

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE

Plant : **Unit - 1 Cement Plant**

STACK MONITORING

Apr-11

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
18/04/2011	Raw Mill + Kiln	13.47	361	12.80	130.36	49	56	0.551	-	-
11/04/2011	Coal Mill	2.41	350	7.16	13.45	58		0.054	-	-
07/04/2011	Cooler	7.55	494	16.09	67.13	62		0.359	-	-
16/04/2011	Cement Mill	1.33	360	6.85	6.91	54		0.026	-	-
11/04/2011	TPP Boiler ESP	20.39	393	2.74	38.88	56	56	0.188	-	-

Plant : **Unit - II Cement Plant & CPP (2x25 MW)**

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
05/04/2011	Raw Mill + Kiln	40.28	382	3.90	112.39	25	29	0.156	-	-
04/04/2011	Coal Mill	6.16	358	7.67	36.04	27		0.030	-	-
26/04/2011	Cooler	33.2	515	6.83	120.25	19		0.127	-	-
19/04/2011	Cement Mill	8.04	355	7.90	48.82	23		0.062	-	-
30/04/2011	Boiler	19.9	385	4.94	69.76	51		0.232	-	-

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE

Plant : **Unit - 1 Cement Plant**

STACK MONITORING

May-11

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
07/05/2011	Raw Mill + Kiln	13.47	365	13.09	131.92	42	49	0.233	-	-
25/05/2011	Coal Mill	2.41	344	5.20	9.95	51		0.016	-	-
31/05/2011	Cooler	7.55	500	15.86	65.37	59		0.162	-	-
21/05/2011	Cement Mill	1.33	349	4.72	4.91	45		0.013	-	-
11/05/2011	TPP Boiler ESP	20.39	385	2.62	37.94	58	58	0.112	-	-

Plant : **Unit - II Cement Plant & CPP (2x25 MW)**

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
16/05/2011	Raw Mill + Kiln	40.28	383	3.51	100.75	21	29	0.176	-	-
13/05/2011	Coal Mill	6.16	350	7.84	37.66	23		0.041	-	-
06/05/2011	Cooler	33.2	509	7.04	125.34	19		0.198	-	-
24/05/2011	Cement Mill	8.04	351	8.39	52.44	26		0.066	-	-
19./05/2011	Boiler	19.9	390	4.84	67.48	54		0.306	-	-

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE

Plant : **Unit - 1 Cement Plant**

STACK MONITORING

Jun-11

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
11/06/2011	Raw Mill + Kiln	13.47	359	13.15	134.65	45	48	0.510	-	-
28/06/2011	Coal Mill	2.41	343	8.59	16.48	57		0.062	-	-
12/06/2011	Cooler	7.55	500	15.82	65.22	47		0.258	-	-
15/06/2011	Cement Mill	1.33	363	7.30	7.30	44		0.020	-	-
12/06/2011	TPP Boiler ESP	20.39	378	2.84	41.84	52	52	0.127	-	-

Plant : **Unit - II Cement Plant & CPP (2x25 MW)**

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
13/06/2011	Raw Mill + Kiln	40.28	383	4.55	130.58	28	32	0.175	-	-
16/06/2011	Coal Mill	6.16	352	8.14	38.88	23		0.024	-	-
10/06/2011	Cooler	33.2	533	7.26	123.52	21		0.124	-	-
21/06/2011	Cement Mill	8.04	351	7.51	46.97	32		0.085	-	-
11/06/2011	Boiler	19.9	388	3.83	53.58	58		0.268	-	-

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE

Plant : **Unit - 1 Cement Plant**

STACK MONITORING

Jul-11

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
12/07/2011	Raw Mill + Kiln	13.47	362	12.86	130.65	52	52	0.568	-	-
15/07/2011	Coal Mill	2.41	343	6.10	11.69	50		0.040	-	-
11/07/2011	Cooler	7.55	471	15.37	67.27	58		0.326	-	-
04/07/2011	Cement Mill	1.33	352	7.84	8.08	48		0.023	-	-
25/07/2011	TPP Boiler ESP	20.39	382	2.78	40.54	54	54	0.116	-	-

