

J.K. Cement WORKS, MANGROL (RAJ) (Unit-1)
DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE
April' 2016 - September' 2016

DATE	NAME OF THE STACK / DUCT ATTACHED WITH UNIT AND MONTH	CROSS SECTIONAL AREA OF DUCT (M2)	STACK GASES TEMP. (⁰ K)	STACK GASES VELOCITY (M / Sec.)	FLOW OF GASES IN STACK (NM ³ /Sec.)	DUST CONC. (Mg/NM ³)	MEAN DUST CONC. (Mg/NM ³)	EMISSION RATE (Ts/DAY)	REMARK
	April' 2016								
06.04.2016	KILN + RAW MILL (ESP)	5.23	387	17.33	69.79	82.80	78.0	0.499	
12.04.2016	KILN + RAW MILL (ESP)	5.23	383	16.97	69.06	64.90		0.387	
19.04.2016	KILN + RAW MILL (ESP)	5.23	385	16.84	68.17	77.40		0.456	
26.04.2016	KILN + RAW MILL (ESP)	5.23	386	17.08	68.96	86.80		0.517	
	May' 2016								
03.05.2016	KILN + RAW MILL (ESP)	Kiln Under Maintenance							
10.05.2016	KILN + RAW MILL (ESP)								
17.05.2016	KILN + RAW MILL (ESP)								
31.05.2016	KILN + RAW MILL (ESP)								
	June' 2016								
03.06.2016	KILN + RAW MILL (ESP)	Kiln Under Maintenance					11.0		We have converted ESP into Bag
10.06.2016	KILN + RAW MILL (ESP)								

20.06.2016	KILN + RAW MILL (ESP)	5.23	385	15.68	63.48	12.50		0.069	house
27.06.2016	KILN + RAW MILL (ESP)	5.23	389	15.33	61.42	9.50		0.050	
	July' 2016								
02.07.2016	KILN + RAW MILL -1 (B.H.)	5.23	381	14.54	59.48	12.00	13.0	0.062	We have converted ESP into Bag house
11.07.2016	KILN + RAW MILL -1 (B.H.)	5.23	383	14.83	60.35	15.80		0.082	
18.07.2016	KILN + RAW MILL -1 (B.H.)	5.23	380	14.91	61.15	13.80		0.073	
26.07.2016	KILN + RAW MILL -1 (B.H.)	5.23	390	14.86	59.38	10.20		0.052	
	August' 2016								
03.08.2016	KILN + RAW MILL -1 (B.H.)	5.23	384	15.14	61.45	18.30	15.2	0.097	We have converted ESP into Bag house
10.08.2016	KILN + RAW MILL -1 (B.H.)	5.23	382	15.39	62.79	10.30		0.056	
16.08.2016	KILN + RAW MILL -1 (B.H.)	5.23	385	14.81	59.95	14.50		0.075	
24.08.2016	KILN + RAW MILL -1 (B.H.)	5.23	387	14.95	60.21	17.60		0.092	
	September' 2016								
03.09.2016	KILN + RAW MILL -1 (B.H.)	5.23	381	15.41	63.04	10.40	14.4	0.057	We have converted ESP into Bag house
10.09.2016	KILN + RAW MILL -1 (B.H.)	5.23	383	15.22	61.93	15.40		0.082	
17.09.2016	KILN + RAW MILL -1 (B.H.)	5.23	382	14.90	60.79	13.60		0.071	
27.09.2016	KILN + RAW MILL -1 (B.H.)	5.23	384	14.75	59.87	18.30		0.095	
	April' 2016								
06.04.2016	FOLAX COOLER (ESP)	7.07	384	7.31	40.11	34.70	45.0	0.120	

12.04.2016	FOLAX COOLER (ESP)	7.07	389	6.93	37.53	57.30		0.186	
19.04.2016	FOLAX COOLER (ESP)	7.07	386	6.79	37.06	48.20		0.154	
26.04.2016	FOLAX COOLER (ESP)	7.07	385	7.63	41.75	39.90		0.144	
	May' 2016								
03.05.2016	FOLAX COOLER (ESP)	Under Maintenance							
10.05.2016	FOLAX COOLER (ESP)								
17.05.2016	FOLAX COOLER (ESP)								
31.05.2016	FOLAX COOLER (ESP)								
	June' 2016								
03.06.2016	FOLAX COOLER (ESP)	Kiln Under Maintenance					42.0		
10.06.2016	FOLAX COOLER (ESP)								
20.06.2016	FOLAX COOLER (ESP)	7.07	389	7.00	37.91	44.50		0.146	
27.06.2016	FOLAX COOLER (ESP)	7.07	392	7.72	41.49	39.50		0.142	
	July' 2016								
02.07.2016	FOLAX COOLER (ESP)	7.07	391	7.24	39.01	23.80	26.0	0.080	
11.07.2016	FOLAX COOLER (ESP)	7.07	390	6.80	36.73	27.00		0.186	
18.07.2016	FOLAX COOLER (ESP)	7.07	388	7.00	38.01	24.70		0.154	
26.07.2016	FOLAX COOLER (ESP)	7.07	389	7.69	41.65	28.40		0.144	
	August' 2016								

