

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: 01/07/10 to 15/07/10

Total Mines: IX

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 : MLI + 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/M ³				Date of Sampling 1 th to 15 th July 2010 (Average Result)	
	(Three Locations-1 and 2 in core & 3 to 5 in buffer zone with date of sampling)	I	II	III	IV	V
	Location :(Core Zone / Buffer Zone)	L-Type Hostel	Batchlor Hostel	L.S. Crusher	Magazine Section	Water Pond
	SPM	50.00	55.25	64.00	63.50	61.75
	RSPM	21.75	22.25	27.25	21.25	24.75
	Nox	14.42	14.27	14.80	14.77	14.83

	(ii)	Vibration Report			
		(1 or 2 locations)	Location with distance from blast site and habitation	Date & PPV(mm/s)	
		Location : 1	C South Face, Minimate kept at a distance of 300 mtr from the blast site.	08th July -10 :- PPV - 2.22 mm/s	
		Location : 2	A South face, Minimate kept at a distance of 300 mtr from the blast.	14th July -10 :- PPV - 3.84 mm/s	
	(iii)	Quality of Discharge Water			
			Mines Work Shop Outlet (Date of sampling) 07.07.2010	Mining area run-off (Date of sampling)	
		pH	8.6	-	
		TSS (mg/l)	98.0	-	
		TDS (mg/l)	205.0	-	
		DO (mg/l)	4.1	-	
(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 (2009)	1.5	5000.0	200.0	3333.3
	Cumulative	108.4	271489.0	84059.0	2504.51

MINE II

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
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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)	09/07/2010	09/07/2010	09/07/2010	09/07/2010
	Location : (Core Zone / Buffer Zone)	Core Zone	Buffer Zone	Buffer Zone	Buffer Zone
	SPM	161.82	154.01	139.17	137.07
	RSPM	76.15	72.99	63.17	65.65
	SO ₂	4.0	5.0	4.0	5.0
	NO _x	7.0	9.0	6.0	7.0
(ii)	Vibration Report				
	(1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV (mm/s)	
	Location : 1	Rathoh site 1380 MRL (130m)		08/07/2010 - 1.44	
	Location : 2	Haul Road at 1330 MRL (130m)		09/07/2010 - 1.38	
(iii)	Quality of Discharge Water				
		Mines Work Shop Outlet (08/07/2010) Oil & Grease Trap	Mining area run-off (Date of sampling Gyana Khad 10/07/2010 (V Notch))		
	pH	7.4	7.0		
	TSS(mg/l)	36	28		
	TDS(mg/l)	-	310		
DO(mg/l)	-	5.4			
(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	---	87	---	---
	Cumulative	40.11	131444	23644	3866

MINE III

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			
	(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)	5/7/2010	3/7/2010	7/7/2010	
		Location :(Core Zone / Buffer Zone)	Core Zone	Buffer Zone	Buffer Zone	
		SPM	79.95	27.89	46.29	
		RSPM	32.94	17.87	20.49	
		NOx	13.67	5.34	5.18	
	(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation		Date & PPV(mm/s)	
		Location : 1	SOUTH BLOCK (125 MTR)		10 th July & 2.5 MM/Sec	
	(iii)	Quality of Discharge Water				
			Mines Work Shop Outlet (01/04/2010)	Mining area run-off (01/04/2010)		
		pH	7.41		7.54	
		TSS(mg/l)	24		16	
		TDS(mg/l)	403		182	
		DO(mg/l)	3.6		5.2	
	(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 from Jan-2010 to	2.77	3744	6942	2500-4000

	July 15th 2010				
	Cumulative	31.91	105934	522800	2500-3000

MINE IV

I.	Static Information								
	(i)	Name of the Mine	Sugala 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	
			09.07.10	09.07.10	09.07.10	09.07.10	09.07.10	09.07.10	
			SPM	113.5	110	109.2	135.5	121.1	101.8
			RSPM	34.5	29.1	29.2	44	36.2	32.7
			NOx	10.5	11.8	9.4	14.5	12.8	12.1
	(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			
	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
(iv)	During the year	1.55	1550	0	1000
	Cumulative	8.33	16194	3262	2336

MINE V

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	Icchvad	
			03.07.10	03.07.10	03.07.10	03.07.10
		SPM	93.4	92.8	98.1	88.9
		RSPM	22.1	17.6	27.6	98.1
		NOx	5.4	5.4	4.1	4.2
(ii)	Vibration Report (1 or 2 locations)	Location with distance from blast site and habitation			Date & PPV(mm/s)	
		Not applicable			as	
(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		
	Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
(iv)	During the year	0.03	300	0	10000
	Cumulative	2.75	6599	0	2400

MINE VI

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	
				08.07.10	08.07.10	08.07.10	08.07.10
			SPM	102.8	80.9	100.1	102.8
			RSPM	27.3	17.9	23.3	19
			NOx	7.1	7.5	8.2	7.5
	(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	Mining area run-off				

Common Central Work
Shop Outlet (Date of

			sampling)			
			14.06.2010	Not Applicable		
		pH	7.82			
		TSS(mg/l)	78			
		TDS(mg/l)	1165			
		DO(mg/l)	6.5			
		Greenbelt / Plantation	Area Covered (Ha)	No of plants in ML area	No of plants outside ML area	Plantation density (No of plants/ha)
	(iv)	During the year	2.106	2106	0	1000
		Cumulative	10.556	17233	0	1633

MINE VII

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
			12.07.10	12.07.10	12.07.10	12.07.10
		SPM	134.4	164.8	121.5	102.8
		RSPM	44.7	40.2	37.2	19
		NOx	8.7	9.4	10.2	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		Mining area run-off	

			sampling)			
			14.06.2010		Not Applicable	
		pH	7.82			
		TSS(mg/l)	78			
		TDS(mg/l)	1165			
		DO(mg/l)	6.5			
		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
(iv)		Cumulative	0.5	400	0	800

MINE VIII

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	
			10.07.10	10.07.10	10.07.10	10.07.10	10.07.10	
			SPM	122.5	118.1	120.1	117.6	128.8
			RSPM	36	36.1	34.4	34.4	43.5
			NOx	12	12.6	14.2	10.3	9.6
(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

MINE IX

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	31/12/1995		
	(vi)	Lease validity	20 Years		
II.	Dynamic Parameter				
	(i)	Ambient Air Quality in ug/M ³	At L/S Crushing & Screening CCR	Vill. Patan	Vill. Kerpura
		(Three Locations-1 in core & 2 in buffer zone with date of sampling)	10/7/2010	14/07/2010	5/7/2010
		Location :(Core Zone / Buffer Zone)	core Zone	Buffer Zone	Buffer Zone
		SPM	235.5	119	127.4
		RSPM	22.5	19.6	20.7
		NOx	8.5	7.6	8.2

(ii)	Vibration Report				
	(1 or 2 locations)	Location with distance from blast site and habitation			Date & PPV(mm/s)
	Location : 1	Eastern Ridge, Distance 300 mtr., Village distance 500 mtr. From Mines Boundary.			13/07/10 & 0.884
	Location : 2	Western Ridge, Distance 250 mtr.,Cement plant distance 1.5 KM & No village within 3 km. From mines boundary.			09/07/10 & 1.29
(iii)	Quality of Discharge Water				
		Mines Work Shop Outlet (10/07/10)		Mining area run-off (Date of sampling)	
	pH	7.6		-	
	TSS(mg/l)	78.9		-	
(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	5	13700	8000	5700
	Cumulative	75.45	123474	92189	31285