Plant : **Unit - II Cement Plant & CPP (2x25 MW)**

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
21/07/2011	Raw Mill + Kiln	40.28	397	4.49	124.27	25	32	0.151	-	-
22/07/2011	Coal Mill	6.16	359	7.70	36.07	26		0.028	-	-
26/07/2011	Cooler	33.2	525	7.35	126.91	18		0.111	-	-
07/07/2011	Cement Mill	8.04	353	9.69	60.24	34		0.117	-	-
08/07/2011	Boiler	19.9	399	4.68	63.66	56		0.302	-	-

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE

Plant : **Unit - 1 Cement Plant**

STACK MONITORING

Aug-11

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
12/08/2011	Raw Mill + Kiln	13.47	363	13.88	140.60	42	44	0.510	-	-
03/08/2011	Coal Mill	2.41	353	7.27	13.54	41		0.041	-	-
05.08.2011	Cooler	7.55	471	14.13	61.82	52		0.278	-	-
09/08/2011	Cement Mill	1.33	354	7.77	7.97	39		0.021	-	-
17/08/2011	TPP Boiler ESP	20.39	392	2.89	41.09	49	49	0.174	-	-

Plant : **Unit - II Cement Plant & CPP (2x25 MW)**

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
10/08/2011	Raw Mill + Kiln	40.28	381	4.31	124.48	26	30	0.275	-	-
16/08/2011	Coal Mill	6.16	351	8.01	38.36	24		0.048	-	-
29/08/2011	Cooler	33.2	522	7.18	124.65	16		0.169	-	-
04/08/2011	Cement Mill	8.04	353	5.74	35.69	31		0.076	-	-
24/08/2011	Boiler	19.9	394	4.54	62.67	52		0.281	-	-

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE

Plant : **Unit - 1 Cement Plant**

STACK MONITORING

Sep-11

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
16/09/2011	Raw Mill + Kiln	13.47	355	13.64	141.29	46	49	0.559	-	-
19/09/2011	Coal Mill	2.41	347	6.35	12.04	61		0.052	-	-
26/09/2011	Cooler	7.55	489	14.78	62.28	45		0.241	-	-
22/09/2011	Cement Mill	1.33	357	5.30	5.39	43		0.011	-	-
21/09/2011	TPP Boiler ESP	20.39	390	2.64	37.68	52	52	0.168	-	-

Plant : **Unit - II Cement Plant & CPP (2x25 MW)**

Date	Name of the stack / Duct attached with the unit.	Cross sectional area of the duct M ² (at port Hole)	Stack Temp. (°K)	Velocity (m / sec)	Flow of Gas (Nm ³ /Sec)	Emission Conc. (mg / Nm ³)	Mean Conc. (mg / Nm ³)	Emission (T / Day)	Load MW / Production (T)	Emission T/ MW Production (T)
03/09/2011	Raw Mill + Kiln	40.28	395	4.30	119.65	31	29	0.158	-	-
12/09/2011	Coal Mill	6.16	355	8.17	38.71	22		0.021	-	-
06/09/2011	Cooler	33.2	511	6.91	122.63	26		0.136	-	-
23/09/2011	Cement Mill	8.04	355	5.77	35.70	17		0.029	-	-
19/09/2011	Boiler	19.9	394	4.48	61.74	49		0.113	-	-

AMBIENT AIR MONITORING

Particulars	Wind Direction	At Plant Boundary			
		Near Railway Gate (NE)	Near Boundary Wall No 128-129(NW)	Mines Office (SE)	ST Plant (SW)
Suspended Particulate Matter(SPM) and Particulate Matter(Size less than 10 μm or PM_{10} $\mu\text{g} / \text{M}^3$)	NE - SW	265	272	293	169
		58	60	68	52
Particulate Matter(Size less than 2.5 μm or $\text{PM}_{2.5}$ $\mu\text{g} / \text{M}^3$)		27	28	37	27
Sulphur Dioxide $\mu\text{g} / \text{M}^3$		23	21	26	18
Nitrogen Dioxide $\mu\text{g} / \text{M}^3$		22	26	20	27
Carbon Monoxide mg / M^3		Traces	Traces	Traces	Traces