03.08.2016	FOLAX COOLER (ESP)	7.07	393	7.36	39.46	25.90	24.3	0.088		
10.08.2016	FOLAX COOLER (ESP)	7.07	394	7.86	42.03	20.80		0.076		
16.08.2016	FOLAX COOLER (ESP)	7.07	389	7.69	41.65	23.10		0.083		
24.08.2016	FOLAX COOLER (ESP)	7.07	391	7.08	38.15	27.30		0.090		
	September' 2016									
03.09.2016	FOLAX COOLER (ESP)	7.07	392	8.22	44.18	14.00	22.3	0.053		
10.09.2016	FOLAX COOLER (ESP)	7.07	395	7.68	40.96	29.40		0.104		
17.09.2016	FOLAX COOLER (ESP)	7.07	391	7.08	38.15	19.90		0.066		
27.09.2016	FOLAX COOLER (ESP)	7.07	394	8.04	42.99	25.90		0.096		
	April' 2016									
06.04.2016	COAL MILL (B.F.)	0.45	340	27.50	10.85	12.60	17.0	0.012		
12.04.2016	COAL MILL (B.F.)	0.45	337	27.58	10.97	18.30		0.017		
19.04.2016	COAL MILL (B.F.)	0.45	335	27.95	11.19	22.40		0.022		
26.04.2016	COAL MILL (B.F.)	0.45	339	27.80	11.00	14.60		0.014		
	May' 2016									
03.05.2016	COAL MILL (B.F.)	Under Maintenance								
10.05.2016	COAL MILL (B.F.)									
17.05.2016	COAL MILL (B.F.)									
31.05.2016	COAL MILL (B.F.)									

	June' 2016								
03.06.2016	COAL MILL (B.F.)	Under Maintenance					13.0		
10.06.2016	COAL MILL (B.F.)								
20.06.2016	COAL MILL (B.F.)	0.45	337	26.92	10.71	12.30		0.011	
27.06.2016	COAL MILL (B.F.)	0.45	341	27.34	10.75	13.70		0.013	
	July' 2016			-					
02.07.2016	COAL MILL (B.F.)	0.45	335	26.31	10.53	14.80	16.0	0.013	
11.07.2016	COAL MILL (B.F.)	0.45	336	26.47	10.56	18.40		0.017	
18.07.2016	COAL MILL (B.F.)	0.45	338	26.67	10.58	17.00		0.016	
26.07.2016	COAL MILL (B.F.)	0.45	340	26.89	10.61	13.70		0.013	
	August' 2016								
03.08.2016	COAL MILL (B.F.)	0.45	331	26.68	10.81	12.40	14.5	0.012	
10.08.2016	COAL MILL (B.F.)	0.45	335	26.57	10.64	14.60		0.013	
16.08.2016	COAL MILL (B.F.)	0.45	332	26.26	10.61	17.60		0.016	
24.08.2016	COAL MILL (B.F.)	0.45	333	26.83	10.80	13.20		0.012	
	September' 2016								
03.09.2016	COAL MILL (B.F.)	0.45	334	26.61	10.68	9.30	12.6	0.009	
10.09.2016	COAL MILL (B.F.)	0.45	332	26.00	10.50	11.50		0.010	
17.09.2016	COAL MILL (B.F.)	0.45	333	26.85	10.81	16.50		0.015	

27.09.2016	COAL MILL (B.F.)	0.45	330	26.18	10.64	12.90		0.012	
	April' 2016								
06.04.2016	CEMENT MILL No.-1 (B.F.)	Mill Under Maintenance							
12.04.2016	CEMENT MILL No.-1 (B.F.)								
19.04.2016	CEMENT MILL No.-1 (B.F.)								
30.04.2016	CEMENT MILL No.-1 (B.F.)								
	May' 2016								
03.05.2016	CEMENT MILL - 1 (B.F.)	Mill Under Maintenance							
10.05.2016	CEMENT MILL - 1 (B.F.)								
17.05.2016	CEMENT MILL - 1 (B.F.)								
31.05.2016	CEMENT MILL - 1 (B.F.)								
	June' 2016								
03.06.2016	CEMENT MILL No.-1 (B.F.)	Mill Under Maintenance							
10.06.2016	CEMENT MILL No.-1 (B.F.)								
17.06.2016	CEMENT MILL No.-1 (B.F.)								
30.06.2016	CEMENT MILL No.-1 (B.F.)								
	July' 2016			-					
07.07.2016	CEMENT MILL - 1 (B.F.)	Under Major Shutdown							
14.07.2016	CEMENT MILL - 1 (B.F.)								

21.07.2016	CEMENT MILL - 1 (B.F.)								
31.07.2016	CEMENT MILL - 1 (B.F.)								
	August' 2016			-					
03.08.2016	CEMENT MILL No.-1 (B.F.)	Under Major Shutdown							
10.08.2016	CEMENT MILL No.-1 (B.F.)								
16.08.2016	CEMENT MILL No.-1 (B.F.)								
31.08.2016	CEMENT MILL No.-1 (B.F.)								
	September' 2016								
03.09.2016	CEMENT MILL - 1 (B.F.)	Under Major Shutdown							
10.09.2016	CEMENT MILL - 1 (B.F.)								
17.09.2016	CEMENT MILL - 1 (B.F.)								
30.09.2016	CEMENT MILL - 1 (B.F.)								
	April' 2016								
05.04.2016	CEMENT MILL No.-2 (ESP)	0.50	359	8.52	3.54	40.80	39.0	0.012	
12.04.2016	CEMENT MILL No.-2 (ESP)	0.50	363	8.03	3.30	49.40		0.014	
19.04.2016	CEMENT MILL No.-2 (ESP)	0.50	360	8.14	3.37	36.10		0.011	
26.04.2016	CEMENT MILL No.-2 (ESP)	0.50	358	8.32	3.46	29.60		0.009	
	May' 2016								
03.05.2016	CEMENT MILL No.-2 (ESP)	0.50	368	8.82	3.57	41.90	43.0	0.013	

