072	0.020	0.069		
Concentration (µg/m <sup>3</sup> )	24.55	50.79	25.66	51.51	25.66	50.79	29.01	58.04	24.55	50.06	20.08	47.89	24.55	50.06	20.08	47.89		
24 Hourly Average SO <sub>2</sub> (µg/m <sup>3</sup> )													24 Hourly Average NO <sub>2</sub> (µg/m <sup>3</sup> )					
Remarks :													24.91	51.51				
Name & Signature of Official on Duty :	 S.K. Bhasker Lab Attendant						 S.K. Khanna Lab Attendant						 S.K. Khanna Lab Attendant II					

**CENTRAL POLLUTION CONTROL BOARD, DELHI**  
**AMBIENT AIR QUALITY OF DELHI**  
**DATA SHEET FOR GASEOUS AIR POLLUTIONS**

Annexure -II

Station : City Kotwali, Raipur		Date : 05.11.2010														
Shift :	Monitoring Period : Deepawali	Ist Shift				IInd Shift				IIIrd Shift						
		06:00 AM -10:00 AM	10:00 AM -02:00 PM	02:00 PM -06:00 PM	06:00 PM -10:00 PM	10:00 PM -02:00 AM	02:00 AM -06:00 AM	06:00 AM -10:00 AM	10:00 AM -02:00 AM	02:00 AM -06:00 AM						
Parameter :	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>2</sub>	NO <sub>2</sub>		
Average Flow Rate (lpm)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Total Operation Time (Minutes)	240	240	240	240	240	240	240	240	240	240	240	240	240	240		
Initial Volume of Sample (ml)	30	30	30	30	30	30	30	30	30	30	30	30	30	30		
Final Volume of Sample (ml)	24	23	23	22	24	25	24	23	22	22	23	23	23	24		
Volume Taken For Analysis (ml)	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
Total Volume of Air Sampled (lit.)																
Absorbance (Blank)	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.003		
Absorbance (Sample)	0.025	0.074	0.026	0.078	0.027	0.083	0.029	0.086	0.025	0.073	0.023	0.023	0.023	0.070		
Concentration (µg/m <sup>3</sup> )	25.66	51.51	26.78	54.42	27.9	58.04	30.13	60.22	25.66	50.79	23.43	23.43	23.43	48.61		
24 Hourly Average SO <sub>2</sub> (µg/m <sup>3</sup> )	24 Hourly Average NO <sub>2</sub> (µg/m <sup>3</sup> )															
Remarks :	26.59												53.93			
Name & Signature of Official on Duty :																
	(Y. K. Shesher) Lab Assistant				(H. M. Prasad) L. Asst. Cr. I.				(S. K. Khanna) Lab Asst. Cr. II.							

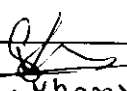

DATA SHEET FOR AMBIENT NOISE MONITORING ON DEEPAWALI DAY

Location : Jai Stambh Chowk, Raipur		Date : 03.11.2010	
Noise Level Meter			
Make	:	k d m instruments 4/5, Sarva Priya Vihar, New Delhi	
Model	:	33 Noise Level Meter Pulsar Instrument Ltd., UK	
Serial No.	:		
Calibration Result of Noise Level Meter			
Calibration	94 dB at 1000 Hz	114 dB at 1000 Hz	
Initial			
Final			
Sampling rate			
S.No.	Time duration	File No.	L equivalent dB (A)
	18:00 Hrs. to 19:00 Hrs.		64.4
	19:00 Hrs. to 20:00 Hrs.		69.4
	20:00 Hrs. to 21:00 Hrs.		72.5
	21:00 Hrs. to 22:00 Hrs.		75.9
	22:00 Hrs. to 23:00 Hrs.		71.1
	23:00 Hrs. to 24:00 Hrs.		79.3
Average L equivalent dB (A) Between (18:00 to 24:00 Hrs.)			72.1
Name & Signature of Official on Duty			
① S. K. Khanna Lab Asst. C.G. II		② H. M. Tiwari Lab Asst. C.G. II	