NOISE LEVEL MONITORING

S. N.	Monitoring Date	Location	Noise Level (avg.) in Leq dB (A)		CPCB Norms
			Day Time (6:00 AM to 10:00 PM)	Night Time (10:00 PM to 6:00 AM)	
1	05.04.2011	Main Gate	69	64	Day Time - 75 dB(A) Night Time - 70 dB(A)
2		Fire gate	67	61	
3		AAMS Near Railway Gate	65	60	
4		AAMS Near Boundary Wall No.128-129	61	56	
5		AAMS at Mines office	63	54	
6		Near TV Cable room	59	53	

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

May-11

AMBIENT AIR MONITORING

Particulars	Wind Direction	At Plant Boundary			
		Near Railway Gate (NE)	Near Boundary Wall No 128-129(NW)	Mines Office (SE)	ST Plant (SW)
Suspended Particulate Matter(SPM) and Particulate Matter(Size less than 10 µm or PM ₁₀ µg / M ³)	NE - SW	268	273	290	167
		60	64	74	57
Particulate Matter(Size less than 2.5 µm or PM _{2.5} µg / M ³)		30	27	37	26
Sulphur Dioxide µg / M ³		26	24	19	20
Nitrogen Dioxide µg / M ³		19	22	18	23
Carbon Monoxide mg / M ³		Traces	Traces	Traces	Traces

NOISE LEVEL MONITORING

S. N.	Monitoring Date	Location	Noise Level (avg.) in Leq dB (A)		CPCB Norms
			Day Time (6:00 AM to 10:00 PM)	Night Time (10:00 PM to 6:00 AM)	
1	06.05.2011	Main Gate	68	62	Day Time - 75 dB(A) Night Time - 70 dB(A)
2		Fire gate	69	63	
3		AAMS Near Railway Gate	66	59	
4		AAMS Near Boundary Wall No.128-129	63	57	
5		AAMS at Mines office	64	54	
6		Near TV Cable room	57	52	

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

Jun-11

AMBIENT AIR MONITORING

Particulars	Wind Direction	At Plant Boundary			
		Near Railway Gate (NE)	Near Boundary Wall No 128-129(NW)	Mines Office (SE)	ST Plant (SW)
Suspended Particulate Matter(SPM) and Particulate Matter(Size less than 10 µm or PM ₁₀ µg / M ³)	NE - SW	211	215	222	129
		36	36	38	34
Particulate Matter(Size less than 2.5 µm or PM _{2.5} µg / M ³)		19	19	21	16
Sulphur Dioxide µg / M ³		20	18	21	19
Nitrogen Dioxide µg / M ³		22	19	22	17
Carbon Monoxide mg / M ³		Traces	Traces	Traces	Traces

NOISE LEVEL MONITORING

S. N.	Monitoring Date	Location	Noise Level (avg.) in Leq dB (A)		CPCB Norms
			Day Time (6:00 AM to 10:00 PM)	Night Time (10:00 PM to 6:00 AM)	
1	04.06.2011	Main Gate	69	64	Day Time - 75 dB(A) Night Time - 70 dB(A)
2		Fire gate	70	65	
3		AAMS Near Railway Gate	65	61	
4		AAMS Near Boundary Wall No.128-129	62	57	
5		AAMS at Mines office	62	55	
6		Near TV Cable room	59	54	

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

Jul-11

AMBIENT AIR MONITORING

Particulars	Wind Direction	At Plant Boundary			
		Near Railway Gate (NE)	Near Boundary Wall No 128-129(NW)	Mines Office (SE)	ST Plant (SW)
Suspended Particulate Matter(SPM) and Particulate Matter(Size less than 10 µm or PM ₁₀ µg / M ³)	NE - SW	149	148	152	87
		33	34	36	27
Particulate Matter(Size less than 2.5 µm or PM _{2.5} µg / M ³)		14	13	15	12
Sulphur Dioxide µg / M ³		27	28	26	34
Nitrogen Dioxide µg / M ³		32	30	34	27
Carbon Monoxide mg / M ³		Traces	Traces	Traces	Traces