10.05.2016	CEMENT MILL No.-2 (ESP)	0.50	374	8.96	3.57	49.00		0.015	
17.05.2016	CEMENT MILL No.-2 (ESP)	0.50	370	8.39	3.38	44.00		0.013	
24.05.2016	CEMENT MILL No.-2 (ESP)	0.50	372	8.61	3.45	37.20		0.011	
	June' 2016								
03.06.2016	CEMENT MILL No.-2 (ESP)	0.50	373	9.30	3.72	39.40	40.0	0.013	
10.06.2016	CEMENT MILL No.-2 (ESP)	0.50	371	8.96	3.60	43.70		0.014	
20.06.2016	CEMENT MILL No.-2 (ESP)	0.50	369	8.41	3.40	40.10		0.012	
25.06.2016	CEMENT MILL No.-2 (ESP)	0.50	374	8.67	3.45	36.60		0.011	
	July' 2016			-					
04.07.2016	CEMENT MILL No.-2 (ESP)	0.50	372	9.23	3.70	31.40	35.0	0.010	
12.07.2016	CEMENT MILL No.-2 (ESP)	0.50	370	8.95	3.60	41.20		0.013	
20.07.2016	CEMENT MILL No.-2 (ESP)	0.50	368	8.60	3.48	37.50		0.011	
27.07.2016	CEMENT MILL No.-2 (ESP)	0.50	371	8.50	3.41	29.70		0.009	
	August' 2016			-					
04.08.2016	CEMENT MILL No.-2 (ESP)	0.50	373	9.91	3.96	42.60	41.6	0.015	
12.08.2016	CEMENT MILL No.-2 (ESP)	0.50	371	9.46	3.80	50.50		0.017	
19.08.2016	CEMENT MILL No.-2 (ESP)	0.50	370	8.89	3.58	38.40		0.012	
26.08.2016	CEMENT MILL No.-2 (ESP)	0.50	374	9.07	3.61	34.90		0.011	
	September' 2016			-					

06.09.2016	CEMENT MILL No.-2 (ESP)	0.50	370	10.43	4.20	47.70	44.3	0.017	
14.09.2016	CEMENT MILL No.-2 (ESP)	0.50	368	9.60	3.89	35.60		0.012	
21.09.2016	CEMENT MILL No.-2 (ESP)	0.50	372	9.29	3.72	40.90		0.013	
27.09.2016	CEMENT MILL No.-2 (ESP)	0.50	369	9.79	3.95	52.90		0.018	
	April' 2016								
06.04.2016	Crusher-1 (B.F.)	0.38	315	13.98	5.03	29.40	28.0	0.013	
12.04.2016	Crusher-1 (B.F.)	0.38	314	14.23	5.13	27.10		0.007	
19.04.2016	Crusher-1 (B.F.)	0.38	312	13.78	5.00	25.40		0.012	
26.04.2016	Crusher-1 (B.F.)	0.38	311	14.33	5.22	30.00		0.006	
	May' 2016								
03.05.2016	Crusher-1 (B.F.)	Under Maintenance							
10.05.2016	Crusher-1 (B.F.)								
17.05.2016	Crusher-1 (B.F.)								
31.05.2016	Crusher-1 (B.F.)								
	June' 2016								
03.06.2016	Crusher-1 (B.F.)	Under Maintenance					37.0		
10.06.2016	Crusher-1 (B.F.)								
16.06.2016	Crusher-1 (B.F.)	0.38	315	13.36	4.80	35.50		0.015	
25.06.2016	Crusher-1 (B.F.)	0.38	319	13.67	4.85	38.50		0.016	

	July' 2016								
04.07.2016	Crusher-1 (B.F.)	0.38	314	13.69	4.94	29.30	42.0	0.013	
12.07.2016	Crusher-1 (B.F.)	0.38	316	13.99	5.01	34.30		0.015	
19.07.2016	Crusher-1 (B.F.)	0.38	317	13.40	4.79	43.80		0.018	
28.07.2016	Crusher-1 (B.F.)	0.38	318	13.64	4.86	60.70		0.025	
	August' 2016								
04.08.2016	Crusher-1 (B.F.)	0.38	310	13.16	4.81	26.60	27.2	0.011	
12.08.2016	Crusher-1 (B.F.)	0.38	312	13.47	4.89	29.80		0.013	
19.08.2016	Crusher-1 (B.F.)	0.38	309	13.32	4.88	24.70		0.010	
26.08.2016	Crusher-1 (B.F.)	0.38	311	13.71	4.99	27.60		0.025	
	September' 2016								
06.09.2016	Crusher-1 (B.F.)	0.38	312	13.91	5.05	27.40	25.4	0.012	
13.09.2016	Crusher-1 (B.F.)	0.38	310	13.60	4.97	23.30		0.010	
20.09.2016	Crusher-1 (B.F.)	0.38	309	13.27	4.86	29.50		0.012	
29.09.2016	Crusher-1 (B.F.)	0.38	313	13.80	4.99	21.50		0.009	

J.K. Cement WORKS, MANGROL (RAJ) (Unit-2)
DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE
April' 2016 - September ' 2016

DATE	NAME OF THE STACK / DUCT ATTACHED WITH UNIT AND MONTH	CROSS SECTIONAL AREA OF DUCT (M2)	STACK GASES TEMP. (⁰ K)	STACK GASES VELOCITY (M / Sec.)	FLOW OF GASES IN STACK (NM ³ /Sec.)	DUST CONC. (Mg/NM ³)	MEAN DUST CONC. (Mg/NM ³)	EMISSION RATE (Ts/DAY)	REMARK
	April' 2016			-					
04.04.2016	KILN + RAW MILL (Bag House)	14.18	383	12.47	137.58	25.50	21.0	0.30	
11.04.2016	KILN + RAW MILL (Bag House)	14.18	380	12.17	135.33	15.80		0.19	
18.04.2016	KILN + RAW MILL (Bag House)	14.18	379	11.97	133.46	19.40		0.22	
25.04.2016	KILN + RAW MILL (Bag House)	14.18	382	12.63	139.71	23.10		0.28	
	May' 2016								
05.05.2016	KILN + RAW MILL (Bag House)	14.18	405	13.07	136.37	19.80	16.0	0.23	
12.05.2016	KILN + RAW MILL (Bag House)	Kiln Under Maintenance							
19.05.2016	KILN + RAW MILL (Bag House)	14.18	395	12.66	135.43	13.10		0.153	
26.05.2016	KILN + RAW MILL (Bag House)	14.18	401	12.51	131.83	15.00		0.171	
	June' 2016								
03.06.2016	KILN + RAW MILL (Bag House)	14.18	399	12.96	137.25	17.10	18.0	0.203	

