

Ambuja Cement

Monitored Key Parameters in Respect of Mining Projects

Ref. MOEF Circular No. J-20012/1/2006-IA.II(M) Dated 27/05/2009

For the Period: 01/06/10 to 15/06/10

Total Mines: X

MINE I

I. Static Information						
(i)	Name of the Mine	Maratha Lime Stone Mines				
(ii)	Area of Mine(Ha)	1509.2				
(iii)	Minerals being produced	Lime Stone				
(iv)	Annual Production (MTPA)	4.2 MTPA				
(v)	Date of mine opening	17.07.2001				
(vi)	Lease validity	03 Lease areas: ML I, ML II, ML III 1. 880.31 Ha: 14.12.2020 2. 579.90 Ha: 31.12.2024 3. 49 Ha: 24.05.2036				
II. Dynamic Parameter						
(i)	Ambient Air Quality in ug/M³				Date of Sampling 1st to 15th June 2010 (Average Result)	
	(Three Locations-1 and 2 in core & 3 to 5 in buffer zone with date of sampling)	I (L-Type Hostel)	II	III	IV (Magazine Section)	V
	Location :(Core Zone / Buffer Zone)	L-Type Hostel	Batchlor Hostel	L.S.Crusher	Magazine Section	Water Pond
	SPM	154.00	153.30	156.00	164.00	157.00
	RSPM	49.80	50.60	55.00	57.40	52.00
	Nox	15.19	14.90	15.00	17.20	17.50
(ii)	Vibration Report (1 or 2 locations)					
		Location with distance from blast site and habitation				Date & PPV(mm/s)

	Location : 1	Blast site - B North Face Nearest Village is around 02 KMs from the blast site	15 th March,10 & PPV - 4.41 mm/s Minimate dist - 200 Mtr from the blast.		
	Location : 2	Blast site - B South Old Nearest Village is around 2.5 KMs from the blast site	12 th March,10 & PPV - 2.38 mm/s Minimate dist - 200 Mtr from the blast.		
	Quality of Discharge Water				
		Mines Work Shop Outlet (Date of sampling) 10.06.2010	Mining area run-off (Date of sampling)		
	pH	8.2	-		
	TSS (mg/l)	85.0	-		
	TDS (mg/l)	195.0	-		
(iii)	DO (mg/l)	3.8	-		
	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
	During the year (2009)	2.0	5000.0	200.0	2500.0
(iv)	Cumulative	106.9	266489.0	84059.0	2494.05

MINE II

I.	Static Information				
	(i)	Name of the Mine	Ras II Limestone Mines		
	(ii)	Area of Mine(Ha)	803		
	(iii)	Minerals being produced	Limestone		
	(iv)	Annual Production (MTPA)	3.6 MTPA		
	(v)	Date of mine opening	12/31/1995		
	(vi)	Lease validity	20 Years		
II.	Dynamic Parameter				
	(i)	Ambient Air Quality in ug/M³	At L/S Crushing & Screening CCR	Vill. Patan	Vill. Kerpura
		(Three Locations-1 in core & 2 in buffer zone with date of sampling)	6/10/2010	6/9/2010	6/14/2010

	Location :(Core Zone / Buffer Zone)	core Zone	Buffer Zone	Buffer Zone	
	SPM	353.5	188.4	195.5	
	RSPM	38.6	35.6	26.2	
	NOx	12.6	10.2	12.5	
	Vibration Report				
	(1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV(mm/s)	
	Location : 1	Eastern Ridge, Distance 200 mtr., Village distance 500 mtr. From Mines Boundary		11/05/10 & 0.785	
(ii)	Location : 2	Western Ridge, Distance 150 mtr.,Cement plant distance 1.5 KM & No village within 3 km. From mines boundary		10/05/10 & 4.97	
	Quality of Discharge Water				
		Mines Work Shop Outlet (08/05/10)	Mining area run-off (Date of sampling)		
	pH	7.4	-		
(iii)	TSS(mg/l)	78	-		
	Greenbelt / Plantation				
		Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
	During the year	5	13700	8000	5700
(iv)	Cumulative	75.45	123474	92189	31285