NOISE LEVEL MONITORING

S. N.	Monitoring Date	Location	Noise Level (avg.) in Leq dB (A)		CPCB Norms
			Day Time (6:00 AM to 10:00 PM)	Night Time (10:00 PM to 6:00 AM)	
1	28.07.2011	Main Gate	69	63	Day Time - 75 dB(A) Night Time - 70 dB(A)
2		Fire gate	71	64	
3		AAMS Near Railway Gate	66	60	
4		AAMS Near Boundary Wall No.128-129	59	54	
5		AAMS at Mines office	64	58	
6		Near TV Cable room	58	54	

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

Aug-11

AMBIENT AIR MONITORING

Particulars	Wind Direction	At Plant Boundary			
		Near Railway Gate (NE)	Near Boundary Wall No 128-129(NW)	Mines Office (SE)	ST Plant (SW)
Suspended Particulate Matter(SPM) and Particulate Matter(Size less than 10 µm or PM ₁₀ µg / M ³)	NE - SW	135	138	141	81
Particulate Matter(Size less than 2.5 µm or PM _{2.5} µg / M ³)		33	31	35	29
Sulphur Dioxide µg / M ³		13	13	13	12
Nitrogen Dioxide µg / M ³		20	24	28	31
Carbon Monoxide mg / M ³		27	31	26	27
		Traces	Traces	Traces	Traces

NOISE LEVEL MONITORING

S. N.	Monitoring Date	Location	Noise Level (avg.) in Leq dB (A)		CPCB Norms
			Day Time (6:00 AM to 10:00 PM)	Night Time (10:00 PM to 6:00 AM)	
1	09.08.2011	Main Gate	68	64	Day Time - 75 dB(A) Night Time - 70 dB(A)
2		Fire gate	71	65	
3		AAMS Near Railway Gate	68	61	
4		AAMS Near Boundary Wall No.128-129	58	54	
5		AAMS at Mines office	62	55	
6		Near TV Cable room	59	54	

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

Sep-11

AMBIENT AIR MONITORING

Particulars	Wind Direction	At Plant Boundary			
		Near Railway Gate (NE)	Near Boundary Wall No 128-129(NW)	Mines Office (SE)	ST Plant (SW)
Suspended Particulate Matter(SPM) and Particulate Matter(Size less than 10 μm or PM_{10} $\mu\text{g} / \text{M}^3$)	NE - SW	150	152	168	80
		41	40	45	34
Particulate Matter(Size less than 2.5 μm or $\text{PM}_{2.5}$ $\mu\text{g} / \text{M}^3$)		20	17	18	14
Sulphur Dioxide $\mu\text{g} / \text{M}^3$		28	22	26	24
Nitrogen Dioxide $\mu\text{g} / \text{M}^3$		26	29	27	26
Carbon Monoxide mg / M^3		Traces	Traces	Traces	Traces

NOISE LEVEL MONITORING

S. N.	Monitoring Date	Location	Noise Level (avg.) in Leq dB (A)		CPCB Norms
			Day Time (6:00 AM to 10:00 PM)	Night Time (10:00 PM to 6:00 AM)	
1	12.09.2011	Main Gate	67	62	Day Time - 75 dB(A) Night Time - 70 dB(A)
2		Fire gate	70	65	
3		AAMS Near Railway Gate	69	62	
4		AAMS Near Boundary Wall No.128-129	57	53	
5		AAMS at Mines office	64	57	
6		Near TV Cable room	54	50	

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

Fugitive Dust Emissions Report

S No	Month of Sampling	Location (Work Zone Area)	SPM (microgram/M3)
1	Jun-11	LS & Additive Yard	1078
2		Clinker Storage Area	1764
3		Coal Yard	1786
4		Gypsum	803
5		Flyash Unloadind Area	562
6		Coal Mill	1059
7		Raw Mill	746
8		Cement Mill	1597
9		Packing Plant	1796

ADITYA CEMENT WORKS, SAWA - SHAMBHUPURA 312 622, DISTT.: CHITTORGARH (Raj.)

Fugitive Dust Emission Report

S No	Month of Sampling	Location (Work Zone Area)	SPM (microgram/M3)
1	Sep-11	LS & Additive Yard	789
2		Clinker Storage Area	1543
3		Coal Yard	957
4		Gypsum	376
5		Flyash Unloading Area	514
6		Coal Mill	708
7		Raw Mill	659
8		Cement Mill	1609
9		Packing Plant	1423