11.06.2016	KILN + RAW MILL (Bag House)	14.18	391	12.38	133.79	18.70		0.216	
18.06.2016	KILN + RAW MILL (Bag House)	14.18	387	13.11	143.15	14.60		0.181	
25.06.2016	KILN + RAW MILL (Bag House)	14.18	394	12.15	130.31	21.40		0.241	
	July' 2016								
04.07.2016	KILN + RAW MILL (Bag House)	14.18	395	12.29	131.48	17.20	14.0	0.195	
11.07.2016	KILN + RAW MILL (Bag House)	14.18	388	12.09	131.67	11.00		0.125	
18.07.2016	KILN + RAW MILL (Bag House)	14.18	386	12.86	140.78	15.30		0.186	
25.07.2016	KILN + RAW MILL (Bag House)	14.18	393	12.29	132.15	12.40		0.142	
	August' 2016								
09.08.2016	KILN + RAW MILL (Bag House)	14.18	393	13.15	141.39	21.80	17.3	0.266	
16.08.2016	KILN + RAW MILL (Bag House)	14.18	390	12.58	136.30	15.00		0.177	
20.08.2016	KILN + RAW MILL (Bag House)	14.18	391	12.17	131.52	17.80		0.202	
27.08.2016	KILN + RAW MILL (Bag House)	14.18	394	12.40	132.99	14.40		0.165	
	September' 2016								
02.09.2016	KILN + RAW MILL (Bag House)	14.18	412	13.81	141.64	17.70	13.7	0.217	
09.09.2016	KILN + RAW MILL (Bag House)	14.18	405	13.35	139.29	15.10		0.182	
16.09.2016	KILN + RAW MILL (Bag House)	14.18	407	12.85	133.41	9.50		0.110	
23.09.2016	KILN + RAW MILL (Bag House)	14.18	410	13.66	140.79	12.30		0.150	
	April' 2016								

04.04.2016	FOLAX COOLER (E.S.P)	8.8	385	10.1	69.0	22.6	18.0	0.135	
11.04.2016	FOLAX COOLER (E.S.P)	8.8	382	9.6	65.6	19.5		0.110	
18.04.2016	FOLAX COOLER (E.S.P)	8.8	387	9.5	64.0	16.4		0.091	
25.04.2016	FOLAX COOLER (E.S.P)	8.8	386	9.8	66.3	13.3		0.076	
	May' 2016								
05.05.2016	FOLAX COOLER (E.S.P)	8.80	389	10.26	69.17	24.90	20.0	0.149	
12.05.2016	FOLAX COOLER (E.S.P)	Under Maintenance							
19.05.2016	FOLAX COOLER (E.S.P)	8.80	383	9.72	66.55	19.60		0.113	
26.05.2016	FOLAX COOLER (E.S.P)	8.80	385	9.98	67.98	15.50		0.091	
	June' 2016								
03.06.2016	FOLAX COOLER (E.S.P)	8.80	388	9.75	65.90	25.00	22.0	0.142	
11.06.2016	FOLAX COOLER (E.S.P)	8.80	392	9.78	65.43	18.80		0.106	
18.06.2016	FOLAX COOLER (E.S.P)	8.80	386	10.10	68.62	20.40		0.121	
25.06.2016	FOLAX COOLER (E.S.P)	8.80	384	9.84	67.20	23.60		0.137	
	July' 2016								
04.07.2016	FOLAX COOLER (E.S.P)	8.80	390	10.15	68.25	26.90	25.0	0.159	
11.07.2016	FOLAX COOLER (E.S.P)	8.80	389	10.44	70.38	22.60		0.137	
18.07.2016	FOLAX COOLER (E.S.P)	8.80	388	9.89	66.84	24.80		0.143	
25.07.2016	FOLAX COOLER (E.S.P)	8.80	385	9.62	65.53	25.70		0.146	

	August' 2016								
09.08.2016	FOLAX COOLER (E.S.P)	8.80	393	9.66	64.46	24.80	23.6	0.138	
16.08.2016	FOLAX COOLER (E.S.P)	8.80	394	10.36	68.95	27.60		0.164	
20.08.2016	FOLAX COOLER (E.S.P)	8.80	395	10.60	70.37	18.90		0.115	
27.08.2016	FOLAX COOLER (E.S.P)	8.80	388	9.57	64.68	22.90		0.128	
	September' 2016								
02.09.2016	FOLAX COOLER (E.S.P)	8.80	396	10.00	66.22	23.50	26.6	0.134	
09.09.2016	FOLAX COOLER (E.S.P)	8.80	398	10.71	70.57	29.60		0.180	
16.09.2016	FOLAX COOLER (E.S.P)	8.80	394	10.36	68.95	25.2		0.150	
23.09.2016	FOLAX COOLER (E.S.P)	8.80	395	10.52	69.84	27.9		0.168	
	April' 2016								
04.04.2016	COAL MILL (B.F.)	2.00	342	14.38	25.06	18.70	20.0	0.040	
11.04.2016	COAL MILL (B.F.)	2.00	348	14.17	24.27	23.10		0.049	
18.04.2016	COAL MILL (B.F.)	2.00	344	14.61	25.31	16.60		0.036	
25.04.2016	COAL MILL (B.F.)	2.00	341	14.22	24.85	21.00		0.045	
	May' 2016								
05.05.2016	COAL MILL (B.F.)	2.00	338	14.49	25.55	22.60	18.0	0.050	
12.05.2016	COAL MILL (B.F.)	Mill under Maintenance							
19.05.2016	COAL MILL (B.F.)	2.00	342	14.90	25.97	13.80		0.031	