MINE III

I.	Static Information	
(i)	Name of the Mine	Kashlog Lime Stone Mines
(ii)	Area of Mine (Ha.)	488.06
(iii)	Minerals being produced	Limestone and Shale
(iv)	Annual Production (MTPA)	5.5
(v)	Date of mine opening	May 1992
(vi)	Lease validity	May 2012

II. Dynamic Parameter					
(i)	Ambient Air Quality in $\mu\text{g}/\text{M}^3$	At L/S Mines Dormitory	Rathoh Village	Chandi Village	Mangoo Village
	(Three Locations-1 in core & 2 in buffer zone with date of sampling)	12/06/2010	12/06/2010	12/06/2010	12/06/2010
	Location : (Core Zone / Buffer Zone)	Core Zone	Buffer Zone	Buffer Zone	Buffer Zone
	SPM	173.90	166.86	166.30	164.68
	RSPM	81.57	77.27	72.64	79.96
	SO ₂	8.0	6.0	4.0	5.0
	NO _x	5.0	4.0	3.0	4.0
(ii)	Vibration Report				
	(1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV (mm/s)	
	Location : 1	Haul Road at 1310 MRL (140m)		02/06/2010 - 1.1	
	Location : 2	Magazine site 1410 MRL (135m)		05/06/2010 - 2.3	
(iii)	Quality of Discharge Water				
		Mines Work Shop Outlet (09/06/2010) Oil & Grease Trap	Mining area run-off (Date of sampling Gyana Khad 11/06/2010 (V Notch))		
	pH	7.5		7.4	
	TSS(mg/l)	42.8		20.0	
	TDS(mg/l)	-		335.0	
	DO(mg/l)	-		5.45	
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No. of plant in ML area	No. of plants outside ML area	Plantation density (No. of plants.ha)
	During the year	---	39	---	---
	Cumulative	40.11	131295	23644	3862

MINE IV

I. Static Information		
(i)	Name of the Mine	Rawan Limestone Mine

(ii)	Area of Mine(Ha)	420.95 hectares
(iii)	Minerals being produced	Limestone
(iv)	Annual Production (MTPA)	6.31 Million Tonnes per annum
(v)	Date of mine opening	01.04.1984
(vi)	Lease validity	26.06.2021

II.

Dynamic Parameter

(i)	Ambient Air Quality in ug/M³				
	(Three Locations-1 in core & 2 in buffer zone with date of sampling)	08/06/2010	08/06/2010	08/06/2010	
	Location :(Core Zone / Buffer Zone)	Core Zone	Buffer Zone	Buffer Zone	
	SPM	151.48	86.87	79.91	
	RSPM	61.86	40.75	37.3	
	NOx	18.36	7.23	7.37	
(ii)	Vibration Report				
	(1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV(mm/s)	
	Location : 1	NORTH BLOCK(125 MTR)		7/06/2010 & 6.89	
	Location : 2	NORTH BLOCK(125 MTR)		10/06/2010 & 1.71	
(iii)	Quality of Discharge Water				
		Mines Work Shop Outlet (01/06/2010)	Mining area run-off (01/06/2010)		
	pH	7.52	7.5		
	TSS(mg/l)	36	21		
	TDS(mg/l)	391	226		
	DO(mg/l)	3.9	5.8		
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
	During the year	3.38	8457	46142	2500-3000
	Cumulative	29.14	102190	516875	2500-3000
	planted in the existing area				