$L_{max}$  Between (18:00 to 24:00 Hrs.) 64.4

$L_{min}$  Between (18:00 to 24:00 Hrs.) 79.3

DATA SHEET FOR AMBIENT NOISE MONITORING ON DEEPAWALI DAY

Location : City Kotwali, Raipur		Date : 03.11.2010	
Noise Level Meter			
Make	:	k d m instruments 4/5, Sarva Priya Vihar, New Delhi	
Model	:	33 Noise Level Meter Pulsar Instrument Ltd., UK	
Serial No.	:		
Calibration Result of Noise Level Meter			
Calibration		94 dB at 1000 Hz	114 dB at 1000 Hz
Initial			
Final			
Sampling rate			
S.No.	Time duration	File No.	L equivalent dB (A)
	18:00 Hrs. to 19:00 Hrs.		64.5
	19:00 Hrs. to 20:00 Hrs.		68.7
	20:00 Hrs. to 21:00 Hrs.		74.7
	21:00 Hrs. to 22:00 Hrs.		89.3
	22:00 Hrs. to 23:00 Hrs.		90.1
	23:00 Hrs. to 24:00 Hrs.		88.2
Average L equivalent dB (A) Between (18:00 to 24:00 Hrs.)			79.25
 S. R. Khanna Lab Asst. Crs. II		Name & Signature of Official on Duty  H. M. Tiwari Tiwari Lab Asst I	

$L_{max}$  Between (18:00 to 24:00 Hrs.) 64.5

$L_{min}$  Between (18:00 to 24:00 Hrs.) 90.1



DATA SHEET FOR AMBIENT NOISE MONITORING ON DEEPAWALI DAY

Location : Jai Stambh Chowk, Raipur		Date : 05.11.2010	
Noise Level Meter			
Make	:	k d m instruments 4/5, Sarva Priya Vihar, New Delhi	
Model	:	33 Noise Level Meter Pulsar Instrument Ltd., UK	
Serial No.	:		
Calibration Result of Noise Level Meter			
Calibration		94 dB at 1000 Hz	114 dB at 1000 Hz
Initial			
Final			
Sampling rate			
S.No.	Time duration	File No.	L equivalent dB (A)
	18:00 Hrs. to 19:00 Hrs.		104.3
	19:00 Hrs. to 20:00 Hrs.		111.2
	20:00 Hrs. to 21:00 Hrs.		115.0
	21:00 Hrs. to 22:00 Hrs.		104.5
	22:00 Hrs. to 23:00 Hrs.		96.3
	23:00 Hrs. to 24:00 Hrs.		82.3
Average L equivalent dB (A) Between (18:00 to 24:00 Hrs.)			102.26
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>① <i>S.K. Khanna</i> Lab Asst. Gr. II</p> </div> <div style="width: 45%;"> <p>Name &amp; Signature of Official on Duty <i>(M.M. Tiwari)</i> Lab Asst. Gr. I.</p> </div> </div>			

$L_{max}$  Between (18:00 to 24:00 Hrs.) 82.3

$L_{min}$  Between (18:00 to 24:00 Hrs.) 115.0

DATA SHEET FOR AMBIENT NOISE MONITORING ON DEEPAWALI DAY

Location : City Kotwali, Raipur		Date : 05.11.2010	
Noise Level Meter			
Make	:	k d m instruments 4/5, Sarva Priya Vihar, New Delhi	
Model	:	33 Noise Level Meter Pulsar Instrument Ltd., UK	
Serial No.	:		
Calibration Result of Noise Level Meter			
Calibration		94 dB at 1000 Hz	114 dB at 1000 Hz
Initial			
Final			
Sampling rate			
S.No.	Time duration	File No.	L equivalent dB (A)
	18:00 Hrs. to 19:00 Hrs.		112.6
	19:00 Hrs. to 20:00 Hrs.		112.3
	20:00 Hrs. to 21:00 Hrs.		115.6
	21:00 Hrs. to 22:00 Hrs.		108.6
	22:00 Hrs. to 23:00 Hrs.		98.4
	23:00 Hrs. to 24:00 Hrs.		96.2
Average L equivalent dB (A) Between (18:00 to 24:00 Hrs.)			107.28
 Name & Signature of Official on Duty (H. M. Tiwari) Lab Asst. I		 S. K. Rana Lab Asst. II	

$L_{max}$  Between (18:00 to 24:00 Hrs.) 96.2

$L_{min}$  Between (18:00 to 24:00 Hrs.) 115.6