26.05.2016	COAL MILL (B.F.)	2.00	345	14.45	24.96	17.50		0.038	
	June' 2016								
03.06.2016	COAL MILL (B.F.)	2.00	335	13.77	24.50	25.60	25.0	0.054	
11.06.2016	COAL MILL (B.F.)	2.00	332	13.85	24.86	22.60		0.049	
18.06.2016	COAL MILL (B.F.)	2.00	336	14.48	25.68	24.80		0.055	
25.06.2016	COAL MILL (B.F.)	2.00	331	13.55	24.40	27.10		0.057	
	July' 2016								
04.07.2016	COAL MILL (B.F.)	2.00	334	13.33	23.79	18.20	17.0	0.037	
11.07.2016	COAL MILL (B.F.)	2.00	333	13.59	24.32	13.50		0.028	
18.07.2016	COAL MILL (B.F.)	2.00	332	13.90	24.95	16.20		0.035	
25.07.2016	COAL MILL (B.F.)	2.00	335	13.87	24.68	20.00		0.043	
	August' 2016								
09.08.2016	COAL MILL (B.F.)	2.00	335	14.14	25.16	17.60	19.4	0.038	
16.08.2016	COAL MILL (B.F.)	2.00	332	13.71	24.61	19.90		0.042	
20.08.2016	COAL MILL (B.F.)	2.00	337	13.91	24.60	23.90		0.051	
27.08.2016	COAL MILL (B.F.)	2.00	334	13.33	23.79	16.20		0.033	
	September' 2016								
02.09.2016	COAL MILL (B.F.)	2.00	334	14.39	25.68	19.8	15.6	0.044	
09.09.2016	COAL MILL (B.F.)	2.00	330	14.12	25.50	13.80		0.030	

16.09.2016	COAL MILL (B.F.)	2.00	338	14.07	24.81	11.20		0.024	
23.09.2016	COAL MILL (B.F.)	2.00	335	13.77	24.50	17.70		0.037	
	April' 2016								
04.04.2016	CEMENT MILL - 3 (Bag filter)	6.60	364	10.97	59.27	12.60	17.0	0.065	
11.04.2016	CEMENT MILL - 3 (Bag filter)	6.60	361	10.59	57.70	17.30		0.086	
18.04.2016	CEMENT MILL - 3 (Bag filter)	6.60	365	10.01	53.94	22.70		0.106	
28.04.2016	CEMENT MILL - 3 (Bag filter)	6.60	363	10.20	55.27	15.20		0.073	
	May' 2016								
04.05.2016	CEMENT MILL - 3 (Bag filter)	6.60	363	11.34	61.44	29.00	21.0	0.154	
12.05.2016	CEMENT MILL - 3 (Bag filter)	6.60	373	11.69	61.64	12.50		0.067	
20.05.2016	CEMENT MILL - 3 (Bag filter)	6.60	369	11.04	58.84	19.20		0.098	
28.05.2016	CEMENT MILL - 3 (Bag filter)	6.60	370	10.72	56.98	23.30		0.115	
	June' 2016								
04.06.2016	CEMENT MILL - 3 (Bag filter)	6.60	369	11.27	60.07	23.80	23.0	0.124	
11.06.2016	CEMENT MILL - 3 (Bag filter)	6.60	365	11.33	61.05	22.10		0.117	
18.06.2016	CEMENT MILL - 3 (Bag filter)	6.60	367	10.80	57.88	25.10		0.126	
25.06.2016	CEMENT MILL - 3 (Bag filter)	6.60	362	10.39	56.45	21.10		0.103	
	July' 2016								
04.07.2016	CEMENT MILL - 3 (Bag filter)	6.60	364	11.13	60.14	28.80	26.0	0.150	

12.07.2016	CEMENT MILL - 3 (Bag filter)	6.60	367	11.24	60.24	24.90		0.130	
19.07.2016	CEMENT MILL - 3 (Bag filter)	6.60	368	11.57	61.84	22.90		0.122	
28.07.2016	CEMENT MILL - 3 (Bag filter)	6.60	363	10.87	58.90	27.40		0.139	
	August' 2016								
06.08.2016	CEMENT MILL - 3 (Bag filter)	6.6	363	11.55	62.58	18.4	20.3	0.099	
11.08.2016	CEMENT MILL - 3 (Bag filter)	6.6	366	11.0	58.95	21.6		0.110	
17.08.2016	CEMENT MILL - 3 (Bag filter)	6.6	365	11.33	61.05	16.4		0.087	
26.08.2016	CEMENT MILL - 3 (Bag filter)	6.6	364	11.8	63.76	24.7		0.136	
	September' 2016								
02.09.2016	CEMENT MILL - 3 (Bag filter)	6.60	365	11.99	64.61	21.60	18.1	0.121	
15.09.2016	CEMENT MILL - 3 (Bag filter)	6.60	363	11.49	62.25	17.00		0.091	
21.09.2016	CEMENT MILL - 3 (Bag filter)	6.60	368	11.75	62.80	19.50		0.106	
27.09.2016	CEMENT MILL - 3 (Bag filter)	6.60	366	12.52	67.28	14.30		0.083	
	April' 2016								
04.04.2016	CRUSHER-2 (B.F.)	1.23	315.00	10.91	12.65	23.00	24.0	0.025	
11.04.2016	CRUSHER-2 (B.F.)	1.23	313.00	10.35	12.08	28.40		0.030	
18.04.2016	CRUSHER-2 (B.F.)	1.23	312.00	10.51	12.31	25.90		0.028	
25.04.2016	CRUSHER-2 (B.F.)	1.23	314.00	10.61	12.35	18.50		0.020	
	May' 2016								