MINE V

I. Static Information							
(i)	Name of the Mine	Sugal Limestone Mine					
(ii)	Area of Mine(Ha)	417.3584					
(iii)	Minerals being produced	Limestone					
(iv)	Annual Production (Mine Capacity - MTPA)	1.29 MTPA					
(v)	Date of mine opening	02.11.2002					
(vi)	Lease validity	1st Sept 2032					
II. Dynamic Parameter							
(i)	Ambient Air Quality in ug/M ³ (Four Locations-1 in core & 5 in buffer zone with date of sampling)	Working Area	Sugala	Jagetiya	Chhachhar	Nagdala	Kansariya
		09.06.10	09.06.10	09.06.10	09.06.10	09.06.10	09.06.10
	SPM	138.6	136.7	150	133.2	142.6	162.6
	RSPM	44.2	41.5	35.6	43.4	41.2	54
	NOx	11.2	9.4	14.5	12.3	10.6	10.9
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV(mm/s)			
		Not applicable as Surface Miner is being used for mining.					
(iii)	Quality of Discharge Water	Common Central Work Shop Outlet (Date of sampling)		Mining area run-off			
		14.06.2010		Not Applicable			
	pH	7.82					
	TSS(mg/l)	78					
	TDS(mg/l)	1165					
DO(mg/l)	6.5						
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)		
	During the year	1.55	1550	0	1000		
	Cumulative	8.33	16194	3262	2336		

MINE VI

I. Static Information						
(i)	Name of the Mine	Vadnagar Limestone Mine (S. No. 44)				
(ii)	Area of Mine(Ha)	108.97				
(iii)	Minerals being produced	Limestone & Marl				
(iv)	Annual Production (Mine Capacity - MTPA)	Limestone-1.5 MTPA & Marl-1.15 MTPA				
(v)	Date of mine opening	14.07.1986				
(vi)	Lease validity	15th April 2005				
		Applied for part area renewal on 05.04.2004.(original lease area was 191.92 ha , i.e. Sy No-44=108.97ha, Sy No-410= 31.28 ha and Sy No-447 = 51.67ha)				
II. Dynamic Parameter						
(i)	Ambient Air Quality in ug/M ³ (Four Locations-1 in core & 3 in buffer zone with date of sampling)	Working Place	D-Block	Devalpara	Ichhavad	
		07.06.10	07.06.10	07.06.10	07.06.10	
		SPM	128.2	146.4	133.8	143.7
		RSPM	36.6	41.9	42.3	43.4
		NOx	14.7	12	11	13.8
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation	Date & PPV(mm/s)			
		Not applicable as Surface Miner is being used for mining.				
(iii)	Quality of Discharge Water	Common Central Work Shop Outlet (Date of sampling)	Mining area run-off			
		14.06.2010	Not Applicable			
		pH				7.82
		TSS(mg/l)				78
		TDS(mg/l)				1165
		DO(mg/l)				6.5
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)	
		During the year	0	1500	500	
		Cumulative	8.95	7040	76021(In 108.8 ha)	1500

MINE VII

I. Static Information					
(i)	Name of the Mine	Vadnagar Limestone Mine (S. No. 200/3p)			
(ii)	Area of Mine(Ha)	85.3108			
(iii)	Minerals being produced	Limestone			
(iv)	Annual Production (Mine Capacity - MTPA)	1.5 MTPA			
(v)	Date of mine opening	05.09.2005			
(vi)	Lease validity	13th July 2035			
II. Dynamic Parameter					
(i)	Ambient Air Quality in ug/M ³ (Four Locations-1 in core & 3 in buffer zone with date of sampling)	Working Place	Vadnagar	Dudana	lcchvad
		01.06.10	01.06.10	01.06.10	01.06.10
	SPM	138.1	123	118.1	143.7
	RSPM	43	39	33	43.4
	NOx	14.2	15.4	14.1	13.8
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation	Date & PPV(mm/s)		
		Not applicable as Surface Miner is being used for mining.			
(iii)	Quality of Discharge Water	Common Central Work Shop Outlet (Date of sampling)	Mining area run-off		
		14.06.2010	Not Applicable		
	pH	7.82			
	TSS(mg/l)	78			
	TDS(mg/l)	1165			
DO(mg/l)	6.5				
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
	During the year	0.03	300	0	10000
	Cumulative	2.75	6599	0	2400