05.05.2016	CRUSHER-2 (B.F.)	1.23	318	11.02	12.66	27.10	22.0	0.030	
12.05.2016	CRUSHER-2 (B.F.)	Under Maintenance							
21.05.2016	CRUSHER-2 (B.F.)	1.23	313	10.47	12.22	17.50		0.018	
27.05.2016	CRUSHER-2 (B.F.)	1.23	317	10.83	12.48	21.50		0.023	
	June' 2016								
04.06.2016	CRUSHER-2 (B.F.)	1.23	320	10.78	12.31	28.20	26.0	0.030	
11.06.2016	CRUSHER-2 (B.F.)	1.23	319	11.16	12.78	22.10		0.024	
18.06.2016	CRUSHER-2 (B.F.)	1.23	322	10.41	11.81	31.40		0.032	
25.06.2016	CRUSHER-2 (B.F.)	1.23	324	10.74	12.11	22.20		0.023	
	July' 2016								
07.07.2016	CRUSHER-2 (B.F.)	1.23	318	11.03	12.67	18.10	19.0	0.020	
14.07.2016	CRUSHER-2 (B.F.)	1.23	320	11.34	12.95	15.3		0.017	
21.07.2016	CRUSHER-2 (B.F.)	1.23	319	10.88	12.46	22.4		0.024	
26.07.2016	CRUSHER-2 (B.F.)	1.23	322	11.15	12.65	20.0		0.022	
	August' 2016								
06.08.2016	CRUSHER-2 (B.F.)	Under Maintenance					28.2		
13.08.2016	CRUSHER-2 (B.F.)	1.23	313	10.72	12.51	29.7		0.032	
20.08.2016	CRUSHER-2 (B.F.)	1.23	314	11.07	12.88	26.5		0.029	
27.08.2016	CRUSHER-2 (B.F.)	1.23	312	10.82	12.67	28.4		0.031	

	September' 2016								
02.09.2016	CRUSHER-2 (B.F.)	1.23	310	10.78	12.7	23.2	21.4	0.025	
09.09.2016	CRUSHER-2 (B.F.)	1.23	312	10.48	12.27	20.0		0.021	
16.09.2016	CRUSHER-2 (B.F.)	1.23	308	11.12	13.19	16.8		0.019	
23.09.2016	CRUSHER-2 (B.F.)	1.23	311	10.91	12.82	25.5		0.028	
	April' 2016								
05.04.2016	PACKER-1 (B.F.)	0.785	315	12.01	8.92	23.5	25.0	0.018	
12.04.2016	PACKER-1 (B.F.)	0.785	317	11.4	8.41	29.5		0.021	
19.04.2016	PACKER-1 (B.F.)	0.785	320	11.73	8.57	25.7		0.019	
29.04.2016	PACKER-1 (B.F.)	0.785	318	11.8	8.68	21.1		0.016	
	May' 2016								
02.05.2016	PACKER-1 (B.F.)	0.785	322	11.98	8.7	18.5	17.0	0.014	
10.05.2016	PACKER-1 (B.F.)	0.785	318	11.75	8.64	12.7		0.009	
17.05.2016	PACKER-1 (B.F.)	0.785	321	12.12	8.83	21.1		0.016	
24.05.2016	PACKER-1 (B.F.)	0.785	324	12.44	8.98	15.5		0.012	
	June' 2016								
03.06.2016	PACKER-1 (B.F.)	0.785	323	12.38	8.97	23.9	19.0	0.019	
11.06.2016	PACKER-1 (B.F.)	0.785	321	11.57	8.43	14.7		0.011	
18.06.2016	PACKER-1 (B.F.)	0.785	319	11.85	8.69	20.5		0.015	

25.06.2016	PACKER-1 (B.F.)	0.785	320	12.12	8.86	16.8		0.013	
	July' 2016								
05.07.2016	PACKER-1 (B.F.)	0.785	321	12.14	8.85	28.2	24.0	0.022	
11.07.2016	PACKER-1 (B.F.)	0.785	322	11.9	8.65	19.3		0.014	
21.07.2016	PACKER-1 (B.F.)	0.785	320	11.74	8.58	26.3		0.020	
28.07.2016	PACKER-1 (B.F.)	0.785	318	11.52	8.47	22.3		0.016	
	August' 2016								
03.08.2016	PACKER-1 (B.F.)	0.785	315	11.93	8.86	20.2	21.7	0.015	
10.08.2016	PACKER-1 (B.F.)	0.785	312	11.51	8.63	26.2		0.020	
17.08.2016	PACKER-1 (B.F.)	0.785	310	12.03	9.08	22.7		0.018	
24.08.2016	PACKER-1 (B.F.)	0.785	313	11.74	8.77	17.7		0.013	
	September' 2016								
02.09.2016	PACKER-1 (B.F.)	0.785	315	11.93	8.86	28.2	23.2	0.022	
16.09.2016	PACKER-1 (B.F.)	0.785	312	11.51	8.63	25.1		0.019	
22.09.2016	PACKER-1 (B.F.)	0.785	310	12.03	9.08	21.9		0.017	
29.09.2016	PACKER-1 (B.F.)	0.785	313	11.74	8.77	17.7		0.013	
	April' 2016								
05.04.2016	PACKER-2 (B.F.)	0.785	321	12.48	9.09	21.8	22.0	0.017	
12.04.2016	PACKER-2 (B.F.)	0.785	318	12.06	8.87	17.7		0.014	