MINE VIII

I. Static Information					
(i)	Name of the Mine Solaj Limestone Mine				
(ii)	Area of Mine(Ha) 200.8184				
(iii)	Minerals being produced Limestone & Marl				
(iv)	Annual Production (Mine Capacity - MTPA) Limestone-1.0 MTPA, Marl-0.4 MTPA				
(v)	Date of mine opening 05.12.1996				
(vi)	Lease validity 1st Feb 2026.				
II. Dynamic Parameter					
(i)	Ambient Air Quality in ug/M ³ (Four Locations-1 in core & 3 in buffer zone with date of sampling)	Working Place	Solaj	Khera	Moradia
		08.06.10	08.06.10	08.06.10	08.06.10
	SPM	137.9	163.6	133.8	131.6
	RSPM	35.8	48.4	36.3	43.3
	NOx	15.3	15.4	14.4	10.7
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation	Date & PPV(mm/s)		
		Not applicable as Surface Miner is being used for mining.			
(iii)	Quality of Discharge Water	Common Central Work Shop Outlet (Date of sampling)	Mining area run-off		
		14.06.2010	Not Applicable		
	pH	7.82			
	TSS(mg/l)	78			
	TDS(mg/l)	1165			
DO(mg/l)	6.5				
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
	During the year	2.106	2106	0	1000
	Cumulative	10.556	17233	0	1633

MINE IX

I.		Static Information			
(i)	Name of the Mine	Pedhavada Limestone Mine			
(ii)	Area of Mine(Ha)	15.1737			
(iii)	Minerals being produced	Limestone			
(iv)	Annual Production (Mine Capacity - MTPA)	0.7 MTPA			
(v)	Date of mine opening	01.08.2009			
(vi)	Lease validity	5.1.2018			
II.		Dynamic Parameter			
(i)	Ambient Air Quality in ug/M ³ (Four Locations-1 in core & 3 in buffer zone with date of sampling)	Working Place	Navagam	Anandpur	Moradia
		14.06.10	14.06.10	14.06.10	14.06.10
	SPM	149.7	158.1	138.2	131.6
	RSPM	36.4	50.1	45.9	43.3
	NOx	13.8	16.9	15.6	12.3
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV(mm/s)	
		Not applicable as Surface Miner is being used for mining.			
(iii)	Quality of Discharge Water	Common Central Work Shop Outlet (Date of sampling)		Mining area run-off	
		14.06.2010		Not Applicable	
	pH	7.82			
	TSS(mg/l)	78			
	TDS(mg/l)	1165			
DO(mg/l)	6.5				
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
	During the year	0.5	400	0	800
	Cumulative	0.5	400	0	800

MINE X

I. Static Information						
(i)	Name of the Mine	RKBA Limestone Mine				
(ii)	Area of Mine(Ha)	310.329				
(iii)	Minerals being produced	Limestone				
(iv)	Annual Production (Mine Capacity - MTPA)	1.0 MTPA				
(v)	Date of mine opening	04.10.2005				
(vi)	Lease validity	5th Sept 2035.				
II. Dynamic Parameter						
(i)	Ambient Air Quality in ug/M ³ (Four Locations-1 in core & 4 in buffer zone with date of sampling)	Working Place	Rampara	Kukras	Anandpara	Bhetali
		12.06.10	12.06.10	12.06.10	12.06.10	12.06.10
	SPM	146.4	123.4	151.7	139.9	131.9
	RSPM	36.3	39	46	44.4	41.5
	NOx	12.4	14.8	10.5	10.6	12.2
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV(mm/s)		
		Not applicable as Surface Miner is being used for mining.				
(iii)	Quality of Discharge Water	Common Central Work Shop Outlet (Date of sampling)		Mining area run-off		
		14.06.2010		Not Applicable		
	pH	7.82				
	TSS(mg/l)	78				
	TDS(mg/l)	1165				
DO(mg/l)	6.5					
(iv)	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)	
	During the year	1.18	1557	0	1319	
	Cumulative	4.86	5450	0	1121	