19.04.2016	PACKER-2 (B.F.)	0.785	313	12.53	9.36	28.6		0.023	
29.04.2016	PACKER-2 (B.F.)	0.785	317	12.25	9.04	19.8		0.015	
	May' 2016								
02.05.2016	PACKER-2 (B.F.)	0.785	326	12.99	9.32	23.9	24.0	0.019	
09.05.2016	PACKER-2 (B.F.)	0.785	324	12.85	9.28	29.3		0.023	
17.05.2016	PACKER-2 (B.F.)	0.785	322	12.35	8.97	20.3		0.016	
25.05.2016	PACKER-2 (B.F.)	0.785	327	12.6	9.0	22.4		0.017	
	June' 2016								
03.06.2016	PACKER-2 (B.F.)	0.785	325	12.57	9.05	17.4	21.0	0.014	
11.06.2016	PACKER-2 (B.F.)	0.785	322	12.36	8.98	27.6		0.021	
18.06.2016	PACKER-2 (B.F.)	0.785	324	12.15	8.77	18.9		0.014	
25.06.2016	PACKER-2 (B.F.)	0.785	320	12.12	8.86	20.2		0.015	
	July' 2016								
05.07.2016	PACKER-2 (B.F.)	0.785	323	12.28	8.89	16.9	20.0	0.013	
11.07.2016	PACKER-2 (B.F.)	0.785	321	12.04	8.77	24.4		0.018	
21.07.2016	PACKER-2 (B.F.)	0.785	322	11.8	8.57	18.3		0.014	
28.07.2016	PACKER-2 (B.F.)	0.785	319	12.35	9.06	20.5		0.016	
	August' 2016								
03.08.2016	PACKER-2 (B.F.)	0.785	317	11.6	8.56	15.3	15.8	0.011	

10.08.2016	PACKER-2 (B.F.)	0.785	315	11.25	8.35	17		0.012	
17.08.2016	PACKER-2 (B.F.)	0.785	313	12.09	9.04	11.8		0.009	
24.08.2016	PACKER-2 (B.F.)	0.785	312	11.72	8.79	18.9		0.014	
	September' 2016								
02.09.2016	PACKER-2 (B.F.)	0.785	312	12.22	9.16	25.2	27.5	0.020	
16.09.2016	PACKER-2 (B.F.)	0.785	315	11.72	8.7	29.3		0.022	
22.09.2016	PACKER-2 (B.F.)	0.785	311	11.18	8.41	28.4		0.021	
29.09.2016	PACKER-2 (B.F.)	0.785	310	11.83	8.93	27.1		0.021	
	April' 2016								
05.04.2016	PACKER-3 (B.F.)	0.785	318	13.12	9.65	15	19	0.013	
12.04.2016	PACKER-3 (B.F.)	0.785	321	12.48	9.09	24.3		0.019	
19.04.2016	PACKER-3 (B.F.)	0.785	320	12.67	9.26	19.7		0.016	
29.04.2016	PACKER-3 (B.F.)	0.785	323	13.32	9.65	17		0.014	
	May' 2016								
02.05.2016	PACKER-3(B.F.)	0.785	322	13.01	9.45	28.4	25	0.023	
10.05.2016	PACKER-3(B.F.)	0.785	319	12.55	9.2	23.9		0.019	
17.05.2016	PACKER-3(B.F.)	0.785	325	12.51	9.0	26.2		0.020	
24.05.2016	PACKER-3(B.F.)	0.785	323	12.73	9.22	21.4		0.017	
	June' 2016								

04.06.2016	PACKER-3(B.F.)	0.785	321	12.54	9.14	28.1	24	0.022	
11.06.2016	PACKER-3(B.F.)	0.785	320	12.07	8.82	22.2		0.017	
18.06.2016	PACKER-3(B.F.)	0.785	324	12.25	8.84	24.4		0.019	
25.06.2016	PACKER-3(B.F.)	0.785	319	12.35	9.06	21.3		0.017	
	July' 2016								
05.07.2016	PACKER-3 (B.F.)	0.785	319	12.3	9.02	21.3	18.0	0.017	
11.07.2016	PACKER-3 (B.F.)	0.785	321	11.78	8.58	14.2		0.011	
21.07.2016	PACKER-3 (B.F.)	0.785	322	12.16	8.83	16.6		0.013	
28.07.2016	PACKER-3 (B.F.)	0.785	320	12.17	8.9	19.7		0.015	
	August' 2016								
03.08.2016	PACKER-3(B.F.)	0.785	312	11.82	8.86	28.2	22.3	0.022	
10.08.2016	PACKER-3(B.F.)	0.785	313	12.23	9.14	22.8		0.018	
17.08.2016	PACKER-3(B.F.)	0.785	314	11.44	8.52	20.1		0.015	
24.08.2016	PACKER-3(B.F.)	0.785	315	11.62	8.63	18.2		0.014	
	September' 2016								
02.09.2016	PACKER-3(B.F.)	0.785	315	12.13	9.01	20.4	24.7	0.016	
16.09.2016	PACKER-3(B.F.)	0.785	314	11.8	8.79	28.8		0.022	
22.09.2016	PACKER-3(B.F.)	0.785	313	11.89	8.89	23.9		0.018	
29.09.2016	PACKER-3(B.F.)	0.785	312	12.26	9.19	25.7		0.020	

	April' 2016								
05.04.2016	PACKER-4 (B.F.)	0.785	322	12.61	9.16	22.4	26.0	0.018	
12.04.2016	PACKER-4 (B.F.)	0.785	323	12.99	9.47	29.1		0.024	
19.04.2016	PACKER-4 (B.F.)	0.785	325	12.61	9.08	24.5		0.019	
29.04.2016	PACKER-4 (B.F.)	0.785	323	12.93	9.36	27.9		0.023	
	May' 2016								
02.05.2016	PACKER-4(B.F.)	0.785	325	12.87	9.26	16.4	19.0	0.013	
11.05.2016	PACKER-4(B.F.)	0.785	320	12.92	9.44	21.4		0.017	
17.05.2016	PACKER-4(B.F.)	0.785	323	12.68	9.18	24.3		0.019	
24.05.2016	PACKER-4(B.F.)	0.785	322	12.76	9.27	13.8		0.011	
	June' 2016								
04.06.2016	PACKER-4(B.F.)	0.785	319	12.3	9.02	15.5	17.0	0.012	
11.06.2016	PACKER-4(B.F.)	0.785	321	12.68	9.24	16.6		0.013	
17.06.2016	PACKER-4(B.F.)	0.785	323	12.08	8.75	21.3		0.016	
25.06.2016	PACKER-4(B.F.)	0.785	320	12.47	9.12	14.4		0.011	
	July' 2016								
05.07.2016	PACKER-4 (B.F.)	0.785	317	12.21	9.01	25.9	22.0	0.020	
11.07.2016	PACKER-4 (B.F.)	0.785	319	12.35	9.06	20.7		0.016	
21.07.2016	PACKER-4 (B.F.)	0.785	321	12.14	8.85	22		0.017	

28.07.2016	PACKER-4 (B.F.)	0.785	320	12.25	8.96	19.5		0.015	
	August' 2016								
3.08.2016	PACKER-4(B.F.)	0.785	315	11.87	8.82	24.2	24.4	0.018	
10.08.2016	PACKER-4(B.F.)	0.785	312	12.26	9.19	28		0.022	
17.08.2016	PACKER-4(B.F.)	0.785	313	12.09	9.04	18.2		0.014	
24.08.2016	PACKER-4(B.F.)	0.785	314	11.96	8.91	27.1		0.021	
	September' 2016								
02.09.2016	PACKER-4(B.F.)	0.785	317	12.21	9.01	18.6	20.8	0.014	
16.09.2016	PACKER-4(B.F.)	0.785	313	12.52	9.36	25.7		0.021	
22.09.2016	PACKER-4(B.F.)	0.785	314	11.91	8.87	21.2		0.016	
29.09.2016	PACKER-4(B.F.)	0.785	316	12.29	9.1	17.8		0.014	

J.K. Cement WORKS, MANGROL (RAJ)
AMBIENT AIR QUALITY AVERAGE RESULTS (SPM) COMMON FOR UNIT-1 & UNIT-2
(ALL VALUES IN MICROGRAMS / CUBIC METER)
(April' 2016 - September' 16)

S.No. & Month	LOCATION / PERAMETER	NEAR TIME OFFICE	NEAR THERMAL POWER PLANT	NEAR RAW MATERIAL GATE	NEAR PACKING PLANT GATE	Remarks
April' 2016						
1	SPM	368.5	326.5	350.0	356.0	
2	SO2	14.0	10.4	11.5	15.2	
3	NOX	25.5	19.8	22.2	26.8	
4	CO	715.6	744.3	687.0	801.5	
May' 2016						
1	SPM	382.0	338.3	356.7	362.5	
2	SO2	15.8	10.9	13.2	12.4	
3	NOX	29.7	22.5	27.3	23.3	
4	CO	844.4	739.5	887.4	863.5	
June' 2016						
1	SPM	332.3	292.2	309.7	316.0	

2	SO2	14.2	9.8	11.7	10.8	
3	NOX	27.6	19.6	24.3	24.7	
4	CO	744.3	729.9	830.1	658.4	
July' 2016						
1	SPM	285.0	311.7	286.8	268.3	
2	SO2	10.7	11.7	9.1	8.1	
3	NOX	19.4	21.4	18.1	16.3	
4	CO	620.2	553.4	658.4	653.6	
August' 2016						
1	SPM	213.0	231.3	204.2	188.2	
2	SO2	6.9	8.8	6.0	6.3	
3	NOX	12.4	16.5	11.8	12.3	
4	CO	353.0	372.1	301	300.6	
September' 2016						
1	SPM	283.0	310.8	288.0	257.3	
2	SO2	12.4	12.9	11.2	9.0	
3	NOX	24.5	25.4	21.2	19.1	

4	CO	530	529.6	515.3	601.1	
Six monthly Average						
1	SPM	310.6	301.8	299.2	291.4	
2	SO2	12.3	10.7	10.5	10.3	
3	NOX	23.2	20.9	20.8	20.4	
4	CO	634.5	611.5	646.4	646.4	

J.K. Cement Works, Mangrol (Unit-1)
Fugitive Emission Monitoring Report
(April' 2016 - September' 2016)

S.No.	Month/Year	SPM (µg/m3)			
		NEAR COAL YARD-1	NEAR LIMESTONE CRUSHING SITE-1	NEAR STACKER RECLAIMER-1	NEAR GYPSUM YARD-1
1	Apr-16	1303.7	2354.9	2597.5	1401.6
2	May-16	1474.8	UM	UM	1541.0
3	Jun-16	1458.3	2153.4	2428.3	2135.4
4	Jul-16	1092.9	1961.8	1916.7	2066.1

5	Aug-16	1327.9	2542.4	2696.5	2459.0
6	Sep-16	1285.3	2430.6	2521.0	2471.8

J.K. Cement Works, Mangrol (Unit-2)
Fugitive Emission Monitoring Report
(April' 2016 - September' 2016)

S.No.	Month/Year	SPM ($\mu\text{g}/\text{m}^3$)			
		NEAR COAL YARD-2	NEAR LIMESTONE CRUSHING SITE-2	NEAR STACKER RECLAIMER-2	NEAR GYPSUM YARD-2
1	Apr-16	1497.2	1758.8	1606.0	1782.9
2	May-16	1583.3	1948.0	1698.6	2060.0
3	Jun-16	1538.5	1894.3	1883.6	1784.7
4	Jul-16	1183.3	1485.7	1406.3	1394.5

5	Aug-16	1106.6	1819.4	1504.2	2023.8
6	Sep-16	1208.3	1697.7	1646.3	1796.4